

THE NIELS BOHR ARCHIVE
Annual Report 1993

Staff	Director	Finn Aaserud (on leave 1 February to 31 July)
	Secretary	Anne Lis Rasmussen
	Preservation	Judith Hjartbro (September to 21 November)
	Programming	Felicity Pors Martin Sørensen Henning Veik (to 14 February)
	Scientific Staff	Hilde Levi Abraham Pais (also at Rockefeller University, New York)

Board of directors

For the Vice-Chancellor of the University of Copenhagen	Ove Nathan
For the Niels Bohr Institute	Aage Winther (chair)
For the Royal Danish Society of Sciences and Letters	David Favrholt
For the Minister of Education	Birgit Andersen
For the family of Niels Bohr	Ernest Bohr (until 7 Oct) Christian Bohr (from 7 Oct)

General remarks

The Niels Bohr Archive (NBA) is a repository of primary material for the history of modern physics, pertaining in particular to the early development of quantum mechanics and the life and career of Niels Bohr. The NBA has

existed since shortly after Bohr's death in 1962. However, its future was only secured at the centennial of Bohr's birth in 1985, when a deed of gift from Bohr's wife, Margrethe, provided the opportunity to establish the NBA as an independent non-profit institution. The NBA has now its own board of directors and receives a fixed annual sum for running expenses from the Danish Ministry of Education as well as project support from private sources. Having housed the NBA from the outset, in 1990 the Niels Bohr Institute supplied improved and expanded quarters.

The core of the collections comprises Bohr's scientific correspondence (6000 letters and drafts) and manuscripts (500 units). This material was cataloged and microfilmed in the early 1960s as part of the Archive for History of Quantum Physics (AHQP), the work for which was sponsored by the American Philosophical Society and the American Physical Society. Since then, 290 microfilms of a wide variety of relevant historical material have been placed in several repositories world-wide.

In addition, the NBA houses several historical collections that cannot be consulted elsewhere. Thus, in 1985 the Bohr family donated the bulk of Bohr's private correspondence, which includes letters to and from central personalities in culture and politics inside and outside Denmark. The equally extensive "Bohr General Correspondence" documents Bohr's substantial administrative involvements. Bohr's family correspondence will become available to researchers in 2012.

Among papers of Bohr's closest colleagues deposited in the NBA, only the George Hevesy Scientific Correspon-

dence has been organized. Yet correspondence of in particular H.A. Kramers, Christian Møller, Oskar Klein, and Léon Rosenfeld is of great historical interest. The large collection of photographs relating to Bohr's career is an especially popular resource. Finally, there are reprint, film, sound tape, and video tape collections, as well as a growing library.

Activities in 1993

The NBA's highest priority continues to be the publication by North-Holland Physics Publishing of the *Niels Bohr Collected Works*, the first volume of which appeared in 1972. The series is planned to comprise eleven volumes, of which three remain to be published. Of these, volume 7, *Foundations of Quantum Physics II*, is a continuation of volume 6, which was also edited by Jørgen Kalckar. Volume 10, dealing with Bohr's extensions of his complementarity argument outside physics, is edited by David Favrholt, professor of philosophy at the University of Odense. These two volumes are planned for publication in 1994/1995. Volume 11, to be edited by Finn Aaserud and planned for publication in 1996, will cover Bohr's activities outside science and philosophy as well as contain a bibliography of Bohr's writings and an index to the whole series. A complete list of the *Collected Works* was given in the Activities Report for 1988. In the course of 1993, volumes 8 and 9 were published in China. The Chinese edition is prepared by Professor Ge Ge in Beijing, with financial support from the (Danish) Sonning Foundation and Direktør Ib Henriksens Fond.

The Hevesy Scientific Correspondence has now been catalogued and microfilmed with the help of a grant from the Alfred Benzon Foundation. A collection pertaining to Niels Bohr's paternal ancestors was deposited by Torben Bohr Topsøe-Jensen, and conserved with financial support from R. Henriques Jr's Fond. Additional material from Bohr's family correspondence has been conserved, and the Bohr family has placed many more valuable family letters in the NBA. During the same period additional items to be included in the planned collection supplementing Bohr's original scientific correspondence in the AHQP have been donated. A five-year grant from the American Lounsbery Foundation makes it possible to conduct a much-needed organization and registration of NBA's multifarious archival material, of which a preliminary listing has been prepared.

Work continues with the registration on the ALIN computer system used by the library of the Niels Bohr Institute of the NBA's original book collection, which includes rare books from the private libraries of Bohr and his close collaborator Léon Rosenfeld (an ardent book collector) and a library of more recent history of science books purchased with a grant from the American Sloan Foundation.

Several foreign scholars paid short visits. Alexei Kojevnikov was guest at the archive for one month, he is doing research for a book on early quantum electrodynamics and he made use of the many hitherto unpublished Rosenfeld letters and manuscripts written in the 1930s.

Finn Aaserud continues his historical project on the

JASON group of elite academic scientists established in 1959 to advise the U.S. government on technical questions related to national security. During the first half of 1993, he was on leave from the NBA to work full-time on the project with grants from the American Council of Learned Societies and the John D. and Catherine T. MacArthur Foundation.

Publications

Abraham Pais, “The impossible real”, *Hudson Review New York* 46, no. 1 (1993): 15–56.

Abraham Pais, “World War II and American Science”, *Southern Humanities Review* (1993): 133–147.