

6, Halliwick Road,  
London. N.10.

20th May, 1934.

Dear Mr. Oliphant,

I think we made a mistake when we figured out together the mean free path between two efficient nuclear collisions for diplogen moving in diplogen.

If we start out from your statement that a diplogen ion of one million volts shot into pure diplogen gives one in a thousand to an efficient collision we can reason as follows.

The range of a proton of one million volts in air is  $2\frac{1}{2}$  centimeters; its range in diplogen must be about seven times more, i.e. 17.5 centimeters. For a diplogen ion of one million volts this range is perhaps 1.4 times less i.e. 12.5 cent. The mean free path between two efficient collisions of diplogen in diplogen at one million volts should therefore be 125 meters.

We thought together the mean free path would be 20 meters but we were probably wrong. 125 meters is what we might have expected for other reasons. It is much too high to leave you a chance for bringing about an explosion in a straightforward way with the means available in the Cavendish.

I shall pop in for a second on Tuesday to hear from you if you agree to this amendment of the mean free path. Perhaps we could talk about the whole situation sometime on Tuesday or Wednesday. and Wigner (Princeton, N.J.) with whom I should also like to discuss the physical aspect as well as questions of policy, will be in Cambridge on Tuesday and will speak at Dirac's place.

Yours sincerely,



c/o Clarendon Laboratory,  
Parks Road,  
O x f o r d .

27th May, 1936.

Dear Dr. Oliphant,

You may still remember that I visited you about two years ago shortly after Fermi's first discoveries, and told you about certain patents connected with the Fermi effect, for which I have applied. The question now arises what to do with these patents which obviously cannot be considered as my property. I should very much like to have on these matters and also on some unpublished experiments the opinion of some of you. I may be in Cambridge over the weekend, and may enquire on Saturday or Monday, whether you are about and happen to be free.

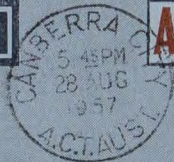
With best wishes,

Yours sincerely,



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Professor L. Szilard,  
The Enrico Fermi Institute for  
Nuclear Studies,  
The University of Chicago,  
CHICAGO 37.. ILLINOIS... U. S. A.

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BOX 4, G.P.O.  
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M. L. Oliphant, F.R.S.  
Director.

28 August 1957

Professor L. Szilard,  
The Enrico Fermi Institute for Nuclear Studies,  
The University of Chicago,  
CHICAGO 37, ILLINOIS. U. S. A.

Dear Szilard,

I was glad to receive your memoranda of August 15th.

Your proposal for a series of post-Pugwash discussions of the urgent problems before us, in an atmosphere free from the necessity to prepare agreed statements, is admirable. It is just what is required if the beginning made at Pugwash is not to be wasted, and I believe that it is the only way to arrive, in the end, at a proper technical background for political actions.

If the University of Chicago took the initiative in arranging the first of such meetings, to be held in the western hemisphere, it might be desirable that the second be held in some place such as India and be organized by a Soviet agency. The intervention of the University, as such, would assist in removing some of the less admirable aspects of private patronage, which is almost always linked with the necessity for the form of publicity which comes from conclusions and agreed statements.

To be effective, discussions of this kind must be international in character. The greatest hurdle before the organizers of such conferences will be that of finance. I do not pretend to know how to pass that obstacle. The usual source of funds for travel by men of science is, nowadays, a government institution. It is improbable that such funds can be tapped for the discussions you envisage - at any rate until their dispassionate character and usefulness have been demonstrated. However, you may have ideas about how finance can be made available.

Your memorandum and appendix are stimulating and to the point. They illustrate very well what topics could be discussed. I do hope that you are able to bring about the first of a series of meetings.

With kind regards,

Yours sincerely,

