

# THE NIELS BOHR ARCHIVE

## Annual Report 2003

The Niels Bohr Archive is an independent institution,  
at present under the Ministry of Science, Technology and Innovation

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### Staff:

Director	Finn Aaserud
Academic Assistant	Felicity Pors
Librarian/Secretary	Anne Lis Rasmussen
Scientific Associates	Aage Bohr
	Jørgen Kalckar
	Hilde Levi (deceased, 26 July 2003)
	Knud Max Møller
	Erik Rüdinger

### Board of directors:

For the Vice-Chancellor of the University of Copenhagen	Hanne Andersen
For the Niels Bohr Institute	Andrew D. Jackson, chair
For the Royal Danish Academy of Sciences and Letters	Jørgen Christensen Dalsgaard
For the Minister of Science, Technology and Innovation	Kirsti Andersen
For the family of Niels Bohr	Vilhelm Bohr

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### General remarks

The Niels Bohr Archive (NBA), website: [www.nba.nbi.dk](http://www.nba.nbi.dk), 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. Although the NBA has existed since shortly after Bohr's death in 1962, 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 not-for-profit institution. Since 1985, the NBA has had its own board of directors and has received a fixed annual sum for running expenses from the Danish Ministry of Education (1985-1998 and 2000-2001), the Ministry of Research (1998-2000) and the Ministry of Science, Technology and Innovation (from 2001); it has also made ample use of its privilege to apply for project support from private sources.

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

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 involvement.

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

Scientific Correspondence has been microfilmed, but the papers of among others H.A. Kramers, Christian Møller, Oskar Klein, and Léon Rosenfeld are also of great historical interest. Some papers of more recent origin - notably those of Niels Bohr's son, Aage Bohr, Niels Bohr's close collaborator, Stefan Rozental, and Danish solid state physicist Allan Mackintosh - have also been deposited. 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.

The NBA continues the publication - through Elsevier - of the *Niels Bohr Collected Works*, the first volume of which appeared in 1972. A complete list of the ten volumes published so far is posted on the NBA's website. Volume 11 (edited by Finn Aaserud and the only one remaining) will cover Bohr's activities outside science and philosophy, prominently including some of Bohr's previously unpublished writings on his idea of an "open world," developed during and after World War II.

In early 1999, upon consultation with the Research Ministry, the NBA increased its special activities disseminating natural science for the public, particularly gymnasium (high-school) students (for details, see the website).

### **Activities in 2003**

In 2003 and 2004 the main effort at the NBA is concentrated on completing the last volume of the *Niels Bohr Collected Works* (Volume 11), which is edited by Finn Aaserud and funded among others by the Lounsbery Foundation. The next major project consists of digitising the film and sound collections. This project, begun this year with a special grant from the Danish Ministry of Science, is planned for completion in mid-2006.

The high number of visitors to the NBA's website resulting from archival documents released in early 2002 pertaining to the Bohr-Heisenberg meeting in 1941 has remained constant. As another fallout of the great interest in this release, Aaserud was invited to give lectures in the North-Western United States (Seattle and Corvallis) in April.

At about the same time, Felicity Pors took part in two international conferences on scientific archives, held respectively in London and Edinburgh. Aaserud has furthermore served as censor for a Ph.D. dissertation in the history of science at the Technical University in Trondheim, Norway, and has been advisor for a Master's degree in the history of science at the University of Copenhagen (see the bibliography below).

The NBA continues its effort to organise and catalogue its historical collections with the help of outside funds.

There have been six events in the NBA's series of History of Science Seminars, with prominent speakers (see the website [here](#)).

The NBA continues to attract historians and other researchers from all over the world.

As part of the dissemination programme, the NBA has hosted or co-hosted several lectures and contributed to the well-attended NBI arrangement on the annual *Kulturnatten* (Culture Night) in Copenhagen.

### **Publications**

The list below includes only publications by NBA staff. On our web site we hope to develop a more general list of publications based on any research carried out using the NBA's archival resources.

Finn Aaserud:

"Niels Bohr's Political Crusade during World War II" in *Mathematics and War*, Bernhelm

Booss-Bavnbek and Jens Høyrup (eds.) (Basel, etc: Birkhäuser, 2003).

Finn Aaserud:

"Niels Bohr - Vitenskapsmann og myte (21. november 2002)" in *P2-Akademiet XXVIII: (14.11.2002--20.2.2003)* (Oslo: Transit AS, 2003), pp. 22-33.

Finn Aaserud:

["Hilde Levi: 1909--2003"](http://www.nba.nbi.dk/hilde.html), [www.nba.nbi.dk/hilde.html](http://www.nba.nbi.dk/hilde.html)

Kragh, Peder Jacob Ellehave:

"Niels Bohr and the Soviet Union between the two world wars : resources at the Niels Bohr Archive" (Copenhagen: Master's dissertation at Copenhagen University, 2003).