

Wigner mit Information;
mit der Bitte um Kommentar
(wenn nötig) und mit der

28th August, 1934.

Bitte um Rückantwort -

Was regiert Palnogy
in dem chemischen
Teil? Zu übertragen:

Dear Professor Hopwood,

Just a few lines to keep you informed.

Vertraulich

The counter tube with the large window is under construction. In the meantime I am concentrating on the question whether it is possible to increase the sensitivity by separating the radio-active isotope from the non-radio-active isotope by chemical methods. Most of the elements follow the example of Iodine which transmutes when bombarded by neutrons into a radio-active Iodine, and the question I am raising is whether we can separate the radio-active Iodine from the bulk of the bombarded Iodine. This sounds 'blasphemous' to the chemist, but I hope it can be achieved by proceeding like this: take an organic compound of Iodine like Iodopropionic acid dissolved in water and bombard it with neutrons. One must expect that those Iodine atoms which swallow a neutron are thrown out of the organic compound and will be present in the solution as ions or bound as Iodides or Iodates or free Iodine according to the circumstances under which we choose to work. It should then be possible to separate the radio-active Iodine together with a small amount of

Iodine set free during the bombardment, for instance by precipitating with silver nitrate (after reducing the free Iodine and the Iodates)%. I am not yet quite certain as to the best conditions to be chosen from the point of view of preventing an exchange of the isotopes. Vedéremo.

In order not to keep the counter idle I thought it would be wise to investigate Indium, Niobium and Scandium. Johnson Matthey had none but advised me how to get it. Mr. Chalmers fetched some Indium and Niobium and at midnight yesterday we were satisfied that Indium shows a fairly strong effect of a halfperiod of one or two hours; as far as I know these elements have not yet been investigated either in Rome or in Cambridge. Well, that is not too exciting.

I have arranged with Paneth to let Dr. Glueckauf see our experiments so that he should learn from them, and he is helping us now to build counter tubes for the benefit of all those concerned. Paneth himself is unfortunately away on holiday but I am getting Freundlich's advice if required.

As I hope to see you in about 10 days time I can tell you the rest and confine myself to wishing you a pleasant stay.

With kind regards,

Yours very sincerely,

On board of " Olympic " Febr. 14 th 1935.

c/o B. Liebowitz, 420 Riverside Drive
New York City

Dear Professor Hopwood ,

this is what I was trying to make clear over the telephone : There may be delay in my work about "canalisation" through my trip to New York and through the fact that the Clarendon will be closed for some time in April. Therefore I do not want to oppose Chalmers, if he wishes to report on his own behalf on our joint experiment. It is up to him what and where he wishes to publish.

I believe he could start by mentioning that he wishes to report these joint experiment and indicate (possibly in the form of a footnote) that I am going on with these experiments and may publish later on an account in a more detailed form . I should appreciate if the impression could be avoided, that I have any part or responsibility, as far as Chalmers note goes, and therefore it would not be suitable that he should thank me for assistance and the like.

Many thanks for the reprints , which you sent me to Waterloo; they just arrived in time. I hope you will have a nice quite time while I am rushing about in America.

Could you perhaps pass this letter, together with my kind regards, on to Chalmers ?

You rs very sincerely

P.S. It was great fun to work at Bart-s and I felt more at home there than I am likely to feel anywhere else in the near future.