

DEN 27th of June 1923.

*Recorded
L.F.A.*



To The International Education Board.

New York.

Dear Sirs,

I herewith take the liberty of applying to the International Education Board for a grant to the Institute for Theoretical Physics of the University of Copenhagen, of which I am the director. The purpose of this grant would be, first the extension of this Institute so that it may be in a position to receive the properly qualified foreign physicists who wish to work there and to offer them suitable working conditions, and second the purchase of equipment for the Institute so that it may take up experimental investigations in certain new domains of theoretical physics which presumably will be of great importance for the future development of the theoretical work in atomic physics.

In the accompanying report, which Professor H.M.Hansen of the University of Copenhagen has been kind enough to prepare, there is given an account of the origin and present organization of the Institute, of the character and extent of the scientific work hitherto carried out in it, and of the funds which have been placed at its disposal by the Danish government and by private parties for its establishment and maintenance. The peculiar character of the Institute is a close cooperation between theory and experiment which is a necessary condition

for productive work in atomic physics, and this explains why many physicists from other countries, and not least from the United States, wish to study here. Naturally I wish very much indeed to be able to receive as many properly qualified physicists as possible and to offer them good working conditions, so that they may carry on with the greatest possible vigor the development of atomic physics which has given and continually promises most important results, and so that by the training of foreign physicists it may be possible to cooperate with other physical and chemical institutes and unite them in the work. However, the restricted space of the Institute, its present unpretentious equipment and the small means at its disposal, permit it to accept only a small number of applicants, if it is to offer them such working conditions that they can employ their time to best advantage. An extension such as that contemplated is absolutely necessary if the Institute shall be able to accomplish the task for which it was established. The necessary enlargement of the building and purchase of equipment will take about 20,000 Dollars. This sum is too large to be raised in this country, even taking into account the possibility of support from private individuals, since the present economic depression in Denmark makes it difficult to procure considerable sums from private sources. For the time being there can be no question of a grant from the government, as the taxes are so high that the government must avoid every expenditure which is not absolutely necessary and would never be able to obtain the consent of the Parliament to the use of money for such an extension which is occasioned essentially by an influx of foreign physicists and which therefore would be of particular benefit to physicists from other countries. However, I believe it possible to obtain in Denmark the funds requisite for the maintenance of the Institute in its extended scope.

As to the details of the contemplated extension, it is the intention to enlarge the Institute's building by some ten rooms, of which about half would be arranged for experimental work and the rest as smaller rooms for theoretical workers, as it is of the greatest importance that the theoretical work also should go on in the building, where the workers can be under the supervision of the director, and can discuss difficulties with their colleagues, consult the library and make use of the other facilities. The new fields of experimental work into which it is desired to enter are investigation of the infra-red region of the spectrum and the investigation of X-ray spectra. In this way the Institute will be equipped for investigation of the entire electromagnetic spectrum. For infra-red work the Institute has at present no equipment whatsoever, but for X-ray investigations the principal want is a modern high-tension outfit.

I hope that the singular economic and scientific situation which exists at the present time may serve as an explanation of the fact that I turn to the International Education Board, for I count in this instance upon the altruistic interest in scientific development which is felt in the United States and of which the foundation of your Board presents so good an example.

Respectfully yours,

Nick Bohn