

April 14, 1940

Dear Wheeler:

Many thanks for your kind enquiry about uranium. I am inclined to feel that your taking an active interest in this matter might be rather important, and I should very much like to discuss this subject with you in great detail. Though I expect to be in Princeton twice next week these visits will be rather hurried, and it will perhaps be better if I try to get in touch with you towards the end of the week or in the course of the following. By then I hope the situation will be somewhat clearer than it is right now. In the meantime I shall try to have the manuscript to which you refer copied, for you, as I have sent my last spare copy to Placzek.

With kind regards,

420 West 116th Street  
New York City

June 24, 1940

Dear Wheeler:

Placzek tells me that you had a long conversation with him on the subject which we last discussed. It seems to me that even if your formula should not hold strictly in case of strong resonance capture, it still might be used for practical purposes provided that it is possible to give the upper limit for the deviation and that this upper limit is not too large. At present <sup>an</sup> ~~the~~ error of about 50 to 10 % could be tolerated in measuring the fraction of the neutrons which reach thermal energies in a mixture containing 3 H atoms per uranium atom.

If I understood you correctly it would be necessary to use a monochromatic neutron source in your experiment, and that means that a radon-beryllium source would be useless for your purposes. This, however, is only a practical difficulty, and it may be possible to overcome it provided that you find that your formula holds with sufficiently good approximation in such a mixture. I understand that you are now looking into this matter, and I should appreciate your letting me know any conclusion which you may reach. We could then, if required, re-discuss the matter from a more experimental point of view.

With kind regards,

yours sincerely,

(Leo Szilard)

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Sept. 4, 1940

Dear Szilard,

Your kind letter of June 24 reached me in Maine, and I must apologize for not having acknowledged it before this. I hope to discuss with you, as you suggested, the experimental side of the proposed experiment to determine the quantities of interest for the losses of neutrons. Unfortunately I have been finishing another paper and have so far not had time to work out an estimate of the accuracy of the proposed method. Now that I have written up the original draft in legible form, however, I am sending it on to you for any additional comments you might have. I hope it won't be long before I can get back to this and clear up the questions you and Placzek raised.

If you are not coming down here shortly, I will try to get to New York sometime and discuss the progress of the fission work, etc.

With best wishes, John A. Wheeler