

NATIONAL CATALOGUING UNIT

FOR THE ARCHIVES OF

CONTEMPORARY SCIENTISTS

Catalogue of the papers and correspondence of

**Sir Nevill Francis Mott CH FRS**

(1905-1996)

by Peter Harper and Timothy E. Powell  
NCUACS catalogue no. 105/4/02

Catalogue of the papers and correspondence of

**Sir Nevill Francis Mott CH FRS**

(1905-1996)

by Peter Harper and Timothy E. Powell  
NCUACS catalogue no. 105/4/02

Title: Catalogue of the papers and correspondence of Sir Nevill  
Francis Mott CH FRS (1905-1996), physicist

Compiled by: Peter Harper and Timothy E. Powell

Description level: Fonds

Date of material: 1929-1996

Extent of material: 16 boxes, *ca* 400 items

Deposited in: Cambridge University Library

Reference code: GB 0012

© 2002 National Cataloguing Unit for the Archives of Contemporary Scientists,  
University of Bath.

NCUACS catalogue no. 105/4/02

The work of the National Cataloguing Unit  
for the Archives of Contemporary Scientists in  
the production of this catalogue, has been made possible  
by the support of the Research Support Libraries  
Programme.



**Research Support Libraries  
Programme**

NOT ALL THE MATERIAL IN THIS COLLECTION  
MAY YET BE AVAILABLE FOR CONSULTATION.  
ENQUIRIES SHOULD BE ADDRESSED IN THE  
FIRST INSTANCE TO:

THE KEEPER OF MANUSCRIPTS  
CAMBRIDGE UNIVERSITY LIBRARY  
WEST ROAD  
CAMBRIDGE

**LIST OF CONTENTS**

	Items	Page
GENERAL INTRODUCTION		5
SECTION A            BIOGRAPHICAL	A.1-A.22	8
SECTION B            RESEARCH	B.1-B.38	10
SECTION C            LECTURES AND PUBLICATIONS	C.1-C.155	13
SECTION D            SOCIETIES AND ORGANISATIONS	D.1-D.46	27
SECTION E            VISITS AND CONFERENCES	E.1-E.24	34
SECTION F            RELIGION	F.1-F.68	38
SECTION G            CORRESPONDENCE	G.1-G.45	47
INDEX OF CORRESPONDENTS		52

## GENERAL INTRODUCTION

### PROVENANCE

The papers were received from Mrs Alice Crampin, daughter, in December 1997.

### OUTLINE OF THE CAREER OF NEVILL FRANCIS MOTT

Nevill Francis Mott was born in Leeds on 30 September 1905. His father, Charles Francis Mott, who later became Director of Education of Liverpool, and his mother, Lillian Mary Mott née Reynolds, had been research students together under J.J. Thomson at the Cavendish Laboratory, Cambridge. Mott was educated at Clifton College, Bristol and St John's College, Cambridge where he studied mathematics and theoretical physics. After three years research in applied mathematics he was appointed to a lectureship at Manchester University in 1929. He returned to Cambridge in 1930 as a Fellow and lecturer of Gonville and Caius College and in 1933 moved to Bristol University as Melville Wills Professor in Theoretical Physics. In 1948 he became Henry Overton Wills Professor of Physics and Director of the Henry Herbert Wills Physical Laboratory at Bristol. In 1954 he was appointed Cavendish Professor of Physics at Cambridge, a post he held until 1971. Additionally he served as Master of Gonville and Caius College, 1959-1966.

Mott's early research at Cambridge established his reputation in the application of the new ideas of wave mechanics to collisions of atomic particles. On moving to Bristol he left this field for that of metals and alloys, establishing an international reputation there too within a few years. Later he turned to research on semiconductors and insulators, and to problems concerned with the formation of a latent image in a photographic emulsion. During Mott's twenty-one years at Bristol his group occupied a position of great eminence in theoretical physics. War-related work during the Second World War was concerned with the propagation of radio waves and the explosive fragmentation of shell and bomb cases.

Mott's appointment as Cavendish Professor inevitably led to a greater involvement in administration both in the laboratory and the university and he assumed a number of positions nationally and internationally, both within the scientific community and more widely, for example, in the field of education. Nevertheless he remained active in research. The work for which he shared the 1977 Nobel Prize in the area of the electronic structure of magnetic and disordered systems was begun in the 1960s, while in his final years he was engaged in investigations of high temperature superconductivity. Not only was Mott one of the great theoreticians of the twentieth-century, his work in semiconductors and solid state physics had great practical implications, enabling improvements to

be made to the performance of electronic circuits, including computer memories, and in making more efficient solar energy cells.

In addition to a great number of scientific papers Mott was the author of a number of major books including *The Theory of Atomic Collisions* (with H.S.W. Massey, 1933), *Electronic Processes in Non-Crystalline Materials* (with E.A. Davis, 1971), *Metal-Insulator Transitions* (1974) and *Conduction in Non-Crystalline Materials* (1986). He also edited a volume of essays by scientists on religious belief *Can scientists believe?* (1991). In 1986 Mott published an autobiography *A life in science*.

He was elected FRS in 1936 (Hughes Medal 1941, Royal Medal 1953, Copley Medal 1972; Bakerian Lecture 1953, Rutherford Memorial Lecture 1962, Humphry Davy Lecture 1988), and was awarded the 1977 Nobel Prize for Physics (with P.W. Anderson and J.H. Van Vleck) 'for their fundamental theoretical investigations of the electronic structure of magnetic and disordered systems'. He was knighted in 1962 and made a Companion of Honour in 1995.

In 1930 he married Ruth Eleanor Horder with whom he had two daughters. He died on 8 August 1996.

#### DESCRIPTION OF THE COLLECTION

The material is presented in the order given in the List of Contents. The papers cover the period 1929-1996.

Section A, Biographical, is slight. It includes, however, drafts for his autobiography and a bibliography, albeit incomplete.

Section B, Research, principally comprises a sequence of published papers, pre-prints etc by other scientists annotated by Mott or occasionally by collaborators such as A.S. Alexandrov, 1946-1996 (bulk 1983-1996). In addition there are a very small number of notes and drafts by Mott and others, 1989-1996.

Section C, Lectures and publications, is the largest in the collection. Only a small number of Mott's public and invitation lectures are documented, 1964, 1986-1994 but there is a major sequence of drafts for his scientific publications, 1961-1996 which is especially substantial for his last years, though not always straightforward in its interpretation. Publications correspondence is not extensive and his long association with Taylor & Francis is represented by a relatively few papers, 1980-1996. There is a substantial but incomplete set of Mott's off-prints, 1929-1995.

Section D, Societies and organisations, documents Mott's association with eleven British and international bodies. His interests in nuclear weapons issues and defence questions more widely are reflected in the papers of the Oxford Research Group and the Pugwash Conferences on Science and World Affairs. Although Mott was a Fellow of the Royal Society from 1936 the record presented here covers the period 1976-1993 only, and relates almost entirely to his interests in science education.

Section E, Visits and conferences, documents a small number of such occasions attended by Mott in the United Kingdom and overseas for about twenty years from 1977 including invitations for 1996 and 1997 he was not able to fulfil. In addition to visits and conferences associated with Mott's scientific research there are records of a seminar on 'gifted' children at Cambridge, 1981 and the Second Nova Spes Colloquium of Nobel Prizewinners in Rome, November 1987 when Mott met the Pope.

Section F, Religion, documents Mott's developing interest in religion in his later years. There is correspondence, 1977-1996, including a small group of papers kept separately by Mott about the Swiss Catholic theologian Hans Küng, and drafts for *Can scientists believe?*, Mott's shorter publications and writings, and sermons.

Section G, Correspondence, presents a chronological sequence of correspondence, 1968-1996, reflecting Mott's continuing interest in research to the end of his life. It also includes correspondence and papers on energy questions, especially solar energy and photovoltaics. The sequence is predominantly incoming.

There is also an index of correspondents.

Peter Harper  
Timothy E. Powell  
Bath  
March 2002

SECTION A	BIOGRAPHICAL	A.1-A.22
A.1-A.3	Shorter biographical accounts, 1988-1995, n.d.	
A.1	Entries in encyclopaedias and similar, n.d.	
A.2	Articles for Dutch, Japanese and German newspapers, 1989-1990 and n.d.	
A.3	Brief correspondence about biographical articles, 1988-1995.	
A.4-A.18	Autobiography, 1985-1995.  Mott published his autobiography <i>A life in science</i> in 1986 (London and Philadelphia: Taylor & Francis).	
A.4-A.16	Typescript drafts with manuscript revision.  13 folders.  At A.16 is draft of chapter dealing with Mott's Mastership of Gonville and Caius College Cambridge, 1959-1966, with comments by H.W.R. Wade, Master of Caius, 1985.	
A.17	Letters from readers and from translator of Japanese edition, 1988-1989.  Review, 1989.	
A.18	2pp typescript 'Addition to "A Life in Science" ' written by Mott for new edition, 1995.	
A.19	Bibliography  List of papers, 1928-1994 and books, 1930-1995. Incomplete.	
A.20, A.21	Personal correspondence, 1980-1996, n.d.  A chronological sequence of personal correspondence.  2 folders.	

**Biographical**

A.22

Photograph

n.d.

Photograph of Mott with ?colleagues, n.d.

**SECTION B                      RESEARCH                      B.1-B.38**

- B.1                      Notebook.  
  
Used for notes on religion and scientific research, 1990-1991.
- B.2                      Contents of Mott's folder: manuscript notes, and papers by others, 1990.
- B.3                      'First draft' of research proposal 'Amorphous semiconductors as a means of utilization of solar energy' by David Elliott, Mott and Ernest Braun, 27 May 1993.
- B.4                      Contents of envelope inscribed 'Anderson's reply' and 'Sasha [A.S. Alexandrov] on arpes [angle resolved photoemission spectroscopy]'.  
  
Manuscript notes, not by Mott, headed 'Several notes on Anderson's reply', and papers by others, 1995-1996.
- B.4A                      'Quantum interference in Liquids'.  
  
8pp manuscript draft by M.K[aveh]., dated '3.7.89'.  
  
Kaveh from Bar-Ilan University Israel was one of Mott's collaborators and published a number of papers with him.
- B.5-B.32                      Annotated papers by others.                      1946, 1979, 1983-1996, n.d.  
  
A sequence of published papers, pre-prints etc annotated by Mott and occasionally by other colleagues such as A.S. Alexandrov.
- B.5                      1946, 1979.
- B.6                      1983.
- B.7                      1985.
- B.8                      1986.

**Research**

B.9	1987.
B.10	1988.
B.11-B.15	1989. 5 folders.
B.16-B.19	1990. 4 folders.
B.20-B.22	1991. 3 folders.
B.23, B.24	1992. 2 folders.
B.25-B.27	1993. 3 folders.
B.28, B.29	1994. 2 folders.
B.30	1996.
B.31, B.32	N.d. 2 folders.

**Research**

B.33-B.38                      Background material *re* solar energy, photovoltaics etc. 1986-1994 and n.d.  
Includes a few manuscript notes by Mott.  
6 folders.

**SECTION C                      LECTURES AND PUBLICATIONS                      C.1-C.155**

C.1-C.8	LECTURES
C.9-C.96	PUBLICATIONS
C.97-C.108	CORRESPONDENCE
C.109-C.155	OFF-PRINTS

**C.1-C.8                      LECTURES                      1964, 1986-1994, n.d.**

- C.1                      Speech by Mott on the occasion of the opening of the Basic Physics Laboratory at the National Physics Laboratory, Teddington, Middlesex, 13 May 1964.
- 4pp typescript draft, brief correspondence, newspaper cuttings and brochures about the laboratory, 1964.
- C.2                      'The beginnings of Solid State Physics - Bristol 1933-1953', British Association, September 1986.
- 5pp typescript draft.
- C.3                      'Conduction in non-crystalline solids', Humphrey Davy Lecture, Paris, 23 November 1987.
- 11pp typescript draft.
- 12pp typescript draft (in French).
- C.4                      'The bipolaron theory of high temperature superconductors' at the IVth International Bar-Ilan Conference on Frontiers in Condensed Matter Physics, Ramat Gan, Israel, March 1993.
- 11pp typescript + legends, references and figures.
- Letter from conference organiser, 8 December 1992.

### Lectures and publications

- C.5 'Special address' on 'Sixty five years of physics' at 20th Anniversary Conference of the Korean Scientists and Engineers Association in the UK (KSEAU), Oxford, 23 September 1994.
- Manuscript and typescript summaries; 14pp manuscript draft; 3pp typescript draft, incomplete.
- Letter from KSEAU President, conference programme etc.
- C.6 'Jacques Friedel'.
- 2pp typescript for talk, n.d.
- Refers to 'those early days, when Jacques came from France ... to work with my group in Bristol'.
- C.7 Transparencies for lecture or lectures, latest bibliographical reference, 1993.
- C.8 Contents of Mott's folder: transparencies for lecture of lectures, n.d.
- C.9-C.96 PUBLICATIONS 1961-1996, n.d.**
- A chronological sequence of drafts and related material *re* Mott's publications. The sequence includes a number of drafts which Mott appears to have written for publication but for which there is no direct evidence that publication took place.
- See A.19 for an (incomplete) list of Mott's published papers, 1928-1994 and books, 1930-1995.
- See A.4-A.18 for Mott's autobiography *A life in science* (London and Philadelphia: Taylor & Francis), 1986.
- See Section F for Mott's publications on his religious interests.
- C.9 'A Policy on Nuclear Weapons'.
- 8pp typescript by Mott, June 1961.

**Lectures and publications**

- C.10 'Arthur Mannering Tyndall 1881-1961', *Biographical Memoirs of Fellows of the Royal Society*, **8**, 1962.  
Off-print and printed and duplicated background material.
- C.11 'An experiment to demonstrate the existence of polarons'.  
3pp typescript inscribed at the top of the first page 'Suggest to Neville Greaves' and 'Ted Davis', latest bibliographical reference, 1971.
- C.12 'Electronic structure of amorphous semiconductors'.  
5pp typescript, latest bibliographical reference, 1975.
- C.13 'Werner Heisenberg 1901-1976' (with R.E. Peierls), *Biographical Memoirs of Fellows of the Royal Society*, **23**, 1977.  
Off-print; carbon copy of letter from Mott to Peierls *re* memoir, 8 March 1977.
- C.14 Letter to the Editor of *Physics Bulletin* *re* nuclear weapons policy from Mott and A.B. Pippard, 26 August 1981.  
1p typescript with manuscript note from Pippard and copy of article by M.J. Berry to which the letter was a reply.  
  
'Against the nuclear arms race; For a sane defence policy'.  
6pp typescript memorandum by Mott 'written for a local "Peace" group', September 1981.  
  
Proof of untitled article by Mott for *Bulletin* [*? of Atomic Scientists*], n.d. but refers to Fall 1981 issue of *Daedalus*.  
  
Manuscript notes on nuclear weapons policy, n.d. [1981].
- C.15 'Appreciation W H Heitler FRS', *Phys. Bull.*, **33**, 1982.  
Letter inviting Mott to write article; article as published in *Physics Bulletin*, 1982.

**Lectures and publications**

- C.16-C.21 'Walter Heinrich Heitler 1904-1981', *Biographical Memoirs of Fellows of the Royal Society*, **28**, 1982.
- C.16 Off-print; typescript draft.
- C.17 Correspondence with Royal Society, widow and colleagues *re* memoir.
- C.18-C.21 Background material.  
4 folders.
- C.22 'Transport of Oxygen and Water in Oxide Layers', in *Passivity of metals and semiconductors : proceedings of the Fifth International Symposium on Passivity, Bombannes, France, May 30-June 3, 1983*, Elsevier, 1983.  
5pp typescript.
- C.23 'Note on the metal-insulator transition in Si : P'.  
5pp typescript dated 'Dec. 1985' + figures; list of those to whom draft was sent.
- C.24 'Solar Energy for the Twenty-First Century'.  
2pp typescript, latest bibliographical reference *Guardian*, 29 December 1986.
- C.25 'Harry Jones 1905-1986', *Biographical Memoirs of Fellows of the Royal Society*, **33**, 1987.  
Off-print; photograph of Jones with Edmund Stoner at conference in Bristol *ca* 1937; correspondence with Jones's daughter, Angela Rumbold MP, 1987-1988.
- C.26 'Can Localised and Extended States Coexist?'.  
3pp typescript, latest bibliographical reference, 1989.

### Lectures and publications

- C.27 'Electrical properties of oxide superconductors above  $T_C$ ', *Phil. Mag.*, **61**, 1990.  
Off-print with list of names and addresses and manuscript note dated '11.6.90' to be sent with the off-prints.
- C.28 'Walter Heitler' in *Dictionary of National Biography Supplement, 1981-1985*, Oxford University Press, 1990.  
Form of agreement; correspondence, 1989.  
  
'Sir Harrie Massey' in *Dictionary of National Biography Supplement, 1981-1985*, Oxford University Press, 1990.  
Form of agreement, correspondence, typescript draft, 1988-1989.
- C.29 'Spin polaron theory of high temperature superconductors; the number of bosons in the superconducting state'.  
Typescript with manuscript additions and corrections, latest bibliographical reference, 1990; letter from G.J. Hyland with comments on the paper, 4 December 1990.
- C.30 'Notes on high  $T_C$  superconductors'.  
3pp typescript, latest bibliographical reference 1990.  
  
'The superconducting gap in high  $T_C$  superconductors'.  
3pp typescript, latest bibliographical reference 1990.
- C.31 'Metal-Insulator Transitions' in *Encyclopedia of Physics*, 1991.  
Brief correspondence, 1988-1989; 'revised contribution' to 1991 edition of the encyclopedia.
- C.32 'A note on  $\text{Bi}_{2-x}\text{Sr}_{1-x}\text{CuO}_{6-\delta}$ '.  
3pp typescript with manuscript additions and corrections + references, legends and figures, latest bibliographical reference, 1991.

**Lectures and publications**

- C.33 'Energy and our grandchildren'.  
Two 2pp typescript drafts and two 3pp typescript drafts, one dated 4 April 1991.  
Letters commenting on the draft, 4 and 22 April 1991 and 'Comments on "Energy and our grandchildren" by C.F. Clement', 8 April 1991.
- C.34 'The minimum metallic conductivity in the presence of a strong magnetic field', *Phil. Mag. Letters*, **66**, 1992.  
Typescript draft of Mott's paper clipped together with typescript draft of paper by G. Biskupski, A El Kaaouachi and A. Briggs.
- C.35 'Note on the specific heat and conductivity of  $\text{YB}_2(\text{Cu}_{1-x}\text{Zn}_x)_3\text{O}_{7-\delta}$  in the non-superconducting range of  $x$ ', *Physica C* **196**, 1992.  
3pp typescript.
- C.36-C.45 'Herbert Fröhlich 9 December 1905-23 January 1991', *Biographical Memoirs of the Royal Society*, **38**, 1992.
- C.36, C.37 Manuscript and typescript notes and drafts.  
2 folders.
- C.38 Correspondence with the Royal Society, widow and colleagues, 1991-1992.
- C.39-C.41 Background material.  
3 folders.  
At C.39 are photocopies of correspondence between R.P. Feynman and Fröhlich, September and November 1954.
- C.42-C.45 Photographs.  
4 folders.  
Mott appears with Fröhlich in photographs in C.42 and C.44.

### Lectures and publications

- C.46 'Spin polarons and copper oxide superconductors', *Phil. Mag. B* **65**, 1992.  
7pp typescript + legends, references and figures.  
The paper was originally given as a lecture, presumably at Marburg which is inscribed at the head of the first page of the draft.
- C.47 'A model for high temperature superconductors'.  
5pp typescript of paper for *Comments on Condensed Matter Physics* + legends and figures; letter about the paper from H. Kamimura, 26 October 1992.
- C.48 'A note on the Conductivity of  $a\text{-Cr}_x\text{Ge}_{1-x}$ '.  
4pp typescript + references, caption and figure, latest bibliographical reference 1992.
- C.49 'High-temperature superconductivity; the bipolaron model'.  
Typescript and manuscript drafts, latest bibliographical reference, 1992.
- C.50, C.51 'Thermal Transport in a Charged Bose-Gas and in High- $T_C$  Oxides' (with A.S. Alexandrov), *Physical Review Letters*, **71**, 1993.
- C.50 14pp typescript with manuscript additions and corrections + figure.
- C.51 14pp typescript with manuscript comment and underscoring + figure.
- C.52 'Do pairs exist above  $T_C$ ?', *Supercond. Sci. Technol.* **6**, 1993.  
24pp typescript + figures.
- C.53-C.57 'Near - infrared Absorption of  $\text{Yba}_2\text{Cu}_3\text{O}_{7.8}$ : Evidence for the Bose-Einstein condensation of small bipolarons' (with A.S. Alexandrov, A.M. Bratkovskii and E.K. Salje), *Physica C* **215**, 1993.

### Lectures and publications

- C.53                    24pp typescript + figures.  
Inscribed on first page 'to Sir Nevill Mott for a discussion'.
- C.54                    26pp typescript + figures.
- C.55-C.57              Contents of Mott's folder.
- C.55                    'Evidence for Bose-Einstein condensation in  $\text{Yb}_2\text{Cu}_3\text{O}_{7-\delta}$ : from Near -  
Infrared Absorption bipolarons' (with A.S. Alexandrov, A.M. Bratkovskii and  
E.K. Salje), latest bibliographical reference 1993.  
13pp typescript with inscription in Russian on first page.
- C.56                    Paper by J.T. Devreese, G. Verbist and F.M. Peeters for Workshop on  
Polarons and Bipolarons on High- $T_C$  Superconductors, Cambridge, 7-9 April  
1994.
- C.57                    Typescript paginated 2-67 (lacks title page) on the polaron concept, latest  
bibliographical reference 1995.
- C.58                    'Polaron models of high-temperature superconductors', *J. Phys.: Condens.  
Matter*, vol 5, 1993.  
Typescript paginated 1-6, 20-22 + 1p references.
- C.59                    'The bipolaron model of high  $T_C$  superconductivity: a discussion of  
overdoping', *Phil. Mag. Letters*, **68**, 1993.  
3pp typescript.
- C.60                    'Bipolaron kinetics of high  $T_C$  metal oxides: Hall effect, resistivity and "spin"  
gap (with A.S. Alexandrov and A.M. Bratkovsky).  
18pp typescript + figures.

/...

### Lectures and publications

- /...  
Inscribed at the top of first page 'Submitted to Supercond. Sci. Tech (July 93) a short version to PRL' and at the bottom of the first page '2.08.93 Dear Sir Nevill, Please find this copy of our paper, which I send to You according to our telephone conversation today. Sincerely Yours Sasha [A.S. Alexandrov]'.  
  
See also C.64.
- C.61 'Professor Rao Festschrift Metal-insulator transition in copper oxide superconductors'.  
  
4pp typescript + figures, latest bibliographical reference 1993.
- C.62 'Lattice and Spin Bipolarons in Metal Oxides and Doped Fullerenes' (with A.S. Alexandrov).  
  
14pp typescript + figures, latest bibliographical reference 1993.
- C.63 'Insulator-metal transitions in high- $T_C$  superconductors', *Phil. Mag. Letters*, **69**, 1994.  
  
5pp typescript + figures.
- C.64 'Hall effect and resistivity of high- $T_C$  oxides in the bipolaron model', *Physical Review Letters*, **72**, 1994.  
  
12pp typescript + figures.  
  
Inscribed at the top of the first page 'Submitted to PRL 30.06.93'.
- C.65 'High-Temperature Superconductors', *Zeitschrift für Physikalische Chemie*, 1994.  
  
14pp typescript + figures.
- C.66 *High Temperature Superconductors and other Superfluids* (with A.S. Alexandrov), Taylor & Francis, 1994.  
  
Preface, introduction and marketing questionnaire for Mott and Alexandrov's book.

### Lectures and publications

- C.67 'The Polaron Theory of High Temperature Superconductors'.  
3pp typescript, latest bibliographical reference 1994.
- C.68 'Polarons'.  
6pp typescript + figure with attached note from A.S. Alexandrov, 15 March 1994.  
  
The note refers to the typescript as the 'printed version' of Mott's workshop talk which may be in the process of preparation for publication.
- C.69-C.72 Contents of folder divided into four for ease of reference: paginated sequences of typescript with photocopied pages from Mott's book *Conduction in Non-Crystalline Materials* (1st edition 1987, 2nd edition 1993), latest bibliographical reference 1994.
- C.73 'Metal-insulator transition in copper oxide superconductors'.  
3pp typescript, latest bibliographical reference 1994.
- C.74 'Bipolarons' (with A.S. Alexandrov).  
103pp typescript, latest bibliographical reference 1994.  
  
In bound volume.
- C.75 'The bipolaron theory of superconductivity' (with A.S. Alexandrov).  
24pp manuscript draft, latest bibliographical reference 1994.
- C.76 Manuscript drafts on 'Polarons', 'Bound Polarons' etc., for publication or publications found clipped together. N.d. but 'Polarons' draft is written on the back of 1994 correspondence.
- C.77 'The insulator metal transition in copper oxide superconductors'.  
  
3pp typescript, latest bibliographical reference 1994.  
  
Three 5pp typescripts, latest bibliographical reference 1995.

**Lectures and publications**

- C.78                    *Polarons and Bipolarons* (with A.S. Alexandrov), World Scientific, ca 1995.  
  
Abstract and list of chapters for book. Not identical to the chapters in the published book.
- C.79                    Variously titled and paginated manuscript notes and drafts for publication or publications.  
  
Draft entitled 'Electrons in a non-crystalline medium' is dated '22.2.95'.
- C.80                    'Formation of polarons in high- $T_C$  materials'.  
  
6pp typescript inscribed at the top of the first page 'Does this still make sense?', latest bibliographical reference 1995.
- C.81                    'High Temperature Superconductors'.  
  
16pp manuscript 'review' inscribed at the top of the first page 'India', latest bibliographical reference, 1995.
- C.82, C.83            'The Polaron model of high  $T_C$  Superconductors'.
- C.82                    Incomplete manuscript draft paginated 1-13 + intercalated pages, latest bibliographical reference 1996.
- C.83                    7pp typescript + references and figures, latest bibliographical reference, 1996.
- C.84                    Untitled manuscript draft on superconductivity, latest bibliographical reference 1996.
- C.85                    Manuscript and typescript drafts: 'Structure of amorphous silicon: the role of hydrogen', 'Doping of amorphous silicon', 'The Mobility Edge in Amorphous Semiconductors', 'New topics for inclusion in 3rd edition of M&D', etc. N.d.  
  
The second edition of *Electronic processes in non-crystalline materials* by Mott and E.A. Davis was published by the Clarendon Press, Oxford in 1979.  
  
See also C.99.







**SECTION D**

**SOCIETIES AND ORGANISATIONS**

**D.1-D.46**

D.1-D.8	ANTI-CONCORDE PROJECT
D.9-D.12	ATOMIC ENERGY RESEARCH ESTABLISHMENT, HARWELL
D.13	THE CONTINUUM INSTITUTE
D.14	DARTINGTON HALL SCHOOL
D.15	DEFENCE RESEARCH TRUST
D.16	FREEZE
D.17	NATIONAL EXTENSION COLLEGE
D.18-D.27	OXFORD RESEARCH GROUP
D.28-D.30	PUGWASH CONFERENCES ON SCIENCE AND WORLD AFFAIRS
D.31-D.45	THE ROYAL SOCIETY
D.46	SAVE BRITISH SCIENCE

### Societies and organisations

- D.1-D.8                      ANTI-CONCORDE PROJECT                      1974-1994**
- Mott explains his involvement in the Anti-Concorde Project from 1967 in his autobiography *A life in science*, 1986, pp 150-151. He chaired the Advisory Committee.
- D.1-D.4                      General correspondence and papers, 1974-1994.
- Includes correspondence, minutes of meetings, accounts etc. Mott's principal correspondent was the Secretary, Richard Wiggs.
- D.1                              1974-1975.
- D.2                              1976.
- D.3                              1977-1979.
- D.4                              1980-1994.
- D.5-D.8                      Duplicated and printed background material.
- 4 folders.
- D.9-D.12                      ATOMIC ENERGY RESEARCH ESTABLISHMENT, HARWELL 1981-1991**
- Mott was a consultant for both the Theoretical Physics Division and the Materials Development Division. Much of the material relates to a proposed university research centre at Jeddah, Saudi Arabia on which Harwell was advising, 1981-1982. Mott's correspondent for the Saudi Arabian project was R.S. Nelson, Head of Materials Development Division. His other correspondent at Harwell was A.M. Stoneham, Director of Research at AEA Technology, 1991-1992.
- D.9                              Correspondence chiefly *re* the proposed research centre in Saudi Arabia, 1981-1982.



**Societies and organisations**

- |                  |  |                  |
|------------------|--|------------------|
| <b>D.16</b>      | <b>FREEZE</b>  | <b>1985</b>      |
|                  | Nuclear weapons FREEZE called for a worldwide moratorium on all further production, testing and deployment of nuclear weapons.   |                  |
| D.16             | Invitation for Mott to become a patron with information folder, 1985.  |                  |
| <b>D.17</b>      | <b>NATIONAL EXTENSION COLLEGE</b>  | <b>1981</b>      |
| D.17             | Letter from Executive Director thanking Mott on the occasion of his resignation from the Trustees for all the help that he had given the NEC 'over a very long period of time'.  |                  |
| <b>D.18-D.27</b> | <b>OXFORD RESEARCH GROUP</b>   | <b>1982-1996</b> |
|                  | Established in 1982 the Oxford Research Group was an independent research group funded by charitable trusts. It researched defence decision-making in five nuclear nations, including China and the Soviet Union. Mott was a sponsor, later member of the Council of Advisers. The Director was Scilla Elworthy. |                  |
| D.18-D.23        | General correspondence and papers, 1987-1996.  |                  |
| D.18             | 1987.  |                  |
| D.19, D.20       | 1988.<br>2 folders.  |                  |
| D.21, D.22       | 1989.<br>2 folders.<br>D.21 includes Mott's 'Comment on the Oxford Research Group "In the Dark" (April 1989)'.   |                  |

**Societies and organisations**

- D.23 1991, 1995-1996.
- D.24 Oxford Research Group publications.  
1 bundle.
- D.25-D.27 Miscellaneous correspondence and papers *re* defence and nuclear weapons issues, 1982-1995, presented here for convenience.  
3 folders.
- D.28-D.30 **PUGWASH CONFERENCES ON SCIENCE AND WORLD AFFAIRS** 1985-1996
- D.28 'SDI and Stability'  
3pp typescript by Mott for 47th Pugwash Symposium 'Strategic Defences: Technological Aspects; Political and Military Implications 5-8 December 1985 London.  
  
'Notes about the Pugwash meeting on SDI [Strategic Defence Initiative] in December 1985'.  
4pp typescript.
- D.29 Copy of Trust Deed establishing the British Pugwash Trust, 6 August 1987.  
Mott was a Trustee.
- D.30 Notice of British Pugwash Group public discussion meeting on 'A nuclear-weapon-free world: desirable? Feasible?', London, 11 December 1992.  
  
Correspondence, 1995-1996, *re* award of the 1995 Nobel Peace Prize to International Pugwash and Joseph Rotblat.

**Societies and organisations**

**D.31-D.45                      THE ROYAL SOCIETY    1976-1993**

D.31-D.44                      Correspondence and papers *re* science education, 1976-1989.

D.31                              *Science and Organization of Schools in England - Implications for the needs of talented children A Discussion paper*, The Royal Society Education Committee, 1979.

The discussion paper was prepared by Mott.

D.32                              'Suggestion for a Discussion Meeting'. 1p typescript note by Mott undated but refers to report on school organization in respect of talented children.

D.33-D.37                      Royal Society Study Group on science education, 1981-1982.

Mott was a member of this study group which was chaired by Sir Harry Pitt. Its report was published by the Royal Society in November 1982.

D.33                              *Science Education 11-18 in England and Wales The Report of a Study Group*, The Royal Society 1982.

D.34                              *Science Education 11-18 in England and Wales The Annex to the Report of a Study Group*, The Royal Society 1982.

D.35                              *Science Education 11-18 in England and Wales A Report in Summary*, The Royal Society 1982.

D.36                              Papers prepared *re* work of the study group, May and October 1981.

D.37                              Correspondence, 1981-1982.

D.38-D.41                      Seminar on Strategies for Physics and Mathematics Education, 23 June 1986.

D.38                              Correspondence, programme, list of participants.



**SECTION E**

**VISITS AND CONFERENCES**

**E.1-E.24**

- E.1                    Celebrations of the 500th Anniversary of the University of Tübingen, West Germany, 7-15 October 1977.
- Mott attended as the representative of the University of Cambridge.
- Programme booklet; information.
- E.2                    University of Tübingen, West Germany, May 1981.
- Mott gave the first 'Johannes Kepler Vorlesung' at the University of Tübingen on 'Theory and Experiment in Science: Some Examples from Solid State Physics'. He may also have visited the Max-Planck-Institut für Metallforschung Institut für Physik, Stuttgart on the same occasion.
- Brief correspondence *re* arrangements, newspaper cutting, 1981.
- 6pp typescript (in German) of the opening of his Tübingen lecture.
- E.3, E.4                'Weekend seminar' on 'Gifted Children and their Contemporaries', Gonville and Caius College Cambridge, 18-20 September 1981.
- The seminar considered the implications for the majority of provision for gifted children within the state system of education. It was sponsored by the Leonardo Trust and hosted by Mott who chaired a session.
- E.3                    Bound volume of programme, seminar papers, information, list of participants etc.
- E.4                    Background material; letter arising, 3 October 1981.
- E.5                    Meeting of Third World Academy of Sciences Study Group to discuss the feasibility and needs of establishing an Applied Physics Centre, Trieste, Italy, 7-9 July 1986.
- There is no evidence that Mott attended the meeting. He was, however, sent a copy of the report which recommended the establishment of an International Network for Applied Physics, and accepted an invitation to become a member of this Advisory Committee.
- Final report of the meeting of the Study Group with covering letter from Abdus Salam, President of the Third World Academy of Sciences, 28 August 1986.
- Letter and photocopy of related item from *Physics World*, May 1987.

### Visits and conferences

- E.6 'Eastern European' meeting on Amorphous and Liquid Semiconductors, Budapest, Hungary, September 1986.  
  
Letter of thanks from organiser, 29 October 1986.  
  
See also E.7.
- E.7 Bi-annual International Conference on Amorphous and Liquid Semiconductors, Prague, Czechoslovakia, August 1987.  
  
4pp typescript report on visit and two copies of 1p typescript report for the British Council, 7 September 1987.
- E.8, E.9 'The Origins of Solid State Physics in Italy: 1945-1960', Pavia, Italy, 21-24 August 1987.  
  
Mott spoke on the 'Development of Solid State Physics in England and Germany'.
- E.8 Programme; brief correspondence *re* arrangements, 1987.
- E.9 Typescript draft of Mott's lecture.
- E.10-E.16 Second Nova Spes Colloquium of Nobel Prizewinners, Rome, Italy, 7-9 November 1987.  
  
Mott accepted an invitation to attend this meeting from Cardinal Franz König, the founder of the Nova Spes International Foundation for the qualitative human development realised on the basis of fundamental values.
- E.10 Correspondence *re* arrangements, agenda, biographical information on Nobel Prizewinners, Nobel Prizewinners colloquium statement etc, 1987.
- E.11 2 photographs of Mott and the Pope and colloquium photograph with the Pope and participants.
- E.12 Newspaper reports of colloquium from *Osservatore Romano* 9-10 November and 7 December 1987.
- E.13 Mott's manuscript and typescript accounts of 'A Visit to the Vatican'.

**Visits and conferences**

- E.14 Correspondence and papers arising from meeting, 1987-1989.
- E.15, E.16 Background material *re* Nova Spes and the first meeting of Nobel Prize Winners, Rome, December 1980.  
  
2 folders.
- E.17 Workshop on Correlated Electron Systems, Aspen Center for Physics, Aspen, Colorado, 4 July -7 August 1988.  
  
Invitation declined by Mott.
- E.18 LT 19 Satellite Conference on High Temperature Superconductivity, Queen's College, Cambridge, 13-15 August 1990.  
  
Mott gave a paper on 'Spin Polaron Model for High  $T_c$ .'  
  
Bound volume comprising programme and abstracts.
- E.19 'High Temperature Superconductors VIII, Birmingham', 19-21 September 1994.  
  
Bound volume comprising final programme, abstracts and lists of delegates and exhibitors, with extensive manuscript annotation by A.S. Alexandrov.  
  
Mott is not listed on the programme or as a delegate.
- E.20 Euroconference on Cross-over Phenomena in Solid State Physics from Weak to Strong Coupling in Electronic Systems', Torino, Italy, 3-7 October 1994.  
  
The meeting was organised by the Institute for Scientific Interchange Foundation, Torino, Italy. Mott gave a paper on 'Spin Bipolarons in the Doped Mott Insulator and in High- $T_c$  Copper Oxides'.  
  
Bound volume comprising conference programme and abstract booklet.
- E.21 International Conference on Electron Localization and Quantum Transport in Solids, Jaszowiec, Poland, 3-6 August 1996.  
  
Mott was invited to give a special lecture on 'The polaron model of high- $T_c$  superconductors' but was unable to attend because of health problems. He died on 8 August 1996.

/...

### Visits and conferences

- /... Programme booklet, manuscript draft of Mott's abstract, correspondence from organiser including faxes, 1996.
- E.22 Course on 'Theoretical models and phenomenology of the conventional and high T<sub>c</sub> superconductivity' of the International School of Physics 'Enrico Fermi', Varenna, Italy, 24-4 July 1997.
- Mott accepted an invitation to act as a Scientific Director of the course. He suggested to the organiser that he would like to appoint Professor A.S. Alexandrov as his scientific secretary: 'We work closely together. I am now 90 years old, and cannot guarantee that I will be well enough to take part in the school (though I hope to); if not he would take my place'.
- Correspondence *re* arrangements, 1996.
- E.23 7th International Conference on Molecular Electronics and Biocomputing, Nanjing, China, 10-12 November 1997.
- Invitation and first announcement only.
- E.24 Miscellaneous shorter correspondence and papers *re* visits and conferences, 1980-1996.

**SECTION F**                      **RELIGION**    **F.1-F.68**

Mott writes about his developing interest in religion in his autobiography *A life in science* (Taylor & Francis, 1986), pp 152-159. This interest culminated in 1991 in the publication of the volume he edited in which scientists wrote about religious belief: *Can scientists believe?*

F.1-F.28	CORRESPONDENCE
F.29-F.41	<i>CAN SCIENTISTS BELIEVE?</i>
F.42-F.64	SHORTER PUBLICATIONS AND WRITINGS
F.65-F.68	SERMONS

**F.1-F.28**                      **CORRESPONDENCE**    **1977-1996**

- F.1-F.4                      Contents of Mott's folder divided into four for ease of reference: correspondence with or correspondence and papers about the Swiss catholic theologian Professor Hans Küng, 1977-1991.  
  
See also F.56, F.66
- F.1                      Correspondence with Küng and Küng's colleague K.J. Kuschel, 1984-1985, 1991.
- F.2                      'Wissenschaft und Gottesfrage'. Festschrift zur 500-Jahr-Feier der Universität Tübingen by Küng, 1977.  
  
18pp duplicated typescript with manuscript greetings from Küng inscribed on the title page.
- F.3                      Newspaper cuttings, 1981-1991.
- F.4                      'Hans Küng'. 4pp typescript by Mott dated 21 February 1988.

### Religion

- F.5-F.9 'Moonies'. Contents of Mott's folder so inscribed divided into four for ease of reference: correspondence and papers *re* International Cultural Foundation and the Unification Church, 1978-1979.
- F.10-F.28 General correspondence *re* Mott's religious interests, 1981-1996.
- F.10 1981-1986.
- F.11 1987-1988.
- F.12, F.13 1989.  
2 folders.
- F.14 1990.
- F.15-F.23 1991.  
Includes public reaction to an article by Mott titled 'A scientific sort of God' which was published in the *Independent*, 1 April 1991 and an article by Mott titled 'Christianity without miracles' which was published in *The Times*, 13 May 1991. See F.50, F.51.  
9 folders.
- F.24 1992-1993.
- F.25 1994.
- F.26 1995.
- F.27 1996.  
Includes copy of talk on 'Scientific Theism' by C.B. Goodhart.

**Religion**

- F.28                      N.d.  
  
Includes incomplete letters.
- F.29-F.41                      CAN SCIENTISTS BELIEVE?                      1988-1992**
- This volume of essays by scientists on religious belief was edited by Mott and published by James and James, 1991.
- F.29                      'Proposal for a book on scientists' approach to belief'. 1p manuscript draft dated July 1988.  
  
Off-print of contents list etc of *Can scientists believe?*  
  
Off-print of 'Christianity without miracles?', Mott's editorial essay from *Can scientists believe?*
- F.30                      Letter from Freeman Dyson in reply to invitation from Mott to write a chapter for his book, 14 November 1988, with copy of Dyson's 'Science and Religion (Statement to the Committee on Human Values, National Conference of Catholic Bishops, Detroit, September 16, 1986)'. In the event Dyson did not contribute a chapter to the book.  
  
2pp typescript headed 'Lecture II The Quest for Concept' with manuscript inscription by Mott 'Freeman Dyson's lectures in Oxford'.
- F.31-F.37                      Drafts of contributions to the book. Not a complete sequence.
- F.31                      'Scientific Knowing and the Knowledge of God' by Christopher Moss S.J., Dean of St Edmund's College, Cambridge.
- F.32                      'Probability, Belief and Truth' by Professor D.J. Bartholomew, London School of Economics.
- F.33                      'Science and the Christian World View' by P.E. Hodgson, Department of Theoretical Physics, Oxford University.
- F.34                      'The Mystery of Being Human' by John C. Eccles.

**Religion**

- F.35 'A physicist in the presence of the cross and the resurrection' by G. Ludwig, Department of Physics, University of Marburg, West Germany.
- F.36 'How can a scientist be a Christian today?' by Richard H. Bube, Professor of Materials Science and Electrical Engineering, Stanford University, California.
- F.37 'Some remarks on scientists and religion, by a Simplicio of our times' by V. Ya. Frenkel, Leningrad, USSR.
- F.38 Reviews.
- F.39-F.41 Society for Process Thought Open Forum 'Can Scientists Believe?', 16 March 1991.  
  
Mott talked about his book at the forum. Other participants included D.J. Bartholomew who contributed to the book and H. Bondi.  
  
Correspondence and papers *re* the Open Forum 'Can Scientists Believe?', the general activities of the Society and other meetings that might be of interest to Mott.  
  
3 folders.  
  
At F.41 are manuscript notes found clipped together for Mott's talk at the forum.
- F.42-F.64                      SHORTER PUBLICATIONS AND WRITINGS                      1981-1996, n.d**
- F.42-F.45 Writings on Christian attitudes to nuclear weapons                      1981-1987  
  
See also F.65.
- F.42 'No First Use'.  
  
Mott contributed an article under this title to *Unholy Warfare: The Church and the Bomb*, Basil Blackwell, 1983.  
  
Memorandum of agreement between Mott and Basil Blackwell Publisher, advance information sheet and letter from editor, David Martin, 1983.

/...

### Religion

- /... Correspondence, 1982, *re* nuclear weapons found with 'No First Use' papers and probably related to the preparation of the article.
- There is no draft by Mott with the title 'No First Use'.
- F.43 'A suggested Christian approach to nuclear weapons'.
- 3pp typescript 'redraft of a paper that was circulated to the St Botolphs discussion group ... and is prepared for consideration by other parishes'. Initialled N.F.M. and dated 27 January 1986.
- St Botolph's was Mott's local church at Apsley Guise, Bedfordshire where he lived during his later years.
- 'Is there a Christian approach to the problem of nuclear weapons'.
- 4pp typescript by Mott, n.d.
- 'A possible Christian attitude to nuclear weapons'.
- 3pp typescript draft, n.d.
- F.44 Minutes of meetings of St Botolph's Church Discussion Group on the question of whether there is a Christian approach to the problem of nuclear weapons, 21 November 1984 and 30 January 1985.
- Mott was the group leader.
- Letters from Mott as convenor/organiser of parish discussion group *re* aspects of nuclear weapons policy, April 1987 and n.d.
- F.45 Printed and duplicated background material, 1981-1986.
- F.46 'What I believe'.
- 3pp typescript 'written ... in an attempt to clear my own mind, and also for a few people with whom I have discussed religion', 17 November 1985.
- F.47 Letter from Mott in The Gospel and our Culture, Newsletter no.4, Winter 1990.

/...

### Religion

- /... Mott's letter was a reply to an article by Bishop Hugh Montefiore in an earlier newsletter.
- Correspondence, 1989-1990, published versions of Montefiore's article and Mott's letter.
- F.48 'Note by Sir Nevill Mott' beginning 'I remember seeing somewhere the remark that a visitor to our planet from another world might form the impression that the major interest of the Roman Catholic Church was to oppose abortion, and of the Anglican Church to protest against the ordination of women'.
- Two copies of 4pp typescript note, one with 2pp manuscript note attached and one inscribed 'Sent to Times'. N.d. but typescript note has bibliographical reference 1990 and manuscript note refers to 65th birthday of the theologian Hans Küng (born 1928).
- F.49 'The decade of evangelism: a liberal's view'.
- Five 2pp typescript drafts, one dated 22 January 1991 and one with manuscript inscription 'Hopefully for Guardian'.
- F.50 'A scientific sort of God'.
- Interview with Mott published in the *Independent*, 1 April 1991.
- Also included here is newspaper cutting 'God lies in unbridgeable gap, says scientist' which substantially reproduces the *Independent* article.
- F.51 'Christianity without miracles'.
- Article by Mott in *The Times*, 13 May 1991.
- Also included here is a photocopy of a note from the Archbishop of Canterbury, 15 May 1991.
- F.52, F.53 'Quantum Mechanics, chance and freewill'.
- F.52 11pp typescript draft by Mott with manuscript additions and corrections, latest bibliographical reference 1992.
- Mott was interested in the theological implications of quantum mechanics.

/...

### Religion

- /... 1p typescript 'Comments on "Quantum Mechanics, Chance and Free-will". N.F. Mott' by P.E. Hodgson, 28 October 1990.
- F.53 'The Interpretation of Quantum Mechanics.'  
13pp typescript by P.E. Hodgson, latest bibliographical reference, 1991.  
Found with Mott's paper on quantum mechanics.
- F.54 'Note on Christian belief'.  
4pp typescript 'short essay' by Mott, 2 November 1993.
- F.55 'What I believe'.  
5pp typescript presentation by Mott of his beliefs as the basis for discussion, December 1993.
- F.56 'An Answer to the Question of God in Modern Times? A Physicist Reads *Does God Exist?*'  
Proof copy of article by Mott with manuscript inscription at the top of the first page 'from "Festschrift" for Hans Küng 65th birthday English translation'. 1993.
- F.57 'Peace between the religions'.  
5pp manuscript draft of article for the official magazine or book on the occasion of the founding of the International Peace University, with related correspondence, 1995.
- F.58 'The Soul and the Brain'.  
5pp typescript and manuscript draft article by Mott and article as published in *Revista Española de Física* **10** (2), 1996.  
Letter from Spanish colleague thanking Mott for the article, 6 April 1996.
- F.59 'Bochum'.  
4pp manuscript notes by Mott for an address at Bochum, West Germany on his views as a scientist on religious belief, n.d.

**Religion**

- F.60 'Introduction Sir N. Mott'.  
1p manuscript draft for introduction to book by David R. Copestake with manuscript draft of covering letter from Mott to Copestake, n.d.
- F.61-F.63 Drafts by Copestake *re* science and religion. Possibly related to the 'Introduction' at F.60.  
3 folders.
- F.64 Miscellaneous unidentified manuscript notes and drafts.
- F.65-F.68 **SERMONS** **1985-1989**
- F.65 'Sermon in St. Botolphs [Apsley Guise, Bedfordshire] Oct. 20 1985' beginning 'Those who read Christian News will know that some of us from Richard's and nearby parishes have met a few times to discuss Christian attitudes to nuclear weapons. ...'  
3pp typescript.  
  
'A Sermon preached in Gonville and Caius College Chapel on Sunday, May 11 1986 by Sir Nevill Mott, Fellow of the College and formerly Master'.  
4pp typescript of sermon on Christian attitudes to nuclear weapons.
- F.66 'A Sermon' by Mott beginning 'Few religions have a history without guilt and bloodshed - certainly not ours. ...'  
2pp typescript dated February 1987.  
  
'Sermon' by Mott beginning 'I have spoken previously in this church about the Swiss catholic theologian Hans Küng ...'  
9pp manuscript draft + 2pp manuscript notes.  
  
The draft has manuscript inscription at the top of the first page 'I have not delivered this, and may be wont' and is dated '30/3/87'.

/...

**Religion**

- /... 'Sermon, St Botolphs, Sunday November 15, 1987'.  
3pp typescript.
- F.67 'Sermon (24th January 1988)'.  
3pp typescript of sermon dated 12 January 1988.
- 'Sermon for St Botolphs October 1988'.  
1pp typescript, incomplete and 4pp manuscript draft.
- F.68 'Sermon by Sir Nevill Mott November 1989'.  
3pp typescript sermon on God and human suffering.
- 'Sermon Nevill Mott'.  
Two 4pp typescript drafts with manuscript additions and corrections, n.d.  
Mott's sermon asked whether what scientists tell us about the origin of the universe is important for our understanding of God.

**SECTION G**

**CORRESPONDENCE**

**G.1-G.45**

G.1-G.38

SCIENTIFIC CORRESPONDENCE

G.39-G.45

REFERENCES AND RECOMMENDATIONS

**G.1-G.38**

**SCIENTIFIC CORRESPONDENCE**

**1968-1996, n.d.**

A chronological sequence of correspondence reflecting Mott's continuing interests in research to the end of his life. The sequence is predominantly incoming.

G.1

1968.

Correspondence with T. Holstein, Department of Physics, University of California, Los Angeles.

G.2

1970-1971.

Includes 'Summary of experimental data on the Hall effect in amorphous conductors, liquid semiconductors, and impurity conduction. (Preliminary draft)' by L. Friedman.

G.3

1975-1979.

Includes paper 'about the Kubo formula' and cv and list of publications from D.J. Thouless.

G.4

1980.

G.5

1982.

Includes preprint of paper by W. Brostow and H.C. Rogers.

G.6

1983.

### Correspondence

- G.7                    1984-1985.
- Includes draft paper by M. Young 'A New European Space Programme' for British Association, 11 September 1984.
- G.8                    1986 January - July.
- Includes correspondence *re* an article by Mott on solar energy for the *New Scientist*.
- G.9                    1986 August - October.
- Includes review article on photovoltaic cells sent to Mott for information.
- G.10                   1986 November - December.
- Principally *re* energy questions including solar power.
- G.11                   1987 January - March.
- Principally *re* energy questions.
- G.12                   1987 May - July.
- Includes correspondence *re* possible Royal Society discussion meeting on photovoltaics for power production.
- G.13                   1987 August - December.
- G.14                   1988 January - March.
- Includes papers *re* the teaching of physical chemistry at the Université Pierre and Marie Curie (Paris VI).
- G.15                   1988 May - December.
- G.16                   1989 January - March.

### Correspondence

- G.17                    1989 April - July.
- G.18                    1989 August.  
  
Letter from P.E. Hodgson enclosing draft of his views on quantum mechanics 'The Bohr-Einstein Debate Revisited'.
- G.19                    1989 August - December.
- G.20                    1990 January - April.
- G.21                    1990 May - August.
- G.22                    1990 September - December.  
  
Includes paper on the impact of energy on environment and development sent to Mott for interest.
- G.23                    1991 January - June.
- G.24                    1991 July - September.
- G.25                    1991 November, n.d.  
  
Includes undated letter from M.M. Gowing enclosing copy of the paper she gave at the centenary celebrations for Sir James Chadwick (1891-1974).
- G.26                    1992 February.
- G.27                    1992 March.
- G.28                    1992 April - June.

**Correspondence**

- G.29 1992 August - December.
- G.30 1993 January - April.
- G.31 1993 May - August.
- G.32 1993 October - December.
- G.33 1994.
- G.34 1995 January - May.
- G.35 1995 June - December.
- G.36 1996 January - July.
- G.37, G.38 N.d.  
Arranged in alphabetical order as far as possible. The sequence includes a number of incomplete letters.  
2 folders.
- G.39-G.45 REFERENCES AND RECOMMENDATIONS 1977-1995, n.d.**  
  
A chronological sequence of correspondence and papers *re* references and recommendations including promotions, applications for fellowships and nominations for prizes, some sent to Mott for information rather than initiated by him.  
  
Unindexed.
- G.39 1977-1978, 1982.

**Correspondence**

G.40                    1986, 1988, 1989.

G.41                    1990.

G.42, G.43            1992.  
2 folders.

G.44                    1994.

G.45                    1995, n.d..

**INDEX OF CORRESPONDENTS**

ACRIVOS, Juana Vivó	G.26
ADKINS, C. John	G.27
ALEXANDER, Hugh C.	F.18
ALEXANDROV, A.S. ('Sasha')	B.22, B.28, C.68, C.106, C.108, E.22, G.27, G.31, G.32, G.35-G.37 See also C.92, E.24
ANDERSON, Philip Warren	G.34, G.37 See also G.13
ANTI-CONCORDE PROJECT	D.1-D.8
ATOMIC ENERGY RESEARCH ESTABLISHMENT, HARWELL	D.9-D.12
BALDACCHINI, Giuseppe	F.10, F.28
BARBOUR, Julian B.	G.36
BASIL BLACKWELL PUBLISHER LTD	F.42
BATCHELOR, George Keith	G.33
BAUM, Harold	G.33
BEEBY, H.D.	F.11, F.12, F.14
BERNHOEFT, Nicholas	G.22
BERRY, R.J. 'Sam'	F.23
BEVANS, H. Gordon	F.26
BHATT, Ravin	E.17
BISKUPSKI, G.	C.100, G.26
BLOSS, W.H.	G.13
BLUMENFELD, Raphael	G.21
BOARD OF DEPUTIES OF BRITISH JEWS	F.20
BONDI, Sir Hermann	F.15
BONNELLE, C.	G.14
BONO, Edward de	E.24

Index of correspondents

BOURBIE, Djilali	G.37
BRADFIELD, John R.G.	A.21
BRAUN, Ernst	G.31, G.33
BRETSCHER, Hanna	C.17
BREWER, Derek	C.103
BRITISH ACADEMY FOR WORLD PEACE	F.24
BROSTOW, Witold	G.5
BURGERS, W.J.	C.107
BURKE, Derek Clissold	F.12
BURMAN, Abha	G.11
BURMAN, Shibdas	G.23
BURTON, John H.S.	F.17
CADOGAN, Sir John Ivan George	G.13
CAHN, Robert Wolfgang	G.34
CALDER, Nigel	G.7
CANA (WORKING FOR PEACE THROUGH JUSTICE IN CREATION)	F.16
CAPELLMANN, Herbert	G.27
CAPEY, A.C.	F.26
CAREY, George Leonard	F.51
CASTNER, Ted	G.36
CHAUDHURI, Rafi Mohammad	G.15
CHOWN, Marcus	G.8
COLES, Bryan Randell	C.105, G.36
<i>CONTEMPORARY PHYSICS</i>	C.97
THE CONTINUUM INSTITUTE	D.13
COPESTAKE, David R.	F.26, F.28 See also F.60-F.63

**Index of correspondents**

CORNALL, Peter	E.4
CROSS, Rodney A.	A.21
DARTINGTON HALL SCHOOL	D.14
DAVIES, E. Roy	F.24, F.25
DAVIS, Edward Arthur	C.99, C.100, C.103, G.24, G.35
DEDIJER, S.	D.9
DEFENCE RESEARCH TRUST	D.15
DENG Zhihong	G.29
DEUTSCHE AKADEMIE DER NATURFORSCHER LEOPOLDINA	G.4
DEVREESE, J.	C.107
DIETL, Tomasz	E.21
DOUMERC, Jean-Pierre	G.15, G.17
DUCKERS, Les J.	G.15
DUNNE, Lawrence J.	G.34
DYSON, Freeman	F.30
EAGLES, David M.	G.22
ECCLES, Sir John Carew	E.14
EDWARDS, David L.	F.14
EDWARDS, Peter Philip	G.34-G.37
ELEFANT, Dieter	G.24
ELWORTHY, Scilla	D.18, D.19, D.23
EMIN, David	G.16
ENDERBY, John Edwin	G.37
ESSALEH, Lahan	G.26, G.27

Index of correspondents

FÄHNLE, M.	G.9
FETTER, Alexander L.	A.17
FEYNMAN, Richard Phillips	C.39
FINKELSTEIN, A	G.37
FLEMING, Edward Willis	F.14
FLOWERS, Brian Hilton, Baron	G.26
FRANCK, J.P.	G.36
FRANK, Sir (Frederick) Charles	C.38
FREEMAN, Gordon R.	G.15
FREEZE (Nuclear weapons campaign organisation)	D.16
FRIEDEL, Jacques	D.30, G.15, G.21, G.33
FRIEDMAN, Lionel	C.38, G.2, G.15, G.29-G.31
FRITZSCHE, Hellmut	G.12, G.15
FRÖHLICH, Fanchon	C.38
FRÖHLICH, Herbert	C.17
FRYER, Ronald	F.16
FUCHS, Klaus	G.9
FUMI, Fausto	E.8, G.35, G.36
GAI, Pratibha L.	G.21
GEERTSMA, W.	G.16, G.17
GIURGIU, Aliu	G.21
GOLD, A.	G.32-G.34, G.36
GOLDSMID, Michael	F.21
GOLIKOVA, Olga	G.29
GONVILLE AND CAIUS COLLEGE, CAMBRIDGE	A.3, A.16
GOODHART, Charles B.	F.27
GORDON, Ronald	F.11

**Index of correspondents**

THE GOSPEL AND OUR CULTURE (British Council of Churches programme)	F.11, F.12, F.14
GOWING, Margaret Mary	G.9, G.25, G.29
GRAY, Peter	A.3, A.21, G.14
GREAT BRITAIN AND NORTHERN IRELAND	
MINISTRY OF DEFENCE	
	G.33
GREAVES, G. Neville	G.30
GRISCOM, David L.	G.26
GUREVICH, Vadim L.	G.15, G.16
HAAS, C.	G.6
HAFNER, Jürgen	G.22
HAGEN, Stephen J.	G.23
HALPERIN, Israel	A.20
HANSON, John G.	G.7, G.8
HARRISON, Keith	F.23
HAZELL, Kenneth	F.20
HEITLER, Kathleen	C.17, C.28
HEWITT, Kenneth V.	F.18
HIGGINSON, Richard	F.14
HILL, Robert	G.10, G.14, G.15, G.22, G.23 See also C.108
HINDE, Robert Aubrey	A.21
HOCH, Paul	C.17, C.20
HODGSON, Peter E.	F.12, F.14, G.18, G.22 See also F.52, F.53
HØGAASEN, H.	E.24
HOLSTEIN, T.	G.1-G.3
HORDER, John	F.11, F.14

Index of correspondents

HOWSON, Mark	G.16, G.17
HÜBENER, R.P.	E.2
HUDSON, Liam	D.14
HÜFNER, Stefan J.	G.34, G.37
HYLAND, Gerard J.	C.29, C.38, G.22
INSTITUTE OF PHYSICS	C.15, C.98
INTERNATIONAL CULTURAL FOUNDATION	F.5
THE ISLAMIC PROPAGATION UNIT	F.16
JAKOBOVITS, Immanuel, Baron	F.11
JAMES & JAMES (PUBLISHERS) LTD	C.108, F.15, F.24
JEFFERSON, John	G.37
JÉROME, D.	E.24, G.36
JONGH, L.J. de	G.19, G.21, G.24
JOSEPHSON, Brian David	G.34
KABANOV, Victor	G.30, G.32
KALBITZER, S.	G.13
KAMIMURA, Hiroshi	C.47, G.19, G.21, G.37
KARASTOYANOV, Alexander S.	G.32
KARLE, Jerome	E.14
KASTNER, Marc A.	G.35
KAVEH, Moshe	G.14-G.16, G.37
KELL, Douglas B.	C.38
KEMMER, Nicholas	C.17, C.38
KEOHANE, Kevin W.	D.43, F.45
KOLOMIETS, Boris T.	G.7
KÖNIG, Franz	E.10, E.14, F.11 See also F.13

Index of correspondents

KRAMER, B.	G.16
KREY, U.	G.4
KÜNG, Hans	F.1, F.2
KUSCHEL, Karl-Josef	F.1, G.25
KUZEMSKY, Alexander L.	F.22, G.28, G.32
KWATRA, Saurabh	G.29
LEDERMAN, Leon M.	G.36
LENAHAN, Patrick M.	G.16
LEWIN, Patrick T.C.	F.39, F.40
LEWIS, John L.	D.37, D.44
LICHTENBERG, Frank	G.35, G.36
LÖHNEYSSEN, H.v.	G.30
LOVELOCK, James Ephraim	F.47, G.20
LOVELOCK, Sandy O.	G.20, G.21
LU Zuhong	E.23
LUDWIG, Günther	G.20
LUGT, W. VAN DER	G.17
McDONALD, Jack	F.26
McLACHLAN, David S.	G.22
MACCOBY, Hyam	F.25
MALOUFI, Nabila	G.12, G.15
MARCER, Peter J.	G.34
MARE, Ben DE LA	F.14
MARKIEWICZ, Robert S.	G.22, G.30
MARSHALL, Joe M.	G.10, G.20
MARTIN, Alan D.	F.14

**Index of correspondents**

MARTIN, David Alfred	F.10, F.42
MARTIN, Lawrence	F.42
MOLNAR, Stephan von	G.28, G.29
MONTEFIORE, Hugh William	F.10, F.24, F.47
MORGAN, Gwynne James	G.16, G.38
MORLEY, Lawrence	F.17
MORRELL, David	D.3
MORTIMER, Nigel D.	G.23
MOSS, Norman	G.11
NACHTIGALL, D.K.	G.19
NATIONAL EXTENSION COLLEGE	D.17
NELSON, R. Stuart	D.9-D.11
<i>NEW SCIENTIST</i>	G.8
NOBLE, Denis	D.46
NOTTAGE, Christopher G.	F.27
NOVA SPES INTERNATIONAL FOUNDATION	E.10-E.16, F.26
OBUKHOV, S.A.	G.20
OLSEN, J.L.	C.17
OVSHINSKY, Iris M.	B.38
OVSHINSKY, Stanford R.	G.8, G.10, G.15
OWEN, A.E.	G.31
OWEN, George L.	F.14
OWEN, G.P.	G.33
OXFORD UNIVERSITY PRESS	C.99
PARLIAMENTARY ALTERNATIVE ENERGY GROUP	G.11
PAUL, Daniel	F.17

Index of correspondents

PAULSON, Dennis W.	D.25
PEARSE, Ronald	F.19
PECK, David	F.12-F.14, F.17
PEDERSEN, Olaf	F.11
PEIERLS, Sir Rudolf Ernst	See C.13
PEVALA, Anton	G.26, G.27
PHILLIPS, Jim P.	G.33, G.38
<i>PHILOSOPHICAL MAGAZINE</i>	C.100
PICHARD, Jean Louis	G.38
PICK, J.M.	C.33, F.17
PINES, David	G.30
PIPPARD, Sir (Alfred) Brian	C.14, F.24
PITT, Sir Harry	D.37
PRICE, Angela	F.28
PRIGOGINE, Ilya	G.13
PRINCE, Simon A.	G.35
PUGWASH CONFERENCES ON SCIENCE AND WORLD AFFAIRS	D.28-D.30
QUINLAN, Sir Michael Edward	F.45
QUINN, Charles M.	G.2
QUITMANN, Christoph	G.35, G.38
RAÑADA, Antonio F.	F.58, G.36
RASCHE, Günther	C.17, C.28
REES, Sir Martin John	G.7
RICCI, Renato Angelo	E.22
RICE, T. Maurice	G.16, G.19
ROBERT, Hilda	F.10

**Index of correspondents**

ROBERTSON, John	G.29
ROCHET, François	G.20
ROSE, Peter E.	D.2
ROTBLAT, Joseph	D.30
THE ROYAL SOCIETY	C.17, C.38, D.31-D.45, G.11
RUMBOLD, Dame Angela Claire Rosemary	C.25, D.44, G.12
SACHS, Robert G.	G.3
SALAM, Abdus	E.5
SAMUEL, Gerald	F.18
SAVE BRITISH SCIENCE organisation	D.46
SAWATZKY, G.A.	G.6, G.16, G.21
SCHLENKER, C.	G.16, G.21, G.36
SCM PRESS TRUST	F.28
SCOTT, David L.	F.11
SEEGER, A.	E.2
SEITZ, Frederick	G.23
SERBIAN ACADEMY OF SCIENCES AND ARTS	A.21
SHALOM (Christian education in an armed world)	F.11
SHAPIRO, Boris	G.14
SHEPPARD, Norman	F.11, F.14
SILVER, Richard N.	G.31
SKIDMORE, David	See F.44
SMITH, Derek BRYCE-	F.15, G.8, G.10-G.12
SMITH, Jack Howard	G.38
SMITH, John MacDonald	F.16, F.27
SMITH, Meg WESTON	A.17
SMOLUCHOWSKI, R.	G.6

**Index of correspondents**

THE SOCIETY FOR PROCESS THOUGHT	F.39-F.41
SOCIETY OF FOUNDERS OF THE INTERNATIONAL PEACE UNIVERSITY	F.57
SONG, Augustin K.S.	G.36
SPANNER, Douglas C.	F.18, F.21
SPEED, H.P.	See F.44
SPELLER, Tony	G.11
SPURGIN, C.B.	F.19
STEEB, H.	G.13
STOCKTON, Eric	F.16
STONEHAM, Arthur Marshall	C.33, D.9, D.12, G.17
SUN, Tao	G.34, G.35
<i>SUNDAY TELEGRAPH</i>	See D.30
<i>THE TABLET</i>	F.25, F.26
TATENO, Jun	G.36
TAYLOR & FRANCIS LTD	C.101-C.105
TAYLOR, John	F.11
TAYLOR, Norman	F.26, F.27
THELLUNG, A.	C.17
THIRD WORLD ACADEMY OF SCIENCES	E.5
THOMAS, Sir John Meurig	G.36
THOMPSON, Norman	C.17
THORNLEY, Marion	F.16
THOULESS, David James	G.3
TUNSTALL, David P.	G.17
UEMURA, Yasutomo J.	G.29
VERWEY, E.J.W.	G.4

**Index of correspondents**

WAAL, Hugo DE	F.15
WACHTER, P.	C.17
WADE, H.W.R.	A.16
WALKER, Peter Knight	F.11, F.13, F.22-F.25, F.28
WALTON, Ernest Thomas Sinton	C.17
WARDER, Michael Young	F.5
WATSON, G. Paul GRETTON-	D.25
WEGER, Meir	G.22
WEST, Harry F.	F.22-F.25
WHALL, Terry E.	G.8, G.31, G.36
WIGGS, Richard	D.1-D.4
WIJERATNE, Brian	F.5, F.24
WILLIAMS, F.H.	F.18
WILLIAMS, Ronald	A.20
WILLMOTT, E.G.	G.8
WINDASS, Stan	D.15
WOLTERS, Don	G.15
WORLD SCIENTIFIC PUBLISHING CO LTD	C.106
YAMASHINA, Toshiro	A.17
YOUNG, Michael, Baron Young of Dartington	D.14, G.7
ZHURKIN, Boris	G.32
ZIEBECK, K.R.A.	G.35