

Dr. E. Margaret Burbidge and Dr. Morris E. Friedkin elected to membership in the National Academy of Sciences

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Two University of California, San Diego faculty members have been elected to membership in the National Academy of Sciences, one of the highest honors for any American scientist.

They are Dr. E. Margaret Burbidge, 59, professor of astronomy in the Department of Physics, and Dr. Morris E. Friedkin, 60, professor of biology. The two new members bring UC San Diego's total academy membership to 54'. The ratio of members to total faculty is one of the highest, if not the highest, in the country.

In all, 60 new members were elected today (Tuesday, April 25) at the academy's 115th annual meeting in Washington, D.C. Of those elected today, 13 were from University of California campuses. In addition to the two UC San Diego members, four were elected from UC Berkeley, three were elected from UCLA, two were elected from UC Davis, and one each from UC Irvine and UC San Francisco.

Chartered by President Abraham Lincoln, the academy is an independent group with the responsibility for advising and counseling the federal government on scientific and technical matters.

Burbidge, one of the world's most recognized astronomical observers, is the wife of Dr. Geoffrey Burbidge, also an astronomer who was named yesterday as the director of Kitt Peak National Observatory near Tucson, Ariz. Margaret Burbidge was the first woman to be named Astronomer Royal of England and served for a year as director of the Royal Greenwich Observatory in England. She was also the first woman to hold the post of president of the American Astronomical Society.

Her current research involves the study of quasars, believed by some to be the most distant objects yet found in the universe,

Burbidge came to UC San Diego in 1962 after serving as a member of the Fermi Institute at the University of Chicago. She has also served as assistant director and acting director at the University of London Observatory, as a research fellow at the Yerkes Observatory and as a research fellow at the California Institute of Technology.

She received her B.Sc. in astronomy and Ph.D. in astrophysics from the University of London. She is the recipient of a number of honorary degrees and was elected a fellow of the Royal Society of London in 1964 and a fellow of University College, London in 1967. She is a fellow of the Royal Astronomical Society, a member of the American Astronomical Society and a fellow of the American Academy of Arts and Sciences.

Considered an authority in observational astronomy with special expertise in spectroscopy, Burbidge has written and published widely on the physical properties of stars and galaxies.

She is currently serving as a co-investigator on a project to develop a faint object spectrograph for a space telescope to be launched by NASA in the early 1980s. The telescope will be unmanned but will allow astronomers to peer deeper into space than has ever before been possible.

Last December, Burbidge took part in a four-week tour of China with a group of 10 American astronomers. She noted that there is a "major revival" of interest in astronomy under way in China evidenced by rapid construction of new observatories, new telescopes and renewed contacts with Western astronomers.

Friedkin has been a professor of biology and a member of the faculty of the UC San Diego School of Medicine since 1969. He was provost of Revelle College from 1974 to 1976 when he chose to return to full-time research and teaching.

He has held professorships in pharmacology and biochemistry at the Washington University School of Medicine (St. Louis, Missouri) and at Tufts University School of Medicine (Medford, Mass.), where he was also chairman of the Departments of Biochemistry and Pharmacology.

He is a Fellow of the Academy of Arts and Sciences and a recipient of a John Simon Guggenheim fellowship. He has published extensively in the areas of cancer chemotherapy, enzymatic aspects of folic acid and developmental biology.

He received his B.S. and M.S. degrees in chemistry from Iowa State College (Ames) and his Ph.D. in biochemistry from the University of Chicago.

His current research interests are in two areas he describes as "separate but equally important."

He is studying what he terms a "problem quite fundamental to biology" -- the nature of the transition in living cells from a resting state (called "quiescence") to a proliferative state in which active replication takes place. Unraveling the biochemical mystery of this transition, says Friedkin, is of the essence in understanding the process of cell development in cancerous diseases.

Friedkin will leave in June for a sabbatical year to work on the cell transition problem at the Imperial Cancer Research Fund laboratory in London. He will also visit laboratories in Germany, France and Israel.

His second research effort is related to collaborative work he is conducting with scientists at Long Island's Brookhaven National Laboratory where a new camera has been developed which utilizes positron-emitting isotopes to generate photographic records of the metabolic process in intact animals and humans.

For information contact: Paul W. West, 452-3120

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