

REVIEWS OF

THE COLLECTED WORKS OF LEO SZILARD: SCIENTIFIC PAPERS
Bernard T. Feld and Gertrud Weiss Szilard, editors

NEW SCIENTIST

56:536-537 (November 30) 1972

By Ian Roxburgh

NATURE

242:68-69 (March 2) 1973

By J. Rotblat

JOURNAL OF THE OPTICAL SOCIETY OF AMERICA

63:766-767 (June) 1973

By Lorenzo M. Narducci

SCIENTIFIC AMERICAN

229:117-118 (July) 1973

By Philip Morrison

FUTURES

5:414-416 (August) 1973

By Richard L. Meier

SCIENCE

181:1036 (September 14) 1973

By David Hawkins

BULLETIN OF THE ATOMIC SCIENTISTS

29:51-52 (September) 1973

By Dennis Gabor

ENDEAVOUR

32:151 (September) 1973

By E. C. Bullard

THE QUARTERLY REVIEW OF BIOLOGY

48:351-352 (June) 1973

By Bentley Glass

THE AMERICAN JOURNAL OF PHYSICS

42:261-263 (March) 1974

By Alvin M. Weinberg

ISIS

65.3.228:425-426 (September) 1974

By Stanley Goldberg

NEW BOOKS ABROAD

(published in Russian in USSR)

N3:3-6, 1974

By Victor Frenkel

Ioffe Physical Technical

Institute, Academy of

Sciences, Leningrad

BUTSURI

(published in Japanese)

Physical Society of Japan

1974

Perspectives in American History

VOLUME II · 1968



PUBLISHED BY THE

Charles Warren Center for Studies
in American History

HARVARD UNIVERSITY

Perspectives in American History, an annual review published by the Charles Warren Center for Studies in American History and edited by Donald Fleming and Bernard Bailyn, is devoted to American history from the age of discoveries to the present. Each issue is a substantial volume—consisting either of a small number of monographs or of a group of essays on a unified theme. When space permits, review essays are included on important publications in the field of American history.

American history is defined broadly to include the history of literature, science, philosophy, the arts, economics, and demography as well as the more usual subjects. Particular importance is attached to the comparative history of Europe and America and to the contacts between America and the rest of the world.

Throughout, the effort is made to open new areas of American history to investigation, to suggest new viewpoints and new approaches, and to pose new questions.

Perspectives IS SOLD ONLY IN ADVANCE OF PUBLICATION. Checks, payable to Harvard University, must accompany subscriptions. They should be mailed to the Charles Warren Center for Studies in American History, 53 Church Street, Cambridge, Massachusetts 02138.

The price of individual issues is \$5.00. Five-year subscriptions are \$22.00.

Perspectives in American History

VOLUME II · 1968

THE INTELLECTUAL MIGRATION: EUROPE AND AMERICA, 1930-1960

The second issue of *Perspectives in American History* will contain a collection of essays and memoirs dealing with the effect on American intellectual and cultural life of the migration to America of leading European intellectuals, scholars, and artists during the Hitler years. It will include biographical essays interpreting the influence of individuals; analyses of certain groups, institutions, and fields reflecting this influence; and memoirs by participants.

Contents

Weimar Culture: The Outsider as Insider, BY PETER GAY

Experiences in America: A Personal Memoir, BY T. W. ADORNO

Kunstgeschichte in America, BY COLIN EISLER

The Wiener Kreis in America, BY HERBERT FEIGL

Émigré Physicists and the Biological Revolution,

BY DONALD FLEMING

Franz Neumann: Between Marxism and Liberal Democracy,

BY H. STUART HUGHES

The Migration of Psychoanalysis: Its Impact on American Psychology,

BY MARIE JAHODA

continued

The Aftermath of the Bauhaus in America: Gropius, Mies, and Breuer,
BY WILLIAM JORDY

Empirical Social Research—The Merger of Two Traditions: A Memoir,
BY PAUL F. LAZARSELD

Two *Romanisten* in America: Spitzer and Auerbach, BY HARRY LEVIN

The Diaspora of Experimental Psychology: The Gestaltists and Others,
BY JEAN MATTER MANDLER AND GEORGE MANDLER

Reminiscences, BY LEO SZILARD

John von Neumann, 1903–1957, BY S. ULAM, H. W. KUHN,
A. W. TUCKER, AND CLAUDE E. SHANNON

A New Site for the Seminar: The Refugees and American Physics
in the 30's, BY CHARLES WEINER

Four Hundred Notable Émigrés: A Biographical Dictionary of
Scholars, Artists, and Scientists

Perspectives in American History, Volume III (1969),
will include studies by

OSCAR HANDLIN: on the new economic history

KENNETH S. LYNN: on William Dean Howells in the 1890's

CHARLES STRICKLAND: on the childrearing practices
of Bronson Alcott

BARRY D. KARL: on the influence of sponsorship on American
social research

review essays by John Clive, Stanley Nider Katz, James McPherson,
Morton White, and others

HARVARD UNIVERSITY PRESS

79 Garden Street
Cambridge 38, Massachusetts

Memorandum on permissions to quote copyright material:

According to the terms of our usual contract, the author is responsible for clearing all permissions to use previously published copyright material. Since many of our authors ask for guidance in the matter of securing permissions, we have felt it might be desirable to draw up a brief statement which might be sent to them.

1. Permission must be secured to use unpublished material by another writer or published material that is still protected by copyright.

Unpublished material is controlled by the writer or his heirs or his assigns--that is, people to whom control has been assigned by the writer's will or by contract.

Published material is controlled by the holder of the copyright. Copyright in the United States runs for twenty-eight years from the date of the copyright and may be renewed for another twenty-eight; after fifty-six years, published material in the United States is in the public domain. In most other countries, copyright runs for fifty years after the death of the writer.

2. All parts of unpublished letters or other writings require permission from the writer or his heirs.

3. Published poetry requires permission if two or more lines are quoted. Requests for permission are usually addressed to the publisher.

4. Prose, up to 200 or 250 words from any one book, may usually be quoted without permission so long as full acknowledgment is made. Alfred Knopf permits the quotation of up to 500 words without specific permission so long as full acknowledgment to author, title, and the publisher is made. Most of the American university presses have by reciprocal agreement permitted the publications of one press to quote from those of another up to 1,000 words of prose without specific permission, so long as full acknowledgment is made. With these exceptions, it is advisable to write to the publishers for permission to quote anything over 250 words.

5. The generous exceptions noted above are made with the understanding that no complete unit, such as a small case history, a letter, or a complete description, even though it may be less than 200 words long, be used without permission.

6. In requesting permission to quote, the author should give the title (or tentative title) of his book, state that it is to be published by the Harvard University Press, and specify the page, the approximate number of words or lines, and the opening and closing words of each passage he wishes to use. He should also indicate that Harvard books are distributed in other countries and ask specifically if the publisher to whom he is writing can give world rights or, if not, to whom application for the further permissions should be made.

7. When you submit the permission to us, transcribe for us the copyright notice exactly as it appears on the copyright page of the volume used.

ALL LETTERS OF PERMISSION MUST BE TURNED OVER TO THE HARVARD UNIVERSITY PRESS TO BE KEPT IN OUR FILES.

Bever 4

HARVARD UNIVERSITY
PERSPECTIVES IN AMERICAN HISTORY

CHARLES WARREN CENTER FOR STUDIES IN AMERICAN HISTORY
53 CHURCH STREET, CAMBRIDGE, MASSACHUSETTS 02138

Editors
DONALD FLEMING
BERNARD BAILYN

March 30, 1968

Dear Mrs Szilard:

We are now beginning to prepare the manuscript of the "Reminiscences" for the printer. I enclose a copy of the headnote (your copyright title will appear directly on the copyright page of the journal) and of the explanatory statement that follows page A59.

There are several questions that I think you will be able to clear up for us very quickly. In accordance with our telephone conversation on this point, I am eliminating the note on page A30 about the four pages edited by Szilard himself; but the note on page A55, and the nature of the four or five paragraphs that follow, puzzle me. First, is it true that the taped interviews end here? If so, I do not understand what the source was for the whole of the third section that you sent. I assume that that third section is in fact more of the transcribed tapes and that the note refers to the interruption of the continuity of the story at the point it was inserted. Am I right in this? Second, if what appears on pages A55, A57, and A59 does not come from the tapes, where does it come from? And should we not state that source?

Am I correct in assuming that what is quoted from NATURE in your note to page A3 is from a summary rather than from a review of the paper? Review sounds like a critique of what Rutherford said, which reduces the relevance of the quotation. On page A5 in the 7th line from the bottom: do you mean to say "published" mass of helium? On page A51, has the Einstein letter been published? If not, is it correct to quote from it? Is there need to quote any of the Szilard letters listed on page A53? On page A58 have you cited the "Smyth Report" before? If not, should we not use the full reference - or leave the source out altogether?

In the third section, notes to page 1, do we need to cite the source for the 5th note? The five-page enclosure to Einstein's letter of March 25, 1945, we would like to print in its entirety as an Appendix. The other attached documents we are still discussing but in general feel that full references to these documents but not the texts themselves (especially in the case of the printed documents) should be given.

Do let me have whatever material you would like to add as soon as possible. Hopefully we can get all of this copyedited and off to the printer in a few days.

Sincerely,

T.S. - T.S. Bailyn

REMINISCENCES.

by

Leo Szilard

headnote

In 1960, while a patient at Memorial Hospital in New York, Leo Szilard enjoyed giving interviews to interested visitors. On a few such occasions his wife switched on his dictaphone recorder. What follows is an exact transcription of these tapes, with editing limited to the minimum needed to change spoken to written English. The editing and annotation have been a collaborative effort of Gertrud Weiss Szilard, Ruth Grodzins, and Kathleen Winsor.

These highly personal, pungent, and incisive comments by a leading participant on three great episodes in recent American history - the migration of intellectuals from Hitler's Europe to America, the discovery of nuclear fission, and the effort to establish civilian control of atomic energy - are published here ~~for the first time~~ by courtesy of ^{Mrs.} Gertrud Weiss Szilard and with the cooperation of the MIT Press, which will include them in a forthcoming ~~volume~~ ^{edition} collection of Szilard's scientific and personal papers.

Unpublished papers referred to in the notes are in the possession of Mrs. Szilard.

insert
this head-
note to
be outside
of
try smaller
type face
than this
size

used,
fact, as
in handwritten

[In these oral reminiscences Szilard ~~did~~ ^{does} not cover his activities at the Metallurgical Laboratory in Chicago from February 1942 to the spring of 1945. During that time ~~he~~ his title was Chief Physicist. The scientific aspects of this period, in the form of some thirty reports written by Szilard, will be included in the forthcoming collected works. ~~and~~ Szilard picks up the story again in 1945.]

to follow at bottom of
p. A 59 below the
present test on the page



THE M.I.T. PRESS
MASSACHUSETTS INSTITUTE OF TECHNOLOGY
CAMBRIDGE, MASSACHUSETTS, 02142
864-6900 AREA CODE 617

Envelope
permarked
3-19-68

X

Dr. Herbert L. Anderson
Enrico Fermi Institute
University of Chicago
5630 Ellis Ave
Chicago Illinois 60637

Dear Dr. Anderson:

Dr. Gertrud Weiss Szilard has requested us to send you this copy of a portion of our forthcoming volume of Leo Szilard's works.

We would like the following credit line to appear with the article, preferably on the first page:

Preprinted by special arrangement with the MIT Press, Cambridge, Massachusetts. To be published later this year in THE WRITINGS OF LEO SZILARD, edited by Gertrud Weiss Szilard, Ruth Grodzins and Kathleen Winsor. Copyright 1968 by Gertrud Weiss Szilard. All rights reserved.

When the memorial volume is complete we would like to receive two copies of it. Thank you.

Yours sincerely,

Lynne Vickson (Mrs.)
Permissions Editor

May 29, 1968

Mr. Albert Rosenfeld
Science Editor
Life Magazine
Time Life Building
New York, New York 10020

Dear Albert:

It was exceedingly kind of you to come to the Terminal the other day and I hope you made your train home. I enjoyed the opportunity of seeing you again and wish that we had more time to chat; please be sure to let me know when you plan to come to California.

I also would like to know more about the book you are writing and since I have a feeling that my favorite story is pertinent I am enclosing a copy of the interview which I mentioned to you where I marked the part which I thought you might perhaps like to use as a "motto."

I have given your regards to Mary Hall and have started to make inquiries about John R. Platt; have so far found out that he will probably leave Michigan for Harvard next year. Everyone thinks that Platt seems a very good idea.

I hope it won't be too long before I see you again. Best wishes.

Sincerely,

Gertrud Weiss Szilard

GWS:adk

Enc.



THE M.I.T. PRESS

MASSACHUSETTS INSTITUTE OF TECHNOLOGY

CAMBRIDGE, MASSACHUSETTS, 02142

May 27, 1968

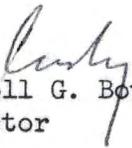
Dr. Gertrud Weiss Szilard
2380 Torrey Pines Road
La Jolla, California 92037

Dear Trude:

I don't know anyone at Florida State but certainly you could find out about Paul Picard from the people at Oak Ridge where he was a Fellow.

I think John Platt is an excellent man but he's got too many irons in the fire, I think, to undertake Volume II, but why not try? Last, what is happening with Goldhaber. It seems to me we must keep after this man until he does something. He's the only one to date who hasn't performed at all.

With best wishes,


Carroll G. Bowen
Director

CGB/kr

May 14, 1968

Mr. Carroll G. Bowen
Director
The M.I.T. Press
50 Ames Street
Building E-19, Room 741
Cambridge, Massachusetts 02142

Dear Curly:

Thank you so much for your nice letter of May 7. I am sorry that Mike Reagan did not work out and I have never heard of Paul Picard. Do you know anybody at Florida State of whom you can make inquiries, because I don't.

Ruth Adams was here this past weekend for a short visit and we were wondering whether John R. Platt might be a suitable editor for Volume II. Kathy Windsor saw him in Michigan last year and reported that he seems to have great admiration for Leo. She also told me that he now seems unhappy at the Mental Health Research Institute in Michigan and will probably go to Harvard next year, in what capacity we do not know. What do you think of him?

Ruth plans to go with Bob and her family to Iran for at least a year beginning next Fall and is looking for a replacement for herself at the Bulletin. She is a marvelous girl and I am sure she could give a lot of help to any one who would edit Volume II, particularly in the selection of writings, as she is so familiar with the work Leo did with the Bulletin and at Pugwash.

Dr. Tabin is also in La Jolla this week and we are working some more on the selection of patents and applications for Volume I.

In spite of the hectic schedule I did enjoy my visit to The Press very much. Please give my best regards to your associates and to Miss Robins.

And my best to yourself as always.

Sincerely,

Copy for
Nina Cherrin

May 14, 1968

Mr. Carroll G. Bowen
Director
The M.I.T. Press
50 Ames Street
Building E-19, Room 741
Cambridge, Massachusetts 02142

Dear Curly:

Thank you so much for your nice letter of May 7. I am sorry that Mike Reagan did not work out and I have never heard of Paul Picard. Do you know anybody at Florida State of whom you can make inquiries, because I don't.

Ruth Adams was here this past weekend for a short visit and we were wondering whether John R. Platt might be a suitable editor for Volume II. Kathy Windsor saw him in Michigan last year and reported that he seems to have great admiration for Leo. She also told me that he now seems unhappy at the Mental Health Research Institute in Michigan and will probably go to Harvard next year, in what capacity we do not know. What do you think of him?

Ruth plans to go with Bob and her family to Iran for at least a year beginning next Fall and is looking for a replacement for herself at the Bulletin. She is a marvelous girl and I am sure she could give a lot of help to any one who would edit Volume II, particularly in the selection of writings, as she is so familiar with the work Leo did with the Bulletin and at Pugwash.

Dr. Tabin is also in La Jolla this week and we are working some more on the selection of patents and applications for Volume I.

In spite of the hectic schedule I did enjoy my visit to The Press very much. Please give my best regards to your associates and to Miss Robins.

And my best to yourself as always.

Sincerely,



THE M.I.T. PRESS

MASSACHUSETTS INSTITUTE OF TECHNOLOGY

CAMBRIDGE, MASSACHUSETTS, 02142

864-6900 AREA CODE 617

May 7, 1968

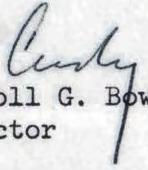
Dr. Gertrud Weiss Szilard
Del Charro
2380 Torrey Pines Road
La Jolla, California 92038

Dear Trude:

I talked with Mike Reagan at Riverside and he says that he simply is not professionally interested in the core problems of volume II. He did suggest that we look into a man at Florida State named Paul Picard, of the ascension and descension Picards, who was at Oak Ridge at the same time that Mike was. Mike says that Picard was greatly intrigued and indeed has published on nuclear weapons politics and might be at the right stage of maturity and age to bite off an assignment like this.

I'm sorry your departure from here was so hectic. I felt that you needed a lot more warmth and strength and support than I was able to give you, except for volume I where it seemed to me that we got quite a lot done.

My warmest regards to you as always,


Carroll G. Bowen
Director

CGB/kr



THE M.I.T. PRESS
MASSACHUSETTS INSTITUTE OF TECHNOLOGY
CAMBRIDGE, MASSACHUSETTS, 02142
864-6900 AREA CODE 617

X 5254

274

February 1, 1968

Mrs. Gertrude Szilard
2380 Torrey Pines Road
La Jolla, California 92038

Dear Trude:

I talked with Bernard Bailyn of Harvard one morning last week and strongly urged him (a) to come out so you could talk to him, (b) to seek photocopies of material covering the ^{last} period in which he is interested, and (c) to give some thought as to what you should do with the papers as a whole.

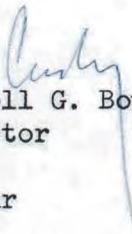
I also have talked with one of his sponsors and advisers about the young man at Berkeley whose credentials look very, very good.

I'm moving toward a view that the real necessity now is for you to get the papers into a library where the bibliographic work can be done by professionals and where a scholar can begin to go out and make appropriate review of materials there organized for his work. A scholar should not be doing bibliographic work; a bibliographer should not be making a selection of papers to be published. In short, I think after meeting Mr. Voigt and after looking at what UCSD has done for you that you should give them the papers, let them go to work on getting them in proper array for a scholar's use, and then turn your young man from Berkely loose on making a volume through selection.

Now all this ^{summarizes} foreshortens a lot of reflection on my part and I know that you resist doing anything impulsively. But I think that (a) it's time you got out of that cellar, (b) it's time you got on with your own work, and (c) it's time you, after having done very ^{good} work in getting the critical pile of materials together, got out of the business and gave it over to those whose business it is to take from this point on.

I had a very good visit with Ruth this past weekend and didn't talk to her about this problem at all.

With best wishes,


Carroll G. Bowen
Director

CGB/kr

X 5254

SAN DIEGO: UNIVERSITY OF CALIFORNIA
LA JOLLA, CALIFORNIA

sent cc of letter to Menard
April 15
(dated April 12)

(same time Menard's → Eckert)

April 8, 1968

Ms. Carroll J. Bowen (personal
M. I. T. Press attention)

Dear Carly:

Here are copies of 2 letters
from Dr. Bailyn (March 29 + 30) and
our reply, including the materials
he asked for. This set is a
duplicate copy for you to keep -
in order to expedite matters I am
sending the originals to him
directly. Please call me.

Sincerely,

Trade

RECEIPT FOR CERTIFIED MAIL—30¢

No. 712608

SENT TO <i>MR. CARROLL G. BOWEN</i> <i>Director MIT</i>		POSTMARK OR DATE
STREET AND NO. <i>MASS. INSTITUTE TECHNOLOGY</i>		
P. O., STATE, AND ZIP CODE <i>CAMBRIDGE MASS 02142</i>		
EXTRA SERVICES FOR ADDITIONAL FEES		
Return Receipt <i>Shows to whom and date delivered</i> <input checked="" type="checkbox"/> 10¢ fee	<i>Shows to whom, date, and where delivered</i> <input type="checkbox"/> 35¢ fee	<i>Deliver to Addressee Only</i> <input type="checkbox"/> 50¢ fee

POD Form 3800
Mar. 1966

**NO INSURANCE COVERAGE PROVIDED—
NOT FOR INTERNATIONAL MAIL**

(See other side)

Way Robins

gone since ^{The p.m.}
^{6:30} Southmore

MIT
rec April 2

March 28, 1968

Mr. Carroll G. Bowen
Director, M.I.T. Press
Cambridge, Mass.

Dear Curly :

Enclosed is some material which Professor Bailyn would like to have for Section II. of the tapes, which we sent you on March 14, 1968 in duplicate, and which you forwarded to Bailyn and Anderson. We did not include these materials at that time a) because they were not ready and b) because Anderson does not need them. There are also a few pages of corrections which should go to Prof. Bailyn for the Sections he has already received.

are not going to send

Also, because we ~~did not~~ send the Monod introduction to Prof. Bailyn, and he may want to have something on Leo's Biology - which is not covered in the tapes- I made a set of already published material , with a duplicate for you.

If you decide that Prof. Bailyn should get these materials, please let him know that they have arrived. Please look them over first. And please let me know whether you would like us to make a Xerox of Section II. which we call the Anderson ~~Excerpt~~ Section , or get it from Baylin.

Dashing off to a conference in Warner Springs - back Saturday Night. Excuse the hurry.

My best,

as ever,

50 Ames Street
Bldg E19 Room 741
Cambridge 02142

M.I.T.
Rec. April 2

La Jolla, Calif. 92037

Mr. Carroll G. Bowen
Director, M.I.T. Press
Cambridge, Mass.

March 26, 1968

Dear Curly :

Here is the Monod Introduction. What do you think of it?

My first reaction was that this is an obituary. One can also think of it as a very beautiful portrait.

I have not written to him yet, because I would like to get your reaction first. I believe there are two alternatives :

1) one can take this as the Preface to the whole "Science Volume " and ask a lesser biologist friend to write more specifically about the papers, as Carl Eckart has done.

2) One can write to Monod and tell him that this is an exceedingly nice introduction to an introduction, send him a copy of Carl Eckart's piece and ask him to add something more specific.

Clearly, we are not going to send this to Baylin, so the deadline I gave Monod for the end of this month no longer holds.

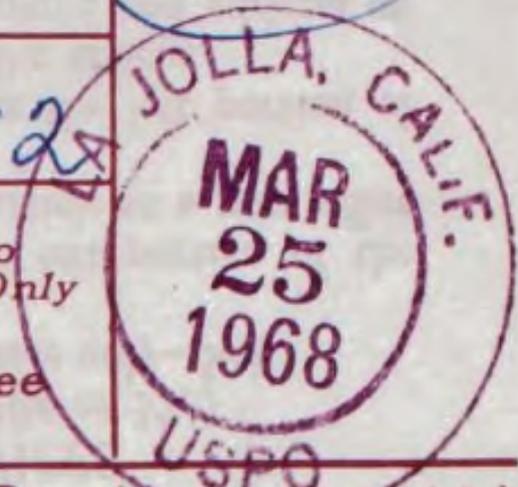
Please let me know.

Sincerely,

RECEIPT FOR CERTIFIED MAIL—30¢

No. 718562

SENT TO MR. Carroll Bowen M. I. T.		POSTMARK OR DATE #2 38
STREET AND NO. Pres M. I. T.		
P. O., STATE, AND ZIP CODE Cambridge, Mass 02142		
EXTRA SERVICES FOR ADDITIONAL FEES		
Return Receipt		<i>Deliver to Addressee Only</i>
<i>Shows to whom and date delivered</i>	<i>Shows to whom, date, and where delivered</i>	<input type="checkbox"/> 50¢ fee
<input checked="" type="checkbox"/> 10¢ fee	<input type="checkbox"/> 35¢ fee	



POD Form 3800
Mar. 1966

**NO INSURANCE COVERAGE PROVIDED—
NOT FOR INTERNATIONAL MAIL**

(See other side)

INSTRUCTIONS TO DELIVERING EMPLOYEE

Show to whom and date delivered

Show to whom, date, and address where delivered

Deliver **ONLY** to addressee

(Additional charges required for these services)

RECEIPT

Received the numbered article described below.

REGISTERED NO.

SIGNATURE OR NAME OF ADDRESSEE *(Must always be filled in)*

CERTIFIED NO.

718562

1

M. D. S. 24-120

INSURED NO.

2

SIGNATURE OF ADDRESSEE'S AGENT, IF ANY

Nena K. Boap

DATE DELIVERED

3/26/68

SHOW WHERE DELIVERED *(only if requested)*

POST OFFICE DEPARTMENT
OFFICIAL BUSINESS

PENALTY FOR PRIVATE USE TO AVOID
PAYMENT OF POSTAGE, \$300

POSTMARK OF
DELIVERING OFFICE

RECEIVED
MAY 26 P.M.
Special Delivery, Tour 3
Cambridge 4, Mass. 02139

INSTRUCTIONS: Show name and address below and complete instructions on other side, where applicable. Moisten gummed ends, attach and hold firmly to back of article. Print on front of article **RETURN RECEIPT REQUESTED**.

**RETURN
TO**

NAME OF SENDER

Dr. Gertrud Weiss Szilard
2380 Torrey Pines Road
La Jolla, California 92038

STREET AND NO. OR P.O. BOX

POST OFFICE, STATE, AND ZIP CODE

72

e55-16-71548-9

June 1966

POD Form 3811

March 25, 1968

Professor Bernard Baylin (personal attention)
Perspectives in American History
Harvard University, Charles Warren Center
53 Church Street
Cambridge, Mass. 02138

Dear Professor Baylin :

Since talking to you on the telephone last Wednesday, we have prepared two further sections of the transcription of Szilard's "Reminiscences" which cover his activities during the periods you are interested in:

Section I. 1930 - 1933 includes his reaction to the events in Germany, his migration to England, via Vienna, and his activities leading to the establishment of the "Academic Assistance Council" . This section is short (eight pages) and we have not annotated it, and although there is a huge amount of correspondence in our files from this period, there was not enough time to select pertinent documents. I trust - and hope - that other authors have provided you with documentation.

Section II. 1933 - February 1942 you have already received last week. This deals with the development of Szilard's thoughts and work in nuclear physics, culminating in the establishment of the Manhattan Project. We are sending you some of the documents and correspondence mentioned in the "Notes" which you wanted to have ; these will go out to-morrow, as the Xeroxing has not yet been completed.

I believe,

It is strange and significant, that there are no interviews covering the Chicago Period from February 1942 - the Spring of 1945. There is, of course voluminous documentation in the form of memoranda, reports and correspondence in the files. This will have to be handled by a well qualified historian, and I do not feel that I should make any attempt to pull any of these for your volume.

Leo, however, picks up the reminiscences with great gusto in 1945:

Section III. Spring 1945 - December 1945 covers the "Petition" and the fight for civilian control of atomic energy. As you are interested in the impact on this nation, I am sending this section to you.

There is another very important, and still persisting, impact which Szilard brought about and this is the establishment of the "Council for Abolishing War" in 1962

It is now called "Council for a Livable World" and is very active in Washington. So far, no history of the "Council" has been written, but I am enclosing four documents :

1) a copy of the speech "Are we on the Road to War" which was first given out in mimeographed form (first version dated November 14, 1961) and then reprinted in the BAS. I believe that as the movement snowballed about 100,000 copies of the speech were distributed.

2) a letter sent by Szilard to persons who had expressed interest in supporting the Council.

3) a pamphlet in which a brief history of the Council is included.

4) an article on the Council published after Leo's death, Science, August 7, 1964.

The President of the Council, who was a close friend and associate of Szilard is Bernard T. Feld, Laboratory of Nuclear Science, Physics Department M.I.T. who will be very glad to fill you in on the history and present work of this organization which Szilard created. His Office Telephone number is 864-6900, x 4235. Home telephone 547-9331. He knows about your project and is helping us with the M.I.T. book.

Kindest regards,

Sincerely

Gertrud Weiss Szilard

RECEIPT FOR CERTIFIED MAIL—30¢

No. 712600

SENT TO MR CARROLL G. Bowen		POSTMARK OR DATE
STREET AND NO. One M.I.T. Press M.I.T.		MAR 15 1968 USPO
P. O., STATE, AND ZIP CODE Cambridge MASS 02142		
EXTRA SERVICES FOR ADDITIONAL FEES		
Return Receipt <i>Shows to whom and date delivered</i> <input checked="" type="checkbox"/> 10¢ fee	<i>Shows to whom, date, and where delivered</i> <input type="checkbox"/> 35¢ fee	<i>Deliver to Addressee Only</i> <input type="checkbox"/> 50¢ fee

POD Form 3800
Mar. 1966

**NO INSURANCE COVERAGE PROVIDED—
NOT FOR INTERNATIONAL MAIL**

(See other side)

INSTRUCTIONS TO DELIVERING EMPLOYEE

Deliver *ONLY* to addressee

Show address where delivered

(Additional charges required for these services)

RECEIPT

Received the numbered article described on other side.

SIGNATURE OR NAME OF ADDRESSEE *(must always be filled in)*

Mat

SIGNATURE OF ADDRESSEE'S AGENT, IF ANY

[Handwritten signature]

DATE DELIVERED

SHOW WHERE DELIVERED *(only if requested)*

18 MAR 68

POST OFFICE DEPARTMENT
OFFICIAL BUSINESS

PENALTY FOR PRIVATE USE TO AVOID
PAYMENT OF POSTAGE, \$300

POSTMARK OF
DELIVERING OFFICE



INSTRUCTIONS: Fill in items below and complete instructions on other side, if applicable. Moisten gummed ends, attach and hold firmly to back of article. Print on front of article RETURN RECEIPT REQUESTED.

RETURN
TO

REGISTERED NO.

NAME OF SENDER

CERTIFIED NO.

STREET AND NO. OR P. O. BOX

INSURED NO.

CITY, ZONE AND STATE

DR. GERTRUD WEISS SZILARD
2380 Torrey Pines Road
La Jolla California 92038

72

Del Charro
2380 Torrey Pines Road
La Jolla, Calif. 92037

March 14, 1968

Mr. Carroll G. Bowen, Director
The M.I.T. Press
Massachusetts Institute of Technology
Cambridge, Massachusetts 02142

Dear Curlie:

After our phone call yesterday I talked to Herbert Anderson in Chicago who said it would be all right if the material arrived a few days after March 15th. I therefore prefer to send the material through you as originally intended. Please send it on to Herbert Anderson as soon as possible with instructions for the appropriate credit line.

I shall also be interested in having your reaction to it. I think that Ruth Grodzins and Kathy really have done a marvellous job. Kathy especially has worked very hard on this and we must find some funds for her (and for myself). I am now paying for all the xeroxing out of my own pocket and we have no typist - Kathy is doing the typing as well. I don't know whether Anderson would pay for part of the expenses; maybe you might ask, if he decides to use the material. He told me that he has not decided on a publisher so far, probably University of Chicago Press or perhaps Quadrangle.

Best wishes, as always,

Gertrud Weiss Szilard

Del Charro
2380 Torrey Pines Road
La Jolla, Calif. 92037

March 14, 1968

Mr. Carroll G. Bowen, Director
The M.I.T. Press
Massachusetts Institute of Technology
Cambridge, Massachusetts 02142

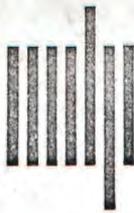
Dear Curlie:

After our phone call yesterday I talked to Herbert Anderson in Chicago who said it would be all right if the material arrived a few days after March 15th. I therefore prefer to send the material through you as originally intended. Please send it on to Herbert Anderson as soon as possible with instructions for the appropriate credit line.

I shall also be interested in having your reaction to it. I think that Ruth Grodzins and Kathy really have done a marvellous job. Kathy especially has worked very hard on this and we must find some funds for her (and for myself). I am now paying for all the xeroxing out of my own pocket and we have no typist - Kathy is doing the typing as well. I don't know whether Anderson would pay for part of the expenses; maybe you might ask, if he decides to use the material. He told me that he has not decided on a publisher so far, probably University of Chicago Press or perhaps Quadrangle.

Best wishes, as always,

Gertrud Weiss Szilard



THE M.I.T. PRESS

MASSACHUSETTS INSTITUTE OF TECHNOLOGY

CAMBRIDGE, MASSACHUSETTS, 02142

864-6900 AREA CODE 617

Copy for B. Feld

February 1, 1968

Mrs. Gertrude Szilard
2380 Torrey Pines Road
La Jolla, California 92038

Dear Trude:

I talked with Bernard Bailyn of Harvard one morning last week and strongly urged him (a) to come out, so you could talk to him, (b) to seek photocopies of material covering the period in which he is interested, and (c) to give some thought as to what you should do with the papers as a whole.

I also have talked with one of his sponsors and advisers about the young man at Berkeley whose credentials look very, very good.

I'm moving toward a view that the real necessity now is for you to get the papers into a library where the bibliographic work can be done by professionals and where a scholar can begin to go out and make appropriate review of materials there organized for his work. A scholar should not be doing bibliographic work; a bibliographer should not be making a selection of papers to be published. In short, I think after meeting Mr. Voigt and after looking at what UCSD has done for you that you should give them the papers, let them go to work on getting them in proper array for a scholar's use, and then turn your young man from Berkely loose on making a volume through selection.

Now all this ^{reminds} ~~freshens~~ a lot of reflection on my part and I know that you resist doing anything impulsively. But I think that (a) it's time you got out of that cellar, (b) it's time you got on with your own work, and (c) it's time you, after having done very ^{good} work in getting the critical pile of materials together, got out of the business and gave it over to those whose business it is to take from this point on.

I had a very good visit with Ruth this past weekend and didn't talk to her about this problem at all.

With best wishes,

Carroll G. Bowen
Carroll G. Bowen
Director

CGB/kr



THE M.I.T. PRESS

MASSACHUSETTS INSTITUTE OF TECHNOLOGY

CAMBRIDGE, MASSACHUSETTS, 02142

864-6900 AREA CODE 617

February 1, 1968

Mrs. Gertrude Szilard
2380 Torrey Pines Road
La Jolla, California 92038

Dear Trude:

I talked with Bernard Bailyn of Harvard one morning last week and strongly urged him (a) to come out so you could talk to him, (b) to seek photocopies of material covering the period in which he is interested, and (c) to give some thought as to what you should do with the papers as a whole.

I also have talked with one of his sponsors and advisers about the young man at Berkeley whose credentials look very, very good.

I'm moving toward a view that the real necessity now is for you to get the papers into a library where the bibliographic work can be done by professionals and where a scholar can begin to go out and make appropriate review of materials there organized for his work. A scholar should not be doing bibliographic work; a bibliographer should not be making a selection of papers to be published. In short, I think after meeting Mr. Voigt and after looking at what UCSD has done for you that you should give them the papers, let them go to work on getting them in proper array for a scholar's use, and then turn your young man from Berkely loose on making a volume through selection.

Now all this ^{circumstances} foreshortens a lot of reflection on my part and I know that you resist doing anything impulsively. But I think that (a) it's time you got out of that cellar, (b) it's time you got on with your own work, and (c) it's time you, after having done very ^{good} work in getting the critical pile of materials together, got out of the business and gave it over to those whose business it is to take from this point on.

I had a very good visit with Ruth this past weekend and didn't talk to her about this problem at all.

With best wishes,

Carroll G. Bowen
Carroll G. Bowen
Director

CGB/kr



THE M.I.T. PRESS

MASSACHUSETTS INSTITUTE OF TECHNOLOGY

CAMBRIDGE, MASSACHUSETTS, 02142

864-6900 AREA CODE 617

February 1, 1968

Mrs. Gertrude Szilard
2380 Torrey Pines Road
La Jolla, California 92038

Dear Trude:

I talked with Bernard Bailyn of Harvard one morning last week and strongly urged him (a) to come out, so you could talk to him, (b) to seek photocopies of material covering the period in which he is interested, and (c) to give some thought as to what you should do with the papers as a whole.

I also have talked with one of his sponsors and advisers about the young man at Berkeley whose credentials look very, very good.

I'm moving toward a view that the real necessity now is for you to get the papers into a library where the bibliographic work can be done by professionals and where a scholar can begin to go out and make appropriate review of materials there organized for his work. A scholar should not be doing bibliographic work; a bibliographer should not be making a selection of papers to be published. In short, I think after meeting Mr. Voigt and after looking at what UCSD has done for you that you should give them the papers, let them go to work on getting them in proper array for a scholar's use, and then turn your young man from Berkeley loose on making a volume through selection.

Now all this foreshortens a lot of reflection on my part and I know that you resist doing anything impulsively. But I think that (a) it's time you got out of that cellar, (b) it's time you got on with your own work, and (c) it's time you, after having done very ^{good} work in getting the critical pile of materials together, got out of the business and gave it over to those whose business it is to take from this point on.

I had a very good visit with Ruth this past weekend and didn't talk to her about this problem at all.

With best wishes,

Carroll G. Bowen
Carroll G. Bowen
Director

CGB/kr



THE M.I.T. PRESS

MASSACHUSETTS INSTITUTE OF TECHNOLOGY

CAMBRIDGE, MASSACHUSETTS, 02142

864-6900 AREA CODE 617

February 1, 1968

Mrs. Gertrude Szilard
2380 Torrey Pines Road
La Jolla, California 92038

Dear Trude:

I talked with Bernard Bailyn of Harvard one morning last week and strongly urged him (a) to come out, so you could talk to him, (b) to seek photocopies of material covering the period in which he is interested, and (c) to give some thought as to what you should do with the papers as a whole.

I also have talked with one of his sponsors and advisers about the young man at Berkeley whose credentials look very, very good.

I'm moving toward a view that the real necessity now is for you to get the papers into a library where the bibliographic work can be done by professionals and where a scholar can begin to go out and make appropriate review of materials there organized for his work. A scholar should not be doing bibliographic work; a bibliographer should not be making a selection of papers to be published. In short, I think after meeting Mr. Voigt and after looking at what UCSD has done for you that you should give them the papers, let them go to work on getting them in proper array for a scholar's use, and then turn your young man from Berkely loose on making a volume through selection.

Now all this ^{reshortens} ~~fereshortens~~ a lot of reflection on my part and I know that you resist doing anything impulsively. But I think that (a) it's time you got out of that cellar, (b) it's time you got on with your own work, and (c) it's time you, after having done very ^{good} work in getting the critical pile of materials together, got out of the business and gave it over to those whose business it is to take from this point on.

I had a very good visit with Ruth this past weekend and didn't talk to her about this problem at all.

With best wishes,

Carroll G. Bowen
Carroll G. Bowen
Director

CGB/kr



THE M.I.T. PRESS

MASSACHUSETTS INSTITUTE OF TECHNOLOGY

CAMBRIDGE, MASSACHUSETTS, 02142

864-6900 AREA CODE 617

February 1, 1968

Mrs. Gertrude Szilard
2380 Torrey Pines Road
La Jolla, California 92038

Dear Trude:

I talked with Bernard Bailyn of Harvard one morning last week and strongly urged him (a) to come out so you could talk to him, (b) to seek photocopies of material covering the period in which he is interested, and (c) to give some thought as to what you should do with the papers as a whole.

I also have talked with one of his sponsors and advisers about the young man at Berkeley whose credentials look very, very good.

I'm moving toward a view that the real necessity now is for you to get the papers into a library where the bibliographic work can be done by professionals and where a scholar can begin to go out and make appropriate review of materials there organized for his work. A scholar should not be doing bibliographic work; a bibliographer should not be making a selection of papers to be published. In short, I think after meeting Mr. Voigt and after looking at what UCSD has done for you that you should give them the papers, let them go to work on getting them in proper array for a scholar's use, and then turn your young man from Berkely loose on making a volume through selection.

Now all this ^{summarizes} foreshortens a lot of reflection on my part and I know that you resist doing anything impulsively. But I think that (a) it's time you got out of that cellar, (b) it's time you got on with your own work, and (c) it's time you, after having done very ^{good} work in getting the critical pile of materials together, got out of the business and gave it over to those whose business it is to take from this point on.

I had a very good visit with Ruth this past weekend and didn't talk to her about this problem at all.

With best wishes,

Carroll G. Bowen
Carroll G. Bowen
Director

CGB/kr

1) Write Introduction

Final page Section I
is not Biogr.

Book - 1951 - Felder
outline fragmentary
supplemented
material largely for

History - fragmentary
outline of book

Selected Writing all appear
by M.I.T. - Book 5 to 10

2) Titles

Baron letters - copies of March 29
" 30

April Friday
8

One time use only

Teleph
try

Don't look lovely

↳ send Eckart

Argument

too general to stand
alone

Del Charro
2380 Torrey Pines Road
La Jolla, Calif. 92037

March 14, 1968

Mr. Carroll G. Bowen, Director
The M.I.T. Press
Massachusetts Institute of Technology
Cambridge, Massachusetts 02142

Dear Curlie:

After our phone call yesterday I talked to Herbert Anderson in Chicago who said it would be all right if the material arrived a few days after March 15th. I therefore prefer to send the material through you as originally intended. Please send it on to Herbert Anderson as soon as possible with instructions for the appropriate credit line.

I shall also be interested in having your reaction to it. I think that Ruth Grodzins and Kathy really have done a marvellous job. Kathy especially has worked very hard on this and we must find some funds for her (and for myself). I am now paying for all the xeroxing out of my own pocket and we have no typist - Kathy is doing the typing as well. I don't know whether Anderson would pay for part of the expenses; maybe you might ask, if he decides to use the material. He told me that he has not decided on a publisher so far, probably University of Chicago Press or perhaps Quadrangle.

Best wishes, as always,

Gertrud Weiss Szilard



THE M.I.T. PRESS

MASSACHUSETTS INSTITUTE OF TECHNOLOGY

CAMBRIDGE, MASSACHUSETTS, 02142

864-6900 AREA CODE 617

December 27, 1967

Mrs. Gertrude Szilard
2380 Torrey Pines Road
La Jolla, California 92038

Dear Trude:

That was a most productive visit and I rejoice in how well you look and your good fortune in having Kathy Windsor with you. These plus your indomitable courage will make this project happen still.

I'm dictating this note before I establish contact with Bernie but I am bird-dogging him as my part of the bargain, just as you are going to get after Goldhaber and Munod. Let's concentrate on Volume I while along the way we see what can be done about Volume II.

With warm regards,

Carroll G. Bowen
Carroll G. Bowen
Director

CGB/kr

Talked with Bernie — who had seen Munod and who said he would finish in La Jolla in Feb; Bernie will try and finish by Jan 15. He thinks relatively few patents should be reproduced in full.



THE M.I.T. PRESS
MASSACHUSETTS INSTITUTE OF TECHNOLOGY
CAMBRIDGE, MASSACHUSETTS, 02142
864-6900 AREA CODE 617

December 27, 1967

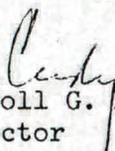
Mrs. Gertrude Szilard
2380 Torrey Pines Road
La Jolla, California 92038

Dear Trude:

That was a most productive visit and I rejoice in how well you look and your good fortune in having Kathy Windsor with you. These plus your indomitable courage will make this project happen still.

I'm dictating this note before I establish contact with Bernie but I am bird-dogging him as my part of the bargain, just as you are going to get after Goldhaber and Munod. Let's concentrate on Volume I while along the way we see what can be done about Volume II.

With warm regards,


Carroll G. Bowen
Director

CGB/kr

Talked with Bernie — who had seen Munod and who said he would finish in La Jolla in Feb; Bernie will try and finish by Jan 15. He thinks relatively few patents should be reproduced in full.

Sept 20, 1965

The Massachusetts Institute of Technology Press

MASSACHUSETTS INSTITUTE OF TECHNOLOGY, CAMBRIDGE 42, MASSACHUSETTS

Letter of Agreement

Mrs. Gertrud Weiss Szilard

La Jolla, California

Dear Mrs. Szilard:

We welcome the addition of your Work tentatively entitled: THE WRITINGS OF LEO SZILARD: Volume I, SCIENCE. Volume II, WELTRETZEN.* (as hereinafter outlined in the Rider to our list on the terms and conditions which follow, and we look forward to its publication. ^{annexed hereto and made a part hereof.})

1 By this letter you grant and assign to us exclusively for our use or disposition throughout the world, in all languages, during the term of copyright in each respective country (and renewal copyright where available), all rights in the Work and every part thereof, and any revisions thereof which you may make, protectible under each such country's respective common law and statutory copyright, for all purposes and adaptations, and by all means and methods of distribution and communication, be these graphic, audio-visual, or otherwise, except as to the contrary provided in the Rider annexed hereto and made a part hereof.

2 Upon its publication we will undertake to procure copyright for your Work, and any revisions thereof which you may make, in the United States and in all member countries of the Universal Copyright Convention in either our or your name; and in order to protect copyright for the renewal term in the United States, you appoint us or our designee as your attorney-in-fact with power of substitution to renew copyright in your name or in the name of your executors; and upon such renewal, the grants made to us are to continue during the renewal copyright term.

3 You warrant: (a) ~~that the Work is original and that you are the sole author and owner of the Work and have full power to make the grants to us;~~ (a) and (b) replaced by typed paragraphs attached hereto! (b) ~~that neither the Work nor any part has been published before, nor is any agreement with respect thereto presently outstanding (except as you may set out in a rider that is attached to this letter and signed by both of us);~~ (c) that the Work contains no unlawful or libelous material and does not invade the right of privacy or infringe upon the common law or statutory rights of anyone. You will hold us, our licensees, and our distributees harmless and indemnify us and them against liabilities, judgments, or decrees against us and them and against expenses and attorneys' fees that may be incurred by us or them resulting from any claim, action, or proceeding alleging facts that constitute a breach of any warranty enumerated in this paragraph.

4 You agree to deliver to us in substance, content, form, and style satisfactory to The M.I.T. Press Board, on or before ~~September 1, 1965~~ Replaced by typed paragraphs attached hereto. , time being of the essence, two clean and legible double-spaced typewritten copies of the complete manuscript of the Work, including illustrations, charts, etc., ready for the printer, without requiring redrawing or relettering, it being understood that the length of the manuscript shall be approximately ~~200,000~~ words and that illustrations and other supplementary material shall be as follows: technical charts, graphs, and tables; personal photographs up to 32 pages.

5 When galley and page proofs of the Work are submitted to you, you are to correct and return them to us promptly; if by any chance you do not return corrected proofs within sixty (60) days after our mailing them to you, we shall be free to proceed with the manufacture and publication of the Work without waiting for the return of the corrected proofs. If we decide to have the proofs read and corrected by another because of your delay, then the expense incurred in that connection is to be charged to your royalty account. If, when correcting the galley or page proofs, alterations are required by you, or by us because of your delay in correcting them, and such alterations cost us more than 10% of the cost of original composition, then you will pay us or we will charge to your royalty account at our option such excess within thirty (30) days after we furnish you with a statement of such excess cost. ~~(If we request an index in connection with your Work, you are to deliver the copy for the index to us within thirty days after final page proofs are mailed to you. If you fail to deliver the index as requested, you authorize us to have the index copy prepared by another, and the cost of such preparation will be charged to your royalty account. If permissions are necessary in order to publish the Work, you will undertake to acquire them for us at your expense.)~~

We agree to prepare an index in connection with your Work and to submit same to you for approval together with final page proofs, the expense to be charged to you & payable only out of your royalty account.

Replaced
by typed
paragraph
annexed.

6 ~~As soon as practical after receipt of the final and complete manuscript, and after formal approval of the Work by the M.I.T. Press Board, we will publish the Work in the English language at our own cost and expense in such manner and style and at such price as appears to us best suited for the sale of the Work, and we will reprint the Work as long as in our judgment demand justifies.~~

7 We will pay to you during the continuance of this agreement on our actual cash receipts the following royalties on our sales (less returns and refunds) of the Work as published by us:

a ~~No royalty shall be paid to you on the sale of the first ----- copies of any hard-bound edition.~~

b 10 % on sales of the first/next 3000 copies of any hard-bound edition;
of each volume;
12 1/2 % on sales of the next 3000 copies of any hard-bound edition;
of each volume;
~~-% on sales of the next ----- copies of any hard-bound edition;~~

15 % on all additional sales of this edition, in each case with respect to sales in the continental United States of America;

and on sales outside the continental United States, two-thirds thereof, respectively.

c One-half the prevailing hard-bound royalty shall be paid on sales of any paperback edition if published by us.

d Five percent (5%) on all sales outside regular bookstore channels, by mail or coupon or other special solicitation advertising, in lieu of any other royalty; it being specifically agreed that sales through mail solicitation or otherwise to universities, colleges and libraries shall be covered by royalty provision in (b) of this paragraph 7 above.

e The prevailing English-language hard-bound or paperback royalties shall be paid on sales of any translation published by us after first recouping the cost of the translation.

f Fifty percent (50%) from licensing by us to others to exercise any right in the Work protectible by copyright, after first recouping any costs incurred by us to effect the license.

g ~~In the event the Work is included in an omnibus edition and no specific sum is fixed for the use of this Work, we will fix a pro rata reasonable sum therefor, fifty percent (50%) of which will be your share.~~

h We expect to distribute free copies of the Work for promotion of sales, review, advertising, samples, or like purposes; in such cases, and on copies furnished (or sold) to you, or damaged copies, no royalties shall be payable.

i If at any time after two years from date of first publication of the Work, we find we are overstocked and sell your Work at reduced prices, either at retail or at wholesale, then the rate of royalty of such sales shall be calculated at five percent (5%) of our actual receipts from the sales, but if on such copies sold our receipts are less than our manufacturing cost, no royalty shall be payable, and no such royalty shall in any event reduce our receipts to less than our manufacturing cost.

j. An advance against all earnings to accrue under this agreement of up to ^{Two} ~~One~~ Thousand (\$1,000.00) dollars shall be payable at times and in amounts to be mutually agreed upon, to cover approved expenses of manuscript preparation.

8 Royalty statements and royalty payments in accordance with such statements will be made for each of our fiscal years ending June thirtieth and will be mailed to you on or before the following thirtieth of September.

9 We will present to you 25 copies of your Work on publication by us. If you require additional copies for your own personal use, and not for resale, we will supply them to you at our wholesale price.

10 You grant permission for the use of ~~your name~~ the name of Dr. Leo Szilard, his picture, and biographical data in connection with the distribution and publicizing of the Work and the exercise of other rights granted in paragraph 1 of this letter.

11 Any notice which either of us may desire to give to the other will be sufficient if addressed by prepaid certified or registered mail to our respective addresses above shown, or as last appearing on our records, or to such other place as either of us may designate by certified or registered mail notice to the other. Galley proofs and page proofs, statements, and remittances may be sent by ordinary mail. We should be addressed as The M.I.T. Press, Massachusetts Institute of Technology, Cambridge 42, Massachusetts.

12 ~~When requested by us, you are to revise the latest edition of the Work and provide us with any new matter necessary from time to time to keep the Work current and up to date. If for any reason you fail to do so, we may engage some other person or persons for that purpose and may deduct the cost of such revisions from royalties accruing to you on subsequent editions. If the revisions are made by others, such fact will be set forth in the revised edition. For all purposes the revised material will be deemed part of the original Work, except that the royalty provision on sales shall be calculated as if the revised Work were a new Work.~~

13 As long as this contract is in force between us, it is understood that you may not contract for publication of a work that is competitive with the Work which is the subject of this agreement, unless our written consent is first obtained. It is expressly agreed that a biography of Leo Szilard and any presently published or un-published writings or other original material of Leo Szilard not selected by Gertrud Weiss Szilard for inclusion in the Work, shall not be deemed competitive with the Work which is the subject of this agreement.

3. You warrant: (a) That you will take all steps necessary to obtain full power to make the grants to us and, in connection therewith, we agree to aid and assist you as hereinafter set forth in the Rider attached hereto and made a part hereof; (b) that the Work has not been published before, although portions thereof have been previously published or publicly disseminated, as to which portions it is agreed that diligent effort shall be made forthwith to obtain either an assignment of any existing copyright or a consent to the inclusion of such previously published material in the Work and it is further understood and agreed that such previously published material shall be included in the Work only when, as and if such copyright assignment or consent is received. Attached hereto and made a part hereof is Schedule "A" which sets forth title, publisher and copyright owner of all writings of Leo Szilard contemplated to be included in the Work which have been previously published; . . .
4. You agree to deliver to us in substance, content, form and style satisfactory to The M.I.T. Press Board, on or before ^{SEP 1} May 1, 1966, one legible reproduction of Volume I of the Work and on or before December 31, 1966, one legible reproduction of Volume II of the Work, including illustrations, charts, etc., ready for the printer, without requiring redrawing or relettering, it being understood that the length of the manuscript shall not exceed app. 500,000 words and that illustrations and other supplementary material shall be as follows: technical charts, graphs, and tables; personal photographs up to 32 pages.
6. As soon as practicable after receipt of the final and complete manuscript, and after formal approval of the Work by the M.I.T. Press Board, we will publish the Work in the English language. It being agreed, however, that a portion thereof may be published in the original German language, such portion to be selected by you, or if translated into the English language for such publication, then such translation shall be at our own cost and expense and shall first be submitted to you for approval, all such publication to be at our own cost and expense,

in such manner and style and at such price as appears to us best suited for the sale of the Work, and we will reprint the Work as long as in our judgment demand justifies.

12. Notwithstanding anything to the contrary contained herein, it is understood and agreed that should you decide not to proceed with publication of Volume II for any reason whatsoever, then all terms and provisions of this agreement as refers to Volume II shall become null and void. However, should you at any time thereafter decide to proceed with the printing and publication of Volume II, it is agreed that you will print and publish the same through our auspices under the terms and provisions of this agreement, unless we shall then decide not to proceed with such printing and publication, in which event you shall be free to print and publish the same wherever and with whomever you choose.

RIDER

Notwithstanding anything to the contrary heretofore provided in this Letter of Agreement, it is expressly understood and agreed between us as follows:

(a) The Work shall include selected writings, *consisting of* ~~the some~~ published and some unpublished ~~writings~~ of the late Dr. Leo Szilard, transcriptions in whole or in part of tape recordings made by the said Leo Szilard, patent applications filed by or on behalf of the said Leo Szilard and Letters Patent issued on inventions of the said Leo Szilard, either alone or with others, and other technical material written and/or originated or invented by Leo Szilard, alone or with others, all as selected by his widow, Gertrud Weiss Szilard, in her absolute and unrestricted discretion.

(b) You are to supply us with a form of letter of request for assignment of existing copyrights on scientific and other writings of Dr. Leo Szilard already printed and published and we agree to promptly solicit such assignment on your behalf. Where assignment is unobtainable, we agree to solicit permission to reprint such previously printed and published scientific and other writings in the Work on your behalf. The expenses incurred by us in connection therewith shall be charged to your royalty account.

(c) We agree to consult with you concerning editorial procedure and expenses chargeable to you before making any editorial decisions or incurring such expenses and we further agree that the final decisions with respect to these matters shall be made by you.

(d) We agree to render no charge for editing the Work nor for manuscript editing and we further agree to compile a bibliography of the material to be included in the Work, prior to printing and to supply you with copies of same, the cost of which will be charged to your royalty account.

(e) You are to have the absolute right to select the material to be included in the Work and shall be solely responsible for the preparation and submission to us of all introductory material to be included therein.

(f) It is agreed that with respect to foreign publication (i.e. non-American publication) in the English or any foreign language, we will consult with you and insofar as possible follow your recommendations as to the selection of a foreign publisher.

(g) We agree to limit the rights and privileges heretofore granted to us in connection with publication of the Work and/or any part thereof to the permission granted by the copyright owner of any previously published writings of Dr. Leo Szilard.

(h) Whenever there is a provision made herein for items to be charged to your account, we agree that no such expense will be incurred without your prior approval thereof.

14

In order that there may be no misunderstanding between us, there are to be no amendments to this agreement unless in writing signed by both of us. All the rights granted to us under this agreement shall inure to us and our respective successors, assignees, licensees, and permittees. (Your interest in royalties hereunder may be assigned, but only as a whole, and no such assignment shall be binding upon us until you have first given us in writing due notice and evidence thereof.)

cc: Mr. Tolson, Boston, MA
Mr. Warren, Wash. D.C.

If the foregoing correctly reflects the agreement between us, will you please sign two copies in the place indicated below and return them to us within 21 days of the date hereof; upon your so doing, we will both be bound by the foregoing terms as an agreement.

Sincerely yours,

MASSACHUSETTS INSTITUTE OF TECHNOLOGY

by _____
Director, The M.I.T. Press

Accepted this 20th day of September, 1965.

G. E. Justus Weiss Gylard

M.I.T.
 GRAPHIC
 ARTS
 SERVICE
 EXT. 4765



GRAPHIC ARTS BUILDING,
 BRANCHES - BUILDING 3-003, EXT. 2806

211 MASSACHUSETTS AVENUE
 BUILDING E19-220, EXT. 6058

BUILDING 52-442 EXT. 5203

XEROX QUICK COPIES - EXT. 2806 ILLUSTRATION SERVICE - 2375 BULK MAILING - 2804 LETTER SHOP - 4378 OZALID - 4765
 OFFSET PRINTING & BINDING - 2811 PHOTOGRAPHIC - 4765 PORTRAIT STUDIO - 4765 PHOTOSTAT - 4765 AUDIO-VISUAL - 2808

GRAPHIC ARTS SERVICE

ILLUSTRATION DEPARTMENT EXT. 2375 Staffed and equipped to prepare creative designs and artwork for covers, brochures, posters. Prepares schematic diagrams, exploded views, and graphs for thesis, reports, and publications.

LETTER SHOP DEPARTMENT EXT. 4379 Includes mimeographing, typing of reports, thesis, term papers, and stencils. Maintains mailing list and will address and mail any enclosures or announcements for authorized personnel.

PHOTOGRAPHIC DEPARTMENT EXT. 5201 or 3687 Offers a complete Illustrative and Portrait Studio where various types of pictures may be taken. Professional photographers available to take pictures anywhere on campus.

PHOTOGRAPHIC COPY AND SLIDE DEPARTMENT Originals of various sizes may be copied for Projection Slides or Photographic Prints.

CONTACT PRINTING, ENLARGING, AND PHOTO MURALS

PHOTOSTAT DEPARTMENT Original copies may be reproduced same size, enlarged, or reduced.

OZALID DEPARTMENT EXT. 6058 Reproductions made same size from originals on translucent material.

XEROX COPYING DEPARTMENT A method of making good quality low cost copies while you wait at the location nearest to you. **BLDG. 3-003 EXT. 2806, BLDG. 52-442 EXT. 5203, BLDG. E19-220 EXT. 6058**

OFFSET PRINTING DEPARTMENT EXT. 2811 Provides offset printing of all types—reports, class notes, posters, pamphlets, brochures, and thesis reproduction.

A complete bindery service is maintained as part of the offset printing department.

BULK MAIL DEPARTMENT EXT. 2804 Provides the facilities for labelling, addressing, sorting, machine insertion, sealing, typing, and trucking to the Post Office.

THE COMBINED SERVICES OF SPECIALISTS

MASSACHUSETTS INSTITUTE OF TECHNOLOGY

GRAPHIC ARTS SERVICE

GRAPHIC ARTS BUILDING, 211 MASSACHUSETTS AVENUE

CAMBRIDGE, MASSACHUSETTS 02139

FRANK H. CONANT, *Director*

TELEPHONE UN 4-6900
EXTENSION 4765

To the Faculty and Staff of 1967-68,

Once again the M.I.T. Graphic Arts Service is able to provide you with the most recent map of M.I.T. for your use and reference. We hope it will serve you well throughout the coming year - just as we are here to serve you well with the combined services of specialists.

Conveniently located within the Institute, the M.I.T. Graphic Arts Service provides complete facilities in photography, illustration, printing, and mailing. For your classroom we will provide a complete line of Visual Aids, and we have many quick reproduction services available for your class notes - Xerox, multilith, and mimeo. Our photographic and illustration departments will prepare drawings and graphs for slides or glossy prints, and our offset department will reproduce all or part of previously printed works for additional reference material.

For your department our complete reproduction services combine for the printing of departmental and classified project reports from typing to mailing. Our photographic service maintains the negatives of faculty pictures for your use, and professional photographers are available to take pictures for passports, portraits, or illustrative photos of any type.

For your organizations we maintain the mailing list of the complete staff and other groups and will set up a mailing list for you. Our combined illustration and printing services will reproduce posters, flyers, and programs for your next meeting.

For further information on any of these services and the many more, just give a call, or better still, use the enclosed map to help find your way to the centrally located offices of the M.I.T. Graphic Arts Service.

Sincerely,

Frank H. Conant

Mr S Sillard

Op

50

607
Hyanis
Mass

432-0051

Mr Bower

WORLD OF SCIENCE

43 Pauli Lectures on Physics
 by Wolfgang Pauli
 edited by C. P. Enz
 foreword by Victor F. Weisskopf
 "Victor Weisskopf concludes his foreword to this six-volume set of notes from Wolfgang Pauli's lectures given at the Swiss Federal Institute of Technology in the late 1940's and early 1950's with this wish: 'May this volume serve as an example of how the concepts of theoretical physics were conceived and taught by one of the great men who created them.' On the whole the wish is fulfilled."
 —*Physics Today*
 Volume 1: Electrodynamics
 PPL1—160pp.—\$9.95—\$7.95
 Volume 2: Optics and the Theory of Electrons
 PPL2—159pp.—\$9.95—\$7.95
 Volume 3: Thermodynamics and the Kinetic Theory of Gases
 PPL3—138pp.—\$9.95—\$7.95
 Volume 4: Statistical Mechanics
 PPL4—121pp.—\$9.95—\$7.95
 Volume 5: Wave Mechanics
 PPL5—205pp.—\$9.95—\$7.95
 Volume 6: Selected Topics in Field Quantization
 PPL6—189pp.—\$9.95—\$7.95
 6 volumes, \$40.00

The Collected Works of Leo Szilard: Scientific Papers
 edited by Bernard T. Feld, Gertrud Weiss Szilard, and Kathleen R. Winsor
 foreword by Jacques Monod
 "I will be known as a man who wrote three important papers in the last year of his life, all of them wrong," Szilard thus remarked in an attempt to cheer up his friends while he was seriously ill.
 "I had occasion to become familiar with one of the 'wrong' papers he referred to in 1960, 'On the Nature of the Aging Process' (p.447. . . .) It gave me a certain insight into what Monod refers to in his foreword as Szilard's 'mode of being.' Without denigrating Szilard's scientific accomplishments as such, I think it is the revelation of his style, or mode of being, which chiefly justifies this volume.
 "This paper and the companion work on memory (p. 497) are examples of good theory (right or wrong), as at an earlier time (1934) had been Szilard's secret patent on the neutron chain reaction (p. 639).
 "In chronological order follow a series of papers in nuclear physics (1934-39) and then the famous Einstein letter to President Roosevelt, followed in turn by a series of Manhattan Project documents. . . ."
 —David Hawkins, *Science*
 FLS—738pp.—illus.—\$25.00—\$12.50

The Character of Physical Law
 by Richard Feynman
 "Richard P. Feynman, Caltech's Richard Chace Tolman Professor of Theoretical Physics, presented seven lectures, in extempore style, at Cornell University in November 1964, on 'The Character of Physical Law.' The lectures were recorded for television by the BBC, and a transcription was prepared and printed 'to serve as a guide or memory aid for television viewers who may see the lectures and wish to have a permanent reminder to refer to.' The transcription was an extremely lucid, self-contained account of Feynman's lectures, and since you can't keep so good a manuscript hidden in the obscurity of BBC publications, The MIT Press has reprinted it in paperback form."
 —*Engineering and Science*
 FL—paper—173pp.—\$2.95—\$2.45

Currents, Fields, and Particles
 by Francis Bitter
 "This excellent book represents the second-year work of a two-year course developed by Professor Bitter at the Massachusetts Institute of Technology. . . . The arrangement and presentation are strikingly original, for the author has woven modern ideas into the whole of the book, so that the reader assimilates them as he goes through it instead of colliding with them towards the end."
 —*Nature*
 BC—600pp.—\$15.00—\$4.95

History & Philosophy of Physics
 The Natural Philosophy of Galileo: Essay on the Origins and Formation of Classical Mechanics
 by Maurice Clavelin
 translated from the French by A. J. Pomerans
 Galileo's work represents something of a historical singularity: he was able to create the new science of motion—classical mechanics, with its solid mathematical foundation—almost single-handedly, breaking with his forebears and little influenced by his contemporaries.
 Stillman Drake, who is among the foremost authorities on Galileo, has stated that "I have seldom read a book of this kind with as much pleasure and interest as I read this one. There is no question in my mind that it is the most significant contribution in its specific area since 1939, when Alexandre Koyré published his *Etudes Galiléennes*."
 CG—528pp.—\$25.00—\$18.50

Homage to Galileo
 edited by Morton F. Kaplan
 "There were many celebrations in 1964, commemorating the 400th anniversary of Galileo's birth. Some appeared in print, like the one reviewed here, others not. Many opinions were voiced about Galileo's achievement, some of them contradictory. Galileo remains a controversial figure, which is by no means a derogatory remark. In fact, I believe that the controversies add to his stature and that we learn to appreciate more the versatility of his genius.
 "[The book] starts with de Santillana's contribution entitled, 'Galileo in the Present.' Generally speaking, I liked it even better than his earlier book [*The Crime of Galileo*]."
 —L. Martin, *Physics Today*
 KHO—139pp.—\$10.00—\$5.00

The Genesis of Quantum Theory, 1899-1913
 by Armin Hermann
 translated from the German by Claude W. Nash
 "In 1900 Max Planck, as 'an act of desperation,' applied statistical mechanics to the radiation problem; scarcely thirteen years later Niels Bohr buried classical physics forever without a qualm. Bohr's work was no sudden leap in the dark, for the way had been prepared in the intervening years. In this book Hermann adds to our knowledge of the complex development of ideas during this period."
 —*American Scientist*
 HQT—165pp.—\$12.00—\$4.95

Physical Science, Its Structure and Development:
 From Geometric Astronomy to the Mechanical Theory of Heat
 by Edwin C. Kemble
 "An introductory textbook with emphasis on physics, giving full account of its debt to astronomy and chemistry, and of the interaction between science and technology."
 —*Science News*
 KPS—400pp.—\$15.00—\$4.95
 KPSP—paper—\$7.95—\$2.95

Mechanics, Molecular Physics, Heat, and Sound
 by Robert A. Millikan, Duane Roller, and Ernest C. Watson
 "A reissue of one of the best and most widely used physics textbooks, its particularly lucid exposition made doubly attractive by abundant historical information."
 —*Scientific American*
 MILH—498pp.—\$15.00—\$5.50
 MILM—paper—\$3.45—\$2.25

Thermodynamics
 by Joseph H. Keenan
 KTHP—512pp.—\$15.00—\$5.95
 KTHP—paper—\$4.95—\$1.65

The Annus Mirabilis of Sir Isaac Newton, 1666-1666
 edited by Robert Palter
 In Newton's own words, the year 1666 was the "wonderful year" during which (at the age of 24) he developed the fundamental principles of the integral calculus, verified the composite nature of sunlight, and satisfied himself by calculation that the earth's gravitation holds the moon in its orbit.
 "Speaking generally, most of the contributors are determined to follow Wordsworth in seeing Newton 'voyaging through strange seas of thought alone,' but in this excellent volume they have provided one of the best general studies of the single-handed voyage yet available."
 —*Isis*
 PNS—359pp.—\$18.00—\$10.00

Quantum Physics and the Philosophical Tradition
 by Aage Petersen
 "Petersen has produced a tantalizing and infuriating work. Each reader will have to decide for himself whether to throw the book away in despair, or to conduct a dialogue with it."
 —*Philosophy of Science*
 PPH—212pp.—\$8.95—\$3.25

The Extension of Man: A History of Physics before the Quantum
 by J. D. Bernal
 "On the whole, Professor Bernal's history of physics is a witty, informative, and urbane introduction to the history of physical thought. It can be read with enjoyment and profit by both the layman and the physicist seeking to learn about the antecedents of his discipline. The book is well illustrated and has an index."
 —*American Scientist*
 "Serious students of the history of science and admirers of J. D. Bernal would be well advised to ignore this work and order the newest edition of *Science in History or The Social Function of Science*, which are also published by the MIT Press."
 —*American Historical Review*
 BEM—317pp.—illus.—\$15.00—\$4.50

Theoretical Physics
44 Lectures on Elementary Particles and Quantum Field Theory
 1970 Brandeis University Summer Institute in Theoretical Physics
 edited by Stanley Deser, Marc Grisaru, and Hugh Pendleton
 Volume 1: Perturbation Theory
 Anomalies, Stephen L. Adler; Dynamical Applications of the Veneziano Formula, Stanley Mandelstam; Dynamic and Algebraic Symmetries, Steven Weinberg; Local Operator Products and Renormalization in Quantum Field Theory, Wolfram Zimmermann.
 GB1—paper—592pp.—\$7.95—\$4.95
 Volume 2: Observables and Fields, Rudolf Haag; Regge Models and Duality, Maurice Jacob; Weak Interactions, Henry Primakoff; The GNS Construction, Michael C. Reed; Effective Lagrangians and Broken Symmetries, Bruno Zumino.
 GB2—502pp.—\$17.50—\$4.50
 GB2—paper—\$6.95—\$1.95
 2 volumes, p. \$3.00

Perspectives in Quantum Theory: Essays in Honor of Alfred Landé
 edited by Wolfgang Yourgrau and Alwyn van der Merwe
 "A *Festschrift* makes a very satisfying way for authors and editors to pay tribute to an honored colleague. What function it serves for the *Schrift* or the general public is less clear, since the authors usually write for their specialized colleagues and thus address themselves to as many disjoint audiences as there are contributors.
 "These essays for Alfred Landé are, for the most part, happy exceptions to the rule; they are generally written so that a person interested in one of the articles can profitably read most of the others.
 "Finally, every teacher of Quantum Mechanics should read H. J. Treder's excellent discussion of Einstein's $\Delta E \Delta t$ Gedanken-experiment for a clarification of an important point and Bondi's call for logic and clarity for inspiration."
 —Thomas von Foerster, *American Scientist*
 YDL—283pp.—\$17.50—\$14.95

Symmetries and Reflections: Scientific Essays
 by Eugene P. Wigner
 "A volume containing some of the more popular papers of Professor Wigner. The papers are divided into four main topics: symmetry and other physical problems, nuclear energy, epistemology and quantum mechanics, and reflections."
 WSR—280pp.—\$4.45—\$2.95

Differential Space, Quantum Systems, and Prediction
 by Norbert Wiener, Armand Siegel, Bayard Rankin, and William Ted Martin
 edited by Bayard Rankin
 "This book presupposes some knowledge of measure, probability and Hilbert space. It is centered upon Wiener's approach and contributions concerning Brownian motion, statistical prediction and quantum theory.
 ". . . has a very convenient and detailed index and constitutes an excellent integrated introduction to this whole cycle of ideas."
 —*Mathematical Reviews*
 RSE—176pp.—\$12.50—\$4.95

Electrodynamics of Moving Media
 by Paul Panfield, Jr., and Hermann A. Haus
 "If such books as this served no other purpose than to bring up to date work in a field of speciality, particularly one so fundamental as this one, they would be worthwhile contributions. Of course this book does more."
 —*Physics Today*
 PMM—276pp.—\$12.50—\$3.85

In Honor of Philip M. Morse
 edited by Herman Feshbach and K. Uno Ingard
 ". . . it is a striking tribute to Professor Morse that his honorary volume could command such contributions.
 "A book like this does not have the immediate usefulness that a collection of papers on one topic might have, but rather is more of a recreational book."
 —*Tech Engineering News*
 FPM—284pp.—\$20.00—\$9.95

The Conceptual Foundations of Contemporary Relativity Theory
 by John Cowperthwaite Graves
 ". . . many typical conceptual questions and difficulties that arise when one is first confronted with the ideas of general relativity are discussed in more detail than in many texts. This book gives a fair idea of the complexity of the subject, and does not use analogies or pictures for simplification.
 "Graves is at his best where discussing the striking new ideas in general relativity and the objections and misconceptions they have generated."
 —*Science*
 GRT—362pp.—\$18.00—\$11.50

The Theory of Spinors
 by Elie Cartan
 ". . . a translation of Cartan's lectures on spinors in 1937—a classic of the mathematical literature."
 —*Physics Today*
 CTSP—150pp.—\$12.50—\$5.50

Applications of Group Theory in Quantum Mechanics
 by M. I. Petrashen and E. D. Trifanov
 PGT—318pp.—\$14.95—\$2.95

Mathematical Theory of Elementary Particles
 edited by Roe W. Goodman and Irving E. Segal
 "The title is a misnomer, for there are neither 'theories' nor 'elementary particles' in this book. It is perhaps justified by the fact that if everyone at the conference solved all the problems they wanted to solve, then maybe one can catch a glimpse of some 'mathematical theory of elementary particles.' This is not meant to be disparaging, but to set the proper perspective, for when mathematicians try to understand what physicists are doing (and probably vice versa) the hardest thing to come by is the proper perspective. The content of this book actually shows that this conference was both worthwhile and interesting."
 —*Nuclear Science and Engineering*
 SMT—188pp.—\$12.50—\$1.50

Functional Methods and Models in Quantum Field Theory
 by H. M. Fried
 "Functional techniques for solving problems in quantum mechanics and quantum field theories have been around for more than twenty years. As yet very few books on the subject exist. H. M. Fried has done much research on these techniques, and should be congratulated for producing such a fine volume to fill the gap."
 —*Physics Today*
 FFM—214pp.—\$12.50—\$6.25

Quantum Radio Frequency Physics
 by L.D. Stepin
 "The book covers the areas of electron and nuclear magnetic resonances, two- and three-level masers based on electron paramagnetic resonances, radio-frequency spectroscopy of gases, and ammonia masers. It is purely descriptive in nature, and the use of mathematics is held to an absolute minimum.
 ". . . it is well written and provides a good overall idea of quantum radio-frequency physics to a reader who is not yet familiar with this field."
 —*IEEE Spectrum*
 SRH—221pp.—\$13.95—\$4.50

High Magnetic Fields
 edited by Henry Kolm, Benjamin Lax, Francis Bitter, and Robert Mills
 "The editors of these proceedings are well known experts in the production and the use of high magnetic fields: Henry H. Kolm did outstanding work in the development of pulsed-field and powerful continuous-field magnets. Benjamin Lax is well known for his important research work in solid-state. . . . Francis Bitter. . . is an authority in magnetics and did pioneer work in designing high field water cooled magnets ('Bitter Magnets'). Robert G. Mills. . . contributed greatly to the development of research machines for thermonuclear studies."
 —*Nuclear Science and Engineering*
 KF—751pp.—419 figs.—\$25.00—\$1.75

Francis Bitter: Selected Papers and Commentaries
 edited by Thomas Erber and Clarence M. Fowler
 "A commemorative volume in honor of Francis Bitter, which contains his principal papers on ferromagnetism; construction of powerful electromagnets; optical pumping and double resonance; with additional articles recording his achievements in other areas of physics. . . . They form a mosaic of the work and life of one of the most eminent physicists and teachers of his generation."
 —*Mechanical Engineering*
 EFB—551pp.—\$20.00—\$3.95

Elements of Neutron Interaction Theory
 by Anthony Federaro
 ". . . can be read and understood by anyone who has obtained the equivalent of a bachelor's degree in physics, chemistry, or one of the engineering disciplines. It assumes no mathematical background beyond differential equations and elementary vector analysis, and no physics background beyond the elementary level. Text material is pertinent to understanding of neutron interactions in the energy range below 20 Mev."
 —*Nuclear News*
 FEN—585pp.—\$23.95—\$8.25

Problems of Atomic Dynamics
 by Max Born
 Two sets of lectures (1925-1926) by the late Max Born—one on the structure of the atom, the other on the lattice theory of rigid bodies.
 "The book gives an excellent transition from the 'old' quantum to the 'new.'"
 —*American Mathematical*
 BADP—paper—\$4.95—\$1.95

Nuclear Forces: Introduction to Theoretical Nuclear Physics
 by Gernot Eder
 "This is one of the best books on nuclear theory I have ever seen. The style is refreshingly clear yet economical; the author drives through this big subject at an even, rapid pace. . . . The definitions are clear and concise, the notation consistent, stripping false mystery from many topics usually accessible only to 'insiders.' The emphasis is on theory (and it is remarkable to see how far consistent theories can go, in this subject where the basic dynamics is still unknown), with little attention to examples or specific nuclei."
 —R. L. Ingraham, *Quarterly of Applied Mathematics*
 EN—349pp.—\$20.00—\$8.75
 ENP—paper—\$5.95—\$4.95

Proceedings of the Conference on Photon Interactions in the BeV Energy Range
 edited by Bernard T. Feld
 "For research workers in the fields of high-energy and elementary particle physics, especially those associated with the multi-BeV electron accelerators.
 FP—176pp.—\$15.00—\$3.95

Atomic Collisions: The Theory of Electron-Atom Collisions
 edited by V. Ya Veldre
 "The present book is the translation of a compilation of papers by theorists mainly, but not exclusively, from the Latvian Academy of Sciences, on the collisions of electrons, particularly slow electrons, with atoms. In this field, some outstanding contributions have come from the Soviet Union."
 —*Journal of the Franklin Institute*
 VAC—150pp.—\$10.00—\$3.45

Atomic Order: An Introduction to the Philosophy of Microphysics
 by Enrico Cantore
 "In this book Enrico Cantore has made a welcome return to the philosophy of science in the tradition of Poincaré. . . .
 "[He] has brought together a wealth of material here. In handling it he repeatedly exhibits a philosophical genius for producing extremely precise formulations which at a stroke clarify many traditional areas of confusion."
 —*American Scientist*
 CAO—334pp.—\$16.50—\$9.95

Sixth International Conference on the Physics of Electronic and Atomic Collisions: Abstracts of Papers
 "It's as thick as the Manhattan Telephone Directory."
 —Randall Goff
 MPOE—paper—1079pp.—\$35.00—\$3.50

45 Quantum Electronics
 Volume 1: Basic Theory
 FEL—314pp.—\$15.00—\$3.50
 Volume 2: Maser Amplifiers and Oscillators
 FEL2—312pp.—\$15.00—\$3.50
 by V. M. Fain and Ya. I. Khanin
 translated from the Russian by H. S. H. Massey
 edited by J. H. Sanders
 "On balance, I would recommend [this] as a useful addition to the few good texts available in this field. That the usefulness is mostly restricted to the theoretical sections is not the fault of the authors. I only wish I could have a copy of the new Soviet edition in English now."
 —Andrew Dienes, *Applied Optics*
 2 volumes, \$5.00

46 Reactor Physics in the Resonance and Thermal Regions
 Volume 1: Neutron Thermalization
 GRP—421pp.—\$20.00—\$5.50
 Volume 2: Resonance Absorption
 GRPP—452pp.—\$20.00—\$5.50
 edited by Albert J. Goodjohn and Gerald C. Pomraning
 ". . . the two volumes provide a fairly complete and current source of information on neutron thermalization and resonance capture. The papers, in general, are of high caliber and contain sizeable bibliographies which make the set a required addition to library shelves and also to the personal collections of reactor physicists interested in these areas."
 —*Nuclear Science and Engineering*
 2 volumes, \$10.00

Quantum Radio Frequency Physics
 by L.D. Stepin
 "The book covers the areas of electron and nuclear magnetic resonances, two- and three-level masers based on electron paramagnetic resonances, radio-frequency spectroscopy of gases, and ammonia masers. It is purely descriptive in nature, and the use of mathematics is held to an absolute minimum.
 ". . . it is well written and provides a good overall idea of quantum radio-frequency physics to a reader who is not yet familiar with this field."
 —*IEEE Spectrum*
 SRH—221pp.—\$13.95—\$4.50

High Magnetic Fields
 edited by Henry Kolm, Benjamin Lax, Francis Bitter, and Robert Mills
 "The editors of these proceedings are well known experts in the production and the use of high magnetic fields: Henry H. Kolm did outstanding work in the development of pulsed-field and powerful continuous-field magnets. Benjamin Lax is well known for his important research work in solid-state. . . . Francis Bitter. . . is an authority in magnetics and did pioneer work in designing high field water cooled magnets ('Bitter Magnets'). Robert G. Mills. . . contributed greatly to the development of research machines for thermonuclear studies."
 —*Nuclear Science and Engineering*
 KF—751pp.—419 figs.—\$25.00—\$1.75

Francis Bitter: Selected Papers and Commentaries
 edited by Thomas Erber and Clarence M. Fowler
 "A commemorative volume in honor of Francis Bitter, which contains his principal papers on ferromagnetism; construction of powerful electromagnets; optical pumping and double resonance; with additional articles recording his achievements in other areas of physics. . . . They form a mosaic of the work and life of one of the most eminent physicists and teachers of his generation."
 —*Mechanical Engineering*
 EFB—551pp.—\$20.00—\$3.95

Elements of Neutron Interaction Theory
 by Anthony Federaro
 ". . . can be read and understood by anyone who has obtained the equivalent of a bachelor's degree in physics, chemistry, or one of the engineering disciplines. It assumes no mathematical background beyond differential equations and elementary vector analysis, and no physics background beyond the elementary level. Text material is pertinent to understanding of neutron interactions in the energy range below 20 Mev."
 —*Nuclear News*
 FEN—585pp.—\$23.95—\$8.25

Problems of Atomic Dynamics
 by Max Born
 Two sets of lectures (1925-1926) by the late Max Born—one on the structure of the atom, the other on the lattice theory of rigid bodies.
 "The book gives an excellent transition from the 'old' quantum to the 'new.'"
 —*American Mathematical*
 BADP—paper—\$4.95—\$1.95

Nuclear Forces: Introduction to Theoretical Nuclear Physics
 by Gernot Eder
 "This is one of the best books on nuclear theory I have ever seen. The style is refreshingly clear yet economical; the author drives through this big subject at an even, rapid pace. . . . The definitions are clear and concise, the notation consistent, stripping false mystery from many topics usually accessible only to 'insiders.' The emphasis is on theory (and it is remarkable to see how far consistent theories can go, in this subject where the basic dynamics is still unknown), with little attention to examples or specific nuclei."
 —R. L. Ingraham, *Quarterly of Applied Mathematics*
 EN—349pp.—\$20.00—\$8.75
 ENP—paper—\$5.95—\$4.95

Proceedings of the Conference on Photon Interactions in the BeV Energy Range
 edited by Bernard T. Feld
 "For research workers in the fields of high-energy and elementary particle physics, especially those associated with the multi-BeV electron accelerators.
 FP—176pp.—\$15.00—\$3.95

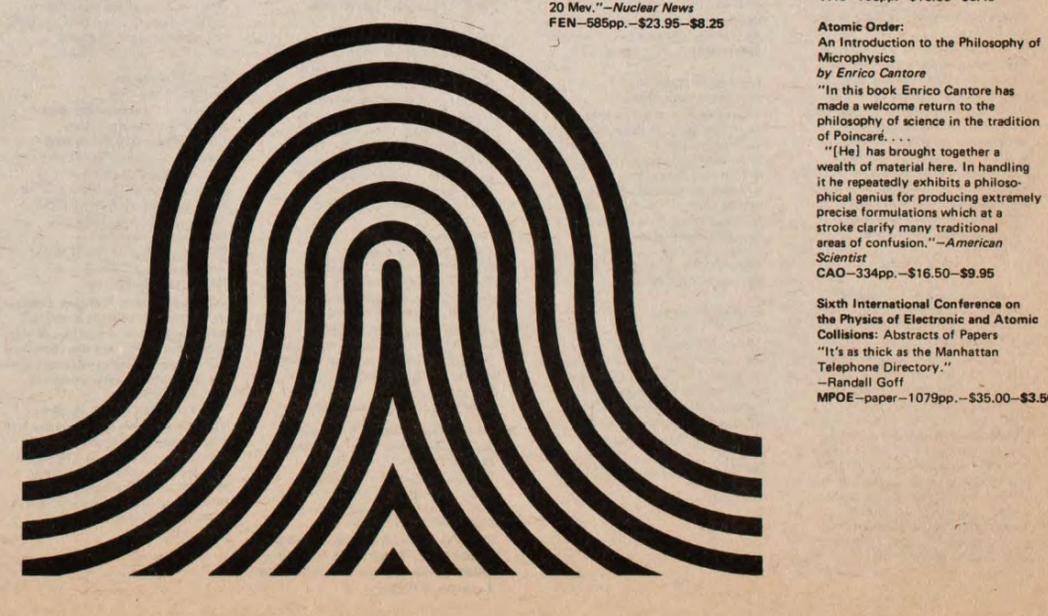
Atomic Collisions: The Theory of Electron-Atom Collisions
 edited by V. Ya Veldre
 "The present book is the translation of a compilation of papers by theorists mainly, but not exclusively, from the Latvian Academy of Sciences, on the collisions of electrons, particularly slow electrons, with atoms. In this field, some outstanding contributions have come from the Soviet Union."
 —*Journal of the Franklin Institute*
 VAC—150pp.—\$10.00—\$3.45

General Physics
Physics in the Twentieth Century
 Selected Essays
 by Victor F. Weisskopf
 "Human existence depends on compassion and curiosity. Curiosity without compassion is inhuman; compassion without curiosity is ineffectual." These are the closing lines of the final essay in this volume; they are also the opening lines of Hans Bethe's perceptive foreword. And these words, which thus enclose this remarkable collection of essays, also indicate their range and tenor."
 —*Physics Today*
 WTCP—paper—\$3.45—Special

Mechanics, Molecular Physics, Heat, and Sound
 by Robert A. Millikan, Duane Roller, and Ernest C. Watson
 "A reissue of one of the best and most widely used physics textbooks, its particularly lucid exposition made doubly attractive by abundant historical information."
 —*Scientific American*
 MILH—498pp.—\$15.00—\$5.50
 MILM—paper—\$3.45—\$2.25

Thermodynamics
 by Joseph H. Keenan
 KTHP—512pp.—\$15.00—\$5.95
 KTHP—paper—\$4.95—\$1.65

Physical Science, Its Structure and Development:
 From Geometric Astronomy to the Mechanical Theory of Heat
 by Edwin C. Kemble
 "An introductory textbook with emphasis on physics, giving full account of its debt to astronomy and chemistry, and of the interaction between science and technology."
 —*Science News*
 KPS—400pp.—\$15.00—\$4.95
 KPSP—paper—\$7.95—\$2.95



The Search for Understanding
 edited by Caryl P. Haskins
 "The Search for Understanding grows out of and reflects some of the major discoveries of more than 1,000 scientists who have been associated with the Carnegie Institution for over a half a century. It covers a vast range of knowledge and experience. Broad in scope, yet concise, clear, vivid, the book is rich with accounts by inspired and highly gifted men."
 —*Scientific Research*
 HUNH—\$35pp.—\$12.95—\$2.25
 HUN—paper—\$3.95—\$1.85

Scientists as Writers
 edited by James Harrison
 Ranging from Aristotle to C. P. Snow, this delightful sampler of scientific writing introduces the reader to the state of science yesterday and today.
 HSI—206pp.—\$15.00—\$1.95
 HSP—paper—\$3.95—\$1.85

The State of Soviet Science
 Walter Laqueur, general editor
 In July 1964, *Survey*, a British journal of Soviet and East European Studies, devoted an entire issue to a report on Soviet science—lucid non-technical accounts of the major developments in astronomy, biology, cybernetics, chemistry as well as in mathematics, medicine, psychology, and space research.
 LSS1—209pp.—\$11.50—\$1.00

Woman in Science
 by H. J. Mozans
 with an introduction by Mildred S. Dresselhaus
 First published in 1913 and long out of print, Mozans's book is an engaging and well-documented account of women's achievements in the various branches of science, beginning with ancient Greece and continuing into Roman times, the medieval convents, Renaissance society, and the university laboratories of the Victorian era.
 MWSH—452pp.—\$15.00—\$13.50
 MWSP—paper—\$4.95—\$4.25

Bicycling Science:
 Ergonomics and Mechanics
 by Frank Rowland Whitl and David Gordon Wilson
 Two engineers examine the mechanical and physiological aspects of bicycle transportation in a detailed way. Bikes from the past, the present, and—very likely—the future are described and illustrated.
 WBS—192pp.—illus.—\$12.95—\$11.65

Life Science

Order and Life
 by Joseph Needham
 First published in 1936, this book presents a fundamental view of biological order as it appeared before the introduction of electron microscopy. Its central assumption, that large-scale biological form is directly and specifically traceable to molecular form, has been triumphantly vindicated by modern genetics.
 NOP—paper—224pp.—\$3.45—\$1.95

Biological Order
 by André Lwoff
 "It will delight the philosophical biologist, please the mechanistic biologist, and may disturb the vitalist."
 —*The Quarterly Review of Biology*
 LBOP—paper—101pp.—\$2.45—\$1.25

Nomogenesis or Evolution Determined by Law?
 by Leo S. Berg
 Comparing Haeckel's *Generelle Morphologie* and Berg's *Nomogenesis*: "Their entire approach and their conclusions are of great importance to any biologist interested in evolutionary theory, not because of their correctness, but quite the contrary, because of their incorrectness. These books provide an excellent example of the myriad of pitfalls awaiting evolutionary biologists. It was my experience while reading both works that these many problems became far clearer than from the reading of many excellent recent treatments of evolutionary theory. Berg's *Nomogenesis* is the better book in this respect."
 —Walter J. Bock, *Science*
 BN—488pp.—illus.—\$17.50—\$2.25
 BNP—paper—\$4.95—\$1.95

Readings in Molecular Biology
 selected from *Nature* by W. B. Gratzer
 "Each week in *Nature*, a group of correspondents presents an olio of topical scientific editorials with wit and spice. *Nature's* science writers have taken full advantage of the opportunity to critically scrutinize current scientific literature with broad journalistic license. Hence, the weekly 'News and Views' section of *Nature* does not present the image of cold, objective science detached from all human involvement, but instead demonstrates the vitality and diversity of viewpoint among leading scientists."
 —*Science Books*
 GMBP—paper—168pp.—\$3.95—\$3.45

Molecular Biology:
 A Structural Approach
 by C. U. M. Smith
 "This book is well written, simplified, and direct. . . . The coverage of the topics is quite adequate and complete, progressing from atoms to complex molecules to bioenergetics to DNA and multicellular forms. The book is well documented (with examples) and offers a balanced and simplified presentation."
 —*Science Teacher*
 SMB—404pp.—\$14.50—\$4.75

Essays in the History of Embryology and Biology
 by Jane M. Oppenheimer
 "The reader begins with Twentieth Century concepts and ends with Harvey and Gilbert, encountering along the way most of the great ideas and many of the great figures of embryology. But meeting up with greatness is not enough. Through Professor Oppenheimer's eyes we see what makes an idea great, how it is won and nourished, and how ultimately it is modified, or even replaced by a new idea."
 —*Bioscience*
 OE—374pp.—\$15.00—\$3.50

Engineering and Living Systems:
 Interfaces and Opportunities
 by David D. Rutstein, M.D. and Murray Eden
 "Physical and engineering systems and mathematics can form a foundation for the biology and medicine of the future. This book defines a program to integrate these disciplines, pointing out the need for an integrative structure and defining the type of experts needed to bridge the present gaps. A detailed example is given of the application of systems analysis and operations research to a specific medical care program."
 —*Instruments & Control Systems*
 RLS—309pp.—\$12.50—\$2.95

The Crayfish: An Introduction to the Study of Zoology
 by T. H. Huxley
 Stephen A. Raymond, a biologist at MIT, writes in a foreword to Huxley's text, "Obviously the book deals with one animal. Yet the actual subject is the interaction of that animal (and hence by extension any animal—or plant or machine) and a disciplined observer."
 HCHH—400pp.—\$12.50—\$10.00

The Mathematical Approach to Physiological Problems:
 A Critical Primer
 by Douglas Shepard Riggs
 "The material is presented in general mathematical form, with application to biologic problems developed in exercises. Carefully written and organized, the book is an excellent graduate text."
 —*MD*
 RMAH—445pp.—\$15.00—\$5.95
 RMPP—paper—\$4.45—\$2.95

Models of the Structural-Functional Organization of Certain Biological Systems
 edited by I. M. Gelfand with V. S. Gurfinkel, S. V. Fomin, and M. L. Tsetlin
 "In a time when the investigation of the nervous and other excitable systems has become one of the central areas of biological research, and when the realization of synergic effects of interdisciplinary studies has been accepted as one of the most important scientific tools, the appearance of a book dealing with the application of cybernetics to neurophysiology is certain to excite much interest. The field of neurophysiology is one where this type of cooperation can be most fruitful."
 —*Yale Scientific Review*
 GBS—404pp.—\$16.50—\$3.65

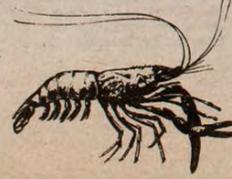
Reflex Action
 by Franklin Fearing
 introduction by Richard Held
 Traces the development of the reflex arc concept as an explanation of human action. Throughout this book Fearing takes pains not only to detail progress in clarifying the physiological basis of the reflex but also to explicate the debates that centered around naturalistic interpretations of animal and human action. Ranges from the work of Vesalius, Harvey, and Paracelsus to the Gestalt viewpoint.
 FRAP—paper—350pp.—illus.—\$4.95—\$1.95

Reflexes of the Brain:
 An Attempt to Establish the Physiological Basis of Psychological Processes
 by Ivan M. Sechenov
 Sechenov advanced the bold proposal in 1863 that the principal forms of psychological activity can be regarded as reflex processes; that all acts of conscious and unconscious life are reflexes.
 "The work is not only of historical interest but also provides valuable ideas for present analyses of neurophysiology."
 —*Biological Abstracts*
 SRBH—149pp.—\$9.95—\$3.95
 SRB—paper—\$2.95—\$1.95

Disease and Social Behavior:
 An Interdisciplinary Perspective
 by Horacio Fabrega, Jr.
 "Examines behavioral aspects of human disease. Drawing on the perspectives of the social and biological sciences, the author shows how they are related in medical research, education and theory."
 —*Science News*
 FDSB—360pp.—\$14.95—\$13.00

Mycotoxins in Foodstuffs
 edited by Gerald N. Wogan
 This book offers "a good insight into the current research effort on the incidence and biological consequences of noxious mould metabolites in stored food, feed-stuffs, including cereal grains and oil seeds, pathological conditions produced in man and animals, chemical work on the structure of various aflatoxins and their cytotoxic and carcinogenic characteristics."
 —*Food Technology*
 WMFH—291pp.—\$15.00—\$3.75

Biochemistry of Some Foodborne Microbial Toxins
 edited by R. I. Mateles and Gerald N. Wogan
 "The ten papers . . . cover staphylococcal enterotoxins, chemistry and biological activity of the toxin of *Clostridium botulinum*, the Bongkrek toxins, and biochemical studies on certain algal toxins. Recent advances in research on chemistry and biochemistry of various fungal toxins are discussed. . . . Quality fare for the interested."
 —*Food Technology*
 MFH—171pp.—\$12.00—\$1.50



An Annotated Bibliography on Microwaves: Their Properties, Production, and Applications to Food Processing
 by Samuel A. Goldblith and Robert V. Decarau
 GM—356pp.—\$17.50—\$8.95

The Sense of Time:
 An Electrophysiological Study of Its Mechanisms in Man
 by Josef Holubar
 translated from the Czech by John S. Barlow
 "This is a posthumous translation of a monograph by the late Dr. Holubar, one of Czechoslovakia's most distinguished neurophysiologists. The author assumes the existence of a mechanism 'by which organisms can measure time', and supports this assumption by reference to the facts of temporal conditioning and the navigation of birds."
 —*Quarterly Review of Biology*
 HST—122pp.—\$10.00—\$2.00

Dynamic Patterns of Brain Cell Assemblies
 by Aaron Katchalsky, Vernon Rowland, and Robert Blumenthal
 This monograph grew from a Neurosciences Research Program work session inspired by Professor Katchalsky. Essentially, it explores the concept of dynamic patterns in the physical sciences, in chemistry, and in biological systems; and it presents problems in continuous and discontinuous systems and in mixed systems.
 KBC—200pp.—\$15.00—\$13.50

Sensory Communication
 edited by Walter A. Rosenblith
 "... undoubtedly one of the most important volumes on what is generally known as the physiology of sense organs and sensation that has appeared in recent years. . . . The book contains a wealth of information in each chapter and has elaborate references."
 —*American Journal of Physical Medicine*
 RS2—844pp.—\$20.00—\$14.50

The Neurosciences:
 Third Study Program
 Francis O. Schmitt and Frederic G. Worden, Editors-in-Chief
 Covers twelve topics that have been selected as especially significant and catalytic trends in neuroscience research. These range across the various levels of organization of the nervous system—molecular, cellular, and behavioral.
 SNP—1107pp.—\$25.00—\$19.95

Neurosciences Research Symposium Summaries: An Anthology of Work Session Reports from the Neurosciences Research Program Bulletin
 edited by Francis O. Schmitt, Theodore Melnechuk, George Adeiman, and Frederic G. Worden
 SNU4 (Vol. 4)—528pp.—\$15.00—\$6.00
 SNU5 (Vol. 5)—566pp.—\$15.00—\$5.00
 SNU6 (Vol. 6)—712pp.—\$15.00—\$10.00
 3 volumes, \$15.00

History of Genetics: From Prehistoric Times to the Discovery of Mendel's Laws
 by Hans Stubbe
 "Hans Stubbe's *Kurze Geschichte der Genetik*, now available in a vigorous and clear English translation based on the second German edition (1965), is among the best introductions to the history of the new science."
 —*American Scientist*
 SHG—356pp.—\$16.95—\$13.95

Chemistry

Free Energy of Formation of Binary Compounds: An Atlas of Charts for High-Temperature Chemical Calculations
 by Thomas B. Reed
 "This book is a clear presentation of computer-generated tables and charts of standard free energies of formation as functions of temperature of binary compounds of the metals such as halides, oxides, hydrides, nitrides, selenides, and tellurides. In addition, data on ionization of the elements, molecular dissociation of the gaseous elements and their vaporization are presented in a clear and concise form. . . . An extra attraction to these handy-dandy tables is transparent plastic overlays and scales which enable one to estimate quite well equilibrium constants of the gaseous reactions, EMP's, and composition of reacting gases at various temperatures. . . . This is a very good and simple reference book which is well set up for ready and convenient use for estimation of the mentioned quantities. For more accurate work, the tables can be used for exact calculations."
 —*Journal of the Electrochemical Society*
 RFE—82pp.—\$15.95—\$4.95

Prelude to Chemistry:
 An Outline of Alchemy
 by John Reed
 The author covers the history of alchemy from its first stirrings in Egypt and India, through the developments of the Pythagoreans and the transmigrations of the Chinese and middle Europeans, to the era of the phlogiston theory. Among the topics treated: the Quest, the Elixirs of Life, the Preparation of the Stone, Astrology, the Golden Tripod, the Gardens of Hermes, the Great Mother, the Four Humours, the *Gloria Mundi*. Many engravings and woodcuts are reproduced and the final section even includes an example of alchemic music.
 RCP—paper—416pp.—illus.—\$3.95—\$2.95

Interaction of Plan-Parallel Double Layers
 by Owen F. Devereux and Philip L. de Bruyn
 A tabulation of computer-calculated values accompanied by an introductory mathematical discussion. For use in determining the energy of double-layer interaction between two plane-parallel bodies separated by a thin electrolyte film, as in coagulation studies of colloids, flotation of minerals by large gas bubbles, and similar projects.
 RCP—paper—416pp.—illus.—\$3.95—\$2.95

The General Circulation of the Tropical Atmosphere and Interactions with Extratropical Latitudes
 by Reginald E. Newell, John W. Kidson, Dayton G. Vincent, and George J. Boer
 Volume 1: NTA—258pp.—\$32.00—\$22.50
 "A world-wide sample of free-air balloon observations from 330 stations within about 45 degrees of the equator (1957-1964) has been analyzed. . . . The text is well written. . . . The cartographic work is of a very high standard. . . . This monograph adds a great deal to our knowledge and understanding of the mean circulation and eddy fluxes in the tropical and subtropical atmosphere in relation to the distribution of energy sources and sinks."
 —*Nature*
 Volume 2: NTA2—224pp.—\$65.00—\$58.50
 This book continues the research begun, and, in fact, contains the conclusions to much of the work presented in Volume 1. Taken together, these two volumes embody the most extensive study ever undertaken of the tropical atmosphere in a general circulation sense.
 2 volumes, \$75.00

Physical Meteorology
 by John C. Johnson
 "Physical Meteorology investigates those meteorological phenomena not directly connected with the circulation of the atmosphere, and links meteorology with other branches of science. This book is designed to meet the needs of the research worker and the student."
 —*Science Newsletter*
 JM—393pp.—\$15.00—\$12.00

Research in Geophysics
 Volume 1: Sun, Upper Atmosphere, and Space
 Volume 2: Solid Earth and Interface
 edited by Hugh Odishaw
 "A whole new panorama of the sun and earth and all that lies between unfolds from this integration of literally thousands of scattered sources."
 —*Science Fortnightly*
 OG1—574pp.—\$20.00—\$5.00
 OG2—595pp.—\$20.00—\$5.00
 2 volumes, \$6.00

Topics in Geophysics
 by Peter J. Smith
 "In general, it is a likeable book that helps fill a definite need in that it can serve the purpose of informing the general public of the techniques of geophysics; of the information about the earth and its structure, properties, and activity gained through these techniques; and of the ways in which this information is important to man's daily life."
 —Carl Bowin, Woods Hole Oceanographic Institution
 STG—246pp.—\$12.00—\$9.95

Advances in Earth Science
 edited by Patrick M. Hurley
 "A book that contains many excellent critical reviews and original contributions."
 —*Science*
 HGA—528pp.—\$20.00—\$5.50
 3 volumes, \$75.00

Lunar Science

Proceedings of the Second Lunar Science Conference
 sponsored by the Lunar Science Institute
 edited by A. A. Levinson
 Volume 1: Mineralogy and Petrology
 Volume 2: Chemical and Isotope Analyses/Organic Geochemistry
 Volume 3: Physical Properties/Surveyor III
 Presents studies of Apollo 11 and Apollo 12 lunar rocks and soil samples, and the results of the lunar surface experiments conducted by the astronauts during their two missions to the moon.
 LLS—398pp.—\$35.00—\$15.00
 LLS2—965pp.—\$35.00—\$15.00
 LLS3—865pp.—\$35.00—\$15.00
 3 volumes, \$40.00

Proceedings of the Third Lunar Science Conference
 Volume 1: Mineralogy and Petrology
 edited by Elbert A. King, Jr.
 Volume 2: Chemical and Isotope Analyses/Organic Chemistry
 edited by Dieter Heymann
 Volume 3: Physical Properties
 edited by David R. Criswell
 The research teams report here on samples from five lunar landings—Apollo 11, 12, 14, and 15 and Luna 16, the Soviet automated probe—which are revealing the variegated nature of the lunar surface.
 LTL1—1132pp.—\$35.00—\$25.00
 LTL2—1022pp.—\$35.00—\$25.00
 LTL3—1106pp.—\$35.00—\$25.00
 LTV3, 3 volume set, \$70.00
 6 volumes, \$100.00

Toward a History of Geology
 edited by Cecil J. Schneer
 "Illustrations include four plates showing delightful caricatures of famous geologists, including Hally, Hutton, Buckland, Murchison, and Geikie. These pictures accentuate the temper of the book, which on the whole is gracefully written and which is enlivened by good humor in many of its passages. The idea of bringing together the scientists and the historians of science has proved eminently successful."
 —*Science*
 SHO—474pp.—\$24.50—\$12.50

Sun, Earth, & Sea Science

Annals of the International Years of the Quiet Sun
 Observations made under the IQSY program during 1964 and 1965, when solar activity was at a minimum in the 11 year solar cycle.
 Volume 1: Geophysical Measurements: Techniques, Observational Schedules, and Treatment of Data
 IQ1—398pp.—\$25.00—\$5.00
 Volume 2: Solar and Geophysical Events 1960-1965 (Calendar Record)
 IQ2—320 pp.—\$20.00—\$5.00
 Volume 3: The Proton Flare Project
 IQ3—420pp.—\$25.00—\$5.00
 Volume 4: Solar-Terrestrial Physics: Solar Aspects
 IQ4—432pp.—\$25.00—\$5.00
 Volume 5: Solar-Terrestrial Physics: Terrestrial Aspects
 IQ5—488pp.—\$25.00—\$5.00
 Volume 6: Survey of IQSY Observations and Bibliography
 IQ6—608pp.—\$30.00—\$5.00
 Volume 7: Sources and Availability of IQSY Data
 IQ7—368pp.—\$25.00—\$5.00
 7 volumes, \$25.00

Man's Impact on the Global Environment: Assessment and Recommendations for Action
 edited by William H. Matthews
 "Scientists from the United States and Europe, after a month-long meeting here on environmental problems, recommended today that large-scale operation of supersonic transport planes be delayed until serious questions about the planes' potential for environmental contamination can be answered."
 —*New York Times*, August, 1970

Man's Impact on the Global Environment: Assessment and Recommendations for Action
 edited by William H. Matthews
 "This is the report on that important meeting: The most recent data are presented, with impressive references to source publications, and are then followed by specific recommendations."
 —*American Scientist*
 MCE—318pp.—\$15.00—\$7.50
 MCEP—paper—\$3.45—\$1.65
 Man's Impact on Terrestrial and Oceanic Ecosystems
 edited by William H. Matthews, Frederic E. Smith, and Edward D. Goldberg
 MTO—540pp.—\$25.00—\$16.50
 Man's Impact on the Climate
 edited by William H. Matthews, William H. Kellogg, and G. D. Robinson
 MICH—594pp.—\$25.00—\$16.50
 These two volumes contain the technical background papers on *Man's Impact on the Global Environment*.
 3 volumes, h., \$35.00

Inadvertent Climate Modification:
 Report of the Study of Man's Impact on Climate (SMIC)
 "This book is packed full of information of both a general and specific nature. Many ideas are presented in the recommendation section that could lead to valuable research projects."
 —*Bios*
 SCM—308pp.—\$15.00—\$3.50

Citizen Groups and the Nuclear Power Controversy:
 Uses of Scientific and Technological Information
 by Steven Ebbin and Raphael Kasper
 Some controversies, as the useful cliché has it, generate more heat than light. Nowhere is this more true than in the polarizing debates that are sparked by public hearings on the licensing, location, and construction of nuclear power plants and on the safety criteria that they should be required to meet. This book covers three such cases: the construction permit hearings on the nuclear plants proposed for Midland, Michigan; the operating license proceedings for the plant at Vernon, Vermont; and the rule-making hearings on criteria for emergency core cooling systems.
 ECG—318pp.—\$15.00—\$12.00
 ECGP—paper—\$7.95—\$5.95

Introduction to Coastline Development
 edited by J. A. Steers
 SIC—229pp.—\$12.50—\$3.50
 Applied Coastal Geomorphology
 edited by J. A. Steers
 SGP—227pp.—\$12.50—\$3.50
 "These two books are valuable collections of important papers in the particular studies and it is clearly useful to have them gathered together."
 —*Geographical Journal*
 2 volumes, \$5.00

The Lightning Book
 by Peter E. Viemeister
 Explains the nature of lightning and includes practical advice on protection that can reduce property loss and save lives.
 "Stay away from trees."
 —*Yale Alman*
 VLP—paper—316pp.—illus.—\$2.95—\$1.25

Introduction to Systematic Geomorphology
 The point of view adopted by the authors of books in this series is that the central themes of geomorphology are the characterization, origin, and evolution of landforms.
 Coasts
 by E. C. F. Bird
 BCOA—237pp.—\$12.50—\$4.50
 Landforms of Cold Climates
 by J. L. Davies
 DL—250pp.—\$12.50—\$5.50
 DLP—paper—\$3.95—\$3.45
 Volcanoes
 by Cliff Ollier
 OV—370pp.—\$12.00—\$4.50
 OVP—paper—\$3.45—\$2.95
 Structural Landforms
 by C. R. Twidale
 TS—247pp.—\$12.50—\$7.50
 4 volumes, h., \$20.00

Paper Profits: Pollution in the Pulp and Paper Industry
 by The Council on Economic Priorities
 "Paper Profits reveals all—the pollutants and their effects and a plant-by-plant analysis of each company and what they are or aren't doing to clean up."
 —*Environment Action Bulletin*
 CPPI—paper—504pp.—\$20.00—\$12.50

Economics and Pollution:
 The Automobile Pollution Case
 by Donald N. Dewees
 This book represents an economist's approach to the problem of auto pollution controls. In considering possible strategies for pollution abatement, it examines such factors as the benefits of pollution abatement, the costs of implementing a system of pollution abatement, the question of fuel consumption and fuel composition, the demand for motoring, and the cost and effectiveness of technical alternatives such as abatement devices and unconventional pollution systems.
 DAP—208pp.—\$18.50—\$16.65

Drugs of Abuse:
 Their Genetic and other Chronic Nonpsychiatric Hazards
 edited by Samuel S. Epstein
 "The increasing extent to which human beings are being exposed to substances of potential mutagenic, teratogenic, or carcinogenic activity is a subject of much concern. . . . In this volume, brief reviews are presented of the chemistry, epidemiology, pharmacology, carcinogenicity, teratogenicity, and mutagenicity of various 'drugs of abuse.' Methods of testing for mutagenicity in microbes, *Drosophila*, and experimental mammals are reviewed, and there are chapters on estimation of the mutation rates in human populations and their surveillance for mutational hazards."
 —*American Scientist*
 ERP—228pp.—\$15.00—\$5.50

The Mutagenicity of Pesticides:
 Concepts and Evaluation
 edited by Samuel S. Epstein and Marvin S. Legator
 foreword by Joshua Lederberg
 ". . . addresses itself to the importance of chemical mutagenesis in the human population and the value of reliable measures to decrease the spontaneous mutation rate."
 —*Science News*
 Includes a useful and lengthy tabulation with cross-index of pesticides, giving their common names and synonyms, chemical names and formulas, major uses and manufacturers.
 EDA—220pp.—\$15.00—\$5.50

The Legislation of Product Safety
 edited by Samuel S. Epstein and Richard D. Grundy
 Volume 1: Consumer Health and Product Hazards—Chemicals, Electronic Products, Radiation
 EC—384pp.—\$15.00—\$13.50
 Volume 2: Consumer Health and Product Hazards—Cosmetics and Drugs, Pesticides, Food Additives
 EC2—360pp.—\$15.00—\$13.50
 These two volumes review the incorporation of public health and environmental concerns into national policies for regulating consumer products.
 2 volumes, \$25.00

The Spoils of Progress:
 Environmental Pollution in the Soviet Union
 by Marshall I. Goldman
 ". . . covers a wide range of environmental aspects, including fishing out the seas, over-irrigation, excess water development, the falling of water levels, the pollution of waters, and the waste of natural resources. It will be informative reading for those interested in the broadest economic ramifications of environmental disruption."
 —*Journal of Environmental Quality*
 GUID—384pp.—\$15.00—\$4.25

Scientific Oddities

On the Track of Unknown Animals
 by Bernard Heuvelmans
 translated from the French by Richard Garnett
 Here is Bigfoot revealed (in a photograph), cheek by jowl with the Not-So-Abominable Snowman, the Australian Bunyips, and the Little Fairy Men. "The book is a tour of some of the strangest animals in the world that are found in the jungles of southeast Asia, South America, and Africa."
 —*Science Digest*
 HUAP—paper—306pp.—illus.—\$3.45—\$2.95

Man, Materials, and Environment
 prepared by the National Academy of Sciences and the National Academy of Engineering
 "How do we, in the words of the National Environmental Policy Act, create and maintain conditions under which man and nature can exist in productive harmony and fulfill the social, economic, and other requirements of present and future generations of Americans? That effort is a new and urgent priority; but how can it be translated into workable practices in field, forest, mine, and manufacturing plant?"
 Man, Materials, and Environment begins with these questions and proceeds to provide some of the answers.
 NMM—256pp.—\$15.50—\$12.40
 NMMPP—paper—\$4.95—\$3.95

Power, Pollution, and Public Policy:
 Issues in Electric Power Production, Shoreline Recreation, and Air and Water Pollution Facing New England and the Nation
 edited by Dennis W. Duscik
 DEC—paper—322pp.—\$13.95—\$10.95

Shoreline for the Public:
 A Handbook of Social, Economic, and Legal Considerations Regarding Public Recreational Use of the Nation's Coastal Shoreline
 by Dennis W. Duscik
 DS—182pp.—\$12.50—\$11.25

Critical Problems of the Coastal Zone
 edited by Bostwick H. Ketchum
 "This book is well-edited, and I recommend it highly to those individuals interested in planning and managing coastal zone resources."
 —William S. Sipple, *Journal of Soil and Water Conservation*
 KCZP—paper—363pp.—\$3.95—\$3.45

Paper Profits: Pollution in the Pulp and Paper Industry
 by The Council on Economic Priorities
 "Paper Profits reveals all—the pollutants and their effects and a plant-by-plant analysis of each company and what they are or aren't doing to clean up."
 —*Environment Action Bulletin*
 CPPI—paper—504pp.—\$20.00—\$12.50

Economics and Pollution:
 The Automobile Pollution Case
 by Donald N. Dewees
 This book represents an economist's approach to the problem of auto pollution controls. In considering possible strategies for pollution abatement, it examines such factors as the benefits of pollution abatement, the costs of implementing a system of pollution abatement, the question of fuel consumption and fuel composition, the demand for motoring, and the cost and effectiveness of technical alternatives such as abatement devices and unconventional pollution systems.
 DAP—208pp.—\$18.50—\$16.65

Drugs of Abuse:
 Their Genetic and other Chronic Nonpsychiatric Hazards
 edited by Samuel S. Epstein
 "The increasing extent to which human beings are being exposed to substances of potential mutagenic, teratogenic, or carcinogenic activity is a subject of much concern. . . . In this volume, brief reviews are presented of the chemistry, epidemiology, pharmacology, carcinogenicity, teratogenicity, and mutagenicity of various 'drugs of abuse.' Methods of testing for mutagenicity in microbes, *Drosophila*, and experimental mammals are reviewed, and there are chapters on estimation of the mutation rates in human populations and their surveillance for mutational hazards."
 —*American Scientist*
 ERP—228pp.—\$15.00—\$5.50

The Mutagenicity of Pesticides:
 Concepts and Evaluation
 edited by Samuel S. Epstein and Marvin S. Legator
 foreword by Joshua Lederberg
 ". . . addresses itself to the importance of chemical mutagenesis in the human population and the value of reliable measures to decrease the spontaneous mutation rate."
 —*Science News*
 Includes a useful and lengthy tabulation with cross-index of pesticides, giving their common names and synonyms, chemical names and formulas, major uses and manufacturers.
 EDA—220pp.—\$15.00—\$5.50

The Legislation of Product Safety
 edited by Samuel S. Epstein and Richard D. Grundy
 Volume 1: Consumer Health and Product Hazards—Chemicals, Electronic Products, Radiation
 EC—384pp.—\$15.00—\$13.50
 Volume 2: Consumer Health and Product Hazards—Cosmetics and Drugs, Pesticides, Food Additives
 EC2—360pp.—\$15.00—\$13.50
 These two volumes review the incorporation of public health and environmental concerns into national policies for regulating consumer products.
 2 volumes, \$25.00

SCIENCE

Rosenblith Named Institute Professor

Professor Walter A. Rosenblith, MIT's Provost since 1971, has been appointed Institute Professor in recognition of his contributions to the study of sensory communication and brain function through the

for scholars of special distinction. The title was bestowed upon the recommendation of a faculty committee formed in response to the nomination by a group of faculty members.

"Professor Rosenblith is a distinguished scientist who was a charter member of the Harvard-MIT Cybernetics Seminar that the late Norbert Wiener drew together in the late 1940s. His early use of computers in quantifying electrical responses to sensory stimuli and in detecting significant patterns in the electrical activity of the central nervous system has received worldwide attention," Dr. Wiesner said.

A native of Vienna, Austria, Professor Rosenblith joined MIT in 1951 as associate professor of communications biophysics and staff member of the Research Laboratory of Electronics. He was named full professor in 1957. In the late 1950s he was a member of the steering committee of the Center for the Communication Sciences and in the early 1960s the first chairman of the committee on Engineering and Living Systems. In 1967 he was elected chairman of the faculty and was associate provost for two years before being named to succeed Dr. Wiesner as

(Continued on page 5)



Professor Rosenblith

use of electrical engineering and biophysics.

Dr. Jerome B. Wiesner, MIT president, announced Professor Rosenblith's appointment to the rank which the Institute reserves

Working Group Progress Noted

The Working Group on Office/Clerical Issues is alive and well and hard at work.

A questionnaire will be distributed this week to all biweekly employees and their supervisors. This questionnaire is of paramount importance.

The group needs the reactions of the participants of the biweekly review to learn the strengths and weaknesses of the review process. It is important to receive completed questionnaires from a large portion of the community in order

to be sure that future recommendations reflect your views. *Tech Talk* will publish the results of this brief questionnaire in May.

In addition to the questionnaire the working group is exploring a variety of issues. Some of these are the following: classification and grade structure, grievance procedure, supervisory training, evaluation of different ways of achieving reasonable compensation, changes in the employee orientation program and a career development week.



Tractor Brushwork—A Physical Plant tractor avoiding the trees in sweeping arcs. All Institute powdered the Killian Court lawn with lime last week, lawns are scheduled to receive this spring treatment.

Faculty Meeting Today

The faculty will have its monthly meeting today (Wednesday, April 16) in Rm 10-250 starting at 3:15pm. The agenda includes:

Discussion of and vote on new regulations regarding registration, examinations and grading procedures.

Report of the Committee on Nominations.

Recommendations for new degrees in Electrical Engineering and Computer Science.

Discussion of and vote on:

The motion to recommend to the President that he establish an ad hoc advisory committee for the area of international institutional commitments;

The motion regarding the admissions procedure of the Special Nuclear Engineering Program for students from Iran;

The motion opposing the proposed program of cooperation between the Institute and the Iranian government;

The proposal for a master's degree program in Technology and Policy.

Urbanowski To Direct MIT Press

Frank Urbanowski, who has held editorial and management positions for Macmillan, Inc., Glencoe Press and Educational Testing Service (E.T.S.) of Princeton, N.J., has been named director of the MIT Press effective June 1.

The MIT Press is one of the largest university presses in the United States. Mr. Urbanowski will be the third director of the Press since its establishment as an independent entity in 1963. He succeeds Howard Webber, who resigned last summer.

In announcing the appointment, Constantine B. Simonides, Vice President of MIT, said, "Mr. Urbanowski was our first choice in a selection process which included

(Continued on page 12)

Staff Classification Study Continues

Progress on the staff classification study, begun last year, is continuing.

The Steering Committee for the study, chaired by Chancellor Paul E. Gray, has worked over a period

of several months in a review of the levels assigned to the various classifications by the six functional committees.

The Steering Committee has

(Continued on page 7)

Alumni Yachtsmen Lead Campaign

Fund for Sail Pavilion, Fleet Tops Midway Mark

By PATRICIA MARONI
Staff Writer

Generation has followed generation aboard the fleet of MIT sailboats that every year around this time work their magic on end-of-the-day scenes along the Charles.

In the 40-year lifetime of the MIT Sailing Program, more than a thousand professors and their families, secretaries and students, and alumni and guests have passed through the tiny cement sailing pavilion to the envy of many a laboratory-se-

questered landlubber.

Today, as the Program attempts to rejuvenate itself—through a fund drive to raise \$211,800 for a new fleet and pavilion—the grandson of the man who built the original Tech Dinghy can be seen walking the dock, taking measurements and making specification notes. Halsey C. Herreshoff '60, the descendant of Nathaniel Herreshoff, of the Class of 1871, who implemented the designs of Professor George Owen '94 for MIT's first fleet of wooden dinghies, is a key member of the drive's Sponsoring Committee, itself a "Who's Who in American Yachting."

Headed by George Warren Smith '26, who won the Bull's Eye National Championship off Rockport last summer, the Com-

mittee reports that it has already received \$121,327 in pledges since last November—a significant portion of which is from alumni who have never before contributed to MIT. The second stage of the drive will be spearheaded this week by a select mailing to MIT faculty, students and staff who are members of the MIT Nautical Association.

Committee member Emily L. Wick '51, Dean of the Faculty at Mount Holyoke College and signer of the letter to the MIT Community, said personal memories and support for the national collegiate sailing record set by MIT had ensured the success of past fund-raising activities despite economically difficult times.

Established in 1935 as the first collegiate sailing program in

America and the first club on the Charles, the MIT Sailing Program derived much of its early success from men like Professor Erwin H. Schell '12 and Walter C. "Jack" Wood '17, MIT's first Sailing Master and founder of the Intercollegiate Yacht Racing Association's Hall of Fame at the US Naval Academy. Under his direction, MIT's program served as a model and training ground for Harvard, BU, Emerson, and other area schools that lacked their own facilities at the time.

As Wood guided MIT to a leading position in North American sailing—which included representation at the US Olympics—it became necessary to replace the mahogany-trimmed first fleet of Tech Dinghies. In 1953,

(Continued on page 4)



—Photos by Calvin Campbell



Leads Robin Smith as Maria and Mitchell Rothstein as Feste the Jester, of the MIT Shakespeare Ensemble, run through a scene from "Twelfth Night" preparing for the opening performance Saturday, April 19 in the Sala. Performances will take place Saturday through Wednesday, April 19-23. Tickets are on sale now in the Building 10 lobby. For reservations call 742-0681.

—Photo by Joe Schuyler

Six Receive Sloan Grants

Six assistant professors and two associate professors at MIT have received Sloan Research Fellowships from the Alfred P. Sloan Foundation this year—giving MIT more 1975 Sloan Fellows than any other institution in the country.

The fellows are: Tanya Atwater, assistant professor of marine geophysics; Robert W. Field, assistant professor of chemistry; Sidney M. Hecht, assistant professor of chemistry; Robert L. Jaffe, assistant professor of physics; Loy D. Lytle, assistant professor of psychopharmacology; Peter Molnar, assistant professor of earth and planetary sciences; David G. Schaeffer, associate professor of mathematics, and Christopher Walsh, assistant professor of chemistry.

This year's 86 Sloan Fellows were chosen from nearly 600 nominations on the basis of nominations from senior colleagues familiar with the nominees' capacities to perform outstanding and creative basic research. The selections were made by a committee of distinguished senior scientists, including Dr. Francis O. Schmitt, chairman of the Neurosciences Research Program at MIT and Dr. I.M. Singer, MIT professor of mathematics.

The funds from the fellowships may be used for support of tech-

nical assistance, professional travel, summer support, computer time, support of predoctoral and postdoctoral fellows, equipment and other purposes approved by the Institute.

Chamber Players In Final Concert

The MIT Chamber Players will present their final concert of the season at 8pm today, Wednesday, April 16, in Kresge Auditorium. The performance will be free and open to the public.

Featured work on the program will be Bartok's Sonata for Two Pianos and Percussion. Guest performers for the Bartok will be pianists John Buttrick, director of music at MIT, and Beatrice Erdely. Mrs. Erdely is a member of the faculty of the New England Conservatory of music and wife of violinist Stephen Erdely, a member of the MIT music faculty.

The program will include Hummel's Quartet for Clarinet and Strings, Irving Fine's Quintet for Winds, and Maurice Ravel's Introduction and Allegro.

Violist Marcus Thompson, director of the MIT Chamber Music Society and organizer of the MIT Chamber Players, will participate in the concert.

Community Service Fund Sets \$50,000 Campaign Goal

The trustees of the MIT Community Service Fund (CSF) have set a goal of \$50,000 to be raised during the Fund's annual solicitation to be held April 23-May 2 this year.

"That's a lot of money to be looking for, particularly in financially troubled times," Dean Peter P. Gil, co-chairman of the trustees said. "However, we anticipate funding requests in excess of \$75,000 this year. Even though some requests are denied and others are cut back, the Fund will need \$50,000 to maintain the level of support it has provided in the past," Dr. Gil said.

During its eight-year history, CSF has provided financial support to more than a dozen educational, job-training and social

organizations in which MIT volunteers—students, faculty and employees—participate.

"One exciting aspect of the Fund is its ability to provide seed money for innovative programs," according to Gregory Smith, also co-chairman of the trustees.

As examples, he cited Tutoring Plus and the Junior Beavers, the oldest and newest programs supported by the Fund.

"Both of these activities originated with MIT people," Mr. Smith said. "Tutoring Plus began and continues as a cooperative venture between MIT students and parents in the Roberts School area. The Junior Beavers, initiated by the Campus Patrol, is a recreational derprivileged pre-teens in the neighborhood around MIT."

Campus Residents Given Warning

The MIT Committee on Discipline recently issued a strong warning to all MIT campus residents that possession or storing of dangerous chemicals and fireworks in Institute houses was a serious violation of MIT housing rules.

The Committee's warning, contained in a letter sent to all residents, follows an incident this winter involving three students who set off an explosion in a dormitory stairwell which result-

ed in considerable damage to the building. According to the Committee, "It was only a matter of luck that no one was harmed."

The Committee's warning was further prompted by testimony at a hearing on the incident at which it was revealed that there are known to be other students on campus who are illegally storing dangerous chemicals in the houses.

The Committee stated in its

letter that the potential danger posed by such an explosion was "intolerable in this community" and they placed all students on notice that any such incident in the future would be grounds for expulsion.

The Committee's letter went on to say, "We seek the cooperation of all students and House officers in removing these hazards from the Houses and in educating new residents as to the illegality, potential danger and disciplinary consequences of maintaining and using such items in the Houses."

Students who are currently storing chemicals and fireworks in the houses should contact the Campus Patrol, x3-2997, to arrange for the safe disposal of these items. If they are turned over to the Campus Patrol prior to May 1, 1975, complete anonymity is guaranteed.

The Committee also reminded all students that "sales, possession and use of combustible or explosive substances are punishable by fine or imprisonment under Massachusetts law."

Health Sciences Fund Meets, Elects Officers and Directors

The Health Sciences Fund was established a year ago by its directors to support faculty and graduate students research in the life sciences and biomedical engineering.

Recently the Fund was incorporated as a non-profit organization under the bylaws of the Commonwealth of Pennsylvania.

The Fund held its first annual meeting on April 10, 1975 in the President's House of MIT. At that time its officers were announced as follows:

President: Irwin W. Sizer, dean of the Graduate School, MIT; Vice-President: George W. Thorn, Executive Committee, MIT Corporation; Treasurer: Cleve J. Fredricksen, Chief Financial Officer, AMP, Inc.; Secretary: Miles J. Gibbons, Jr., Attorney, AMP, Inc.

Directors of the Fund were announced as follows:

Jerome B. Wiesner, President of MIT; Uncas A. Whitaker, Chairman of the Board of AMP, Inc.; Henry Meadow, Associate Dean, Harvard Medical School.

At this meeting it was announced that the Fund would continue to support graduate student and faculty research at MIT in the

field of biomedical sciences. Since about \$400,000 will be available for this purpose in the coming year, it will be possible to extend support to a small number of faculty research projects, which will be carried on in collaboration with the investigators in certain Boston hospitals. Special attention will be



Dean Sizer

paid to research carried on jointly by faculty of MIT and Harvard Medical School. In addition, nine MIT doctoral graduate students will be given fellowships by the Fund in the coming year.

During the meeting the Directors of the Fund received oral progress reports from those faculty members at MIT who are receiving support from the Fund. A highlight of the evening meeting was a seminar on "A Design Engineer's Travels through Medicine" by Professor Robert W. Mann, Whitaker Professor of Biomedical Engineering.

Special guests at the meeting were Drs. F.M. Bumpus, J.W. McCubbin, W.L. Proudfit, Mason Sones and Irvine H. Page, cardiovascular surgeons from the Cleveland Clinic, and Dr. Van H. Leichter from the Coronary Club, Inc., of Cleveland.

Bicentennial Concert Planned

The US Armed Forces Bicentennial Band and Chorus will present a concert, 8:15pm, Sunday, April 20 in Kresge Auditorium.

The 67-piece symphonic band and 24 voice mixed chorus will perform a broad medley of patriotic, original and familiar American songs including works by John Philip Souza, Rogers and Hammerstein, Percy Grainger and Vaclav Nelhybel.

The concert, sponsored by Boston 200 and the MIT Concert Band, will be open to the public free of charge. Tickets will be available at the Kresge Music Office.

Community Service Fund Sets \$50,000 Campaign Goal

Tutoring Plus, now beginning its 12th year, has improved the educational outlook for hundreds of youngsters and is heavily dependent on CSF for support. Regarded as the flagship of the Fund, Tutoring Plus received \$20,000 from CSF this year and will need that much again. The money is used for materials and services needed in the program and for nominal salaries for five neighborhood mothers who staff T+ on a part-time basis.

The Junior Beavers, on the other hand, was funded this year at only \$2,400. Since the Campus Patrolmen operate the program on a voluntary basis, the money is used to pay for buses and admission to attractions such as the Edaville Railroad or the Red Sox games.

Other activities now being supported by CSF include:

The Cambridge Community Center, a multi-purpose service center in Riverside.

The Group School—an accredited alternative high school in Cambridge.

Just-A-Start—a neighborhood improvement program in the Wellington-Harrington district of Cambridge.

MIT Student Summer Projects—a summer program for students in community work or field service in Greater Boston.

Concord Prison Telephone Center—a program that helps prospective parolees find employment.

Urban Action—an on-campus resource center where MIT people can find volunteer opportunities.

Simonides Named To Task Force

MIT Vice President Constantine B. Simonides is serving on a nine-member task force studying the organizational structure and management approach employed by the Federal Aviation Administration in carrying out its various missions, including aviation safety. The panel will report to US Secretary of Transportation William Coleman, who took office in March. It was formed in January by former Secretary of Transportation Claude S. Brinegar in response to Congressional criticism of the FAA's handling of safety matters.

Echoes

April 13-19

50 Years Ago

Junior Week opened with the Tech Rush and the annual battle of oil and water.

The Beaver Ball Team opened its season with a victory, defeating Tufts 10-3.

40 Years Ago

Tech Debating Society scheduled to meet with Radcliffe College on the issue of Dutch Treats.

Dr. Vannevar Bush featured speaker at the Tau Beta Pi 50th anniversary dinner.

25 Years Ago

Dr. John G. Trump, associate professor of electrical engineering, announced a new method of treating malignant tumors by use of a 2 million volt x-ray.

Tech sailing team victorious over Northeastern, BU and WPI.

(Prepared by Ethel Newell of the MIT Historical Collections, x4444.)

TECH TALK

Volume 19, Number 40
April 16, 1975

Tech Talk is published 50 times a year by the News Office, Massachusetts Institute of Technology. Director: Robert M. Byers; Assistant Directors: Charles H. Ball, Barbara Burke, Robert C. Di Iorio, Patricia M. Maroni, Joanne Miller, William T. Struble, and Calvin D. Campbell, photojournalist; Reporters: Sally M. Hamilton, Ellen N. Hoffman; Institute Calendar, Institute Notices, Classified Ads: Susan E. Walker.

Address news and editorial comment to MIT News Office, Room 5-111, MIT, Cambridge, MA 02139. Telephone 253-2701.

Mail subscriptions are \$6 per year. Checks should be made payable to MIT and mailed to the Business Manager, Room 5-111, MIT, Cambridge, MA 02139.

24 Promoted to Associate Professor Rank

Twenty-four assistant professors at MIT have been promoted to the rank of associate professor, effective July 1. They are:

John Belcher, Physics. Professor Belcher was appointed to the MIT faculty in 1971 after receiving his PhD ('71) from the California Institute of Technology and his BA from Rice University in 1965. A member of the Second European Conference on Cosmic Plasma Physics at Culham Laboratories in Berkshire, England, last summer, he is professionally interested in acceleration mechanisms for solar and stellar winds and the properties of the microscopic structure of the interplanetary medium.

Charles L. Cooney, Nutrition and Food Science. Professor Cooney, who has been a visiting professor at Portugal's Gulbenkian Institute, the University of Waterloo in Canada, and the Centro de Investigacion in Mexico City, graduated from the University of Pennsylvania in 1966 with a BS and received the MS and PhD degrees from MIT in 1967 and 1970 respectively. He became an instructor at MIT in 1970 and was appointed assistant professor in July of that same year. Professor Cooney is also a former consultant for the US Agency for International Development to Survey Uses of Agricultural Wastes in Panama.

John M. Edmond, Earth and Planetary Sciences. Professor Edmond's worldwide research into the chemistry of particulate material in the ocean, the chemistry of rainwater, and paleo-oceanography and paleo-climatology has taken him from Morocco to the Antarctic. The Glasgow, Scotland, native is now in East Africa, conducting research on Lake Tanganyika at the invitation of the United Nations Food and Agriculture Organization. He holds a PhD in marine chemistry from the University of California at San Diego, and a BSc in pure chemistry from the University of Glasgow. Other field experience has included studies of suspended material in upswelling areas of the Southeast Atlantic, and oceanography and geochemistry studies of the Indian-Antarctic, the Caribbean and the Central Pacific.

Woodie C. Flowers, Mechanical Engineering. Professor Flowers, chairman of MIT's Clapp and Poliak Engineering Design Award Committee and a member of the Innovation Center Education Council, graduated from the Louisiana Polytechnic Institute (BS '66) and received the SM, ME and PhD degrees from MIT between 1968 and 1973. He became a research assistant at MIT in 1966, instructor in 1968, and assistant professor in the fall of 1972. Professor Flowers holds the 1971 Goodwin Medal for "outstanding effectiveness in teaching" at MIT.

Michael W. Golay, Nuclear Engineering. Professor Golay, a graduate of Cornell (PhD '69) and the University of Florida at Gainesville (MBE '64) is now at work on a book with Professor Norman C. Rasmussen on the environmental impacts of electrical power production and a case-study examination of the effects of the National Environmental Protection Act modifying preliminary designs of nuclear power stations. A research associate at Rensselaer Polytechnic Institute before he was appointed assistant professor at MIT in 1971, he held the Arthur D. Little Professorship in Environmental Sciences and Engineering at MIT from 1972-74.

Sidney M. Hecht, Chemistry. Professor Hecht graduated from the University of Rochester (AB '66) and the University of Illinois (PhD '70), and was a research associate in the Laboratory of Molecular Biology at the University of Wisconsin. He was a National Institutes of Health pre- and postdoctoral fellow before his appointment to the MIT faculty in 1971. His main interest is synthetic chemistry and its application to the solution of problems in biochemistry.

Timothy L. Johnson, Electrical Engineering and Computer Science. He was appointed assistant professor in 1972 after receiving his PhD from MIT. He also holds SB and SM degrees from MIT (1969). A member of the American Association for the Advancement of Science, Professor Johnson is researching applications of electrical engineering to biomedical systems and optimal control theory.

Paul L. Joskow, Economics. Assistant professor at MIT since 1972, Professor Joskow has also taught at Yale, where he received the MPhil in 1971 and the PhD degrees in 1972. He received the BA degree from Cornell in 1968. His teaching assignments at MIT encompass market organization, energy economics, government regulation, law and economics and microeconomics.

Maria C. Linder, Nutrition and Food Science. Professor Linder, who is now participating in an EMBO workshop in Belgium on "Iron Transport and Storage Proteins," came to MIT in 1968 for postdoctoral research after two years as a postdoctoral student at Harvard Medical School and the Cancer Institute of N.E. Deaconess Hospital. She received a BA degree in chemistry from Vassar in 1960 and a PhD from Harvard in 1966. She was a research associate in physiological chemistry at MIT from 1970-71 and was appointed assistant professor of physiological chemistry in 1972. Her main research is in copper and ceruloplasmin metabolism as a phenomenon useful in the diagnosis of cancer. Her teaching is in

the areas of mammalian biochemistry and metabolism.

Barbara Liskov, Electrical Engineering and Computer Science. Between receipt of her PhD degree in computer science at Stanford in 1968 and her appointment to MIT's faculty in 1972, Professor Liskov was a member of the technical staff of the MITRE Corp., specializing in operating systems, microprogramming, and programming methodology. She also holds an AB ('61) from the University of California at Berkeley and an SM (65) from Stanford. Her research interests include software system reliability and design, programming languages and operating systems.

Ole S. Madsen, Civil Engineering. Formerly an oceanographer for the US Army Corps of Engineers and MIT research assistant before his appointment as assistant professor of civil engineering in 1972, Professor Madsen received the MS degree in 1964 from the Technical University of Denmark and the ScD in hydrodynamics (1970) from MIT. He is a specialist in coastal engineering, sediment transport by waves and open channel flow.

Thomas L. Magnanti, Sloan School. Appointed assistant professor of operations research and management in 1971, he holds a BS degree from Syracuse University (1967), an MS in statistics (1969) and an MS in mathematics (1971), both from Stanford, where he earned the PhD in 1972. Past employment experience has included jobs with Allied Chemical Corporation, ESSO Mathematics and System Corporation, and IBM, as part-time analyst from 1969-71. He was a research assistant at Stanford before his appointment to MIT's faculty.

June L. Matthews, Physics. Professor Matthews received her BA degree with honors in physics from Carleton College in Minnesota and came to MIT in 1960 for her MS and PhD degrees, in 1962 and 1967 respectively. As a student she conducted research with the Van de Graaff accelerator group of the Los Alamos Scientific Laboratory, the Cyclotron Laboratory at UCLA, and MIT's Lab for Nuclear Science. She was also a postdoctoral research fellow in the Kelvin Laboratory of the University of Glasgow, from 1968-71, and the Nuclear Physics Laboratory at Rutgers University, from 1971-72. She was appointed assistant professor of physics at MIT in 1973.

Robert Mehrabian, Materials Science and Engineering. Born in Tehran, Iran, Professor Mehrabian received the BS and ScD degrees from MIT in 1964 and 1968 respectively. He was a research associate in that department from 1968 to 1972, when he was appointed assistant professor. He has worked as a metallurgist for Monsanto Research Laboratories in

Everett, Mass. and is specifically interested in process metallurgy, solidification and foundry technology, and energy conservation.

Stephen F. Moore, Civil Engineering. Professor Moore is a graduate of California State Polytechnic Institute (BS '67) and the University of California at Davis (MS '69, PhD '71). Appointed assistant professor in October, 1971, he lists his principal fields of research as modeling aquatic ecosystems and the design of monitoring programs for these systems. As a member of the National Academy of Sciences, he has served on the panels of the Boards of Ocean Affairs and Marine Transportation Research. He has been a consultant to the New England Aquarium, Arthur D. Little, Inc., the Coastal Resources Action Council of Portland, Me., and the New England Electric System.

Suhass S. Patil, Electrical Engineering and Computer Science. Named an instructor at MIT in 1968 and assistant professor in 1970, Professor Patil received the BTech degree from the Indian Institute of Technology and the SM and ScD degrees from MIT in 1970. He was assistant director of Project MAC from 1972-74 and helped develop Course 6.032 in Computation Structures.

Robert S. Pindyck, Sloan School. Professor Pindyck, who received all his degrees from MIT (SB, SM, PhD), is the author of *Optimal Planning for Economic Stabilization* (North-Holland Publishing Co., 1973) and co-author of *The Economics of the Natural Gas Shortage: 1960-1980*, and *Economic Models and Economic Forecasts*. Appointed assistant professor in 1971, upon receipt of his PhD, Professor Pindyck has focused current research on the economics of the energy sector and natural resource industries, and applications of optimal control theory to the design and analysis of economic policy. His teaching assignments encompass applied micro- and macroeconomics, and quantitative methods in policy analysis.

Jeffrey Pressman, Political Science. A former legislative intern to Senators George McGovern (D-S.D.) and Lee Metcalf, (D-Mont.), Professor Pressman received a BA from Yale in 1965 and held a Henry Fellowship to Oxford University from 1965-66. He earned his MA and PhD degrees from the University of California at Berkeley between 1967-72 and became assistant professor at Dartmouth College. In 1973 he was appointed to the faculty of MIT. He is the author of the forthcoming book, *Federal Programs and City Politics* (University of California Press) and is a member of the editorial board of "Political Science Quarterly" and "Administration and Society."

David E. Pritchard, Physics. A former Polaroid Fellow at Harvard, Professor Pritchard received the BA degree from the California Institute of Technology in 1962 and the PhD from Harvard in 1968. His major research is in atomic and molecular physics, both in atomic scattering and in molecular beams, with work increasingly concentrated on the application of tunable die lasers to atomic and molecular physics.

Richard Stanley, Mathematics. Graduated from the California Institute of Technology in 1966 with a BS in mathematics, Professor Stanley was a research scientist and consultant for the Jet Propulsion Laboratory. He received his PhD from Harvard in 1971 and served as C.L.E. Moore Instructor of Mathematics at MIT for one academic year. He returned to Berkeley for the years 1971-73, when he was a Miller Re-

search Fellow, and was appointed assistant professor of applied mathematics at MIT in 1973. In addition to research activities in combinatorial theory, commutative algebra and number theory, Professor Stanley is a consultant for Bell Telephone Laboratories.

Donald Y. Sur, Humanities. Professor Sur, a former music student of Roger Sessions and Earl Kim, received the AB degree from the University of California at Berkeley in 1956 and the MFA from Princeton in 1962. He conducted Far Eastern language and music study at Harvard from 1963-64, and from 1964-68 at the Seoul National University and Korean Classical Music Institute. Some of his compositions are: *Five Bagatelles* for piano, *Red Dust* and *Raindrops Under the Eaves* for Korean instruments, *Invita Minerva* for piano, and in progress, *The Sleepwalker's Ballade* for soprano and chamber orchestra.

John B. Vander Sande, Materials Science and Engineering. After earning a bachelor of engineering degree from Stevens Institute of Technology and a PhD from Northwestern University, Professor Vander Sande did postdoctoral research at Oxford University under a Fulbright-Hays grant. He was appointed assistant professor in 1971 and has been doing research in transmission electron microscopy, electron diffraction, and the mechanical behavior of materials.

Jan Wampler, Architecture. Professor Wampler first came to MIT in 1970 as a visiting lecturer, after serving as instructor at the Boston Architectural Center, the Inter-American University in Puerto Rico, and the Rhode Island School of Design, where he received the BS degree in architecture in 1963. He received the MArch from Harvard in 1964. Professor Wampler was director of the planning and design group of the Boston Redevelopment Authority from 1967-70 and was appointed assistant professor of architecture in 1970. His building and design projects include schools, low-income housing, planning for the Columbia Point project, parks and climbing toys for children.

Daniel S. White, Humanities. Professor White was an instructor in history at Harvard, where he received the MA and PhD degrees, before coming to MIT in 1969 as assistant professor. In 1961 he received a BA from Stanford. He is a member of the Institute Committee on the Requirement in the Humanities, Arts and Social Sciences and a former member of the Policy Committee of the Department of Humanities. Professor White, active in town meeting politics since 1967, is a member of the Brookline Democratic Town Committee, to which he was elected in 1972. His forthcoming book, to be published by Harvard University Press is *The Splintered Party: National Liberalism in Hessen and the Reich*.

Beckwith at T&C

Dr. Jonathan R. Beckwith, professor of microbiology and molecular genetics at Harvard Medical School, will speak on the politics of genetic engineering at a lecture in the Technology and Culture Seminar series, 4pm Thursday, April 17 in Bldg. 9-150.

Dr. Beckwith, who is the ninth speaker in the seminar series, "Merit and Equality in a Just Society," will speak on how new advances in genetic screening programs raise the specter of a genetically controlled society.

Five Receive Health Sciences Fellowships

Five MIT graduate students have been selected to receive fellowships from the Health Sciences Fund, Inc. during the coming academic year. They are:

James P. Barber, who is comparing Soviet and American vocational rehabilitation services, in the Department of Political Science.

Yak-Fa Cheung, who is researching flavin coenzyme dependent enzymes and biotin dependent enzymes, in the Department of Chemistry

Ronald L. Levin, who is studying the physical phenomena associated with the freezing and thawing of erythrocytes, in the Department of Mechanical Engineering.

Gustav von Schultess, who is de-

veloping a technique of providing a sensitive and quantitative determination of very low levels of antibody and antigen in living matter, in the Department of Physics.

Robert G. Zamenhof, who is working on a project to measure calcium and phosphorus in vivo by neutron activation analysis, a process which will facilitate an evaluation of the effects of therapy on bone diseases, in the Department of Nuclear Engineering.

Announcement of the fellowship awards was made by Dr. Irwin W. Sizer, dean of the Graduate School. Candidates for the awards were nominated by their department heads and were selected from an outstanding group of students who are pursuing doctor-

al theses in the field of the life sciences and biomedical engineering.

The fellowships, which are for 12 months commencing September 1975, cover full tuition and medical fees and provide a stipend of \$3,600. Fellows are eligible for a second and final year of support upon documentation of major progress on their thesis research.

This will be the second year of the Health Sciences Fund Graduate Fellowship program, part of a grant from the Health Sciences Fund, Inc. which also supports research projects in health sciences by MIT faculty members and collaborating investigators in the Boston biomedical community.

Mazlish Book Reviewed in *New York Times*

(This review, by Philip Rosenberg, author of *The Seventh Hero: Thomas Carlyle and the Theory of Radical Activism*, appeared in The New York Times Book Review on April 6.)

By PHILIP ROSENBERG

The story of John Stuart Mill reads like a work of fiction—which is many ways it was. From his own account of the celebrated education he received at the hands of his father, we get an unnerving picture of a little homunculus, an artificial child reading Greek at 3, mastering Robertson, Hume and Gibbon at 7, and returning, at age 8, to reread Roman history “both in my old favourite, Hooke, and in Ferguson.”

Almost literally he seems to have been the brain-child rather than merely the offspring of his father, who appears to have created him by an act of mind much as a novelist would. James Mill was in fact a writer, in his own day widely regarded as the best and most ardent literary promoter of Benthamism, though little read today. If, then, we tend to remember him largely as the author of John

Stuart Mill, this is neither less than he deserves nor a mere figure of speech. The son himself saw the connection. “I was born in London on the 20th of May, 1806, and was the eldest son of James Mill, the author of the *History of British India*,” he writes at the beginning of his autobiography.

“Most readers, and this includes most scholars, have not noticed what an extraordinary statement this is,” M.I.T. historian Bruce Mazlish comments in “James and John Stuart Mill,” his masterful new psychohistorical study of the Mills. “It invokes a new version of the immaculate conception, in which the mother is entirely missing; indeed, John Stuart Mill never mentions her throughout the published version of his work. Instead, we have ‘book and boy’ both produced by James Mill, seemingly acting alone,” Mazlish acutely notes, then adds, in what may or may not be a pun, “The rest of the *Autobiography* appears to bear out this conception.”

Subtitled “Father and Son in the Nineteenth Century,” Professor Mazlish’s book is an outstanding

contribution to the relatively new discipline of psychohistory. Indeed, his subjects seem to have been perfectly chosen for the type of analysis he provides. Both were highly articulate men who left considerable records of their thought; both figured prominently in the literary and political cultures of their day. What is more, if in their writings the two Mills dealt with some of the major social issues of 19th-century England, in their lives they acted them out. As Mazlish demonstrates time and again, the Mill household was a sort of proving ground for liberal theory, a microcosm of the militantly ascendant British bourgeoisie.

The first half of the 19th century was, as we are well aware, a period of profound and dramatic change in the institutional structures of British life, which were forced to absorb the impact of rapid industrialization and urbanization. It was a time when, as John Ruskin observed, “every man’s aim is to be in some more elevated sphere than his natural one, and every man’s past life is his habitual scorn.” Nowhere was

this scorn more lucidly expressed than in the “Philosophic Radicalism” preached by Bentham and the elder Mill. In his own writings and in the writings of his followers, Bentham explained, “men at large were invited to break loose from the trammels of authority and ancestor-wisdom.”

Undoubtedly none of the Benthamites applied this principle as assiduously as did James Mill, whose private resistance to the “ancestor-wisdom” embodied in his own parents reached almost Dickensian proportions. Like Boudier in “*Hard Times*,” James Mill so thoroughly repudiated his humble Scottish upbringing that even his closest associates knew almost nothing of his background. After his death, when his son undertook to write a biographical essay on him for the *Encyclopaedia Britannica*, he found it necessary to search out friends from his father’s youth and to bombard them with elementary questions. “The chief points,” John Stuart Mill wrote in one such inquiry, “are the time and place of his birth; who and what his parents were, and anything interesting there may be to state about them: what places of education he went to: for what professions he was educated.”

With material such as this to work with, Professor Mazlish is able to trace the deep and wide-ranging connections between James Mill’s family situation, his writings and his social milieu. Similarly, in the two-thirds of the volume devoted to John Stuart Mill we are offered a fascinating exploration of the labyrinthine network of private pieties and rebellions that underlay his work. For example, Mill’s lifelong involvement with the “woman question” has to my knowledge never been treated with such subtlety and sympathy.

With great care and precision, Mazlish unravels the tortuous and complex story of how the young John Stuart Mill learned from his

father to despise his mother, Harriet Mill, and how he fell in love with the wife of John Taylor, also named Harriet; how he struggled against what he called “the harder & sterner features” of his father’s teachings, and then entered into a lifelong liaison with Mrs. Taylor, which culminated after 18 years in a platonic marriage and which, in countless ways, allowed Mill to duplicate his discipleship to his father in his discipleship to her.

Through these sad and incomplete relationships, one can trace the growth of Mill’s most permanent works, the essays “On Liberty” and “On the Subjection of Women.” His thought, as Mazlish demonstrates, was always rooted in the subsoil of buried emotions, which at times limited his achievement and at times nourished it. If some of his unresolved tensions hindered his work as a social scientist, others facilitated his development as a social philosopher—in fact were an important part of the preconditions that made this development possible. “In Mill,” Mazlish writes, “the political, the moral, and the psychological are inextricably mixed. He is a man, not just a mind.”

Even more to the point, he was a mind, not just a man. It is to Mazlish’s credit that his careful “un-

masking” of the psychosocial forces behind Mill’s thought has not blinded him to the thought in front. Too often, psychohistorical and psychobiographical analyses have tended to pay such exclusive attention to unconscious mental processes that they leave the reader with a thoroughly depressing estimate of the value of the conscious mind. They explain away what they should be explaining and end, as Richard Ellmann once remarked, by reducing “all achievement to a web of causation until we cannot see the Ego for the Id.” Indeed, Professor Mazlish’s preceding book, “*In Search of Nixon*,” is as fine an example as one can find of why psychohistory has a bad name.

Service Planned Today For Professor Emeritus Lent

Memorial services for Deane Lent, retired MIT professor of mechanical engineering who died April 9, will be held today (Wednesday, April 16) at 3pm at the First Parish (Unitarian-Universalist) Church in Cohasset.

Professor Lent, 67, who lived at 9 Little Harbor Road, Cohasset, died at West Palm Beach, Fla., where he and Mrs. Lent were spending the winter. He retired in 1972 after 34 years at MIT.

Born in Gananoque, Ontario, Canada, Professor Lent had lived in Cohasset for 30 years after moving from Cambridge.

Professor Lent was a graduate

of Dartmouth College in 1930 and the Lowell Institute School in 1937. He began his career at MIT as an instructor in 1938, was assistant professor from 1944 to 1963, associate professor from 1963 to 1968, and professor from 1969 until his retirement.

He had published two textbooks on mechanical engineering, *Machine Drawing* and *An Analysis and Design of Mechanisms*, which has been published in Japanese and Spanish editions.

At various times from 1939 to 1954, Professor Lent was an instructor in the Lowell Institute School, the Lincoln School and the Franklin Technical Institute.

Dr. Robert W. Mann, the Whitaker Professor of Biomedical Engineering, a former student of Professor Lent and a longtime friend and colleague, said:

“Generations of MIT students knew Deane Lent through his instruction in graphics, descriptive geometry, machine drawing, kinematics and engineering design. A lot of people have a very warm and personal recollection of his concern for his students and for the thoroughness and the skill that he brought to his teaching.”

Professor Lent is survived by his wife, Mrs. Rachel (Cosby) Lent; a son, Peter C. Lent of Canton, N.Y., and two grandchildren.

Burial will be in Oak Hill Cemetery, Sterling.

Donations may be made to the Heart Fund.



Professor Lent

Fund Drive to Upgrade Sail Pavilion, Fleet

(Continued from page 1)

the current fiberglass Owen was designed by Professor Owen and built by Beetle Boat Company of New Bedford, Mass.

Now 22 years old, the second fleet of dinghies no longer serves the diverse needs of Nautical Association members who have grown in numbers from 500 in 1935 to about 1,100 today. One of the major projects of the present fund drive will therefore be the replacement of all 26 Tech Dinghies and the addition of four more, at a cost of about \$3,200 each. In addition, four more Larks are needed, which will bring that portion of MIT’s fleet to 12. According to Sailing Master Gerald M. Reed, Jr. ’34, the appearance of the new boats will not be noticeable to the inexperienced eye, but changes in flotation technology and weather protection will provide boats that are lighter, stronger, and more easily rescued.

A second purpose of the fund drive, according to Harold Brown, Jr., associate director of the Sailing Program, will be the expansion, renovation and remodeling of the MIT pavilion, which could begin as early as this summer. Plans to subdivide the present Shore School into separate locker and rest room facilities for men and women is one example of the Program’s commitment to expand upon its reputation as the first sports group at MIT to accord a women’s team varsity status.

Also planned is the addition of about 1,800 square feet of dock space and 1,000 square feet of boat storage area sufficient to accommodate the large number of visiting boats during regattas, a new power hoist that will eliminate manual lifting and enable the boats to be stored right side up—thus eliminating a major cause of cracked gunwales—and new boat racks that would simplify storage and increase availability.

“Each year, it takes longer and longer to get the boats into operation because of problems with the existing facilities,” Coach Brown said. “The proposed 35-foot floating extension at the east end of the dock will supply badly needed frontage for landing, and the hoist will allow



Gerald M. Reed '34 (left) and Harold Brown, Jr.

us to launch and haul larger boats.”

As if in fulfillment of the sailing master’s call to “pull in unison,” the committee to raise funds for MIT’s pioneering Sailing Program recalls some glorious years in racing.

Honorary Chairman Walter C. Wood ’17, led MIT to 11 victories in the Henry A. Morss Bowl competition during the first 25 years of the North American Intercollegiate Racing Championships. Ole J. Stephens, II ’30, designer of the last five America’s Cup defenders, Daniel D. Stroheimer ’34, who won his eleventh Newport-Bermuda Race last summer, and Sumner A. Long ’47, owner of what is considered the fastest big yacht in the world (“Ondine”) are three committee members who continue to test their skills between the sands of Newport or Australia and the coral of Bermuda.

Mr. Long’s “Ondine,” which last year achieved a lapse time two and a half hours ahead of the previous record set in the Newport-Bermuda run, recently won the Sidney-Hobart Race in Australia.

The youngest member of the 20-member committee is Stephen J. Cucchiaro ’74, who brought unparalleled acclaim to the MIT Sailing Program in 1973, when he won the prestigious Prince of Wales Trophy—one of five North American yachting championships.

Other members of the MIT

Community like Ruth Goodwin, assistant to the Registrar, became fascinated by sailing on the Charles during the War years, “when gas was scarce and recreation had to be simple.” As a secretary in the Department of Mathematics, just three years into her 36-year-career at MIT, Miss Goodwin was an ardent sailor in the informal Saturday and Sunday afternoon races that preceded MIT’s more formal intercollegiate regatta schedule.

Still seen ducking under varnished masts and stepping over coiled ropes at the sailing pavilion, Miss Goodwin says the stilled sails of MIT’s fleet on a calm afternoon often belie stories of romance and devotion. For a former secretary friend of hers, the MIT Sailing Program marked the beginning of a long affectionate relationship with a doctoral student who taught her how to rig a mast one spring.

The couple eventually married and continued the course of their opening conversation until the husband’s death three years ago. When the former secretary heard about the Sailing Program’s fund drive and remembered the early perils of navigating a 110 dinghy upriver, she sent MIT a check for \$1,000.

“It’s stories like that,” Mr. Smith said, “that make the splash of an MIT sail on the Charles every bit as important as the great accomplishments on our one hundred and thirty acres of land.”

54 Executives Named 1975-76 Sloan Fellows

Fifty-four young executives from industry, medicine, government and universities have been named Alfred P. Sloan Fellows by MIT.

The class is the largest in the 44-year history of the nation's oldest executive development program and this year includes for the first time a married couple.

The Fellows will follow a 12-month course of studies leading to a Master of Science in Management.

Peter P. Gil, associate dean of the Sloan School of Management and director of the program, said 33 of the Fellows come from industry, 10 from government and seven from medicine under the new MIT Health Management Executive Development Program. The remaining four are from several organizations combining the private and public sector.

"These young executives with 10 to 15 years of successful experience constitute a dynamic and demanding student group," Dr. Gil said. "They come to MIT at mid-career, still young enough to learn, but senior enough to relate their studies to the tough, practical needs of the organizations that sponsor them. The investment in the future contributions to their firms is a wise, long-term investment in managerial resources."

The married couple are Angelika Esser and Klaus Esser, of Munich, Germany. She is a research associate with Panta, Inc., of New York City and holds the JD degree from the University of Munich and a PhD in law from the University of Salzburg. He is a staff consultant for Bayerische Motoren Werke AG of Munich and holds the JD degree from the University of Munich.

The names, titles and affiliations of those selected for the Alfred P. Sloan Fellows class of 1975-76 are as follows:

Yoshitumi Amano of Kanagawa-ken, Japan: Assistant Manager, Television Development, Sony Corporation; Tokyo, Japan (BS, 1965; MS, 1967; Keio University).

Theodore I. Anderson of Lexington, Mass.: Assistant Commissioner for Mental Health Services, Department of Mental Health, The Commonwealth of Massachusetts; Boston, Mass. (AB, Harvard College, 1951; MD, University of Michigan, 1956).

Ronald A. Andrews of Alexandria, Virginia; Head, Interaction Physics Branch, Optical Sciences Division, Naval Research Laboratory, United States Department of the Navy; Washington, D.C. (BS, 1962; PhD, 1966, Wayne State University).

Tor J. Arnt-Jensen of Oslo, Norway; Legal Manager, Fearnley & Eger; Oslo, Norway (Laudabilis, University of Oslo, 1968).

Arthur O. Beall, Jr., of Ponca City, Oklahoma; Geological Coordinator, Exploration Department, Continental Oil Company; High Ridge Park, Stamford, Connecticut (BS, 1959; MS, 1963, Baylor University; PhD, Stanford University, 1964).

Michael A. Bell of Jamaica, West Indies; Staff Assistant to Vice President of Finance, Alcan Jamaica Limited; Mandeville, Jamaica, West Indies; (Certified Accountant, South West London College, 1970).

Michael R. Bruce of Wilton, Connecticut; Manager, Intermediate Systems Marketing, IBM; Armonk, New York (BA, 1960, University of Detroit).

Lincoln D. Cathers of Bethesda, Maryland; Program Manager, Materials and Mechanics Division, Research and Technology Directorate, Naval Sea Systems Command, United States Department of the Navy; Washington, D.C. (BS, Webb Institute of Naval Architecture, 1956; JD George Washington University, 1961).

George P. Chandler, Jr. of Arlington, Virginia; Assistant Executive Officer, Office of the Administrator, National Aeronautics and Space Administration; Washington, D.C. (BS, University of Tennessee, 1957).

Louis Chertkow of Johannesburg, South Africa; Vice President, Operations, Metro Cash and Carry Holdings Ltd.; Kirsh Industries Limited; Johannesburg, South Africa (Certificate for Theory of Accountancy, University of Witwatersrand, 1969).

Fredric S. Cohen of Lexington, Massachusetts; Research Group Leader, Research Department, Polaroid Corporation; Cambridge, Massachusetts (AB, 1957, Oberlin College; PhD, Brandeis University, 1963).

John E. Crawford of Birmingham, Alabama; General Personnel Supervisor, Personnel Department, South Central Bell Telephone Company; Birmingham, Alabama (BBA, Emory University, 1957).

Jerry R. Davis of Salt Lake City, Utah; Division Superintendent, Transportation, Union Pacific Railroad Company; Omaha, Nebraska.

Angelika Esser of Munich, Germany; Research Associate, Panta Inc.; New York, New

York (JD, University of Munich, 1971; PhD in Law, University of Salzburg, 1974).

Klaus Esser of Munich, Germany; Staff Consultant, Bayerische Motoren Werke AG; Munich, Germany (JD, University of Munich, 1970).

Robert L. Evans of Rockford, Illinois; Dean and Professor of Medicine, Rockford School of Medicine, University of Illinois; Rockford, Illinois (MD, Thomas Jefferson University, 1952).

Trevor A. Fisk of Middlesex, Great Britain; Manager, Social and Regional Policy, British Steel Corporation; London (BSc, London School of Economics and Political Science, 1964).

William A. Garrett, Jr. of Ridgewood, New Jersey; Labor Relations Manager-Personnel, American Telephone and Telegraph Company, Long Lines Department; New York, New York (BA, Colgate University, 1963).

James G. Groszklaus of Appleton, Wisconsin; Vice President, Consumer Business Divi-

William Hecht's three children are facing a year of brown-bag lunches and fewer trips to MacDonald's and the pizzeria, but they don't mind.

"We'd rather have a smarter daddy than a bunch of Big Macs or super combinations," report Olivia, 10, Maria, 11, and William, Jr., 13.

The need for frugality burst upon the young Hechts suddenly when they learned that daddy's acceptance into the Sloan Fellows Program meant a leave of absence as director of MIT's Educational Council, that a leave of absence meant no salary for a year, and that no salary meant they'd probably become strangers in MacDonalddland.

Mr. Hecht, a 1961 graduate of MIT with an SB in industrial management, decided several months ago to seek admission to the Sloan School's executive development program as a self-nominated candidate.

"I had a number of reasons for wanting to get involved with the Sloan Fellows Program," Mr. Hecht said. "First of all, in my work with the Educational Council I have constantly stressed the importance of private higher education and the time has come, so to speak, for me to put my money where my mouth is. Second, I have become increasingly aware of the importance of graduate management training in the work of the Council and of the admissions office, of which I am associate director. Third, several members of the Educational Council are Sloan alumni and I became convinced that I should apply for the program after talking with several of them."

Mr. Hecht, who plans to return to his post at MIT after completing the Sloan program, was named executive secretary of the Educational Council and assistant director of admissions in 1967. He became council director and associate director of admissions two years later.

A native of New York City, Mr. Hecht, who will be 35 in May, was affiliated with the New York Telephone Company from 1961 to 1963.

He was personnel officer for United Aircraft Laboratories in East Hartford, Conn., before coming to MIT.

Mr. Hecht is married to the former Olive Burke. They live in Reading, Mass.

son-US, Kimberly-Clark Corporation; Neenah, Wisconsin (BBA, University of Wisconsin, 1957).

Jeffrey T. Hamilton of Vienna, Virginia; Director of Technology Utilization, National Aeronautics and Space Administration; Washington, D.C. (BA, 1960; BS, 1962; University of Notre Dame).

Phillip R. Haug of Vienna, Virginia; Computer Systems Analyst, INFORM Group, Forest Service, United States Department of Agriculture; Washington, D.C. (BA, 1960; BS, 1962, University of Nevada).

Marshall L. Heard of Mercer Island, Wash-

ington; Boeing Company; Seattle, Washington (BS, United States Naval Academy, 1960; MS, University of Illinois, 1962).

William J. Hecht of Reading, Mass.; Director, Educational Council and Associate Director of Admissions, Massachusetts Institute of Technology; Cambridge, Mass. (SB, Massachusetts Institute of Technology, 1961).

Steven A. Heller of Philadelphia, Pennsylvania; Director of Marketing, IU International Corporation; Philadelphia, Pennsylvania (BS, University of Pennsylvania, 1961).

Arthur D. Hopkins of Fairfax, Virginia; Chief, Analysis and Requirements Section, Computer Center Division, US Geological Survey, United States Department of the Interior; Reston, Virginia (BS, University of Oklahoma, 1958).

David W. Hunt of Pittsford, New York; Manager, Central Distribution, Eastman Kodak Company; Rochester, New York (BA, Coe College, 1960).

Richard J. Jackson of Leawood, Kansas; Manager-Engineering, Transmission Products, Western Electric Company Inc.; Lee's Summit, Missouri (BS, University of Pittsburgh, 1957).

Hiroshi Kashiwagi of Tokyo, Japan; Senior Assistant Manager, Planning Department, International Division, The Dai-Ichi Kangyo Bank, Ltd.; Tokyo, Japan (BLaws, University of Tokyo, 1958).

Kenneth H. Kulesza of Hingham, Mass.; Assistant Vice President, Personnel, Federal Reserve Bank of Boston; Boston, Mass. (BA, Amherst College, 1964).

Sandra G. LeFlore of Cambridge, Mass.; Director of Resources and Development, Mayor's Office of Cultural Affairs; Boston, Mass. (AB, Syracuse University, 1969).

Katherine B. Magrath of Marblehead, Mass.; Portfolio Management Consultant (BSBA, Washington University, 1973).

Bruce A. McNally of Wilmington, Delaware; Superintendent, General Motors Assembly Division, General Motors Corporation; Wilmington, Delaware (BA, 1963, Lycoming College).

Sister Kathleen Natwin of Boston, Mass.; Director, Ambulatory Nursing Service, Division of Ambulatory & Community Services,

Carney Hospital; Boston, Massachusetts (BS, St. Joseph College, 1967).

Ellen W. Ober of Columbia, Maryland; Vice President, Social Services Group, Macro Systems, Inc.; Silver Spring, Maryland (AB, Bryn Mawr College, 1961; MRP, University of North Carolina, 1971).

Michikazu Okada of Tokyo, Japan; Manager, Corporate Planning Section, Kirin Brewery Company, Ltd.; Tokyo, Japan (BEconomics, University of Tokyo, 1958).

Yeop A. Othman of Kuala Lumpur, Malaysia; Deputy Director and Principal, Employee Development Centre, National Institute of Public Administration; Petaling, Jaya, Malaysia (BS, University of Malaya, 1965; Diploma, London School of Economics, 1972).

Paul E. Pakos of Buckinghamshire, England; Chief, Loran Division (NATO) United States Coast Guard Activities; Europe (BS, US Coast Guard Academy, 1959; MS, MIT, 1965; MS, University of Arkansas, 1974).

Robert H. Peterson of Salt Lake City, Utah; Refinery Operations Superintendent, Utah Copper Division, Kennecott Copper Corporation; Magna, Utah (BS, University of Utah, 1963).

Tom D. Plant of Marina del Rey, California; Assistant to Vice President, Santa Fe Land Improvement Company, Santa Fe Industries, Inc.; Los Angeles, California (BA, 1969; MCE, 1969, Rice University).

Robert C. Ricci of Bedford, Mass.; Chief, Control and Simulation Branch, Information Sciences Division, Transportation Systems Center, US Department of Transportation; Cambridge, Mass. (BS, 1959; MS, 1959, MIT).

Donald L. Runkle of Royal Oak, Michigan; Administrator, Automobile Design and Manufacturing, Product Planning Department, Chevrolet Motor Division, General Motors Corporation; Warren, Michigan (BSE, 1968, MSE, 1971, University of Michigan).

Larry L. Schedin of Minnetonka, Minnesota; General Manager of Rates, Northern States Power Company; Minneapolis, Minnesota (BEE, University of Minnesota, 1961).

Margaret R. Shanley of Jamaica Plain, Mass.; Associate Director of the Hospital, Director, Nursing Service, The Children's

Hospital Medical Center; Boston, Mass. (BS, Seton Hall University, 1967; MA, Catholic University of America, 1970).

Charles J. Smith, Jr. of Huntsville, Alabama; Supervisory Physical Scientist, Ballistic Missile Defense Systems Command, United States Department of the Army; Huntsville, Alabama (BS, University of Alabama, 1958).

George T. Smith of Reno, Nevada; Dean, School of Medical Sciences, University of Nevada; Reno, Nevada (BS, 1954; MD, 1956, University of Maryland).

Gordon W. Soares of Moraga, California; Deputy Director, Division of Health Services, Public Health Service, United States Department of Health, Education and Welfare; San Francisco, California (BA, St. Mary's College, 1962).

Takeshi Tange of Tokyo, Japan; Senior Assistant Manager, Credit Supervision Division, The Mitsubishi Bank, Ltd.; Tokyo, Japan (B of Commerce, Hitotsubashi University, 1960).

William N. Turner of Calgary, Alberta, Canada; Division Production Manager, Sun Oil Company Limited; Calgary, Alberta, Canada (BSc, University of Alberta, 1958).

Dennis H. Vaughn of Huntsville, Alabama; Director, Product Assurance and Test Division, STINGER Project Office, US Army Missile Command, United States Department of the Army; Redstone Arsenal, Alabama (BS, Tennessee Technological University, 1961).

John Y-H. Wei of North Point, Hong Kong; Manager, Neptune Maritime Limited; Hong Kong (BSc, University of Eastern China, 1962).

William P. Wesley of Orlando, Florida; Program Manager, Tactical Weapons Systems, Martin Marietta Aerospace; Orlando, Florida (BEE, Cornell University, 1963; ME, New York University, 1965).

W. Donald Weston, Jr. of Lansing, Michigan; Associate Dean, College of Human Medicine, Michigan State University; East Lansing, Michigan (AB, 1954; MD, 1958, University of Southern California).

Ichiro Yamanouchi of Tokyo, Japan; Senior Staff Engineer, Engineering Bureau, Nippon Telegraph and Telephone Public Corporation; Tokyo, Japan; (BS, Keio University, 1959).

Rosenblith Is Institute Professor

(Continued from page 1)

provost in 1971.

Professor Rosenblith holds degrees in communications engineering from the University of Bordeaux, France (1936) and from the Ecole Supérieure d'Electricite in Paris (1937). After his arrival in the United States he was first a research assistant in physics at New York University. Later he became a university fellow in physics at UCLA.

From 1943-1947, Professor Rosenblith was successively assistant professor, associate professor and acting head of the physics department at the South Dakota School of Mines and Technology.

While a research fellow in the Harvard Psycho-Acoustic Laboratory from 1947 to 1951, Professor Rosenblith did experiments in auditory biophysics and psychophysics. It was this research that led to his interest in mathematical models for the electrical activity of the brain.

His earlier work in hearing and on the effects of noise on man had led to his collaboration in the formation of the Eaton Peabody Laboratory for Auditory Physiology at the Massachusetts Eye and Ear Infirmary and to an appointment as research associate in otology at the Harvard Medical School in 1957. Since 1968 he has also been a scientific adviser to the Callier Center for Communication Disorders at Dallas, Texas.

He has served on numerous technical committees and advisory boards, including the Life Sciences Panel of the President's Science Advisory Committee in the early 1960s, the National Academy of Sciences' Brain Sciences Committee from 1965-1968, the NAS-NRC Committee on Computers in Science, Education and Research (1962-66) and the NAS Board of Medicine from 1967-1970.

Professor Rosenblith is the editor of two MIT Press volumes *Processing Neuroelectric Data* and *Sensory Communication*. He is the author of numerous scientific and technical papers and chapters and has been a member of several editorial boards.

Professor Rosenblith has lectured widely in the United States and

abroad. He has served on the executive committee of the International Brain Research Organization, on the council of the International Union for Pure and Applied Biophysics, and was president of its commission on the biophysics of communication and control processes.

Professor Rosenblith is a member of the National Academy of Engineering; a charter and council member of the NAS Institute of Medicine; he currently serves as a member of the Governing Board of the National Research Council; he is a fellow of the American Academy of Arts and Sciences and a member of its executive board.

In 1966 Professor Rosenblith served as chairman of a summer

study on Science and Urban Development, in 1967-68 he was a member of the President's Committee on Urban Housing (chaired by Edgar Kaiser) and in 1970-71 he served as Acting Director of the Harvard-MIT Joint Center for Urban Studies.

As Provost he is the Institute's senior academic officer with responsibilities for educational programs as well as for interdepartmental, interschool and interdisciplinary laboratories, centers and programs.

The former Judy Olcott Francis, a psychology professor at Wheaton College, is his wife. They live at 164 Mason Terrace in Brookline. The Rosenbliths have two children, Sandra and Ronald.

FAC Seeks Advisors for '79

Currently facing an advisor shortage, the MIT Freshman Advisory Council (FAC) is seeking volunteers to serve as advisors for the class of 1979.

A total of 280 volunteers will be needed to accommodate the large incoming freshman class, yet only 151 faculty, staff members and graduate students had volunteered by the April 11 deadline—leaving a shortage of approximately 130 advisors.

The volunteer method of seeking freshman advisors, which was instituted seven years ago, has been very successful in past years and members of the Freshman Advisory Council hope that a sufficient number of faculty, graduate students and staff members will come forward to insure the program's continued success.

Although freshman advising has been handled primarily by the faculty, in recent years some staff members—those whose work at MIT keeps them in close proximity to the academic processes of the Institute—and graduate students have also served successfully in an advising capacity.

The FAC hopes to expand an experimental program in which graduate students, with faculty affiliates serving as their backups, advise freshmen as the demand for advisors increases.

According to Peter Buttner,

Associate Dean for Student Affairs; "Persons interested in advising should have at least one year's experience at MIT, preferably two or three years and they should feel reasonably familiar with the Institute."

"Advisors do not have to be expert in freshman curriculum, but they will be asked to become familiar with all aspects of the freshman year by reading the Freshman Handbook and other materials concerning the freshman year," Buttner added.

The Freshman Advisory Council is concerned with maintaining the quality of advising, despite the ever tightening Institute budget. However, the program will suffer if the current volunteers are overloaded.

If, by the first week in May, a number of volunteers do not come forth, members of the Freshman Advisory Council will attempt to solicit additional volunteers through academic department heads.

Those interested in serving as freshman advisors should contact Peter Buttner or Bonny Kellermann in the Freshman Advisory Council office, x3-6771, as soon as possible.

THE INSTITUTE CALENDAR

April 16
through
April 27

Events of Special Interest

Pre-Retirement Seminars* – Sponsored by the Benefits Office. Thurs, Apr 17: **AARP (American Association of Retired Persons)** – Albert Sise, MIT retiree, Vermont Regional Representative of AARP. Thurs, Apr 24: **Social Security** – James Duby, social security administrator. 3pm, Rm 6-120. Info: x3-4271.

Massachusetts State Science Fair* – Sat, Apr 19, 12n-3:30pm, Rockwell Cage. Awards ceremony 3:30pm, Kresge.

Women Students and AMITA Dinner Meeting** – Sponsored by AWS & AMITA. Women students are invited to come to dinner with MIT alumnae who have 500 woman-years of experience in all technological fields. Come get a preview of where you're needed. Wed, Apr 23, 6pm, meet in Stu Ctr lobby. (Location of dinner yet to be decided).

Seminars and Lectures

Wednesday, April 16

An Analysis of Ocean Floor Topography and Heat Flow – Barry Parsons, earth & planetary sciences. Oceanography Sack Lunch Seminar. 12n, Rm 54-311. Coffee, bring lunch.

Energy-Saving Improvements to Domestic Heating Systems* – Student presentations of mechanical engineering design projects. Mechanical Engineering Seminar. 1pm, Rm 3-270.

The Einstein-Podolsky-Rosen Paradox: Measurement and Probability in Quantum Mechanics* – O. Costa de Beauregard, Institute Henri Poincaré, University de Paris. Mechanical Engineering Thermodynamics Seminar. 3pm, Rm 3-133.

Impurity Particle Instabilities* – Hark C. Chan, G. Nuclear Engineering Doctoral Seminar. 3pm, Rm 38-136.

Urban Emergency Services: A New Computer Implemented Model* – Richard C. Larson, electrical engineering & urban studies. Innovative Resource Planning Project, Operations Research Center Seminar. 3:30pm, Rm 24-121.

Renaissance* – Dirk J. Struik, mathematics, emeritus. Mathematics Department & Concourse Forum, History of Mathematics Lecture. 3:30pm, Rm 10-105.

Rotational and Vibrational Quantum Transitions of H₂ in Collisions with Li⁺: Experiment Versus Theory* – J. Peter Toennies, Max-Planck-Institut für Stromungsforschung, Gottingen, Germany. Physical Chemistry Special Seminar. 4pm, Rm 6-233.

Research in Physics at MIT* – Bernard Burke, Thomas Greytak, Lawrence Rosenson, physics; Francis Low, Karl Taylor Compton Professor of Physics & director of Center for Theoretical Physics. Undergraduate Physics Colloquium. 4:15pm, Rm 4-339. Social hr 5pm.

Gogol and his Relation to Other European Writers* – Panel discussion in English and Russian. Foreign Literature and Linguistics Seminar. 7:15pm, Rm 8-105.

Thursday, April 17

Some Scientific Evaluations of Several Different Types of Tennis Racquets by Strobe and High-Speed Videography* – Charles E. Miller, electrical engineering. Stroboscopic Light Laboratory Seminar. 12n, Rm 4-402.

Computer Experiments in Plastic Anisotropy in BCC Single Crystals* – Shin Takeuchi, mechanical engineering, visiting. Mechanical Engineering & Materials Science Special Seminar. 2pm, Rm 13-2101.

Gigahertz Band Width HgCdTe Photodiodes for Heterodyne Detection* – David L. Spears, Lincoln Lab. Electrical Engineering Optics Seminar. 3pm, Rm 39-400.

The Politics of Genetic Engineering: Who Decides Who is Defective?* – Jonathan Beckwith, MD, microbiology & molecular genetics, Harvard Medical School. Technology & Culture Seminar. 4pm, Rm 9-150.

The Middle East at the Crossroads* – Nadav Safran, Harvard Center for Middle Eastern Studies. MIT-Harvard Arms Control Seminar. 4-6pm, Faculty Club Penthouse.

Review of Spectral Lowering Techniques for the Hearing Impaired* – Louis Braid, electrical engineering. Interdepartmental Acoustics Seminar. 4pm, Rm 5-134. Coffee 3:30pm, Rm 1-114.

Fusion Power by 1995* – Robert Taylor, physics. Physics Colloquium. 4:15pm, Rm 26-100. Refreshments 3:45pm, Rm 26-110.

Physical Irreversibility Problems* – O. Costa de Beauregard, Institute Henri Poincaré, University de Paris. 4pm, Rm 3-343.

Surrealist Painting: The Landscape of the Mind* – Whitney Chadwick, architecture. Humanities Crossroads Lecture. 4:30pm, Rm 3-133.

Socialist Education in the German Democratic Republic* – Waldemar Damp and Dr. Heinz Fischer, 1st Secretaries of the Embassy of the GDR. Foreign Literature & Linguistics Seminar (in English). 8pm, Rm 3-370.

Friday, April 18

A Preliminary Study of the Application of Magnetic Separation to Coal Liquefaction* – I. Akoto, G. Chemical Engineering Doctoral Seminar. 2pm, Rm 10-105.

Conversion of Fuel Nitrogen to Nitrogen Oxides to Flames* – B. Taylor, G. Chemical Engineering Doctoral Seminar. 3pm, Rm 10-105.

Medical Applications of ²⁵²Cf at MIT* – Roderic I. Pettigrew, G. Nuclear Engineering Biomedical Applications of Radiation Seminar. 3:45pm, Rm NW12-222. Coffee 3:30pm.

Angular Momentum Diffusion and the Initiation of Natural Vortices* – Angus McEwan, Woods Hole Oceanographic Institution. GFD Seminar. 4pm, Harvard University Pierce Hall, Rm 110. Coffee 3:30pm, Pierce Hall faculty coffee rm.

Panama Canal: Treaty, Issues and Management Alternatives* – Steve Gibbs, G. Ocean Engineering Tankard Seminar. 4pm, Rm 5-314. Slides & refreshments.

Generation and Detection of Subnanosecond Pulses at 10.6 μ m – A.J. Alcock, National Research Council of Canada. Plasma Dynamics Seminar. 4pm, Rm 36-261. Refreshments before.

He³A and He³B – Magnetic Superfluids* – D.D. Osheroff, Bell Labs, NJ. Materials Science Colloquium. 4pm, Rm 9-150. Refreshments 3:30pm.

Tuesday, April 22

Grain Boundary Contributions to Internal Friction; Substructures Formation in Deformed KCl** – Rowland M. Cannon, G. Materials Science & Engineering, Ceramic & Glass Seminar. 9am, Rm 16-310.

MIT PDP 11 Users Group* – Sponsored by IPS. 2:30pm, Rm 13-5002. Coffee 2pm.

International Boundary Questions: What Principles to Apply – A Discussion of the US-Canada-Georges Bank Question* – Robert Hodgson, the geographer for Department of State. MIT-Harvard Law School Ocean Laws Series Seminar. 3pm, Intl Legal Studies Bldg, Rm 3, Harvard Law School. Cocktails following.

Germ-Cell Determinants in Drosophila – Dr. Karl Illmensee, Institute for Cancer Research, Phila, Pa. Biology Colloquium. 4:30pm, Rm 6-120. Coffee 4pm, Bldg 56, 5th fl vestibule.

Qualitative Analysis of Large-Scale Dynamical Systems* – Anthony N. Michel, electrical engineering, Engineering Research Institute, Iowa State University. Electrical Engineering & Computer Science Decision & Control Group Seminar. 4pm, Rm 39-500.

Wednesday, April 23

Iran's Nuclear Options* – Anne Cahn, Harvard University Program for Science & International Affairs. Center for International Studies Seminar. 12n, Rm E53-482.

Numerical Methods for Solving Multidimensional Kinetics* – Antonio Alvim, G. Nuclear Engineering Doctoral Seminar. 3pm, Rm NW12-222.

Plasma Ion Energy Measurement by Charge-Exchange Neutral Analysis* – Donald Cook, G. Nuclear Engineering Doctoral Seminar. 3pm, Rm 38-136.

Calculus* – Dirk J. Struik, mathematics, emeritus. Mathematics Department & Concourse Forum, History of Mathematics Lecture. 3:30pm, Rm 10-105.

Models for Fracture and Progressive Failure in Porous Saturated Media* – Michael Cleary, Brown University. Applied Mechanics Seminar. 4pm, Rm 5-134. Coffee 3:30pm, Rm 1-114.

Optimal Performance of Electric Utilities with Nuclear Plants* – T. Zimmerman, G. Nuclear Engineering Doctoral Seminar. 4pm, Rm NW12-222.

Reminiscences of Wolfgang Pauli* – Victor Weisskopf Institute Professor and Professor of Physics, Emeritus. Physics Undergraduate Colloquium. 4:15pm, Rm 4-339. Social hour 5pm.

Skylab Medical Studies: Neurophysiological and Circulatory Findings* – Dr. Sherman Vinograd, director of biomedical research, NASA. Man Vehicle Laboratory Special Seminar with movie. 4:30pm, Rm 37-212.

Thursday, April 24

Underwater Acoustics Navigation Systems* – Robert Porter, Woods Hole Oceanographic Institution. Interdepartmental Acoustics Seminar. 4pm, Rm 5-134. Coffee 3:30pm, Rm 1-114.

Magneto Hydrodynamic Power Generation: Current Status and Critical Problems* – David Oliver, aero/astro. Mechanical Engineering Thermal-Fluids Seminar. 4pm, Rm 3-343.

Selected Topics in Polymer Processing* – Seymour Newman, senior staff engineer, Ford Motor Company Plastics Development Center. Mechanical Engineering Polymer Processing Seminar. 4pm, Rm 36-372. Coffee 3:45pm.

Radiation Laboratory: Its Impact on Research* – Albert G. Hill, physics, Vice President for Research. RLE, Electrical Engineering & Computer Sciences, Physics Seminar. 4:15pm, Rm 26-100.

Friday, April 25

Study of the Aggregation and Allosteric Control of Bovine Glutamate Dehydrogenase Using Quasi-Elastic Light Scattering Spectroscopy* – Richard J. Cohen, G. Special Joint Seminar, Physics and Harvard-MIT Health Sciences and Technology Program. 12n, Rm 4-253.

Design of an Interactive Computer System for Engineering Chemical Processes* – M. Arab-Ismaïli, G. Chemical Engineering Doctoral Seminar. 2pm, Rm 10-105.

Rapid Hydrogasification/Liquefaction of Coal* – E. Suuberg, G. Chemical Engineering Doctoral Seminar. 3pm, Rm 10-105.

Food Irradiation: Status and Problems – E. Josephson, US Army Natick Laboratories. Nutrition & Food Science Seminar. 3pm, Rm 16-134.

Wind-Effects on Buildings* – J.E. Cermak, Fluid Dynamics Program; director, Fluid Dynamics & Diffusion Laboratory; Colorado State University. Mechanical Engineering Seminar. 3pm, Rm 3-133. Coffee 4pm, Rm 1-114.

Magnetic Field Line Reconnection – V.M. Vasyliunas, physics Plasma Dynamics Seminar. 4pm, Rm 36-261. Refreshments before.

Community Meetings

TWO Meeting – Maureen and Adam Yagodka, co-directors of Personnel Development, will speak on job sharing at final General Meeting of the year. Wed, Apr 16, 8pm, President's house, 111 Memorial Drive. Husbands welcome.

Big Brother Drive – Apply now to be a Big Brother next term Thurs, Apr 17 & Fri, Apr 18, 12n-5pm, Bldg 10 Lobby, sponsored by Urban Action. Current Big Brothers will be there to answer questions. If can't attend call x3-2894, Rm 10-206, Tues-Fri, 1-5pm.

Women's Forum** – Meetings Mon, 12n, Rm 10-105. (Tues in case of Mon holiday). Tues, Apr 22: The technique of role reversal will be used to present forms of subtle discrimination against women. Men are especially encouraged to attend and participate in discussion. **Special Dinner Meeting, Sun, Apr 27, 7pm: Dr. Rosemary Rueher, author of Religion and Sexism: Images of Women in the Jewish and Christian Traditions, will speak on "Matriarchy and the Mastery of Nature." Call Claudia Liebesny, x3-1595, or Connie Parvey, x3-2325, to reserve a place for the light supper (costs will be shared).**

AWARE Secretaries Week Activities* – All events 12n, Rm 6-120, unless otherwise noted. Tues, Apr 22: **Florence Luscomb, '09, noted feminist, will speak on her experiences during her long career in the feminist movement. Wed, Apr 23: Karen Nussbaum, co-founder of 9-5, will speak on current developments in the field of organizing. Thurs, Apr 24: Joanne Goldstein, feminist lawyer, will speak on sex discrimination suits and how unions affect them. Fri, Apr 25: information booths, 12n-2pm, in Bldg 10 Lobby, Walker and Stu Ctr.**

Men's (People?) Consciousness Group* – Sponsored by MIT SACC. Discussion of men's relations with others as people. Tues, 5pm, Rm 50-361.

The Wives' Discussion Group** – Wed, 2:15-4pm, Stu Ctr West Lge. Babysitting in Stu Ctr Rm 473.

Stained Glass Workshop** – Student Art Association. Four weekend sessions, beg Sat, Apr 26, 1-4pm, Stu Ctr Rm 429. Fee: \$25 students, \$30 others. Dave or Malka, x3-7019.

Wellesley Events

Photography within the Humanities* – Exhibition of 100 photographs chosen by the participants, accompanied by daily lecture by one of the photographers or a critic. Exhibit thru Fri, Apr 25, Mon-Fri 8:30am-5pm; Sat 8:30am-12n & 1-5pm; Sun 2-5pm; Wellesley College Museum, Jewett Arts Center. Lectures, 8pm: Wed, Apr 16: **John Szarkowski, curator of photography, Museum of Modern Art, Jewett Auditorium. Fri, Apr 18: W. Eugene Smith, Life photographer, inventor of "picture story." Jewett Auditorium. Mon, Apr 21: Susan Sontag, author of On Photography, reviewer, Jewett Auditorium. Wed, Apr 23: Irving Penn, Vogue photographer. 112E Pendleton Hall. Fri, Apr 25: Robert Coles, author; psychiatry, Harvard. Jewett Auditorium. Free.**

Social Events

Ad-Hoc Over 30's Singles Chowder and Marching Society – Luncheon meeting in Stu Ctr East Lge (small dining room off Lobdell), Fri, 12:30-1:30pm. New members always invited. Look for the table with the red balloon. Suzanne, x3-3131 or Marty x8-1206 Draper.

24 Hour Coffeehouse* – Enjoy relaxing conversation, piano playing, games, inexpensive food, candy & drinks. Open 24 hours per day, 7 days per week, Stu Ctr 2nd fl lge.

Strat's Rat – Sat, Apr 25, 8:30pm, Sala. Light & dark beer \$.25/16 oz cup (\$1 for 5). Music by WTBS, requests until 1am. College ID required.

Movies

Eddy; Chiefs: Queen of Apollo (Leacock)* – Film Section. Wed, Apr 16, 7pm, Rm E21-010. Free.

An Interview with G.I. Taylor; Rheological Behavior of Fluids* – Fluid Mechanics Films. Thurs, Apr 17, 4pm, Rm 33-319. Free.

Is There Life Out There?* – Barker Library Film. Thurs, Apr 17, 5pm, Rm 10-500. Free, coffee served.

Rocco and his Brothers* – Humanities Film. Thurs, Apr 17, 7pm, Rm 10-250. Free.

Is There Life Out There?* – Barker Library Film. Fri, Apr 18, 12n, Rm 10-500. Free coffee served.

The Life and Times of Judge Roy Bean** – LSC. Fri, Apr 18, 7 & 10pm, Rm 26-100. Admission \$.50, ID required.

Variety Lights (Fellini, Lattuada) – Film Society. Fri, Apr 18, 7:30 & 9:30pm, Rm 6-120. Admission \$1.

The Lavender Hill Mob – SCC MidNite Movie. Fri, Apr 18, 12m, Sala. Admission free w/college ID.

2001: A Space Odyssey** – LSC. Sat, Apr 19, 7 & 10pm, Kresge. Admission \$.50, ID required.

Professor* – Sangam. Indian movie with English subtitles. Sun, Apr 20, 2:30pm, Rm 26-100. Admission \$.50 with ID.

Dr. Strangelove** – LSC. Sun, Apr 20, 6:30 & 9pm, Rm 26-100. Admission \$.50, ID required.

The General; The Odd Couple* – Humanities Film. Wed, Apr 23, 7:30pm, Rm 10-250. Free.

8½* – Humanities Film, Wed, Apr 23, 8pm, Rm 26-100. Free.

Cavitation* - Fluid Mechanics Film. Thurs, Apr 24, 4pm, Rm 33-319. Free.

Exploiting the Oceans* - Barker Library Films. Thurs, Apr 24, 5pm, Rm 10-500. Free, coffee served.

Exploiting the Oceans* - Barker Library Film. Fri, Apr 25, 12n, Rm 10-500. Free, coffee served.

I Vitelloni (Fellini) - Film Society. Fri, Apr 25, 7:30 & 9:30pm, Rm 6-120. Admission \$1.

The Selling of the Pentagon/Red Nightmare - SCC MidNite Movie. Fri, Apr 25, 12m, Sala. Admission free w/college ID.

Gone with the Wind** - LSC. Sat, Apr 26, 4 & 9pm, Rm 26-100. Admission \$.50, ID required.

The Pink Panther** - LSC. Sun, Apr 27, 6:30 & 9pm, Rm 26-100. Admission \$.50, ID required.

Lobby 7 Events

Food: Mixed Media Show* - Lobby 7 transformed into a multi-media gallery of more than 20 "pocket" participatory displays. Designed & directed by Otto Piene, director of CAVS. Individual displays created by members of the community. Free. Highlights, 12n: Thurs, Apr 17: National Food Day. Friday, Apr 18: Julia Child, author & TV personality.

Central Maine Power Music Company* - Wed, Apr 23, 12n. Free.

MIT Logarithms Concert* - Fri, Apr 25, midnight. Free.

Music

MIT Chamber Music Society Concert* - Wed, 5:15pm, Music Library Free.

MIT Chamber Players* - With John Buttrick & Beatrice Erdely. Program of Hummel, Bartok, Janacek, Martinu. Wed, Apr 16, 8pm, Kresge. Free.

Noon Hour Concert* - Rufus Hallmark, tenor. Thurs, Apr 17, 12n, Chapel. Free.

US Armed Forces Bicentennial Band & Chorus* - Sponsored by the MIT Concert Band and Boston 200. Sun, Apr 20, 8:15pm, Kresge. Free.

Indian Classical Evening* - Sponsored by Sangam, featuring Jothi Raghavan in Bharata Natyam; Peter Row, sitar, with Swaraj Bhattacharji, tabla; Odissi dance by Frederique Marglin. Sat, Apr 26, 7pm, Kresge. Admission \$3 & \$2. Info & tickets: 494-0493 or 894-6537.

New England Fine Arts Trio** - Consisting of piano, violin and cello. Sponsored by LSC. Sun, Apr 27, 2pm, Kresge. Free. ID required.

Zamir Chorale Group* - Sponsored by Hillel. Boston chorale group specializing in Hebrew & Israeli music. Sun, Apr 27, 8pm, Kresge. Admission: \$3, \$4 & \$5. Reservations: 266-7664.

Theatre

Twelfth Night* - Shakespeare Ensemble production. Sat, Apr 19-Wed, Apr 23, 8pm, Sala. Admission \$2.50; except Shakespeare's birthday (Apr 23), \$3.50 (champagne will be served). \$1 off all performances with MIT or Wellesley student ID.

Dance

Folkdancing - International: Sun, 7:30-11pm, Sala. **Balkan:** Tues, 7:30-11pm, Stu Ctr Rm 491. **Israeli:** Thurs, 7:30-11pm Sala. **Noon dancing:** Fri, 12n-1:30pm, Kresge Oval in good weather, otherwise Bldg 7 Lobby. Learn & practice more difficult dances Fri, 1:30-3 or 4pm, Stu Ctr 491.

Scottish Country Dancing* - Wed, 8pm, Rm 3-343. Free. Info: Yuval Peduel, x3-7860.

Exhibitions

Photography Exhibition* - Photographs by Roger N. Goldstein, graduate student in architecture. Thru Fri, Apr 18, Rotch Library, Rm 7-238.

Transportable Solar Laboratory* - Sponsored by the Energy Research & Development Administration and Honeywell, Inc. The exhibit will be in the back of Kresge parking lot thru Mon, Apr 21. Hours: 11am-2pm, Mon-Fri; 11am-4pm, weekends.

Creative Photography Exhibit* - Works by Wendy Snyder MacNeil. Thurs, Apr 3-Sat, Apr 22, 10am-6pm, Bldg W31. Free.

Photographs by Bob Lyon* - Former special student at the Creative Photography Gallery. Thru Thurs, Apr 24, Lounge, Creative Photography Laboratory, Bldg W31.

Boston Celebrations: Part I* - Scale models, drawings & conceptual pieces for temporary visual celebrations on specific Boston sites, by fellows at CAVS. Thru Fri, Apr 25, CAVS.

Geo-Astral Formulations 1969-1972* - Lowry Burgess, CAVS fellow. Weekdays during April 9am-5pm, Center for Advanced Visual Studies (Bldg W11). Free.

Faculty Club Exhibit* - Water color and oil paintings by Nancy Begin. Thurs, Apr 3-Wed, Apr 30, Faculty Club. Free.

Kinetic and Mural Sculpture* - Robin Parkinson. Center for Advanced Visual Studies. 9am-5pm, Wed-Fri only, Apr 11-Apr 30, Bldg W11. Free.

Drawings: Andrew Tavarelli* - Fri, Apr 4-Sun, May 4, Hayden Corridor Gallery. Open daily. Free.

Visual Dharma* - The Buddhist art of Tibet. Sponsored by the Committee on the Visual Arts. Fri, Apr 4-Wed, May 7; daily 10am-4pm, Tues 6-9pm; Hayden Gallery. Public Preview Fri, Apr 4, 8-10pm. Free.

The Look of Music in the Middle Ages* - Facsimiles of manuscripts and transcriptions into modern notation; pictures of life in the Middle Ages. Open daily, Music Library, Bldg 14E.

Hart Nautical Museum* - Permanent exhibit of rigged merchant and naval ship models, half models of yachts and engine models. Open daily in Bldg 5, 1st floor.

MIT Historical Collection* - Permanent exhibition, open Mon-Fri, 9am-5pm, Bldg N52, 2nd floor.

Photographs* - Showing the original 19th century MIT buildings in downtown Boston and step-by-step views of construction in Cambridge. Bldg 4 Corridor.

MITV News* - News program in and around MIT during the week. Shown Fri, 9am-5pm, Bldg 10 Lobby.

Athletics

Home Schedule* - Wednesday, April 16 - JV/F Lacrosse. Phillips Exeter, 3pm, Briggs Field. **V Baseball.** Lowell Tech, 3pm, Briggs Field. **Friday, April 18 - V Lacrosse.** Holy Cross, 4pm, Briggs Field. **JV/F Baseball.** Browne & Nichols, 3:30pm, Briggs Field. **F Tennis.** Belmont Hill, 4pm, duPont courts. **Saturday, April 19 - Lt Crew.** Biglin Cup, F-11am, JV-11:45am, V-12:30pm, Charles River. **Hvy Crew.** Northeastern, BU, F-11am, JV-11:45am, V-12:30pm, Charles River. **W Sailing.** CCT Invitational, Charles River. JV-11:45am, V-12:30pm, Charles River. **W Sailing.** CCT Invitational, Charles River. **Outdoor Track.** Bowdoin, 12:30pm, duPont Oval. **JV/F Lacrosse.** Winchendon School, 2pm, Briggs Field. **F Tennis.** Buckingham, Browne & Nichols, 2pm, duPont courts. **V Tennis.** Williams, 2pm, duPont courts. **Monday, April 21 - V Baseball.** Brandeis, 2pm, Briggs Field. **F&V Tennis.** Brown Univ, 3pm, duPont courts. **Tuesday, April 22 - V Baseball.** Boston State, 3pm, Briggs Field. **Wednesday, April 23 - Outdoor Track.** Tufts, 3pm, duPont Oval. **JV/F Lacrosse.** LaSalle Academy, 4pm, Briggs Field. **Thursday, April 24 - V Lacrosse.** New Hampshire, 4pm, Briggs Field. **Friday, April 25 - V Golf.** Bates, Lowell Tech, Bowdoin. 12:30pm, Braeburn Cntry Club. **Saturday, April 26 - Hvy Crew.** Compton Cup (Harvard, Princeton), F-11am, JV-11:30am, V-12n, Charles River. **Outdoor Track.** WPI, 12:30pm, duPont Oval. **F&V Tennis.** Trinity, 2pm, duPont courts. **Saturday, April 26 & Sunday, April 27 - W Sailing.** Gerry Reed Trophy, 9:30am, Charles River.

Summer Softball Umpires - Persons wishing to umpire in the summer fast-pitch softball league (June 9-Aug 15) should sit in on officiating course Tues & Thurs, 12n, duPont conference rm; or 1pm, duPont T-Club Lge. Course now in progress. Info: Sam Benichasa, x8-3686 or x8-3661 Draper.

Rugby Football Club Practices** - Tues & Thurs, 7:30pm, Rockwell Cage. Full medical insurance necessary. Info x3-6221.

Women's Athletic Council* - Meetings 1st & 3rd Tues of each month, 7:30pm, duPont conference rm. Info: Mary Lou Sayles, director of women's athletics, x3-4910.

Freshman are encouraged to attend departmental lectures and seminars. Even when these are highly technical they provide students one means to learn more about professional work in a department and field.

*Open to the public
**Open to the MIT community only
***Open to members only

Send notices for April 23 through May 4 to the Calendar Editor, Room 5-111, Ext. 3-3279, before noon Friday, April 18.

Women Invite Boys to Forum

Women are urged to invite the boys they work with to a consciousness raising presentation on Tuesday, April 22, 1975 at 12:00 noon in the Bush Room (10-105).

If this headline and sentence grate, you now know how women feel when men talk about "the girls in the office" or "a girl I work with." This is one of many subtle and indeed subconscious forms of discrimination which women suffer daily. There are many others and at Tuesday's Forum meeting we'll present more role rehearsals for your consideration and discussion.

So, men, come see what it's like with the shoe on the other foot. Women, make this "National Boss' Week": invite your favorite supervisors (and peers). As people, let's try to understand each other's views and eliminate discrimination against any of us.

-Submitted by the Women's Forum

Nine Energy Traineeships Awarded to MIT

MIT leads the nation in the number of three-year energy-related graduate traineeships received from the National Science Foundation this year—obtaining nine of the 99 grants awarded.

Of the nine traineeships given to MIT, five are to be used for coal research and four are to be used for studying the environmental effects of non-nuclear energy production and use. The traineeships will be distributed through the MIT departments which applied for the grants.

The departments receiving the coal research grants are: the Department of Chemical Engineering (2), the Department of Mechanical Engineering, the Department of Materials Science and Engineering and the Department of Chemistry.

The environmental effects of non-nuclear energy production and use traineeships went to: the Department of Civil Engineering, the Department of Electrical Engineering, the Department of

Political Science and the Department of Nuclear Engineering.

The three year grants, designed to increase the number of scientific personnel for energy research and development, were awarded to 26 institutions which give doctoral degrees in science and engineering. A total of 76 institutions submitted 758 requests for the 99 1975 traineeships.

Summer Session Registration

Registration material for the 1975 Summer Session will be available on Wednesday, April 23, at the Registrar's Office, E19-335.

The registration forms must be filled in and returned to the Registrar's Office by Wednesday, May 7.

Ads Seek Summer Jobs for MIT Students

THE WALL STREET JOURNAL, Tuesday, April 15, 1975

15

MIT STUDENTS SEEK SUMMER JOBS

Massachusetts Institute of Technology students at all levels of education and training, both undergraduate and graduate, are seeking summer jobs. If you have a job opening won't you call or write? Massachusetts Institute of Technology students are talented men and women whose capabilities and contributions you will find rewarding. Their studies are in the following departments:

Aeronautics and Astronautics
Architecture
Biology
Chemical Engineering
City

Electrical Engineering and
Computer Science
Foreign Literature and
Linguistics
Humanities

Meteorology
Nuclear Engineering
Nutrition and Food Science
Ocean Engineering
Philosophy
Physics
Political Science

ery and equipment.

Crane said the Student Employment Office would attempt "to match up job offerings with students whose resumes are on file at the office. Principally, however, he said, the office would act as a clearing house for students inquiring about jobs since students greatly outnumber the existing positions.

It was Crane's idea to place the ads, which cost \$1,400. Jack H. Frailey, director of student financial aid, gave his support and provided the funding.

It is too early to tell whether the campaign can be counted a suc-

cess in the number of jobs it provides, he said, but he thinks the effort will have "public relations value" and give the office valuable contacts for the future.

The somewhat unusual job-hunting approach was undertaken, he said, because MIT students, like students everywhere, are having difficulty finding interesting and good-paying summer jobs.

"I would guess we have about 2,000 or 3,000 students looking for jobs," he said. "We beat the traditional bushes and got very little fruit."

Classification Study Continues

(Continued from page 1)

also begun work on policies which will govern the introduction and maintenance of the staff classification system with the intent of assuring careful and continuing monitoring of its operation by the committee.

This study was begun to provide a more systematic basis for determining administrative staff and library staff salaries, to assure greater fairness and equity for everyone in salary administration, and in particular to aid us in fulfilling our commitment to salary equity for women and minorities.

Finally, the study aimed at defining more clearly and openly the alternative career paths within the library system and the administration.

The Steering Committee has submitted its initial recommendations to the Academic Council where they are being examined carefully and will discuss them with the Faculty and Administrative Councils prior to final decision on the form and timing of implementation.

CLASSIFIED ADS

Ads are limited to one per person per issue and may not be repeated in successive issues. All ads must be accompanied by full name and Institute extension. Only Institute extensions may be listed. Members of the community who have no extensions may submit ads by coming in person to the Tech Talk office, Room 5-111, and presenting Institute identification. Ads may be telephoned to Ext. 3-3270 or mailed to room 5-105. Please submit all ads before noon, Friday, April 18.

For Sale, Etc.

Teac AN-50 Dolby unit, 3yrs, works fine, best for cassette decks, \$40 or best. Mike, 661-3883, evgs.

Haig Ultra registered golf clubs, 2-9, PW, SW, '71 mdl D2, exc cond, '75. Lou, x8-1313 Draper.

LR 8 pc set, agreement on price. Call, 282-5486.

Port b&w TV, 9" diag screen, fair cond, \$25 firm. Call, 494-8141.

Refrig/frzr, Frigidaire 12.3 cu ft, cprrtone, 10 mos, perf cond, 5 yr wrnty, \$150. x3-6368.

Mtrcyl helmet w/face sheild, lk nw, hi qual, \$20. x3-6739.

Sony HP-510A compact stereo, 2 yrs, gd cond, amfm, fm-stereo, Dual 1211 trntbl, Shure M-75 mag crtrd & 4 mos old pr KLH 31 spkrs, \$400 nw, best, sell as sys only. x9439 Dorm, aft 7pm.

Unique antique mahog empire chest on chest, exc cond, circa 1850, \$320. Allen, x3-6279.

BR furn, 2 yrs; 2 ac used 1 seas; crtns; 6x9 off wht rug, etc, best. Call, 924-8395, aft 9pm.

Upright piano, gd cond, recently tuned, \$150; pr L78x15 blk wall retreat stud snws, \$20. Morgan, x3-2937.

Camera, 35 mm SLR, Mamiya/Sekor 500 D7L, top cond, 8 mos, \$135 or best. x0341 Dorm.

K sz matt, unused, \$40. Steve, x3-2554.

Akai M-9 head cross-field open reel rcrdr w/blt in 10 W RMS/ch amp & spkrs, all access, rarely used, \$180. Warren, x0162 Dorm.

Wagoner whl tire & jack, jumper cables, \$15. Lve msg McGregor desk box A321.

Sailboat, hi perf 470-class, w/sail, deck mtd compass, trlr, \$1,600 or best; 7.50x16 Dodge truck rim, \$20; tire change for 7.50x16 whl, \$15; 5' shower doors \$10. Bob, x8-4587 Draper.

M 10 spd bike, Motobecane-mirage, coffee clr, 21", 6 mos old, perf cond, \$120; amfm car radio, ideal for VW, \$40. x8984 Dorm.

Pr Gdyr 4 ply polyester tires, F78x14, 8 K, \$40. Call, 232-3867.

Valuable antique wall clocks, 2, (type Vinyard comtoise), \$150/ea; 2 box spr for sgl bed, used 1 mos, \$10/ea; 2 mtl bed frames, \$5/ea. Herman, x5800 Linc.

JVC integrated amp, 40 W/ch, .1% THD, bit in SEA 7 band equalizer, ideal med power sys, nw \$360, nd cash, sacrifice \$220. Brian, 232-3867.

Gd used Frigidaire elec range, 40", lots storage space, used 1 yr, \$200 delivered, \$175 u pick up. Call, 272-7186.

B nw Minolta Rokkor lens, 28 mm f3.5 \$110; used Minolta Rokkor lens, 1:2.8 f35 mm w/Hoya UV(0) fltr, \$100; Sony mini-cassette rcrdr w/condensor mic & tape counter, 9 mos, \$130. Call, 868-2031, evgs.

Dbl bed, spr & matt; chest drwr; K tbl & chrs; reclining chr; plywd; snowblower; VW snws; sailboat w/trlr. Mike, x3-5880.

Phillips 212 trntbl w/ADC-XLM crtrd, gd cond, \$120. Rich, 267-5451.

Vista 5 spd m touring bike, used but exc cond, \$50. Dale, x3-6296.

Pr m hockey skates, sz 10, used once, \$10. Ayre, x3-7511.

Compl LR set, 6 mos, cstm made furn, \$1,350. Mike, x461 Linc.

Frigidiare deluxe blt in dishwasher, 10 yrs, working cond, door nds some repair, \$25. Call, 862-6321.

F Raleigh grand prix, 21" frame, \$80. x8-1450 Draper.

Zenith b&w TV, \$60; 21" fan, \$5. Albert, x3-1916.

Dynaco FM-3 tuner, 2 yrs, gd cond, \$75 nego. Chip, 494-8866, evgs.

AC, 8000 BTU, yr old, \$100. Jerry, x3-2173.

DR tbl, smoked glass top, 4 chrs, chrome tweed & rattan, approx 4'x6', orig \$475, best. Marge, x3-2974.

Refrig w/top frzr, \$80; 3 pc den set, leath covered couch folds into bed, mpl finish, grn/gold, \$175; 19" Zenith b&w TV, \$60. Call, 395-7265, 2-7pm.

Mark Twain ed, "Following the Equator," pub 1897, bndg slight damaged, all pages intact, \$18. Ed, x8708 Dorm, lve msg.

Vala pack suitcase, red/blk plaid, prac nw, \$12. Dianne, x3-4827.

Canon TLB 35 mm SLR camera, month old, incl case & fltr, \$170. Norman, 547-3431.

F Pappagallo leath shoes, 9M, 2 ident prs w/ankle strap & 2" heels, wht pr b nw, navy pr worn 3X, too sm for me, orig \$28/pr, sacrifice, both \$10. x8-2577 Draper.

Child 3 swing outdr gym set, \$10; Wards collection of Amer rocks, 150, w/UV lite, make offer. Bob, x8-4181 Draper.

Raleigh prof 21 1/2" Reynolds 531 frame, Campagnolo equip thruout, nw cond, \$480. Call, 661-8027, evgs.

Sgl bed w/nice wd frame, v gd cond, \$40. Sally, x3-2932.

Turq rings, \$25/ea; bureau, \$30; '70 Ford Torino Brougham, gd run cond, 80 K, beaut int, body nds some repair, tow hitch incl, must sell, lvg cntry, \$800 firm. June, x3-7709.

Sansui SR212 trntbl w/Stanton crtrd, just like Pioneer, \$100; Kenwood SQ & QS decoder, \$50. Greg, 492-6983.

Sofabed, v gd cond, \$140. Call, 472-3137, evgs.

Gold & yel 12x15 rug, \$30. Dave, x3-6921, aft & evgs.

Magic Chef combo 4 brnr gas stove & heating unit, \$60. Call, 232-7158.

Sum mbrship in E Lex nbrhd swim-pool, avail June-Aug, incl daily swim lessons. x3-5264.

Slide proj; PE3012 trntbl; Sony CF 610 amfm stereo compact cassette; '66 Impala w/nw front end alignment, fr shocks, valve cvrs, runs; asst furn. Call, 776-5100, evgs.

K sz waterbed, platform & fr, exc cond, must sell, best. Kris, x9807 Dorm.

Lg mtch mahog dressers w/mirrors, 2, v gd cond, \$100 or best/both. Fred, x5858 Linc.

Celtics, Washington playoff tckts, 1 pr, all games, sold sep; games 11 & 12, wl they be played? Take chance & grab bargain. Call, 494-9053.

Pr used Gdyr polyglass tires, twin wht stripes, H78x15, \$25/pr. JK, x8-3977 Draper.

Snowbird 5 hp self-prop snowblower, runs gd, \$100. Syd, x8-4406 Draper.

RCA b&w TV w/std, UHF & VHF, gd cond, \$30. x0249 Dorm.

Atlas stud snws on rims, 7.35x14, \$20/pr. x3-1961.

Moving, must sell: apt sz dryer, \$60; 6000 BTU ac, \$50; lg toaster oven, \$25; lawn fert-weed & sprdr, 10K sq ft, \$10; dbl elec blnkt, \$15; all lk nw. Joanne, 646-6305.

Port Admiral 19" TV, UHF only, \$7. Melvin Alpert, x3-4192.

Dbl bed, \$35; convert couch, \$10; chr, \$10; tbl & 4 chrs, \$20; sm rocking chr, \$5; humidifier, \$25; wd planks for shlvs, \$5; many hsehold items. Call, 494-0491.

Pr smaller Advent spkrs & Sherwood S7100A rcrv, 20W/ch RMS, \$250. Call, 547-2056.

Tires, (2) 7.35x14, lk nw, \$25; lime in 10 lb bags, 6/\$1. Ray, x7573 Linc.

Sofa bed, dbl sz. Amparo, x3-5358.

F Caravelle sport watch, \$20; SCM DV12 calculator, 2 reg, mem, tape, \$75 or best; AB Dick mimeo 430, gd cond, \$75 or best. Jane x3-4804.

Volvo tire, 6.85x15, 4 ply, 7 K, \$15. x3-4923.

Vehicles

'62 Comet, 4 dr, recent valve job, snws, \$65. Peter, x3-1738.

'64 Ford Gal 500, v gd cond, runs fine, nds brake work, p st & br, v roomy, 4 dr, wht, 85 K, best over \$100. Call, 237-2309, bef 10pm.

'65 VW, runs v gd, \$450 nego. Denise, x645 Linc.

'66 Barracuda, classic Amer car, lking for nw owner, v reas. x3-4900.

'66 Dodge Dart wgn, rusty, oil brnr, but runs, gd tires, nw valve hd, gd parts car, \$100 or best. Call, 876-7756.

'67 VW bug, gd run cond, nw brakes, nw tires, \$500. Henry, x5766 Linc.

'68 Chevelle Malibu conv, red w/blk top, 98K but nw brakes, manifold, muff & exh pipe, batt, carb, points, plugs, distr cap, water pump, reworked eng, snws, etc, \$600 or best. Eric, 247-0732, evgs.

'69 VW sed, blu w/wht int, ready to sell. Pat, x3-4570.

'71 Audi 100LS, 4 dr sed, dk grn, amfm, 60 K, \$1,975, John Paul, 369-4865.

'71 Peugeot 504, ac, auto, radials, more, truly lux car, \$1,900. Marty, 924-2727.

'72 VW beetle, exc cond, 40 K, radio, nw batt, \$1,650 or best. Nancy, x3-6776.

'73 Merc Marquis wgn, 6 psgr, avail 6/30, going to Kwaj, \$3,100. Alan, x5710 Linc.

'73 Olds Toronado, brndy, wht vinyl top, fully loaded, radial tires, 16 K, exc cond, \$4,000 best. Jim, x8-4054 Draper.

'74 VW sunbug, exc cond, std, amfm, 8 trk stereo, sunrf, snws, \$2,700. Peggy, x8-1592 Draper.

Honda 350 cc CL w/reblt eng, sissy bar, \$725 or best. Irene, x8-4478 Draper.

Ducatti 250 cc scrambler, nds some work, helmet & manual-incl, \$200 or best. Bruce, x0746 Dorm, lve msg.

Housing

Allston, 4 rm unfurn sunny apt, sub 5/1 w/opt, \$190 incl ht & ht wtr, x8-1571 Draper.

Back Bay, BR, front, old charming marble frpl, bay wndws, avail 5/1, safe nbrhd nr Commons, \$338.50. x3-4794.

Belmont, 3 1/2 BR, unfurn colonial hse, 1 1/2 B, mod K, sunprch, nr T, schools, shops, avail 6/1 for yr lse, \$500. x3-3223.

Belmont, Winbrook sect, 8 rm Tudor, 1 1/2 B, mod, garage, for sale. Bill, x8-3546 Draper.

Bkline, mod hse for rent, nr MIT & BU, all conv incl central ac, avail sum, \$450. x3-4992.

Camb, sum sub w/Sept opt, BR, LR, K, ideal for cpl, 15 min MIT, mod bldg, no hassles. Call, 492-6384, try evgs.

Camb, 2 lg stu apts, sub or rent beg May or June res nbrhd nr Radcliffe, 10 min walk Sq, \$166/ea, cheap. Debbie, x3-4872.

Camb, Northgate sum sub 6/1, Magazine St nr Cent Sq & Purity Supr, furn BR, secure area, must be MIT affil (rmmates stus), \$91.50 incl ht. Call, 868-8873.

Camb, sum sub, lg Victorian hse, qt st, 5 BR, lg yd, \$525. Kathleen Born, x3-7915.

Camb, Cent Sq area, attrac 2nd fl rm & Kette, nicely furn, on T, incl ht & util. x3-7138.

Camb-Som line, BR, mod sunny apt nr Inman Sq, avail 5/1, gd for plants, \$173 & ht; also plant sale, lemon, geranium, Swedish ivy, strawberry begonia. Peter. Rm 13-3078, x3-6893.

Cambport, 2 BR, sub 6/1 w/Sept opt, nr MIT & Stop & Shop, pets ok, fully furn, dbl beds, frndly landlady, \$200 nego, incl ht & tutil. Call, 661-1761, evgs best.

Framingham, condo grdn twnhse, 2 BR 1 1/2 B, mod elec K, nr rt 9, 35 min MIT, \$28,500. Amanda, x3-1873.

Jam Pl, 6 rm (3 BR) apt avail 6/1, ultra-mod, nr Forest Hills, \$185 + ht. Helen, x3-4965.

Lex furn 2 BR apt, grdn, car, stereo, etc, rent for sum, Call, 861-9027.

Nwtn Ctr, spac 6 rm apt, frpl LR, DR, 2 BR, study, eat-in-K w/d&d, pkg, lndry, 20 min MIT, avail 6/1, \$325 + util. x3-4101.

Som, nr Inman Sq, sub mod 2 BR apt 7/1-9/1, ac, ww, dw, garage pkg, \$300 incl util. Call, 547-3415, evgs.

Watertown, 7 rm duplex, 3 BR, dryer, disp, ref, lg sundeck, avail 6/1, no dogs. Call 923-0690.

W Woburn, 5 rm ranch, exc cond, full jalousied porch, xtras too many to list, mid 30's. Call, 933-6734.

Harwich, wtrfront Cape Cod, 2 BR, slps 6, K, LR, screened porch, ht & hot wtr, all mod conv, priv bch w/boat, \$240/wk, 2 wks min. Betty, x3-2165.

Squam Lake, NH, 2 BR cottage w/sand bch, wonderful view, avail June-July, x3-1879.

Stoddard, NH, 2 rental lakefront cottages, sec on 9 mi Highland Lake, frpl, elec stove & refrig, hot/cold water, porches, rowboats, piers, priv bch, 90 mi (2 hrs) Bos, x8-1566 Draper.

Animals

Bird cage plus all access, toys & food, \$2. Nancy, 864-0453, evgs aft 7:30.

Free, pretty, fluffy, affect cat, all shots, spayed, owner allergic. Alan Hein, x3-5759.

Lost and Found

Lost: plaid plstc bag w/hat & jewelry, left in wht sta wgn Sat, Mar 29, when given ride by f MIT stu across Wellesley campus. Anna, 235-9623.

Found: sm dog w/wht & brn spots, looks little lk beagle, cute & frightened. Susan, x3-3639.

Wanted

Sum sub, 2 or more BR, Camb hse or apt, for visit prof. Brian, x3-5585.

Golf partner. Ted Doan, x3-4757.

Used Oriental rug, red/blu, approx 12x14. Liz, x3-4669.

Sm AC. Ken, 492-6983.

Kryptonite lock for 10 spd bike. Larry, x7500 Linc.

Mtl file cab, 2-3 drwr. Mark, x3-4067.

Tbl saw, 10 or 12", w/or w/out motor. x7713 Linc.

Used/nw capacitive discharge sys for 8 cyl auto. Ed, x139 Linc.

Merc Mark 20, any cond. Earl, x5881 Linc.

Visit fac fam seeks furn hse or apt w/yd for sum, dates flex. F. Winkler, 6 Hillcrest Rd, Middlebury, Vt, 05753.

Pr BSO tckts, Apr 26 perf of Mahler's 2nd Symph. Chris, x9240 Dorm.

Hse or apt, 6 BR or lger, for long estabtable working grp w/cats, Arl, Camb, Som or Medford, nr T, min yr lse, overcrowded nw, desperate. Mary, x3-1700.

Prof cpl w/no chldrn lking for lg 2 BR apt, Arl, Bel, Lex area, by 7/1, \$250 max. John, x5385 Linc.

Ride to Montreal 4/18 or 4/19, w/ share driving & exp. Joel, 536-1300.

Exper hsesitters, avail beg June, refs. Andy Lippman, x3-5113.

Backpack & frame, lg & gd qual, wl pay cash. Call, 494-8888.

Exper babysitter, honor stu in HS, seeks mother's helper job w/fam going to Cape, Vineyard, etc, June-Aug, exc refs. Sue, x3-6736.

Sew mach, used, wanted for project. x8454 Dorm.

Full sz cello. R. Curry, x3-7756.

Reliable married cpl seek hsesitting position 6/1-9/1, wl grdn, sit animals, hsework. Maureen, x3-3913.

Sm foam mattress. Walter, x3-4933.

Place pces old Master flatware by Towle, cash pd. Elizabeth, x8-1216 Draper.

Nd few more rolls Ektachrome 35mm or larger to complete E-4 run I'm doing this wknd, exc qual, price less \$1.50 unmtd. x3-2980, lve msg.

Ride to & from W Acton-MIT, for 2-3 mos, hrs flex. x3-2363.

Roommates

F rmmate for lg sunny apt, 10 min walk MIT, immed occup, pkg, \$110. Eileen, x3-1624.

Sum sub, rm in Cent Sq Apt, 10 min walk MIT, \$65. Call, 876-0717, evgs.

M, 3rd rmmate, 21 or older, Som apt nr Tufts, nr T, avail immed, \$80/prsn + util. Bob, x3-2105.

Camb, 26 Inman St, sub rm in apt 6/7-8/31 w/opt, mod, furn. Mark B, x3-4978.

Own furn BR w/loft in 6 BR Back Bay, sum sub, K, lg LR, roof deck, \$79 incl util. Lee, 267-2867.

Working f, 23, wants to share apt, nd own BR, nw T, up to \$150 incl util. Irene, x8-3591 Draper.

Want sum rmmate, own rm in 3 BR fully furn apt nr Jamaica Pond, frpl, wash/dry, dishwasher, lots pkg, 100 yds T, \$101 + elec. Tony, 521-0679, aft 7pm.

Rmmates, 2 rms avail in lg coed apt, 10 min walk MIT, furn, 7 rms, full K, \$45 or \$55 & util, pref to stay thru sum. Call, 491-6963.

F, 2 desire 3rd rmmate, over 25 pls, N Camb 3 BR apt, furn, \$73 + util & ht. Pearl, x3-1961.

Rmmate, sum sub for my BR in 4 BR Tang 8B, beg 5/1 or later, rent nego. Chip, 494-8866, evgs.

Miscellaneous

Xtra typing. Nancy, x3-6651.

Fr, bilingual Canadian & Amer people nded for psych exper w/pay. Lve name & nmbr w/Judy, x3-7369.

Wl type theses, manu, etc on IBM Selec. Carol, x3-4152.

Wl babysit full or part time at my Westgate home. Call, 494-8249.

Learn to sing or play piano, beg welcome, free trial lesson, reas rates by exper, qualified tchr. Call, 729-7591.

Tech Stu Travel has sts avail on flights to major Amer cities lvg 5/22, group rates, open rtn, reservation deadline 5/1. x3-5433.

Hifi hacker sought, I nd honest advise on buying stereo, wl offer same in cameras. Phil, 491-4243.

Wl pay \$25 for Dutch to Eng trans, written or spoken into tape, 16 pg anthro article. Jean Jackson, x3-6953.

Charter 30' sloop, fully equip w/6 berths, galley, inbrd eng, nav equip & charts, dinghy, etc, out of Mrblhd or Booth Bay Hrbr, Me, by wk. x5464 Linc.

POSITIONS AVAILABLE

This list includes all non-academic jobs currently available on the MIT campus. Duplicate lists are posted each Tuesday preceding Tech Talk publication date on the women's kiosk in Building 7, outside the Office of Minority Affairs, 10-211, and in the personnel office, E19-239, on the day of Tech Talk publication. Personnel interviewers will refer any qualified applicants on all biweekly jobs Grades I-IV as soon as possible after their receipt in Personnel.

Persons who are not MIT employees should call the Personnel Office on extension 3-4251.

Employees at the Institute should continue to contact their Personnel Officers to apply for positions for which they feel they qualify.

Dick Higham 3-4278
Pat Williams 3-1594
(secretary - Dixie Chin)

Virginia Bishop 3-1591
Mike Parr 3-4266
Philip Knight 3-4267
(secretary - Joy Dukowitz)

Sally Hansen 3-4

with alumni and corporation executives, MIT faculty and administration, extensive travel to or residence in NYC as well as some other travel. MIT degree or extensive knowledge of the Institute is also necessary. A75-23 (4/16).

DSR Staff, Programming Analyst, Sloan School for E. Campus computer facility: provide programming assistance and other advisory services to users; coordinate student consultants; will have responsibility for implementation, maintenance and documentation of information, administration and pedagogical systems. Knowledge of PL and IBM/OS/370 JCL, Bachelor's degree and 2-3 yrs. programming experience, or equivalent, oral and written communication skill required. Knowledge of Fortran, Basic statistical packages, and time-sharing systems desirable. A75-22 (4/16).

DSR Staff, Electrical Engineer, in Lab for Nuclear Science will work on operation and modification of Bates Linear Accelerator rf system. Minimum of 5 years experience in design and operation of high power microwave transmitter systems is required. Experience with digital systems and computer control systems helpful. Flexible work schedule required to accommodate round-the-clock operation. D75-70 (4/16).

DSR Staff, Marine Advisory Service Mgr., in Sea Grant Program, will be responsible for organization, operation and management of project having two major activities: the operation of a marine industry professional organization and intensive studies in marine topics by industry and university participants. Duties include solicitation and provision of informational services to collegium members, acting as liaison between membership and research group, coordination of the selection of research topics, assistance in selection of research project members, solicitation of industrial interest and support of projects, publication and distribution of results, budget preparation and maintenance. Science or engineering degree plus MBA or experience in combined technology-business field, writing and speaking skill required. Experience in marine field, program development and coordination desirable. D75-69 (4/16).

DSR Staff, Technical Asst. in Cell Culture Center will perform techniques relating to virus concentration and purification including continuous flow ultracentrifugation. Bachelor's degree required. Some experience in cell culture or virus purification preferred. D75-74 (4/16).

DSR Staff, Technical Asst. in Cell Culture Center will work on mass production of animal cells and viruses including growth of a variety of cell types in both suspension and monolayer cultures. Bachelor's degree required. Some cell culture or virus purification experience preferred. D75-75 (4/16).

Admin. Staff, Asst. Director of Personnel Services will assist Director in administration of all areas of non-academic employment policy and practices including the provision of service to departments and employees through Personnel Officers and Personnel Information functions. Person will act in Director's absence. Bachelor's degree, or equivalent combination of education and experience, specifically in personnel or related administration, human relations skill, ability to develop and apply personnel policy and to supervise a wide span of activities requiring extensive daily schedule are necessary. MIT experience and familiarity with its personnel practices preferred. Please submit resume. A75-21 (4/9).

DSR Staff, part-time, in Center for Advanced Engineering Study will conduct research to evaluate nature and usage of cable TV system. Familiarity with questionnaire design and interviewing techniques required. Masters degree in social science or related field or equivalent experience required. 15-20 hrs/wk. Position in for 7/1/75 through 6/30/76. D75-67 (4/9).

Admin. Staff, Applications Coordinator, in Office of Facilities Management Systems (Planning Office) will develop contact and provide application support for non-Institute users of computerized space accounting system (INSITE); assist in formal education programs given by Office. Familiarity with business systems, facilities management and related computer applications, experience in preparation and delivery of technical presentations, Bachelor's degree or equivalent required. MBA, familiarity with education and health-care administration desirable. Travel is required. A75-20 (4/9).

Admin. Staff, Sr. Applications Programmer, in Office of Administrative Information Systems will assist in development of new and modified programs: program, test, debug; establish file requirements and processing techniques for new systems design; contribute to development of programming and documentation standards program. 3 yrs experience with COBOL or PL/1, knowledge of BAL and financial applications required. Knowl-

edge of 1401 Autocoder preferred. A75-19 (4/2).

DSR Staff, Programmer, in Center for Space Research will be responsible for acquisition of data from SAS-C X-ray astronomy satellite on PDP-9 mini-computer: arrange for data transmission; organize tape library of data; catalogue computer routines. Knowledge of celestial coordinate systems and coordinate transformations, some knowledge of x-ray sky and scientific content of data, as well as substantial programming experience required. D75-65 (4/2).

DSR Staff in Center for Cancer Research will conduct laboratory research on molecular biology of polio virus: make solutions, assay viruses, prepare infected cells; also order supplies and oversee equipment maintenance. Bachelor's degree in Biology or Biochemistry required. Chemistry, Biochemistry or Microbiology experience helpful. D75-62 (4/2).

DSR Staff in Center for Space Research will participate in preparation, test and calibration of x-ray astronomy satellite experiment (Focal Plane Crystal Spectrometer for High Energy Astronomy Observatory x-ray telescope); prepare data analysis system; participate in scientific planning of observing program; collect, analyze and publish data. Ph.D. in experimental physics, laboratory experience required. Familiarity with x-ray techniques, x-ray astronomy and experience with satellite experiments desirable. D75-58 (3/26).

DSR Staff, temporary in Artificial Intelligence Lab will participate in the design of new learning environments for children and in development of learning theory; design and build equipment; write descriptive material, teach. EE or Physics degree; knowledge of electronics, computers; machine shop experience, ability to design and build prototype control and sensing circuits required. Temporary through 9/30/75. D75-56. (3/26).

DSR Staff in Lab for Nuclear Science (Linear Accelerator Lab, Middleton, Ma.) will provide instrumentation development, operation and data handling support for research group in electron scattering and other programs. Strong EE or Physics background at BS level, or equivalent, minimum 5 yrs experience in nuclear instrumentation including Scintillation, Solid State and Multi-wire Proportional Counters, Nanosecond Digital and Analogue Electronics, CAMAC required. PDP 11/45 experience helpful. D75-55 (3/26).

DSR Staff, temporary, Systems Programmer in Lab for Nuclear Science (Linear Accelerator, Middleton, Ma.) will assist in maintaining and extending RT-11 and RSX 11-D real-time operating systems on PDP-11/45 computers with a variety of nonstandard peripherals: intersystem files compatibility on DEC, magnetic tapes, DEC pack and century discs; compatible graphics packages on Tektronix 4010, Gould 5000 and GT-40 graphics hardware. Thorough knowledge of DEC PDP-11 machine code and I/O handling, experience in mini-computer graphics, real time systems and graphics hardware required. Temp. through 8/31/75. D75-57 (3/26).

Admin. Staff, Area Coordinator, Office of Administrative Information Systems will analyze and resolve problems of an assigned area of operating business systems: develop modification specifications for present systems; schedule and control tasks to meet deadlines; direct and coordinate work systems analysts, programmers as required. Oversee testing of changed programs, act as client liaison and as applications programmer as required. Applicants should have business and administrative experience, analytical ability and knowledge of programming. A75-15 (3/26).

Admin. Staff, District Officer, in Resource Development will coordinate volunteer solicitors in major geographic areas. Out of town travel necessary 50% of the time. Familiarity with MIT required for effective representation as well as poise and ease in dealing with people, demonstrated initiative and ability to work independently, good oral and written communication skill. A75-16 (3/26), A75-25, A75-26 (4/16).

DSR Staff in Joint Center for Urban Studies will conduct research on real estate economics for study and model development of neighborhood evolution and decline. Ph.D., or equivalent, familiarity with operations of participants in real estate sector of economy (bankers, insurers, builders, etc.), computer programming ability (preferably FORTRAN IV), experience in data gathering and analysis of real estate sector, willingness to assume design and implementation of a component of the overall project required. Position will terminate December 31, 1976. D75-52 (3/12).

DSR Staff, part-time, Tech. Asst., in Arteriosclerosis Center will process plasmas for cholesterol, triglyceride and lipoprotein quantitation procedures; run and maintain Technicon Auto Analyzer I; maintain patient

records and run ultracentrifuge. Clinical chemistry and hematology background, ability to work with minimum supervision; previous lab experience desirable. 20 hrs/wk. D75-50 (3/12).

Admin. Staff, Director, Office of Administrative Information Systems/Assistant Director, Information Processing Services will have overall responsibility for operation of 70-employee office which provides information systems services to MIT administrative offices: oversee the delivery of timely, accurate reports to clients; interact with client offices on the development, implementation and design of new systems. Ability to identify and resolve problems in service environment, demonstrated skill in management of medium-sized organization required. Familiarity with MIT administrative environment and understanding of computer and information systems desirable. Please submit resume. A75-13 (3/5).

DSR Staff, Economist/Econometrician in Energy Lab will participate in projects on development and application of models of domestic and international energy production and utilization; develop and apply econometric procedures to estimate parameters of simultaneous equation energy models; assist in model formulation and development of energy data and accounts in US and other industrialized countries, supervise junior staff and students, perform related duties as required. Ph.D. Economics, specifically mathematical economics and econometrics, experience in application of functional specifications, such as translog and generalized Leontief, familiarity with economic accounts of at least one foreign industrialized country required. D75-48 (3/5).

DSR Staff, temporary in Project MAC Planner Group will write and implement programs in PLASMA and LISP. Experience in these languages required. Position runs June-August, 1975. S75-1 (2/26).

DSR Staff, Electrical Engineer, in National Magnet Lab, will perform daily operation of Low Field Lab: maintain sensitive magnetic detectors and display equipment, design and construct new equipment, perform human body measurements. Laboratory-oriented person with knowledge of low frequency electronics, and experience with magnetics and cryogenics is desirable. Candidate should be able to work with hospital patients and to do occasional evening and weekend work. 50 hr/wk. D75-7 (1/22).

DSR Staff, Biophysicist, in National Magnet Lab will supervise day-to-day magnetic fields produced by the human body are measured, perform specific lab measurements, design lab equipment. Experience with low-frequency electronics, magnetics, heart and lung physiology required. Must be available for occasional evening and weekend work. 40 hr/wk. D75-8 (1/22).

Admin. Staff, Sr. Consultant Trainer, in Office of Personnel Development will have responsibility for planning, design and follow-up services related to training workshops, organization development; perform professional, management and support tasks as a participating team member. Must be knowledgeable and experienced in organization development, career development, adult education, process-oriented group work with adults, and applied social science survey research. Applicants will present 1-2 hour training activity, including written proposal and report, for staff evaluation. Report, proposal and process documentation writing skill, Master's degree in behavioral science plus facilitation experience required. Knowledge of MIT/academic institutions helpful. A75-1 (1/8).

DSR Staff, in Joint Center for Urban Studies will be principal researcher on development of computer-based manpower information system for construction industry, ability to supervise program development and operational system required. 74-1484-R (1/8).

DSR Staff in Energy Lab will be involved in developmental work with coal gasification projects. Prior experience in development and related technological processes of coal gasification: computer simulation, construction of pilot equipment and minimal technical assistance and financial resources, data gathering. Work with students inexperienced in research activities, and ability to meet project deadlines required. Advanced degree in Chem. Eng. is also necessary. 74-1428-A (12/11).

Subcontract Administrator, Assistant Director in Office of Sponsored Programs will work with project personnel in negotiating complex subcontracts; prepare Requests for Bids; review quotations; arrange for preaudit of proposed costs and negotiation of active awards. Bachelor's degree in Business Administration or equivalent combination of education and experience, subcontracting experience in government agency or university environment, knowledge of procurement regulations of government agencies required. 74-1403-R (11/27).

DSR Staff at the National Magnet Laboratory will work on the Alcatraz thermonuclear experiment. Conceive, design, and carry out plasma diagnostic experiments using neutron, X-ray, optical, electrical, magnetic and micro-analysis and assessment of data. Ph.D. in plasma physics or related area required. Familiarity with tokamak devices desirable. 75-1512-A (1/8).

DSR Staff, in the Energy Lab must have minimum of 5 yrs experience in defining, securing, organizing and supervising research in heat transfer related to energy production and utilization. Familiarity with MIT; experience in supervising student theses, research and staff; Ph.D. in Mechanical Engineering required. 74-359-A (5/1).

DSR Staff, Engineer, in the Energy Lab will do experimental research in stratified charge internal combustion engines: design, construct and maintain experimental facilities and conduct basic experiments and data analysis with single cylinder test engine and rapid compression machine. BS in Mechanical or Aeronautic Engineering, some practical experience with mechanical systems and workshop practice required. D75-30 (2/29).

DSR Staff, Programmer in Clinical Decision Making Group, Project MAC will supervise construction and clinical testing of computer system to advise physicians regarding the administration of digitalis. Familiarity with pharmacokinetics of digitalis and its clinical administration, general and medical knowledge including cardiovascular physiology, thorough knowledge of LISP 1.5 and ITS operating system required. D75-19 (2/5).

Technical Assistant, Acad. Staff, in Nutrition and Food Science, will perform specialized and routine chemical analyses on body fluids; operate and maintain mass spectrometer, Beckman automated amino acid analyzer; assist in new methodology development; occasionally supervise other lab personnel. BS, chemistry, biology or medical technology and minimum 2 years experience in clinical chemistry required. C75-4 (2/5).

Admin. Asst., Exempt, in Aeronautics and Astronautics will coordinate repair, maintenance and replacement of experimental equipment, organize and manage funds for repair and maintenance of workshop equipment in several dept. locations; assist in laboratory organization; coordinate space allocations, plan and oversee space renovation. Engineering background, preferably plant engineering, knowledge of MIT operations, administrative skill required. Familiarity with OSHA regulations also necessary. E75-10 (4/9).

Exempt, Asst. Account Representative in Comptrollers Acctg. Office will act as Institute liaison with employees, students, organizations in matters of credit and collection through written correspondence and personal contact; prepare aging reports, payroll notices and other related material. 4-5 yrs accounting experience, specifically in credit collection, required. Tact, good judgment also necessary. E75-8 (3/19).

In-patient Staff Nurse, Exempt in Infirmary will do bedside nursing and may assist with emergency and first aid treatment. Mass. licensed RN with 2 yrs experience in medical/surgical nursing required. First-aid or emergency clinic experience desirable. Must be able to work all shifts and weekends on rotating basis. (40 hours) E75-5 (3/5).

Clinic Nurse, Exempt, in Emergency Clinic will evaluate and treat patients, administer first aid and admit patients as necessary. Mass. licensed RN with 2 yrs clinic experience, preferably in emergency room, required. Expertise in physical assessment desirable. Must be able to work permanent evenings (4pm-12am) and rotate all weekend shifts (40 hrs). E75-6 (3/5).

Engineering Assistant, Exempt in the National Magnet Laboratory will set up experiments and take measurements of magnetic fields produced by humans and animals. Will work with hospital medical groups. Experience in biomedical research, strong experience in low frequency electronics; knowledge of magnetics and cryogenics required. Flexible schedule necessary for occasional evening or weekend work. 74-1033-R (8/28).

Tech. Asst. IV part-time, in Psychology Dept. neurophysiology lab will be involved in mammal motor control and coordination research. Primary duty is care, feeding and training of animals; will also manufacture testing equipment, assist in laboratory procedures, in data analysis and in general upkeep of lab. Familiarity with elementary electronics and digital logic helpful. High school graduate, or equivalent required. 30 hr/wk. B75-79 (3/5).

Secretary V to Director and other professional staff, Planning Office: will compose correspondence independently and from verbal instruction; organize meeting agenda; edit manuscripts including verification of content through varied source; arrange luncheon, dinner meetings without supervision; manage busy appointment

schedule; assist other secretaries in routine office duties. High school graduate plus 5 years secretarial experience or equivalent combination of education and experience, ability to use dictating equipment and to work without supervision required. B75-141 (4/9).

Admin. Asst. V in Lab for Nuclear Science will handle secretarial and administrative duties for 40-member research group: type technical material, reports; arrange travel; maintain files; proofread articles for publication. Position requires travel overseas and to other US facilities (NY, Illinois) for varying durations. Applicants should be able to speak and write German or French fluently. B75-112 (3/26).

Secretary V in Resource Development will take and transcribe dictation; maintain busy calendar; schedule meetings; make travel arrangements; maintain files, supervise part-time secretary; independently organize and carry out varied projects including research of topics. Minimum of 2 years experience, shorthand, organization skill required. College training desirable. B75-114 (3/26).

Secretary IV-V in Preprofessional Advising and Education Office (Dean for Student Affairs Office): arrange schedules and publicity for medical/law school representatives; advise students on professional school application procedures and related matters; compile statistical data from many sources; assist in handbook editing; coordinate IAP activities; perform other standard secretarial duties. Previous secretarial experience, ability to interact with students and faculty required. Non-smoking office. B75-142 (4/9).

Secretary IV-V in Harvard-MIT Program in Health Sciences and Technology will handle varied office duties; type correspondence, proposals; organize symposia and seminars; prepare budgets; administer contracts. Experience in budget and contract maintenance, high level of secretarial and organizational skills required. Non-smoking office. B75-125 (4/2).

Secretary IV-V to Physics department head will maintain calendar, type correspondence and manuscripts, answer phones, handle a variety of independent projects. Position includes large amount of contact with students and other office visitors. Shorthand, technical typing skill required. B75-136 (4/9).

Secretary IV to Administrative Officer in Civil Engineering will respond independently to inquiries on behalf of the AO; prepare and maintain several payrolls including allocations to various accounts; advise secretarial personnel of procedures, and maintain confidential records. Good typing skills and ability to deal with figures required. Must be able to interact with departmental personnel and students. Knowledge of MIT procedures helpful. B75-145 (4/16).

Secretary IV in Medical Department, Psychiatry Service, will work for two full-time psychiatrists and share secretarial work with other secretaries for part-time psychiatric staff. The position requires answering telephones, scheduling appointments, arranging meetings, transcribing case histories, typing papers, making all travel arrangements and maintaining files. Experienced secretary, maturity and ability to work under pressure required. 37 1/2 hr wk. B75-147 (4/16).

Secretary IV to Nutrition and Food Science faculty member involved in research on malnutrition, learning and behavior will perform standard secretarial duties including shorthand, typing, filing, machine dictation. Secretarial school training or equivalent experience required. Knowledge of medical/biological terminology helpful. B75-152 (4/16).

Secretary IV to faculty member and research staff in Urban Studies and Planning will perform varied secretarial duties including technical typing, editing; maintain expense records on accounts; maintain computer lists by keypunching. May do occasional library research and contract administration. Technical typing skill, keypunch ability (or willingness to learn) required. Shorthand skill preferred. Economics background helpful. Non-smoking office. B75-130 (4/2).

Secretary IV to faculty members in labor management section of Sloan School will assist in all matters relating to operation of the section: schedule and publicize seminars and conferences; publication distribution; maintenance of section contribution and alumni records; perform other varied duties relating to research programs. Discretion, ability to work independently and to interact effectively with all members of working group, excellent secretarial skills, including shorthand and machine transcription required. MIT experience desirable. B75-138 (4/9).

(Continued on page 10)

	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
Midnight	The Ghetto Funk, blues, jazz...	The Ghetto Popular and progressive soul...	The Ghetto The spectrum of black music...	The Ghetto A moving sound experience...	The Ghetto The soulful side of WTBS...	The Ghetto Funk, blues, jazz...	The Ghetto Popular and progressive soul...
3:00 am	Sunrise All night in every direction...	Sunrise Sunrise is jazz...	Sunrise Sunrise is soul...	Sunrise Sunrise is rock...	Sunrise Sunrise is comedy...	Sunrise All night in every direction...	After Hours with Gerrard Sit back and catch the solid soul sound of yesterday & tomorrow
7:00 am	The Great American Disaster Current rock and soul with new and old tunes	Rock, Etc. New morning progressive...	Rock, Etc. Local tapes and events...	Rock, Etc. New morning progressive...	Rock, Etc. Local tapes and events...	Rock, Etc. New morning progressive...	The Great American Disaster Current rock and soul with new and old tunes
10:00 am	For Lovers Only Sweet soul from this side of Philadelphia	Sign Off	Sign Off	Sign Off	Sign Off	Sign Off	Musical Theatre Original cast recordings and local productions
Noon	Mr. C's R&B Revue The mellow sound of Philadelphia in Boston						Happy Trails Live country, blues, rock with singer/comedian David Misch
2:00 pm	Jazz Traditional Slink and swing with Goodman, Coleman, and Ellington		Music at MIT Concerts and interviews by and with MIT music people				Rock and Roll Memory Time The original source of obscure oldies. Featuring Rick Starr
3:00 pm		The Right Track T. C.'s picks to click and the disco sounds of tomorrow		Across the River Music of student composers and musicians in the Boston area	The Symphony A chronological development of the symphonic form.	20th Century Limited Works of our century, traditional and electronic music	
4:00 pm	Great Ragtime in the Sky Rags and novelty tunes from the 1890's, '78's, local recordings		John Reardon's Music Magazine Music, comedy, bird reports, the other side of the news		Upstate Folk music from ballads to blues rags to reets		Eine Kleine Abendmusik Live and recorded, poetry with music. Each week Jascha Heifetz
5:00 pm	Sedenka Folk music from the Balkans, kolos, dance songs, taburitza	African Beat Rhythms and music from Africa		Solid Rock Rock with a message: Jesus			
6:00 pm	Sweetwater Jamboree Old Timey, Bluegrass, C&W, in the spirit(s) in which it was made	Black Perspectives The black experience in Boston, local people and talk		Majority Speaks An independent feminist collective presents a topical program	Downeast Ceilidh Cape Breton fiddling, music from the Canadian Maritime	So It Goes A focus on local controversy, events and people	
7:00 pm		Cheryl's Place Mellow jazz with a touch of rhythm and soul	Jazz at Seven Interviews with local performers, along with emphasis on bebop	Five by Five Take a listen to the feelings expressed by jazz, old and new	Visions Jazz - tune in, sit back, and let the visions flow.	Jazz Celebration The heritage of Parker, Gillespie, Monk, Rollins, Mingus and more	Nite Owl All request radio at 494-8810
9:00 pm	News An in-depth approach	News	News	News	News	News	News
9:30 pm	The Angel Presents Gospel, jazz, excerpts of service from St. Paul's AME Church	West Indian Music In Jamaica they dance in the streets. Let reggae move you.	Transatlantic Cable Revolutionary electronic music from Europe and England	No Soap Radio Tune in for good time rock and jazz, Firesign Theatre at 11	Rail's Electric Doghouse Progressive sounds with Rail, Firesign Theatre at 11	Ground Zero Good night rock and roll	Nite Owl You can hear what you want, when you want it.

Berrier to Study in France As Fulbright-Hays Fellow

Robert J. Berrier, a 28-year-old graduate student in the Department of Political Science at MIT, has become the first MIT student in six years to be awarded a Fulbright-Hays Grant for a year of academic study abroad.

One of only nine scholars selected to study in France, the site of his proposed PhD research, Berrier was the first in the country to win acceptance by Fulbright's Franco-American screening committee—one month in advance of the usual date of notification.

His proposed research, to be carried out in Paris, Lyon and Roubaix, will examine the role of the French State in the politically willed survival of non-competitive industrial sectors; namely, the French textile industry. In two preliminary research projects for MIT's Center for Policy Alternatives and Harvard's Center for West European Studies, Berrier laid the foundation for his research hypothesis through interviews with French industrialists, government officials and political leaders who, he said, "are anxious for answers to the problem of economic dualism in France."

Berrier, a native of Scottsdale, Ariz., entered MIT's PhD program in 1972 after earning an MA in political science at Arizona State University and a BA in psychology at Stanford ('69). His interest in West European politics dates from 1966, when he spent a year at Stanford's campus in Florence, Italy, as an undergraduate.

Returning to Florence as assistant director of the Stanford program, he became interested in Tuscany's shoe factories and textile mills as advocates of political rather than economic change.

Dean Sanborn C. Brown, MIT's Fulbright Program Advisor and chairman of MIT's Foreign Scholarship Committee, said Berrier's "special kind of excellence, combined with his practical interviewing experience abroad speaks well for the increasing representation of MIT humanities and social science students in award competitions that require broad educational backgrounds."

The only other Fulbright candidates to reach the national stage of competition were Stephanie Bartos of the Department of

Architecture and Judith Chubb, of Political Science, whose proposal to study urban labor markets in Sicily is still under consideration by committee officials.

Ms. Chubb, a graduate of the Johns Hopkins School of Advanced International Relations, has already been awarded, along with Warren Fishbein, a third year

Students Win Foreign Grants

Trips to England and Germany are among the travel-study opportunities awarded to MIT students this year.

The Churchill Fellowship leading to study at Churchill College in Cambridge, England, and for which only 28 US institutions are eligible, was awarded to Stanley Brooks, a senior in mathematics from Douglas, Ga. In order not to interrupt his research in analysis however, he has decided to accept the John McCormick Fellowship awarded him by the University of Chicago, where he will be a first year graduate student next year. He will retain the National Science Foundation Graduate Fellowship, awarded to only 39 other students across the country.

graduate student in the Department of Political Science, the prestigious Social Science Research Council Grant for study abroad. Twenty of these grants are available nationwide for study in West European countries.

Ms. Chubb began studying Italy's South as a departmental research assistant to Professors

Donald Blackmer and Suzanne Berger and later undertook an independent living experience in the province of Corleone, where she examined the domestic and international policies of the Italian Communist Party. Mr. Fishbein will use his fellowship to focus on the integration of England's trade unions into political-economic policymaking.

Planck Institut at the University of Munich.

Three other graduate students from the Department of Political Science who have been awarded summer study grants by the Council for European Study, an inter-university consortium, are Lee Otterholt, of Eau Claire, Wis., Eusabio M. Mujal-Leon of Washington, D.C., and Marilyn L. Shapleigh of Reading, Mass.

Ms. Shapleigh's grant is for an intensive French language program, sponsored by the US German Marshall Fund. Mr. Otterholt and Mr. Mujal-Leon will be conducting pre-dissertation research on contemporary issues in Norway and Spain respectively.

Positions Available

(Continued from page 9)

Secretary IV to Associate Director, Systems Dynamics Group: type and edit correspondence, manuscripts from handwritten and machine dictation; maintain files; arrange travel and appointments; research subjects as required. Excellent typing, organization skill, command of English grammar and minimum of 2 yrs secretarial experience required. Shorthand/speedwriting helpful. B75-121 (3/26).

Secretary III-IV to a Center for Space Research program manager and other members of research group will type correspondence and technical material, answer phones, make travel arrangements; maintain files and supplies; assist other secretaries as required. Secretarial school or junior college training, or equivalent, required. Technical typing experience also necessary. B75-140 (4/9).

Secretary III-IV to Physics Department Executive Officer will perform standard secretarial duties: handle arrangements for weekly colloquia, including teas, posters speaker stipend; complete varied projects independently. Position includes frequent student and other visitor contact. Shorthand, typing skill and ability to work under pressure required. B75-137 (4/9).

Secretary III, part-time, in Sloan School will assist research group involved in computer projects: perform standard secretarial duties including typing technical material, answering phones, handle payroll procedures, arrange travel and meetings. Good typing skill required. Approx. 16-20 hrs/wk. B75-148 (4/16).

Secretary III to the Superintendent for Engineering and Construction in Physical Plant will perform general secretarial duties: handle general telephone inquiries; schedule meetings; maintain correspondence files; type blueprint specifications and project reports. Will also type for members of the Engineering and Construction group. Excellent shorthand, typing skills, ability to work independently and previous office experience required. B75-139 (4/9).

Secretary III support of group secretary. Will handle various secretarial duties, including typing of technical papers and correspondence, answering telephones, acting as receptionist, filing, etc. Some typing on IBM Mag-Card III and computer terminals, though previous experience not necessary. Good secretarial skills, high school training with at least one year of secretarial experience, or secretarial school graduate or a one or two-year course. Dorothy Petrovich, x7305 Linc. B75-131 (4/9).

Lib. Gen. Asst. III-IV part-time in Earth and Planetary Sciences will develop and maintain cataloging and filing systems for publications and other library materials; trace lost items; monitor condition of materials. Position is normally for 1 day per week, but flexibility to work full-time for 2-3 week intervals to complete special projects required. B75-131 (4/9).

Lib. Gen. Asst. III, part-time, will have responsibility for circulation/reserves desk 2 evenings per week, and handle other varied library duties in daytime hours (process reserve materials, file, correct catalogue cards, etc.). Ability to handle demands and pressure at public desk, typing skill required. Library experience desirable. 18 hrs/wk: 2 evening, 5:30-11pm, plus 7 add. daytime hours to be arranged. B74-127 (4/2).

Sr. Clerk IV-V, Accounting Assistant in Sponsored Accounting Section, Comp-

trollers Office, will tabulate sponsored project research expenditures and cash flow; collect forecast data; maintain daily balances; prepare monthly billings and fiscal reports. General business background plus 2-4 yrs accounting experience required. Typing skill desirable. B75-99 (3/12).

Sr. Clerk IV in Mathematics Undergraduate Office will have responsibility for maintenance of accurate records and files, collection and dissemination of information to faculty and students, typing technical and general material; handle class scheduling, telephone and reception duties. Organization skill, ability to work as a group member required. Non-smoking office. B75-149 (4/16).

Sr. Clerk III-IV in Office of Administrative Information Systems will type data processing documents and memoranda involving specialized terminology from rough copy, perform general clerical duties as required, and maintain documentation library files and records for programmer references. Excellent typing skills and ability to work independently required. Data processing experience helpful. B75-146 (4/16).

Clerk III in MIT Press Marketing Dept: will take telephone orders, answer inquiries, proofread, distribute mail; perform other clerical duties in support of sales, advertising and promotion staff. Command of English language, typing skill, ability to work with minimum supervision required. College training desirable. B75-151 (4/16).

Clerk Typist III in MIT Development Office to perform duties relating to fund-raising efforts of the Institute: filing; updating of files; typing - all in support of Analysts in the Development Office. Accuracy and neatness required. B75-126 (4/2).

Clerk-Typist II in Admissions Office to open and sort large volume of mail;

file; type and answer phones. Ability to read quickly and accurately, good memory skills, some office experience necessary. Position requires considerable amount of standing at files. B75-143 (4/9).

Tech. Typist II-III in Comptrollers Acctg. Office, Transfer Voucher Section, will type various accounting and other reports, use adding and mimeograph machines. Typing skill and ability to operate above equipment required. B75-94 (3/12).

Technical Typist III, part-time in Chemical Engineering will type reports, manuscripts, proposals from rough drafts and with use of word-processing equipment. Excellent typing, organization and grammatical skill, technical typing (or willingness to learn), necessary. Work will be coordinated by secretarial supervisor. Morning segment of job-sharing position. 15-20 hrs/wk. B75-38 (1/29).

Nurses' Aide III, biweekly, in Medical Department will assist nurses and physicians in delivery of patient care: maintain supplies, stock examining rooms, clean and autoclave instruments and equipment; provide assistance to physicians and nurses in medical procedures; may schedule appointments and assist with clerical record-keeping. Previous experience as an aide preferred. B75-154 (4/16).

Sr. Detailer, hourly, temporary in Center for Space Research, Lab for Space Experiments, will perform detailing of mechanical units from layout drawings; assemble components to illustrate relationships and functions; will also do block diagrams, schematics and some printed circuit layouts. Two-year technical school graduate, or equivalent, plus minimum two-years applicable experience required. 40 hr/wk. Temporary for 3-4 mos. B75-46 (4/16).

Technician A in Energy Lab will assist

in materials testing, construction and operation of coal conversion test facility. Position requires ability to construct test specimens and modules, perform analyses of samples from test rig, including corrosion, stress rupture, x-ray diffraction and interpretation, metallography, fabricate ceramic parts by sintering, hot pressing, flame spraying and ray material preparation. 8-12 yrs experience as technician desirable. 40 hr wk, 8am-4:30pm. Occasional night work. H75-34 (4/2).

Tech A (E-M), for the Radioactivity Center will assist in laboratory, research or analytical work; operate technical experimental apparatus. Maintain electronic equipment associated with controlled low-background facility, breath radon, thoron equipment. Troubleshoot nuclear pulse instrumentation, construct, wire, perform routine tasks associated with measurement of subjects and administration of laboratory. Strong background in pulse and digital circuits; experience in use of oscilloscopes and test instruments required. 74-922-R (12/18).

The following positions have been FILLED since the last issue of *Tech Talk*:

B75-105	Secretary IV
B75-106	Sr. Clerk III
B75-89	Sr. Clerk IV
74-1416-A	DSR Staff
74-1482-A	DSR Staff
B75-86	Secretary IV
B75-102	Secretary III
B75-116	Secretary IV
H75-13	Grnds., Hrly.
D75-32	DSR Staff
D75-40	DSR Staff
74-753-A	DSR Staff
B75-124	Secretary III-IV
B75-113	Secretary III-IV

The following positions are on HOLD pending final decision:

B74-128	Edit. Asst. V
B75-101	Secretary IV
B75-122	Secretary III

INSTITUTE NOTICES

Announcements

OFFICIAL NOTICE FINAL EXAMINATIONS

All students should obtain an examination schedule at the Information Center, 7-111. Examinations not listed or a conflict in examinations, such as two examinations in the same period, must be reported to the Schedules Office by Friday, April 25.

Funds Relief Drive—APO & Vietnamese Students Assoc will sponsor a Funds Relief Drive to help South Vietnam refugees. Booth will be in Bldg 10 Lobby Wed, Apr 16-Fri, May 9, 10am-3pm.

Baker House Explorer Post 76—Specialty in general science & engineering. Looking for new members: open to high school age, but adults needed for advisory committee. Meets every other week, 7-9pm, Baker Hse (362 Mem Drive), Wed, April 16: Food Show/Biology, election of Pres. Neil Kadon, 494-0440, x3-3162.

Help Wanted for HoToGAMIT—Staffers needed to help produce this valuable guide to MIT and the Boston area. Call TCA, x3-4885, to sign up.

Technology Children's Center Nursery School—Applications are being accepted for summer session, June 16-July 25, and for the fall term. Openings available for 5, 3 or 2 mornings/week, for children 3-5 yrs, in Eastgate & Westgate. Fran Olson, x3-5907.

Marching at Commencement—Faculty members should notify the head of their department by Mon, May 5, whether they wish to march at Commencement on Mon, June 2. Faculty will assemble at 10am in duPont locker room. Ms. Makris, x912-75 at the Coop, will order regalia if notified no later than May 21.

Basic Pistol Marksmanship Course—Open to adult members of MIT Community. 5 Thurs sessions, beginning Thurs, Apr 24, 6:30pm, duPont Pistol Range. Fee: \$15, covers ammo & equipment. Registration: Tom McLennan, x3-3296 or Andy Platais, x8-1417 Draper. If interested in small bore rifle shooting contact Andy Platais.

Course VI Steak Fry—Sponsored by EE & CS Stu-Fac Committee. Featuring steak, baked potato, cole slaw, bread, beer, soft drinks. Thurs, Apr 24, 6pm, Bldg 13 Lobby. Admission \$3.50. Info: Mei Mei Wang, Rm 38-476.

Tickets—BSO discount tickets for April 23 open rehearsal are available at TCA. Metropolitan Opera tickets ordered thru TCA should be picked up this week, 11am-3pm, TCA office, Stu Ctr Rm 450.

Annual Kresge Scheduling Meeting 1975-76—Open to all MIT organizations, departments and activities who plan their programs in advance. Scheduling of the main auditorium will be Thurs, Apr 17, 2pm, Stu Ctr Mezzanine Lge; for Little Theatre, Thurs, Apr 24, 2pm, Stu Ctr West Lge.

1974-75 Prizes for Writing—All MIT undergraduates, writing poetry, fiction, essays, drama, etc., are eligible. Prizes are: Robert A. Boit Prize, Ellen King Prize for freshman writing; & special Boit manuscript prize of \$200 for a work of substantial length, completed or in progress. Deadline 5pm, Fri, Apr 18. Rules & info, Rm 14N-409.

Associate Advisors—Any student interested in working with a freshman advisor should stop by the FAC Office, Rm 7-103, to pick up and fill out an information sheet.

GSC Meetings—Thurs, Apr 17, 6pm, Walker Blue Rm. Dinner 5:30pm. RSVP Spyridon Armenis, pres.

New UROP Listings

For more detailed information on UROP opportunities listed, MIT undergraduates should call or visit the Undergraduate Research Opportunities Program Office, Room 20B-141, Ext. 3-5049 or 3-4849 unless otherwise specified in the listing. Undergraduates are also urged to check with the UROP bulletin board in the main corridor of the Institute.

Laitram Corporation

The Laitram Corporation, based in New Orleans, has been involved in the development of electro-mechanical and electronic devices and machines since 1950. The corporation has conducted research into automated crab meat recovery and feels that a potential source of food has been undeveloped because of the high costs of meat recovery. The project proposed by Laitram involves testing and evaluating a Laitram design for an automated crab-meat packing technique. After this work is completed, a student would be asked to assist in refining the design and building a prototype. Pay or credit is available.

Cordell Engineering Inc.

Everett, Ma. Cordell Engineering has a number of projects in which MIT students can participate: Film Processing Projects—the design of a film processor to handle various sizes of dental x-ray films; the design of an automatic transport system to be utilized in a black & white film processor designed for 105mm film. Boating Related Projects—evaluation of a patent that has been issued on a magnetom-

eter compass; designing a welding fixture to be used for welding a 23 foot aluminum sailboat hull together. Pay or credit available.

Western Electric Company

N. Andover The Merrimack Valley Division of Western Electric would like to involve interested undergraduates and faculty in the following projects: 1) Temperature Profiles in Large Sealed Vessels; 2) Frequency Shift During Manufacture of Sealed Crystal Devices; 3) Computer Aided Fault Diagnostics for Repair of Hybrid Integrated Circuits; 4) Effectiveness of Sn-Ni Electroplated Alloy as a Diffusion Barrier Between Cu and Au. Pay or credit available.

Graduate Studies

The Asian American Mental Health Research Center is seeking a regional full- or part-time research assistant/associate to assist in the identification and development of plans to take action on regional research needs in the Asian/Pacific community by: 1) making a systematic review/summary of regional research needs; 2) conducting a survey and assessing the capabilities of research personnel in the region; 3) identifying and making contacts with possible funding sources; and 4) helping to organize a mini-conference between community and research persons for research development. Qualifications: Master's degree or equivalent preferred, knowledge of local Asian/Pacific community, certification by regional AAMHRC Board Member and regional Research Committee, ability to speak and write effectively, experience with research methodology. Salary is to be negotiated. For more information contact the Pacific Asian Coalition, 199 Harrison Avenue, Boston. Telephone: 482-7555, Ext. 9.

MIT Club Notes

A'nanda Ma'rga—Meditation classes Tues, 1:30-3:30pm, Stu Ctr Rm 407 and 8-10pm, Rm 36-153; Wed, 10am-12n, Stu Ctr 407.

MIT Ballroom Dancing Club—The club** will be very active this term, with regular workshops, lessons & dances. For specific info watch for signs, or call Pete "Twinkle-Toes" Travis, 536-1300.

Bridge Club—ACBL Duplicate Bridge.** Open pairs Tues & Thurs, 7pm. Separate nonexpert pairs Thurs, 7-9pm. Multiweek team of 4 events Fri evg & Sat aft (separate events), call for details. All events Stu Ctr Rm 473. Jeff, 864-551.

MIT/DL Bridge Club—ACBL Duplicate Bridge.** Tues, 6pm, Stu Ctr Mezzanine Lge.

MIT Exotic Fish Society—Meeting** Thurs, Apr 24, 7:30pm, Stu Ctr Rm 002. New members invited.

Goju Karate Club—Mon, Wed, Fri, 7pm.** Stu Ctr Rm 491. Beginners welcome.

MIT Gospel Choir—Members and musicians** needed. Rehearsals are Sun, 4-6pm, Stu Ctr Rm 407. Those interested are encouraged to attend.

MIT Guild of Bell Ringers—Change ringing** done on tower and handbells; tune ringing on handbells. Change ringing Tues, 7pm, Church of the Advent, Bos; Thurs, 6:30pm, Senior Hse (crafts, 1st fl); tune ringing Sun, 7pm, Senior Hse. Info: Ruth Cross, x0669 Dorm.

Hobby Shop—Mon-Fri, 10am-6pm.** Rm W31-031. Fees: \$10/term for students, \$15/term for community. Info, x3-4343.

MIT Karate Club—Shotokan style.** Classes Mon, Wed, 8-10pm, duPont Wrestling Rm; Fri, 6-7:30pm, T-Club Lge. Beginners welcome.

MIT Kung Fu Club—Instruction** in the art of Chinese boxing, Northern Praying Mantis style. Classes Tues, Thurs, 7-9pm, Stu Ctr Rm 407. Visitors welcome. Info, Dave Smith, 494-8683.

MIT Numismatic Society—Wed, 7pm,** Theta Delta Chi (372 Memorial Drive).

MIT Outing Club—Mon & Thurs, 5-6pm.** Stu Ctr Rm 461.

MIT Soaring Association—General Meeting**—Thurs, Apr 17, 7:30pm, Stu Ctr Rm 491. Movie, coffee & donuts.

Strategic Games Society—Offers opponents and discounts on merchandise to members plus gaming and periodical library. Info: Steve Simmons, x8265 Dorm or Gary Brennan, x0280 Dorm.

Student Homophile League—Meetings** 1st & 3rd Sun of the month, 4pm, Rm 1-132. Info, talk, help in coming out, call Tom at the Hotline, x3-5440. Come on out—the water's fine!

MIT Tae Kwon Do Club—Beginner and advanced** classes. Tues, Thurs, 5-7pm, Stu Ctr 491.

Tau Beta Pi—National Engineering Honor Society.** Sun, Apr 27: Initiation of new members 1:30pm, Rm 37-252, followed by election of new officers; Banquet at Su Shiang, 158 Prospect St. Cambridge, 7pm. Reservations due in Rm 38-476 by Fri, Apr 18. Info: x8635 Dorm.

MIT Unicycle Club—Unicycle riding & basketball.** Sun, 11am, Walker gym (Rm 50-340). Beginners welcome. Info: come, or call Mike, x0680 Dorm.

MIT Wheelmen—Meetings** Tues, 7:30pm, Rm 1-203.

White Water Club—Pool sessions.** Tues, Apr 22, 8-10pm, Alumni Pool.

MIT Women's Chorale—Wives and working** members are encouraged to join. Thurs, 8pm, Rm 10-340.

Religious Activities

The Chapel is open for private meditation 7am-11pm daily.

Baha'i Discussion Group—Thurs, 7-9pm.** Rm 8-105, Dale, 354-1907. Of Special Interest: Thurs, Apr 10 & Mon, Apr 14. Laura Lupse-

wicz, MIT employee and sec'y of the assoc. will show slides of her recent pilgrimage to Israel. 7pm, Rm 8-105. Refreshments.

Campus Crusade for Christ/College Life—Family time, singing, prayer, teaching** from God's word. Fri, 7:30pm, Rm 37-252.

Christian Science Organization—Weekly meetings,** including testimonies of healing. Tues, 7:30pm, Rm 8-314.

Hillel Services—Fri:** Traditional 6:15pm, K kosher Kitchen: non-Traditional 8:30pm, Chapel. Sat: Traditional 9am, Chapel. Mon-Fri, Minyan 7:30am, Rm 7-102.

Interdenominational Holy Communion Service—All members of the Institute welcome. Wed, 5:05pm, Chapel. Revs Parvey and Crocker.

MIT Islamic Society—Congregational prayers** Fri, 3:15pm, Kresge rehearsal rm B; discussion session Sat, 4pm, International Stu Lge (2nd fl Walker). Refreshments.

Prayer Time—Lunch hour prayer and Bible** class led by Miriam R. Eccles. Fri, 1-2pm, Rm 20E-226a.

Prophets—Wed, 12n, and fl seminar rm, Bldg** W2. Bring lunch, drinks provided. Discussion of Old and New Testament Prophets.

Roman Catholic Mass—Sun, 9:15am, 12:15** pm & 5:15pm; Tues & Thurs, 5:05pm; Fri, 12:05pm; Chapel.

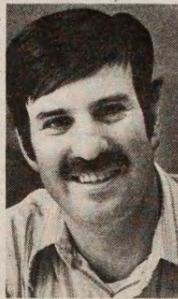
United Christian Worship Service—Sun,** 10:45am, Chapel.

United Christian Fellowship—Sunday** school and nursery for infants and children during United Christian Worship Service. Sun, 10:45-12n, Stu Ctr Mezzanine Lge.

Vedanta Society—Services** Fri, 5:15pm, Chapel. Swami Sarvagatananda will lead meditation & Gita discourses.

Orszag Named Full Professor

Steven A. Orszag, associate professor of applied mathematics, was inadvertently omitted from last week's list of faculty members promoted to the rank of professor, effective July 1.



Professor Orszag, whose current research interests focus on computational methods and fluid dynamics, received the SB degree from MIT in 1962—the same year he was a Henry Fellow at Cambridge University—and the PhD degree from Princeton in 1966. He returned to MIT as assistant professor in 1967 after a year at the Institute for Advanced Study, and in 1970 was appointed associate professor and awarded a Sloan Research Fellowship.

He is chairman of the Computer Panel of the National Center for Atmospheric Research and chief collaborator with Professor Carl M. Bender of the Department of Mathematics on a series of graduate texts on applied mathematics.

Vacation Policies

Questions have arisen regarding the cut-off date by which biweekly employees should use their accrued vacation. The policy is that vacation accrued during a fiscal year shall be taken by June 30 of the following fiscal year or be forfeited. As an example, vacation accrued between July 1, 1973 and June 30, 1974, shall be taken by June 30, 1975. Any exceptions to the use of vacation by the June 30 date should be submitted in writing to the appropriate personnel officer for approval.

Teuber Honored

Dr. Hans-Lukas Teuber, professor of psychology and head of the MIT Department of Psychology, received an honorary doctorate from the University of Lyon, France, April 14. He delivered an address, *Persistent Problems in the Study of Brain and Behavior*.

This Week in Sports

Heavyweights Undeclared, Meet Boston Rivals Next

MIT's heavyweight crew showdown between cross-river rivals Northeastern and Boston University is set for Saturday, April 19, on the Charles River at 12:30pm.

Next Saturday's race against Northeastern especially, is of great importance to MIT. The Engineers were pre-season ranked fourth in the east among heavyweight crews while the once-beaten Huskies are ranked fifth. MIT upset Northeastern and Boston University last year.

The undefeated Tech heavyweight eight coasted to a three and a half length win over Columbia last Saturday, their second straight of the young season. The Engineers, stroked by Pete Beaman (Hampton, N.H.), moved at a 37 strokes a minute and opened up a two-length lead at the quarter race mark. Beaman progressively lowered the stroke and Tech still opened up a greater margin. At 1,000 meters, the halfway point, MIT was three lengths in the lead and increased it to four at 1,500 meters. Rowing a 30, the Engineers didn't even bother to sprint and crossed the finish line 14 seconds in front of Columbia. Tech was timed in 6:17.2 for the 2,000 meters.

While the heavies were beating Columbia, the Tech lightweights edged Yale at New Haven for the Joy Cup. It was MIT's first outing of the year while Yale had already two victories to their credit. MIT was clocked in 6:03.4 followed by Yale three quarter-lengths behind in 6:06.8.

Coach Bill Miller's Varsity faces perennial eastern powerhouse Harvard next Saturday on the Charles River, vying for the Biglin Cup. Harvard, defending EARC champions, blasted the Columbia lights last Saturday and is a heavy favorite to retain the Biglin Cup over Dartmouth and host MIT.

With women's crew, the first annual Eisenberg Cup regatta was held last Saturday on the Charles and Yale women went home with the cup. The Yale crew was a length and a half over Princeton, followed by MIT. Yale was clocked in 5:08.8 for the 1,500 meters.

Baseball Breaks Losing Streak

After dropping three straight due mainly to lack of hitting, MIT's baseball team blasted out thirteen hits, good for twenty runs, beating Bowdoin 20-3 last Saturday. Junior Mike Dziekan (Chicopee, Mass.) paced the hitting attack with three hits and three runs batted in. Junior Mike Royal (Ayer, Mass.), posted his fourth win of the season, scattering eight hits over the six innings he pitched. The fourth victory of the season gave Royal fourteen on his career—an MIT record.

Herb Kummer (Baltimore, Md.) is still the leading MIT hitter, 404 B.A. after eleven games. The Engineers face Harvard Tuesday and Lowell Tech on Wednesday afternoon on Briggs Field.

Women Sailors Place Third

MIT's women's sailing team placed third in the Sloop Shrew Trophy behind host Radcliffe and Jackson. Barbara Belt (Severns Park, Md.) won the individual low point skipper honors in the A division. Senior Debbie Samkoff (Westwood, N.J.) skipped MIT's B division entry.

Still on sailing, MIT's men's team placed second with Harvard in the annual Geiger Cup Regatta. In the four division competition, MIT had senior Paul Erb (Corpus Christi, Tex.) sail and win in the Lark, Chuck Tucker (Greensboro, N.C.) dinghy, Larry DuBois (Beverly Hills, Calif.) Mercury and Bill Critch (Winthrop, Mass.), single-handed.

Tennis Team Victories

MIT's men's tennis team scored two 8-1 victories over Bowdoin and Wesleyan last weekend. Senior captain Lee Simpson (Simpson, S.C.), playing number one singles for MIT, posted two strong victories individually and then teamed with senior Jim Austin (Brookline, Mass.) to win the doubles competition against Bowdoin and Wesleyan. The Engineers host Williams College on Saturday, April 19.

INSITE Gains 3 New Members

Children's Hospital Medical Center, New England Deaconess Hospital and Mt. Sinai Medical Center in New York last week brought to eleven the number of institutions now using INSITE II, MIT's innovative space inventory system administered by the Office of Facilities Management Systems.

Announcement of the new consortium members was made Thursday, April 10, at the fourth semi-annual INSITE conference by Kreon L. Cyros, director of OFSM. About 34 representatives from the INSITE users' group attended the conference, which was co-hosted by the Draper Lab.

Principal speakers were Eric Brown, Director of Institutional Research at Brown University, Peter Stevens, director of Harvard Medical School's Area Planning Office, and Kreon L. Cyros, who spoke on space cost allocation.

Philip A. Stoddard, vice president for operations at MIT and Joseph F. O'Connor, executive assistant to the President of the Charles S. Draper Laboratory also

addressed the conference.

Other members of the INSITE consortium besides new participants and MIT are Brown University, Syracuse University, Harvard Medical School, Rush Presbyterian-St. Luke's Medical Center in Chicago, Tektronix, Inc. of Portland, Ore., the University of Alabama in Birmingham, and the Draper Lab.

Lyon Photographs

A selection of works by Bob Lyon, a photographer from Northampton, Mass., is showing in the lounge of the Creative Photography Gallery concurrent with the exhibition of photographs by Wendy Snyder MacNeil in the main gallery. Lyon's photos are polaroid pictures, mainly portraits he has done over the past four years. Lyon is a former special student at the Creative Photography Laboratory.

Better Jobs, Wages Needed

Massachusetts Is in Depression, Harrison Says

By BENNETT HARRISON

The Massachusetts economy is in a depression. 320,000 people are out of work, and the number is rising. Thousands are trapped in part-time jobs, even though they want—and need—full-time work. Perhaps a third of the jobs that do exist pay less than a living wage.

Partly as a consequence of this depression, tax revenues are lagging behind state expenditures, causing a large deficit. In his now desperate attempt to find ways to cut that deficit, Governor Dukakis is considering a plan to throw thousands of people off the Massachusetts-funded General Relief rolls, on the grounds that they are "able-bodied" (or "employable"). This year, over 40,000 General Relief welfare checks will be issued by the state. If only a third of those recipients are classified as employable, then some 13,000 Massachusetts citizens will lose their benefits.

The Secretary of Manpower Affairs, Howard Smith, says that these welfare payments provide such an attractive alternative to work that some people who would otherwise take a job choose instead to sit at home and draw wel-

fare. But 90 percent of those on General Relief are single persons, and for this group, the maximum benefit under the law is only \$38 a week. How many jobs pay only \$38 a week? Not very many.

For the great majority of General Relief recipients, it is simply not true that welfare pays more than jobs. Most people go on welfare because they are unable to work, because employers are unwilling to hire them (due to race or sex discrimination), or simply because there aren't enough jobs at decent pay to go around.

The trial balloon about possible cuts in the welfare budget may be just the first step in a campaign to reduce state transfer payments in general. If so, the main target will be unemployment compensation. The Governor has just created a task force in the state's Division of Employment Security to propose ways of cutting back on unemployment compensation.

The necessary data are not made public, but we estimate that about 500,000 Massachusetts workers drew benefits at some time last year. That sounds like a massive giveaway, as does the fact that the maximum benefit level of \$143 a

week is the second highest in the country. But only 25 percent of those who drew unemployment comp were even eligible for that maximum benefit, and fewer still actually received it. In fact, the average benefit actually paid out last year was only \$69 a week. Moreover, more than 600,000 people probably experienced unemployment at one time or another last year; that means that perhaps a fifth of the unemployed never collected any benefits at all.

It may be true that some workers have been drawing unemployment benefits that exceed the wage offered by some Massachusetts employers. One way to deal with this is to do what Secretary Smith and Governor Dukakis apparently want to do: cut back the unemployment insurance. Another is to demand more supplementary unemployment insurance funds from Washington (the ability to corner more federal aid was one of the Dukakis-O'Neill campaign's major claims). Most important, we need to pursue economic development policies that, in the long-run, can increase the wages that Massachusetts employers are able—and required—

to pay.

A growing number of local economists who have studied the state's problems agree that a major cause of our difficulties—especially with respect to high unemployment—is the proliferation of low-wage, often seasonal, generally unstable and basically "bad" jobs in the Commonwealth. These kinds of jobs—especially in the consumer-oriented service sector and especially in tourism—make it hard to impossible for people to develop a stable attachment to their jobs, no matter how highly motivated they may be. The worker who changes the beds in a Hyannis motel in July may love the job, but that "work ethic" doesn't prevent the motel from closing down at the end of September. Boring, repetitive, low-wage work sometimes even compels workers to change jobs frequently, if only to preserve their sanity.

The issue of who on the welfare and unemployment insurance rolls is and isn't "employable" is a red herring. The real issue is: what are the objective work opportunities for those who want to work? And how can state government help to increase the supply of good

jobs at decent pay in the region? The sad fact is that the Governor's apparent policy—to throw people off the relief rolls—will make things worse next year, and the year after. The reason is simple: it will force more people to go to work in the low-wage sector of the economy to keep themselves and their families alive. And this, in turn, will certainly not bring any pressure to bear on those employers to raise wages, to invest in new productivity-enhancing capital equipment, or to upgrade their (often outmoded) management practices. Indeed, the extra pool of cheap labor that Governor Dukakis' policy would create will probably make it easier for some employers to lower their wages.

It is indecent to blame the poor for their poverty, the unemployed for their unemployment. Blaming the victim is an old political temptation, which we in Massachusetts—of all states—ought to resist.

(Bennett Harrison is Associate Professor of Economics and Urban Studies in the Department of Urban Studies and Planning at MIT. This is an extended version of a commentary originally delivered on WGBH-TV's Evening Compass April 10.)

Survives Numerous Difficulties

Evidence Shows USSR Still Favors Detente

By LINCOLN BLOOMFIELD

It may seem incredible, in the face of events, that Soviet-US detente remains alive and well. But that is my distinct impression from a week of intensive talks in Moscow with officials and foreign policy experts.

From all the evidence, the Soviets continue to put a high priority on trade with the West, continued strategic arms limitations talks, and increased collaboration in the face of common

problems.

Detente seems strong enough to survive the trade bill fiasco, which dashed their hopes for badly needed credits and machinery. It was strong enough to overcome the temptation to gloat over US defeats in Middle East diplomacy and in South East Asia. Even those Soviet ideologues who wish to debate what they call "the general crisis of capitalism" seem to be outweighed by the pragmatists who sense their system's interde-

pendence with the capitalist's west in ways Marx and Lenin never dreamed of.

But detente is also fragile. Soviet weapons made North Vietnam's military victories possible, and also help support the hard line of the P.L.O. and other Mid-East extremists. And the basic ground rules of detente could be demolished if Moscow encourages the Portuguese communists to try for an all-out dictatorship of the left to take the place of the old dicta-

torship of the right, along with Soviet naval bases.

Given some of these strains on detente, it seems likely that the Muscovite hawks have been making their arguments more strongly than before. But General Secretary Brezhnev has now emerged from the shadows and a couple of weeks ago made a surprisingly strong reaffirmation of the need for good US-Soviet relations.

Above all China looms menacingly on Russia's rear. My

impression is that unless outside temptations become totally irresistible—as, let's say, in Cuba in 1960-61—the dominant faction in Moscow will put detente first, while reminding those who will listen that to them that it also means the continuation of ideological struggle by peaceful means.

(Lincoln Bloomfield is a professor of political science at MIT. He delivered this commentary recently on the WGBH-TV program, *The Evening Compass*.)

Frank Urbanowski Appointed Director of MIT Press

(Continued from page 1)

many able candidates. His editorial background, with particular emphasis in engineering and the sciences, and his experience in the management of all phases of publishing are strong qualifications particularly appropriate for his new position."

As Vice President and then publisher of the Glencoe Press, Mr. Urbanowski created a system for setting objectives and planned and directed their implementation. He formulated a program for the acquisition of a new line of publications for an increasingly competitive and fragmented market.

He also designed and supervised acquisition plans for broad programs of books which included engineering and technology, physical sciences, mathematics, social sciences, English, the humanities and business.

Much of the acquisition, including several best sellers, he conducted personally.

Mr. Simonides, who has been responsible for Press operations for the past eight months, said that the MIT Press has been experiencing serious financial difficul-

ties and has important challenges to face. "Some of the problems are the result of the general economic climate in publishing and some are peculiar to our own situation. Our local problems are largely problems of financial planning and control, including the management of prices, inventory and accounts receivable. The list of MIT Press books is a very distinguished one and we can maintain and enhance its quality, given the right leadership and support of a highly talented and hard-working staff.

"In recent months the level of employment and budget of the Press was reduced significantly to save money. Special marketing efforts have resulted in sales increases which are expected to exceed the \$2.5 million budget for the current fiscal year."

Professor Hartley Rogers Jr., chairman of the MIT Press Editorial Board, said, "We look forward to working with Mr. Urbanowski in developing and maintaining an innovative publishing program of the highest quality—a program that will build on and represent the strengths of MIT as a university centered in science, technology and the arts, and a program that will, at the same time,

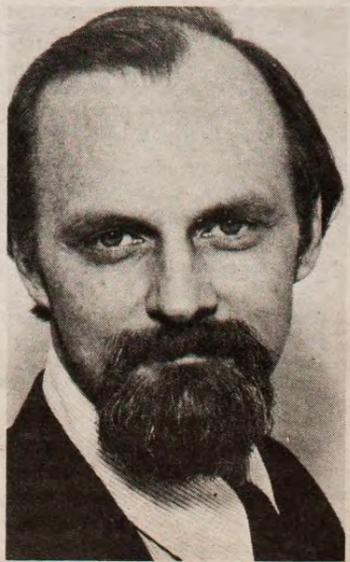
sustain the Press's outstanding international reputation for scholarly publishing.

"We shall continue our distinguished publication in Architecture and Linguistics, and, under Mr. Urbanowski's leadership, we shall seek equal distinction in other areas of institutional strength as well—areas in science, engineering, the arts and the social sciences. We look forward, in this enterprise, to close cooperation and collaboration with faculty, students, staff and other members of the Institute community."

An advisory committee for the selection of the new director was appointed last fall to assist Mr. Simonides in the screening and selection from a large number of candidates who applied for the position. The advisory committee consisted of Professors Stanford Anderson (Department of Architecture), member of the MIT Press Editorial Board; Michael Dertouzos (Department of Electrical Engineering and Computer Science), director of Project MAC and member of the MIT Press Management Board; Hartley Rogers (Department of Mathematics), associate provost, chairman of the MIT Press Editorial

Board and member of the MIT Press Management board, and Jack Schulman (Director of the Cambridge University Press) and Bradford Wiley (Chairman of the Board of John Wiley & Sons), both members of the MIT Press Management Board.

Mr. Urbanowski, 39, received the BS degree in engineering from Virginia Polytechnic Institute in 1959, and joined Macmillan three years later after being a regional



Mr. Urbanowski

representative for the Ronald Press Co. from 1960-62.

He was a junior editor in Macmillan's College Division only a short time when he was given complete responsibility for the development of the company's engineering program at the college level and editorial responsibilities for other areas of the sciences.

In 1966 Mr. Urbanowski was appointed editorial director of Glencoe Press, a newly established division of Macmillan. In this position he was responsible for creating and implementing an acquisitions plan and for hiring, training and supervising staff.

Two years later he was promoted to vice president of Glencoe and in 1972 became publisher with full responsibility for Glencoe in a newly reorganized subsidiary of Macmillan—Benziger, Bruce and Glencoe, Inc.

Mr. Urbanowski joined E.T.S. in 1972 as director of marketing and director of the Department of Educational Relations where he established and manages a group responsible for product and market development for a broad range of E.T.S. programs and services.

Mr. Urbanowski is married to Ferris Buck. They have two children, Alexandra, 10, and Tasha, 8.

MIT Press

Report of
Sales and Royalties
for the period
4/1/1973 — 3/31/1974

FELD

AUTHOR

LEO SZILARD VOL I

TITLE

Sales	UNITS	VALUE	value per unit	Royalty	AMOUNT
				RATE	
Direct Mail	3	\$ 46.75	\$ 15.58	5%	\$ 2.34
Domestic	28	\$ 345.85	\$ 12.35	10%	\$ 34.59
Foreign	120	\$ 1471.40	\$ 12.26	6.67%	\$ 98.14
					Total \$ 135.07

Other Income

Deductions Advances	\$
Author's Alterations	\$
Other	\$
	\$
Total Deductions	\$

Terms 100% Check enclosed: # 321198 Amount \$ 135.07

Sales Summary

Previous Sales	<u>889</u>
Sales this year	<u>151</u>
Sales to date	<u>1040</u>

MIT Press

Report of
Sales and Royalties
for the period
4/1/19 72 — 3/31/19 73

FELD

AUTHOR

LEO SZILARD VOL I

HARD

TITLE

Sales	Sales		Royalty		AMOUNT
	UNITS	VALUE	value per unit	RATE	
Direct Mail	102	\$ 1510.50	\$ 14.81	5%	\$ 75.53
Domestic	684	\$ 7916.64	\$ 11.57	10%	\$ 791.66
Foreign	103	\$ 1054.49	\$ 10.23	6.6%	\$ 69.60
Total \$					936.79

Other Income *Permission Income* \$ 34.35

Deductions	\$
Author's Alterations	\$
Other	\$
	\$
Total \$	

Terms 100% Check enclosed: Number 247050 Amount \$ 971.14

Sales Summary

Previous Sales	<u>0</u>
Sales this year	<u>889</u>
Sales to date	<u>889</u>

Gertrud Weiss Szilard, M.D.
8038 El Paseo Grande
La Jolla, California 92037

Dear Trude,

Good to hear from you.

I have no idea how the previous address of yours was given to Dr. Fruchtbaum when he called. I've never had that address on record since we worked together on publicity; my records and the records of the royalty department reflect the address of this letter.

However, to make certain that it is established correctly everywhere, I've sent a copy of both letters so Barbara Ankeny will note it for the contract and editorial files and Cornelius Kiely will have it for accounting.

Now--to the main part: I am very pleased that Dr. Fruchtbaum wrote you and do hope we can call upon him as the work progresses for whatever recommendations he may have to help us make the book widely known.

I trust this finds you well and in fine spirits.

Indian summer has settled into Cambridge for a few days after a 3 day deluge of rain. It is lovely and wonderful for walking and thinking. Reminiscent of Rilke's poems of Autumn which I trust you know.

Sincerely,

A handwritten signature in blue ink, appearing to read "Anne", with a long, sweeping horizontal stroke extending to the right.

Anne Sayre
October 22, 1975

October 5, 1975

Miss Anne Sayre
The MIT Press
Massachusetts Institute of Technology
28 Carleton Street
Cambridge, Mass. 02142

Dear Anne:

We haven't heard from each other in a long time, have we? I was in Europe for a few weeks in July and August and enjoyed it thoroughly. I hope that you had also a good vacation. I haven't been in touch with anybody really at the MIT Press and wonder how things are going there. We are busy working on Volume Two and I have some really good help this time.

The reason I am writing today is a very nice letter which I received yesterday and of which I am enclosing a xerox. I almost didn't receive this letter because MIT gave the wrong address. Of course I don't know who at MIT gave it out but I should be grateful if you could find out and see that they have my current address as above. The reason that mail doesn't get forwarded to me from the old address is that the place was torn down and the Post Office won't forward because this was a hotel address.*

Anyway the letter cheered me up and you may wish to show it to whomever at the Press might be interested.

Sincerely,

as ever,

Gertrud Weiss Szilard, M.D.

Encl.

returned
*This letter was returned to the sender who then located my office address at UCSD and sent it to me there.

Barbara:

Part II + Chapter II of Part III

Political, Economic, and Social Writings

Reminders:

- Send: 1. key papers of each chapter
- 2. guess page No. for each chapter

again please from Sach

Web Cost Representative:

Judy Kucera

845 Oxford Street

Berkeley Calif. 94707

home (415) 526-4328

1. Find 5 or 6th contract + letter
2. Ann Payne - first series (Bullock → Goff)
3. Barbara de "Reader" pamphlet
4. "Terminations": Kirk Adams
5. "Let us say so"

January 31, 1975

Dear Trude,

Fall '74 is the latest catalog. Spring is in preparation now and when it comes out we'll send you a copy.

No new information to report; a director has not yet been selected.

Trust you are enjoying La Jolla.

Best Greetings,

A handwritten signature in cursive script, appearing to read "Anne", with a long horizontal flourish extending to the right.



From the desk of

EGON A. WEISS

Mude,

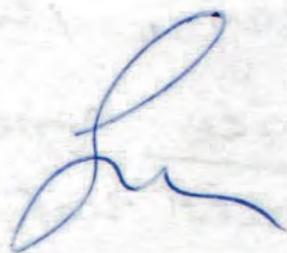
Enclosed list reflects the holdings of Leo's works (as marked) of participating libraries within OCLC.

The number of copies, however, may be presumed to be larger inasmuch as the Voice appeared in '61 and would not necessarily have

been entered into the data
bank which has only been
operational since '69 —
Most institutions have
only joined lately. This
is also true of the
Coll. works.

Tell MIT & Hunter
& get on the ball!

Love



BLUE VOICE
 RED COL. WORKS

OCLC PARTICIPATING LIBRARIES ARRANGED BY SYMBOL

SYMBOL	INSTITUTION	CITY AND STATE	ZIP	NETWORK
AED	U.S. Department of Army	Washington, D.C.	20314	FLECC
AGL	National Agriculture Library	Beltsville, MD	20705	FLECC
AKL	University of Akron-Law	Akron, OH	44304	OCLC
AKR	University of Akron	Akron, OH	44304	OCLC
AMH	Amherst College Library	Amherst, MA.	01002	NELINET
ANC	Antioch College Library	Yellow Springs, OH	45387	OCLC
APL	Akron Public Library	Akron, OH	44326	OCLC
ARL	U.S. Army Library	Washington, D.C.	20310	FLECC
ASC	Ashland College Library	Ashland, OH	44805	OCLC
ATO	Athenaeum of Ohio	Cincinnati, OH	45205	OCLC
AWC	U.S. Army War College Library	Carlisle Barracks, PA	17013	FLECC
BAN	Andover-Newton Theological School	Newton Center, MA	02159	NELINET
BBH	Bowdoin College Library	Brunswick, ME	04011	NELINET
BCT	Gordon-Conwell Theological Seminary	S. Hamilton, MA	01982	NELINET
BDC	Benedict College Library	Columbia, SC	29204	CCLC
BEN	Bennett College Library	Greenboro, NC	27402	CCLC
BEJ	B.F. Jones Memorial Library	Aliquippa, PA	15001	PRLC
BGU	Bowling Green University	Bowling Green, OH	43303	OCLC
BHA	Andover-Harvard Theological School	Cambridge, MA	02159	NELINET
BIS	Bishop College Library	Dallas, TX	75241	IUC
BJO	St. John's Seminary	Brighton, MA	02135	NELINET
BKM	Battelle Memorial Institute	Columbus, OH	43201	OCLC
BLC	Bluffton College Library	Bluffton, OH	45817	OCLC
BMC	Bryn Mawr College Library	Bryn Mawr, PA	19010	PALINET
BNG	SUNY at Binghamton	Binghamton, NY	13901	FAUL
BOS	Boston University Library	Boston, MA	02215	NELINET
BPS	Episcopal Theological School	Cambridge, MA	22138	NELINET
BRB	Bryant College Library	Smithfield, RI	02917	NELINET
BSC	Cincinnati Bible Seminary	Cincinnati, OH	45204	OCLC
BUF	SUNY at Buffalo	Buffalo, NY	14214	FAUL
BVP	Burton Public Library	Burton, OH	44021	OCLC
BWE	Weston College Library	Cambridge, MA	02193	NELINET
BXM	Boston College Library	Boston, MA	02167	NELINET
BYN	Bangor Public Library	Bangor, ME	04401	NELINET
BZM	Boston U. School of Theology	Boston, MA	02115	NELINET
CAU	Capital University Library	Columbus, OH	43209	OCLC
CBY	Colby College Library	Waterville, ME	04901	NELINET
CDC	Cedarville College Library	Cedarville, OH	45314	OCLC
CFC	Claflin College Library	Orangeburg, SC	29115	CCLC
CGP	Chicago Public Library	Chicago, IL	60605	IRRN
CHS	Cleveland Health Sciences Lib.	Cleveland, OH	44108	OCLC
CIN	University of Cincinnati	Cincinnati, OH	45221	OCLC
CRM	Clark University	Worcester, MA	01610	NELINET
CLC	Clark College	Atlanta, GA	31314	CCLC
CMJ	College of Mount St. Joseph	Mount St. Joseph, OH	45051	OCLC
CNC	Central State College	Wilberforce, OH	45384	OCLC
COO	Cornell University	Ithaca, NY	14850	FAUL

OCLC PARTICIPATING LIBRARIES

SYMBOL	INSTITUTION	CITY AND STATE	ZIP	NETWORK
CPL	Carnegie Library of Pittsburgh	Pittsburgh, PA	15213	PRLC
CRC	Carlow College	Pittsburgh, PA	15213	PRLC
CSU	Cleveland State University	Cleveland, OH	44115	OCLC
CTL	Connecticut College	New London, CT	06320	NELINET
CUM	Curry College	Milton, MA	02186	NELINET
CVT	Center for Vocational and Technical Education	Columbus, OH	43201	OCLC
—CWR	Case Western Reserve Univ	Cleveland, OH	44106	OCLC
CXP	Cuyahoga County Public Lib.	Cleveland, OH	44144	OCLC
CYC	Colby Junior College	New London, NH	03257	NELINET
CZL	Connecticut State Library	Hartford, CT	06115	NELINET
DAY	University of Dayton	Dayton, OH	45409	OCLC
DCL	U.S. Dept. of Commerce Lib.	Washington, DC	20230	FLECC
DDF	U.S. Food & Drug Administration Medical Library	Rockville, MD	20852	FLECC
DEF	Defiance College	Defiance, OH	43509	OCLC
DIL	Dillard University	New Orleans, LA	70122	CCLC
DIM	University of Delaware	Newark, DE	19711	PALINET
DMM	Dayton and Montgomery County Public Library	Dayton, OH	45402	OCLC
DNU	Denison University	Granville, OH	43023	OCLC
DRB	Dartmouth College	Hanover, NH	03755	NELINET
DXU	Drexel University	Philadelphia, PA	19104	PALINET
ECP	East Cleveland Public Lib.	East Cleveland, OH	44112	OCLC
EMU	Emory University	Atlanta, GA	30322	SOLINET
FAU	Fairfield University	Fairfield, CT	06430	NELINET
FEM	Ferguson Library	Stamford, CT	06901	NELINET
FIN	Findlay College	Findlay, OH	45840	OCLC
FLT	Florida Institute of Technology Library	Melbourne, FL	32901	CCLC
FMC	Florida Memorial College	Miami, FL	32084	CCLC
FPL	Findlay-Hancock Public Lib.	Findlay, OH	45840	OCLC
FSK	Fisk University	Nashville, TN	37203	CCLC
GAT	Georgia Institute of Technology	Atlanta, GA	30332	SOLINET
GEC	Geauga County District Lib.	Chardon, OH	44024	OCLC
GLF	Great Lakes Fishery Laboratory	Ann Arbor, MI	48107	FLECC
GRC	Green County District Lib.	Xenia, OH	45385	OCLC
GSU	Georgia State Univ. Library	Atlanta, GA	30303	SOLINET
GVA	Greenville Public Library	Greenville, OH	45331	OCLC
HAM	Hampshire College	Amherst, MA	01002	NELINET
HCD	Holy Cross College	Worcester, MA	01610	NELINET
HEI	Heidelberg College	Tiffin, OH	44883	OCLC
HIR	Hiram College	Hiram, OH	44234	OCLC
—HLS	Harvard College Library	Cambridge, MA	02138	NELINET
HOU	U.S. Department of Housing & Urban Development	Washington, DC	20410	FLECC
HPL	Hartford Public Library	Hartford, CT	06103	NELINET
HRM	University of Hartford	West Hartford, CT	06117	NELINET

OCLC PARTICIPATING LIBRARIES

SYMBOL	INSTITUTION	CITY AND STATE	ZIP	NETWORK
HTC	Huston-Tillotson College	Austin, TX	78702	CCLC
HUC	Hebrew Union College	Cincinnati, OH	45220	OCLC
HVC	Haverford College	Haverford, PA	10941	PALINET
IAU	Austin College Library	Sherman, TX	75090	IUC
ICU	Texas Christian University	Fort Worth, TX	76129	IUC
IDA	Dallas Baptist College	Dallas, TX	75211	IUC
IEA	East Texas State University	Commerce, TX	75428	IUC
IFA	Fort Worth Public Library	Fort Worth, TX	76102	IUC
IGA	Dallas Public Library	Dallas, TX	75201	IUC
IHS	University of Texas Health Science Center	Dallas, TX	75235	IUC
IJA	Irving Independence School District	Irving, TX	75060	IUC
IJC	Irving Municipal Library	Irving, TX	75060	IUC
IKM	Texas State Library	Austin, TX	78711	IUC
ILU	Texas Tech University	Lubbock, TX	79409	IUC
INT	North Texas State University	Denton, TX	76201	IUC
IPU	Eastern New Mexico University Library	Portales, NM	88130	IUC
IQU	University of New Mexico	Albuquerque, NM	87131	IUC
IRU	New Mexico State University	Las Cruces, NM	88003	IUC
ISM	Southern Methodist University	Dallas, TX	75222	IUC
ITD	University of Texas at Dallas	Richardson, TX	75080	IUC
IUA	University of Texas at Arlington	Arlington, TX	76010	IUC
IVD	University of Dallas Lib.	Irving, TX	75061	IUC
IWU	Texas Woman's University	Denton, TX	76204	IUC
IXA	University of Texas at Austin	Austin, TX	78712	IUC
IYU	Baylor University Library	Waco, TX	76706	IUC
JCC	Jarvis Christian College	Hawkins, TX	75765	CCLC
KCP	Kansas City Public Library	Kansas City, MO	64106	INDEPENDEN
KEN	Kenyon College	Gambier, OH	43022	OCLC
KIT	Kittrell College	Kittrell, NC	27544	CCLC
KNM	Keene State College	Keene, NH	03431	NELINET
KSU	Kent State University	Kent, OH	44242	OCLC
LAP	Lakewood Public Library	Lakewood, OH	44107	OCLC
LBE	Lakewood Board of Education	Lakewood, OH	44107	OCLC
LEC	Lake Erie College	Paineville, OH	44077	OCLC
LIM	Lima Public Library	Lima, OH	45801	OCLC
LMC	Cleveland-Marshall College of Law	Cleveland, OH	44115	OCLC
LOC	Lemoyne-Owen College	Memphis, TN	38126	CCLC
LTS	Lutheran Theological Seminary	Columbus, OH	43209	OCLC
MAL	Malone College	Canton, OH	44709	OCLC
MBC	Morris Brown College	Atlanta, GA	30314	CCLC
MCL	Medical College of Ohio at Toledo	Toledo, OH	43614	OCLC
MDY	Middlebury College	Middlebury, VT	05753	NELINET
MEA	Maine State Library	Augusta, ME	04330	NELINET
MHC	Mary Holmes College	West Point, MS	39773	CCLC

OCLC PARTICIPATING LIBRARIES

SYMBOL	INSTITUTION	CITY AND STATE	ZIP	NETWORK
MIA	Miami University	Oxford, OH	45056	OCLC
MKN	Northeast Missouri State Univ.	Kirksville, MI	63501	INDEPENDENT
MLC	Miles College	Birmingham, AL	35208	CCLC
MMM	Maine Maritime Academy	Castine, ME	04421	NELINET
MOC	Morris College	Sumter, SC	29150	CCLC
MRC	Marietta College	Marietta, OH	45750	OCLC
MSC	Muskingum College	New Concord, OH	43762	OCLC
MTH	Mt. Holyoke College Library	South Hadley, MA	01075	NELINET
MXC	University of Cincinnati Medical Libraries	Cincinnati, OH	45219	OCLC
MYG	Mass. Institute of Technology Library	Cambridge, MA	02139	NELINET
NAM	State University of New York at Albany	Albany, NY	12203	SUNY
NBS	National Bureau of Standards	Washington, DC	02034	FLECC
NDC	Notre Dame College	Manchester, NH	13104	NELINET
NED	Northeastern University	Boston, MA	02155	NELINET
NHM	University of New Hampshire	Durham, NH	03824	NELINET
NLM	National Library of Medicine	Bethesda, MD	20014	FLECC
NTN	Newton College	Newton, MA	02159	NELINET
NWK	Norwalk Public Library	Norwalk, CT	06850	NELINET
NYG	New York State Library	Albany, NY	12224	SUNY
OAK	Oakwood College	Huntsville, AL	35806	CCLC
OBE	Oberlin College	Oberlin, OH	44074	OCLC
ODC	Ohio Dominican College	Columbus, OH	43219	OCLC
OHI	State Library of Ohio	Columbus, Ohio	43215	OCLC
OLA	U.S. National Oceanic and Atmospheric Admin. Library	Silver Springs, MD	20910	FLECC
ONU	Ohio Northern University	Ada, OH	45810	OCLC
OSU	Ohio State University	Columbus, OH	43210	OCLC
OTC	Otterbein College	Westerville, OH	43081	OCLC
OUN	Ohio University	Athens, OH	45701	OCLC
OWU	Ohio Wesleyan University	Delaware, OH	43015	OCLC
PAU	University of Pennsylvania	Philadelphia, PA	19104	PALINET
PCJ	Pontifical College of Josephinum	Worthington, OH	43085	OCLC
PDC	Community College of Philadelphia	Philadelphia, PA	19107	PALINET
PEM	Perrot Memorial Library	Old Greenwich, CT	06870	NELINET
PGP	University of Maine at Portland/Gorham	Portland, ME	04103	NELINET
PHA	State Library of Pennsylvania	Harrisburg, PA	17126	PALINET
PIT	University of Pittsburgh	Pittsburgh, PA	15213	PRLC
PNE	Paine College	Augusta, GA	30901	CCLC
PPN	Portland Public Library	Portland, ME	04101	NELINET
PQC	Paul Quinn College	Waco, TX	76704	CCLC
PRA	Preble County District Lib	Eaton, OH	45320	OCLC
PSM	Plymouth State College	Plymouth, NH	03264	NELINET
PTP	Point Park College	Pittsburgh, PA	15222	PRLC

OCLC PARTICIPATING LIBRARIES

SYMBOL	INSTITUTION	CITY AND STATE	ZIP	NETWORK
PUL	Princeton University Library	Princeton, NJ	08540	PALINET
RBN	Brown University Library	Providence, RI	02912	NELINET
RCM	Rhode Island College	Providence, RI	02908	NELINET
RDS	Department of State Library Service	Providence, RI	02912	NELINET
RFL	Federal Reserve Bank of Boston, Research Library	Boston, MA	02106	NELINET
RGC	Rio Grande College	Rio Grande, OH	45674	OCLC
RHC	Riverside Methodist Hospital Library	Columbus, OH	43214	OCLC
RIU	University of Rhode Island	Kingston, RI	02881	NELINET
ROB	Robert Morris College	Pittsburgh, PA	15219	PRLC
RRR	Rochester University	Rochester, NY	14627	FAUL
RSC	St. Charles Borromeo Seminary Library	Philadelphia, PA	19151	PALINET
RUS	Rust College	Holly Springs, MS	38635	CCLC
RWB	Roger Williams College	Bristol, RI	02809	NELINET
SAC	St. Anselm's College	Manchester, NH	03102	NELINET
SCM	Stillman College	Tuscaloosa, AL	35401	CCLC
SHP	Shaker Heights Public Lib	Shaker Heights, OH	44120	OCLC
SIN	Sinclair Community College	Dayton, OH	45402	OCLC
SJD	St. Joseph's College	Philadelphia, PA	19131	PALINET
SKR	Shaker Heights City School District	Shaker Heights, OH	44120	OCLC
SMI	Smithsonian Institution Lib	Washington, DC	20560	FLECC
SRS	Slippery Rock State College	Slippery Rock, PA	16057	PRLC
SNN	Smith College	Northampton, MA	01060	NELINET
SPI	Illinois State Library	Springfield, IL	62756	IRRN
SSA	Stratford Public Library	Stratford, CT	06497	NELINET
STU	College of Steubenville	Steubenville, OH	43952	OCLC
SYB	Syracuse University	Syracuse, NY	13210	FAUL
SXP	Sunnyvale Public Library	Sunnyvale, CA	94086	INDEPENDEN
TAL	Talladega College	Talladega, AL	35160	CCLC
TCL	Tusculum College	Greenville, TN	37743	CCLC
TEU	Temple University	Philadelphia, PA	19122	PALINET
TFW	Tufts University	Medford, Ma	02155	NELINET
TGC	Tougaloo College	Tougaloo, MS	39174	CCLC
TLM	Toledo-Lucas County Public Lib	Toledo, OH	43624	OCLC
TMA	Troy-Miami County Public Lib	Troy, OH	45373	OCLC
TOL	University of Toledo	Toledo, OH	43606	OCLC
TRL	U.S. Department of Transportation Library	Washington, DC	20590	FLECC
TSM	Methodist Theological School Library	Delaware, OH		OCLC
TTT	Texas College	Tyler, TX	75701	CCLC
TUS	Tuskegee Institute	Tuskegee, AL	36088	CCLC
TYC	Trinity College Library	Hartford, CT	06106	NELINET
UAP	Upper Arlington Public Lib	Columbus, OH	43221	OCLC

OCLC PARTICIPATING LIBRARIES

SYMBOL	INSTITUTION	CITY AND STATE	ZIP	NETWORK
UCW	University of Connecticut	Storrs, CT	06268	NELINET
UDI	U.S. Department of the Interior Library	Washington, DC	20240	FLECC
UIU	University of Illinois Lib	Urbana, IL	61801	IRRN
ULL	U.S. Department of Labor Library	Washington, DC	20210	FLECC
URB	Urbana College	Urbana, OH	43078	OCLC
UTS	United Theological Seminary	Dayton, OH	45406	OCLC
VCM	Voorhees College Library	Denmark, NC	29042	CCLC
VSC	Virginia State College	Petersburg, VA	23803	CCLC
VTU	University of Vermont	Burlington, VT	05401	NELINET
VUU	Virginia Union University	Richmond, VA	23220	CCLC
WAL	Walsh College	Canton, OH	44720	OCLC
WBU	Wilberforce University	Wilberforce, OH	45384	OCLC
WCW	Western College	Oxford, OH	45056	OCLC
WEL	Wellesley College	Wellesley, MA	02181	NELINET
WGT	Wayne General & Technical College	Orrville, OH	44667	OCLC
WHE	Wheaton College Library	Norton, MA	02766	NELINET
WIT	Wittenberg University	Springfield, OH	45501	OCLC
WLU	Wesleyan University Library	Middletown, CT	06457	NELINET
WMC	Wilmington College	Wilmington, OH	45177	OCLC
WNC	Naval War College Library	Newport, RI	02840	NELINET
WOO	College of Wooster	Wooster, OH	44691	OCLC
WPG	Worcester Polytechnic Institute	Worcester, MA	01609	NELINET
WQM	University of Massachusetts Medical Center Library	Worcester, MA	01605	NELINET
WRM	Worcester State College	Worcester, MA	01602	NELINET
WSC	Wright State-Celine Branch	Celina, OH	45822	OCLC
WSP	Wright State-Piqua Branch	Piqua, OH	45356	OCLC
WSU	Wright State University	Dayton, OH	45431	OCLC
WTU	Washington University	St. Louis, MI	63130	HECC
WUM	Washington University School of Medicine	St. Louis, MI	63110	HECC
WYC	Wiley College	Marshall, TX	75670	CCLC
XAV	Xavier University	Cincinnati, OH	45307	OCLC
XBM	State Univ. College at Brockport	Brockport, NY	14420	SUNY
XDM	SUNY Agriculture & Technical College at Delhi	Delhi, NY	13753	SUNY
XFM	State Univ. College at Fredonia	Fredonia, NY	14063	SUNY
XIM	St. Lawrence University	Canton, NY	13617	SUNY
XMM	SUNY Agriculture & Technical College at Morrisville	Morrisville, NY	13408	SUNY
XQM	Queens College Library	Flushing, NY	11367	SUNY
YAH	Alfred University Library	Alfred, NY	14802	SUNY
YCM	State Univ. College at Cortland	Cortland, NY	13045	SUNY
YDM	New York State College of Ceramics at Alfred Univ.	Alfred, NY	14802	SUNY
YFM	SUNY Agriculture & Technical College at Farmingdale	Farmingdale, NY	11735	SUNY
YGM	State Univ. College at Geneseo	Geneseo, NY	14454	SUNY

OCLC PARTICIPATING LIBRARIES

SYMBOL	INSTITUTION	CITY AND STATE	ZIP	NETWORK
YHM	Hamilton & Kirkland Colleges Library	Clinton, NY	13323	SUNY
YMM	Youngstown and Mahoning County Public Library	Youngstown, OH	44503	OCLC
YNG	Youngstown State University	Youngstown, OH	44503	OCLC
YOM	State Univ. College at Oswego	Oswego, NY	13126	SUNY
YPM	State Univ. College at Plattburgh	Plattsburgh, NY	12901	SUNY
YRM	Rensselaer Polytechnic Inst.	Troy, NY	12181	SUNY
YSM	SUNY at Stony Brook	Stony Brook, NY	11790	SUNY
YTM	State Univ. College at Utica/Rome	Utica, NY	13502	SUNY
YUS	Yale University Libraries	New Haven, CT	06520	NELINET
YVO	Onondaga Library System	Syracuse, NY	13202	SUNY
YWM	U.S. Military Academy Lib	West Point, NY	10996	SUNY
ZAM	SUNY Agriculture and Technical at Alfred	Alfred, NY	14820	SUNY
ZBM	State Univ. College at Oneonta	Oneonta, NY	13820	SUNY

January 27, 1975

Professor Howard Green
Department of Biology
Rm. 56-535
Massachusetts Institute of Technology
77 Massachusetts Avenue
Cambridge, Massachusetts 02139

Dear Howard:

Please forgive me for being so remiss in responding to your nice letter of December 13. I was in Ithaca over the holidays visiting the Rackers who are all fine. Hope that Rosine has returned from France and that all is well with you and her family. also. You wrote me your home address but only the street so I don't know in which community you now reside nor the zip so I couldn't send you a Christmas card.

I haven't heard anything at all from or about the MIT Press and I was wondering whether you ever had a response or heard any news otherwise. We are quite busy putting together the manuscript for Volume Two and also trying to solicit additional funds to supplement the small NSF grant which we have for this purpose. Please let me know if there is any news-- also if there is no news, for that matter.

In Nature of November 8, 1974 on page 93 under Correspondence you will find a short letter which I wrote to the Editor and which might amuse you.

Thanks and my best as always,

MASSACHUSETTS INSTITUTE OF TECHNOLOGY

77 MASSACHUSETTS AVENUE
CAMBRIDGE, MASSACHUSETTS 02139

DEPARTMENT OF BIOLOGY
Rm. 56-535

December 13, 1974

PHONE: (617) 253-~~xxx~~ 6754

Dr. Gertrud Weiss Szilard
8038 El Paseo Grande
La Jolla, Calif. 92037

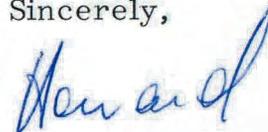
Dear Trude:

Please put your mind at rest over your letter about the Collected Works. I have reread it and cannot see that anyone here would be offended. Webber has been gone for some time and I doubt that anyone of those who would see the letter would feel injured. If your letter is emotional, I see no reason why it shouldn't be, but to me it reads very well and it conveys exactly what it should convey.

Our new address is: 82 Williston Road. Rosine is in France just now, family problems as usual. Hoping you have a nice Christmas.

With very warm regards,

Sincerely,



Howard Green

HG:ju

MASSACHUSETTS INSTITUTE OF TECHNOLOGY

19

Memo to

Room

Ext.

Feld - Sigilard

~ 2800 printed/board

~ 1015 "sold" to date

March 31, 1975

from

Room

Ext.

The MIT Press

Massachusetts Institute of Technology
28 Carleton Street
Cambridge, Massachusetts 02142

Dr. Gertrude Weiss Spilard
8038 El Paseo Grande
LA JOLLA, Calif 92037



The MIT Press

Effective August 12, 1972, a new Centrex telephone system

will allow outside callers to dial the Press directly at the

new numbers listed below (the area code remains 617).

*Eol. 101.01
- 52571
253-1623*

Accounting	Administration	Editorial	Journals	Media/ Design/Production
253-6150 Kiely, C.F. Accounting Manager	253-5254 Webber, H.R. * Director	253-2080 Osborne, H.I. Managing Editor	253-2889 Mark, A.P. Journals Manager	253-5640 Cooper, M. Media/ Design/Production Director
253-5253 Aranda, R.M.	253-5255 Chevalier, H.F.	253-6155 Agro, E.	Marketing	
253-6150 Brown, A.J. Additional Line	Editorial Acquisitions	253-6155 Ankeny, B.H. <i>5255</i>	253-2884 McGovern, R.M. Marketing Director	253-1961 Hacker, E.A.
253-2891 Accounts Receivable	253-5646 Connolly, M.J. Editorial Director	253-6158 Boyd, C.D.	253-2885 Clark, P.B. Sales Manager	253-1962 Rosser, L.E.
	253-1624 Altman, Y.	253-6908 Goodell, C.W.	253-2886 Edwardsen, G.N.	253-5649 Sales, R.O.
	253-5645 Levey, B.K.	253-6158 McCorkle, T.L.	253-5642 Goff, R.O.	253-1962 Steiner, S. Additional Lines
	253-1623 Snyder, J.S.	253-6154 Parker, K.O.	253-7297 Mallory, G.K.	
		253-6154 Ware, C.G.	253-5642 Outerbridge, B.S.	253-2880 Media/Design
		Financial	253-6151 Saulenas, B.J.	253-2881 Media/Production
	<i>Mike Leonard (royalty)</i>	253-5250 De Vie, K.F. Financial Manager →	253-5643 Sayre, A. <i>2885</i>	253-2882
		253-6153 Salmon, R.D.	Additional Lines	253-2883
		Additional Line	253-2887 Marketing	
		253-2888 Financial	253-2877 Customer Service	
			253-2878	
			253-5251	
			253-6152	

Frank Urbanowski (Die.)

269-3770