

CARNEGIE INSTITUTION OF WASHINGTON

DEPARTMENT OF TERRESTRIAL MAGNETISM

5241 BROAD BRANCH ROAD, N. W.  
WASHINGTON, D. C.

Dear J. J. J. J.

Monday 3/27/39

Thanks for your two letters, &  
MS of Fermi's expts.

We are in the midst of an expt to demonstrate simultaneous neutrons  $> 500$  kv similar to your photo-n expt, but using C-neutrons. This type of expt gives very little of quantitative value, but after 2 or 3 more days I will stop it & run up to NY to talk to you & Fermi.

Do not cable for Be block as yet. Thanks.

President Bush (C/W) insisted that we stay clear of the Navy; we can have what funds we need, after we decide what really is worth doing. At present I think the Fermi expt with large (200 lbs) amounts of  $UO_2$  is the only good expt. We could use our water tank 8 ft diam by 8 ft deep, and with ample neutrons, <sup>100 to 1000 curies</sup> (new machine) make a real measure of area under the "tail". Before making any moves or purchases we will confer with you & Fermi.

Regards — Ture

Toliet's expt  $6 \times 10^{-25}$  hardly agrees with his interpretation  
of  $> 1$  in position.

Please advise Fermi.

*pull  
march*

Hotel King's Crown  
420 West 116th Street  
New York City

March 22nd, 1939

Dr. M. Tuve  
Carnegie Institute of Terrestrial Magnetism  
5241 Broad Branch Road  
Washington, D.C.

Dear Tuve:-

I told Fermi of the conversation which we had in Washington. I also raised the question whether he would see much advantage in your using some private funds, which I believe we could find for you if necessary, instead of the Navy funds. Since the Navy funds have already been offered to you Fermi seems to think that you might as well use those for the present. He asked me to send you a copy of his paper which you will find enclosed for your information as well as for Hafstaadt's and Heydenburg's.

I have telephoned to the Radium Chemical Co. and asked them if we could have another gram of radium for a minimum period of one month to be used by your group at Washington. Their reaction was so far favorable, and they cabled at my request to Brussels in order to ask for a permission. I expect a telephone call from them in the next few days and will let you know as soon as I hear from them.

I have also telephoned to the Beryllium Corporation, but so far I did not succeed in getting hold of anybody to whom I could talk sense. I shall try again to-morrow.

I shall keep you informed as to how things develop. At present we are trying to find out the best conditions for the "chemical" experiment.

If you want uranium oxide you can get it in ten pound packages from \$ 2.65 to \$ 2.70; uranium of Belgian origin from B.F. Drakenfeld, 45 Park Place, New York City, and uranium of Canadian origin from Du Pont de Nemours, <sup>the</sup> R. and H. Chemical Department, Empire State Building, New York City.

Following your suggestion that rare earth contamination might be important, we are going to test different samples for such contaminations and shall write you the results.

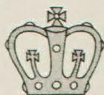
With kind regards to all,

Yours sincerely,

(Leo Szilard)

P.S. Perhaps before you definitely commit yourself to rent one gram of radium you might wish to reconsider whether you cannot do the same experiments equally well with deutron-carbon neutrons. Maybe we can have another talk on this subject in a fortnight or so. By then it will be possible to see clearly what experiments are most urgently needed to complete the picture.

# Kings Crown Hotel



420 WEST 116TH STREET  
NEW YORK

OPPOSITE COLUMBIA UNIVERSITY

March 24th, 1939

Dear Tuve:-

The Beryllium Corporation, whith whom I established contacts at last, can only supply beryllium flakes. This is very unsatisfactory. They said they could get from Germany beryllium plates about 1" by 1" in about four to six weeks. These plates are 1/8th of an inch high, and they charge \$ 13.50 for each. This seems to me hardly worth while.

I could perhaps get a beryllium block which is similar to mine and which belongs to a friend of mine in England. I could try and cable for it if you wish me to do so.

With kind regards to all,

Yours sincerely,

(Leo Szilard)

*His long*