Catalogue of the papers and correspondence of

# Sir (Edgar) William (John) Mitchell CBE FRS

(1925-2002)

by Peter Harper and Timothy E. Powell NCUACS catalogue no. 160/3/08

Title: Catalogue of the papers and correspondence of Sir (Edgar)

William (John) Mitchell CBE FRS (1925-2002), physicist

Compiled by: Peter Harper and Timothy E. Powell

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UNIVERSITY OF READING

## LIST OF CONTENTS

		Items	Page
GENERAL INTRODUC	CTION		5
SECTION A	BIOGRAPHICAL	A.1-A.50	9
SECTION B	UNIVERSITY OF READING	B.1-B.41	12
SECTION C	UNIVERSITY OF OXFORD	C.1-C.13	14
SECTION D	RESEARCH: GENERAL	D.1-D.26	15
SECTION E	RESEARCH: DIAMOND	E.1-E.166	17
SECTION F	PUBLICATIONS	F.1-F.74	30
SECTION G	LECTURES AND BROADCASTS	G.1-G.51A	35
SECTION H	SOCIETIES AND ORGANISATIONS	H.1-H.219	39
SECTION J	VISITS AND CONFERENCES	J.1-J.17	53
SECTION K	REFERENCES AND RECOMMENDATIONS	K.1-K.46	56
INDEX OF CORRESP	ONDENTS		59

#### **GENERAL INTRODUCTION**

#### **PROVENANCE**

The papers were received for cataloguing from Margaret, Lady Mitchell, widow, via Reading University Library, in February 2008.

#### OUTLINE OF THE CAREER OF SIR WILLIAM MITCHELL

Edgar William (Bill) John Mitchell was born on 25 September 1925 in Kingsbridge, South Devon. He was educated at the local grammar school and Sheffield University where he studied for a degree in physics (awarded 1946). He was employed in the Metropolitan-Vickers Research Laboratory between 1946-1951 during which time he successfully studied for a Ph.D. at the University of Bristol. He was then appointed to a lectureship in the Department of Physics at Reading University where he developed a research programme studying defects in crystalline solids, such as semiconductors, quartz and diamond. In 1957 Mitchell's first neutron scattering experiment, using the BEPO (British Experimental Pile 'O') reactor at Harwell, showed that neutron scattering could be used to determine the properties of defects in solids, and thus opened up a new field.

His managerial and administrative abilities were demonstrated both at Reading and nationally. In 1960 he set up a novel interdisciplinary course at Reading on the physical properties of materials and in 1961 he was appointed Professor of Physical Properties of Materials. He subsequently became Head of the Physics Department, 1968-1978, Dean of the Faculty of Science, 1966-1969, and Deputy Vice-Chancellor, 1976-1978. In the national field he served as Chairman of the Physics Committee of the Science Research Council (SRC), 1967-1970. In 1966 the SRC set up the Neutron Beam Research Committee (NBRC) with responsibility for the funding and organisation of university users of the nuclear reactors at Harwell and Aldermaston. Mitchell served as its chairman for the first eight years. When the government rejected the proposal to build a British high flux beam reactor in favour of joining a similar Franco-German project at Grenoble (Institut Laue-Langevin), Mitchell became heavily involved in the successful negotiations for Britain to join, and served as acting joint director in 1973 and member of the scientific council, 1973-1980. In 1974 the NBRC set up the Neutron Beam Unit at the Rutherford Laboratory, Oxfordshire to support university users of neutrons. In 1977 approval was given to convert the old Nimrod accelerator into SNS, Spallation Neutron Source, subsequently renamed ISIS. Mitchell was an initiator and strong supporter of the project, and was a member of the planning group, 1978-1985.

In 1978 Mitchell was appointed Dr Lee's Professor of Experimental Philosophy at Oxford University and to a Fellowship at Wadham College. As head of the Clarendon Laboratory he initiated research in various aspects of laser and condensed matter physics and developed his own interests in the properties of molten salts and diamonds. He continued to be active on national and international committees, most importantly as a member of the Science and Engineering Research Council (SERC), 1982-1990 and chairman, 1985-1990. The most significant development of his chairmanship was probably the introduction of interdisciplinary research centres in universities to concentrate research funding in key areas such as materials science and electronics, while the most publicly controversial issue was the moving of the Royal Greenwich Observatory at Herstmonceux, Sussex. As a sympathetic European committed to international collaboration, he was a very appropriate choice for the Presidency of the CERN Council at a time of important decisions about its future programme, 1991-1993.

Mitchell's distinguished career was recognised by many honours including a CBE 1976 and knighthood 1990. He was elected FRS in 1986 and received honorary degrees from Reading, Kent, Budapest and Birmingham Universities and the Officer's Cross of the German Order of Merit. He died on 30 October 2002.

For a fuller account of Mitchell's career see the memoir by R.A. Cowley in *Biographical Memoirs of Fellows of the Royal Society*, vol. 50 (2004), 173-181.

#### DESCRIPTION OF THE COLLECTION

The papers in the collection cover the period 1944-2002. They are arranged in ten sections.

Section A, Biographical, includes obituaries, curricula vitae and bibliographies, and documentation of career, honours and awards. There is a notebook from 1944 with a record of undergraduate lectures on radio at the University of Sheffield, the earliest item in the archive, papers relating to his application and appointment as Dr Lee's Professor of Experimental Philosophy at Oxford in 1978, his election to the Royal Society in 1986 and his knighthood in 1990.

Section B, University of Reading, chiefly relates to physics teaching, both undergraduate and postgraduate, 1965-1977. There are also a small number of papers relating to university development in the 1970s.

Section C, University of Oxford, relates entirely to teaching: the 'Optics II' lecture course, which Mitchell seems to have taken over on his move to Oxford from Reading in 1978; and 'Solid State Option Structures & Dynamics' 1983.

Section D, Research: general, though small, covers an extended period 1950-1996. There is a copy of Mitchell's PhD thesis 'Some Contact Potential Measurements on Metals and Semi-Conductors' submitted to the University of Bristol 1950; manuscript notes, drafts and offprints relating to molten salts, c.1972-1980, and a little research correspondence, 1966-1996, including an exchange with C.A. Coulson on energy values in interstitials and vacancies, 1966.

Section E, Research: diamond, is by far the most substantial in the archive. It presents documentation of diamond research at Reading and, much more extensively, the Clarendon Laboratory Oxford, 1960-1996 and Mitchell's long association with De Beers as Consultant and from 1982 Chairman of the Diamond Research Committee, the liaison committee between groups of scientists in UK universities and De Beers Industrial Diamond Division (DEBID), which sponsored the research. The papers include correspondence between Mitchell and DEBID and Mitchell and British and South African scientists undertaking diamond research, agenda and minutes of meetings, budgets, Diamond Conference papers, research reports and research proposals.

Section F, Publications, comprises documentation of both Mitchell's own publications and of his editorial work. There are drafts of Mitchell's publications, 1974-1997, including scientific papers in the areas of neutron scattering and molten salts. However, the most extensive documentation relates to a short piece published in *Physics World* in 1991 in which Mitchell took a sceptical view of much of the then current climate change discussion. In addition to drafts, proofs and published version of the article, there is correspondence with readers of the article and scientists and others to whom Mitchell sent copies of the article. There is also an incomplete set of offprints of Mitchell's scientific papers, 1949-1995. Mitchell's editorial work is represented by a good record of his role as general editor of Oxford University Press's Series on Neutron Scattering in Condensed Matter, 1987-1996.

Section G, Lectures and broadcasts, covers the period 1966-1999. The two earliest items are talks by Mitchell on the science of materials for the BBC Radio programme Science Survey. Lecture topics include diamond, molten salts, neutron scattering, science funding and policy, and global climate. Major addresses on diamond include a Friday Evening Discourse at the Royal Institution in 1988 and 'Fifty Years of University / Industry Collaboration' at the 50th Diamond Conference sponsored by De Beers in 1999.

Section H, Societies and organisations, is substantial, documenting Mitchell's association with 15 British and international, chiefly European, organisations. Of particular importance are the papers documenting Mitchell's Presidency of the CERN Council in the early 1990s, his long association with the Science Research Council (SRC) / Science and Engineering Research Council (SERC) including Mitchell's Chairmanship of the SERC, 1985-1990, the Science and Environmental Policy Project (SEPP), 1991-1997, and United Kingdom Atomic Energy Authority Harwell, 1973-1978. The CERN

papers document the President of the Council's role in relations with individual member countries and in such issues as the US proposal for a Superconducting Super Collider (SSC) and CERN's Large Hadron Collider (LHC) proposal. In addition to documentation of his SERC Chairmanship there are papers relating to the provision of neutron research facilities in Britain including papers of the Neutron Beam Research Unit, Rutherford Laboratory, the SRC Neutron Beam Committee, Rutherford Laboratory Proton Spallation Neutron Source Working Group and the SRC Science Planning Group for Spallation Neutron Source. The SEPP papers are principally Mitchell's correspondence with its director S. Fred Singer and background material sent to him for information. Mitchell was contacted by Singer after the publication of Mitchell's 1991 article in *Physics World* (see section F). The UK AERE Harwell material includes papers relating to neutron beam facilities, the 'New Harwell LINAC' project and nuclear fusion.

Section J, Visits and conferences, is very slight. Most of the visits documented are late and relate to his interest in climate change controversy. A number of visits to South Africa in connexion with diamond research and De Beers are to be found in Section E. Visits made in connexion with Mitchell's Presidency of the CERN Council and his Chairmanship of the SERC are to be found in Section H.

Section K, References and recommendations, includes a chronological sequence from the last decade of Mitchell's life relating to appointments, promotions, prizes and honours.

There is also an index of correspondents.

#### LOCATIONS OF RELATED MATERIALS

There are also significant accumulations of materials relating to De Beers sponsored diamond research in the archives of Mitchell's Reading colleague R.W. Ditchburn (NCUACS no.6/5/88), deposited in Reading University Library, and Sir Charles Frank (NCUACS 15/8/89 and NCUACS catalogue no. 127/13/03), deposited in Bristol University Library. Ditchburn was Mitchell's predecessor as Chairman of the Diamond Research Committee and Frank was a member of the Committee.

P. Harper Bath April 2008

SECTION A	BIOGRAPHICAL, A.1-A.50	1944-2002
A.1	Obituaries	2002
	The Times, 8 November 2002.	
	Independent, 11 November 2002.	
	Guardian, 12 November 2002.	
A.2-A.6A	Curriculum vitae, biographical notes and lists of publications.	
	6 folders.	
	At A.6A are papers relating to Lady Mitchell (Professor Margaret Davies).	
		1011 1005
A.7-A.37	Career, honours and awards	1944-1995
A.7	University of Sheffield	1944
	Mitchell's notes on lectures on radio.	
	In original binder.	
	Loose papers enclosed.	
	Mitchell was a student at Sheffield October 1943 - December 1945, studying physics, radio-physics and mathematics.	
A.8-A.13	University of Oxford	1977-1992
A.8-A.11	Application and appointment as Dr Lee's Professor of Experimental Philosophy	1977-1978
	4 folders.	
A.12	Mitchell's headed notepaper as Dr Lee's Professor of Experimental Philosophy	

# Biographical, A.1-A.50

A.13	Opening of new Molecular Beam Epitaxy facility at the Clarendon Laboratory	1992
A.14-A.16	Election to the Fellowship of the Royal Society 1986	1985-1986
	3 folders.	
A.17	Honorary degree, Reading	1987
	Presentation address only.	
A.18	Honorary degree, Budapest	1988
A. 10	Presentation address only.	
	Mentions Mitchell's Hungarian scientific connexions.	
	Wellions Witchell's Hungarian solerians commonistic.	
A.19	Vice-President, European Science Foundation	1989
	Press notice only.	
A.20-A.33	Knighthood	1990-1992
A.20-A.32	'K Letters Replies sent'	1990
	Contents of folder so inscribed divided into thirteen for ease of reference.	
	Includes a number of other personal letters received by Mitchell at about the same time.	
	Unindexed.	
A.33	Miscellaneous correspondence and papers re knighthood	1990-1992
A.34	Officer's Cross of the Order of Merit of the Federal Republic of Germany 1990	1990
	Includes letters of congratulation.	1
		/.,.

# Biographical, A.1-A.50

<i>1</i>	Unindexed.	
A.35	Presidency of CERN	1990-1991
	Letters of congratulation only.	
A.36	Foreign Associate of the Royal Society of South Africa	1993, 1995
	Correspondence and papers re award.	
A.37	Glazebrook Medal Institute of Physics 1996	1995
	Includes letter announcing award and citation.	
A.38-A.50	Miscellaneous biographical items	n.d., 1985- 2002
A.38-A.43	'EJW Mitchell Expenses'	1985-2002
	Contents of folder so inscribed divided into six for ease of reference.	
	Includes consultancy arrangements, travel expenses etc.	
A.44	Kingsbridge Grammar School Old Boys' Society	1990-1991
	Membership list, newsletters.	
	Includes mentions of Mitchell.	
	Mitchell attended the school, 1936-1943.	
A.45-A.49	Portrait photographs of Mitchell	n.d.
	5 folders.	
A.50	Personal correspondence	1986-2002

SECTION B	UNIVERSITY OF READING, B.1-B.41	1965-1977
	Mitchell spent much of his academic career at Reading, 1951-1978: Professor of Physics, 1961-1978, Dean of Faculty of Science, 1966-1969, Deputy Vice-Chancellor, 1976-1978.	
B.1-B.3	'Various University Papers'	1969-1970
	Contents of folder so inscribed divided into three for ease of reference: principally duplicated papers <i>re</i> university development in the 1970s including paper by Mitchell.	
	At B.3 are 5pp typescript notes of after dinner speech by Mitchell, n.d.	
B.4-B.41	Teaching	1965-1977,
		n.d.
B.4-B.11	'F.U.E. Lecture Notes'  Contents of folder so labelled divided into eight for ease of reference: duplicated typescript syllabuses, manuscript notes for 'F.U.E. Physics', 'First University Examination in Science' examination questions for physics, etc.	1970-1976, n.d.
B.12-B.21	'Quantum Mechanics: I P.P.M. [Physical Properties of Materials] Lecture Course'	1965
	Contents of folder so labelled divided into ten for ease of reference: 'Provisional' summary of course and manuscript course notes including sequence paginated 1-159.	
	Mitchell set up the novel interdisciplinary course on the Physical Properties of Materials in 1960.	
B.22-B.24	'Postgraduate Lecture Notes'	1966-1976
	Contents of folder so inscribed divided into three for ease of reference: manuscript notes on optical properties of solids.	
B.25-B.29	'Optical Properties of Defects'	1971, 1974, n.d

### University of Reading, B.1-B.41

Manuscript notes so titled, also 'Optical spectra of defects', 'Related Rough Notes', abstracts of three lectures by W. Hayes on 'Colour Centres in Ionic Solids', etc.

5 folders.

W. Hayes was University Lecturer at Oxford, 1962-1987 and therefore some of the undated material may relate to the period of Mitchell's tenure of the Oxford chair from 1978.

B.30-B.40

Year III Chemical Physics Computer Projects

1977

Examples of student work.

11 folders.

B.41

'Relation between statistical and macroscopic parameters'

n.d.

Manuscript notes found with other teaching material.

SECTION C	UNIVERSITY OF OXFORD, C.1-C.13	1975-1983
	Mitchell was appointed Dr Lee's Professor of Experimental Philosophy and head of the Clarendon Laboratory in 1978.	
	Teaching material.	
C.1-C.10	'Optics II'	1975-1978
	Manuscript notes for lecture course, duplicated handouts and synopses, examination papers.	
	Includes notes on back of both University of Reading and University of Oxford headed notepaper.	
	The handouts were prepared by G.A. Brooker.	
	10 folders.	
	Mitchell seems to have taken over the teaching of this course on his move to the Clarendon in 1978.	
C.11-C.13	Solid State Option Structures & Dynamics M[ichaelmas] T[erm] 1983'	1983

Contents of folder so inscribed divided into three for ease of reference: manuscript course notes and transparencies.

SECTION D	RESEARCH: GENERAL, D.1-D.26	1950-1996
D.1	Ph.D. Thesis  'Some Contact Potential Measurements on Metals and Semi-Conductors'.  'Complete Copy' of thesis submitted to the University of Bristol.	April 1950
D.2-D.19A	'Molten Salts'  Contents of box so inscribed: manuscript notes and drafts, offprints, etc.  19 folders.	c.1972-1980, n.d.
D.20-D.22	Miscellaneous notes and drafts	n.d., 1996
D.20	'Miscellaneous - Rough'  Sheets of manuscript notes found stapled together. Undated but include notes on University of Reading Physics Department headed notepaper	n.d.
D.21	'Molten State Problems'  Manuscript draft, etc so titled.	n.d.
D.22	Manuscript notes, etc.  Relates to the work of the National Gallery's Honorary Scientific Advisory Committee.	1996
D.23-D.26	Research correspondence	1966-1992
D.23	2 letters from C.A. Coulson and 'Note added in proof' re energy values in interstitials and vacancies	March 1966
D.24-D.25	Letter from G.J. Hyland, 18 April 1985, re structure of superfluid helium, enclosing related offprints of papers of	1970-1985

## Research: General, D.1-D.26

his own and others

2 folders.

D.26 Correspondence re research proposals

1991-1992

SECTION E

RESEARCH: DIAMOND, E.1-E.166

1960-2002

The section presents documentation of diamond research at Reading and, much more extensively, the Clarendon Laboratory Oxford, 1960-1996 and Mitchell's long association with De Beers as Consultant and from 1982 Chairman of the Diamond Research Committee, the liaison committee between groups of scientists in UK universities and De Beers Industrial Diamond Division (DEBID), which sponsored the research.

The papers are presented as follows:

E.1-E.85A

DIAMOND RESEARCH AT READING AND

**OXFORD** 

E.86-E.166

2 folders.

DIAMOND RESEARCH COMMITTEE /

CONSULTANCY

E.1-E.85A	DIAMOND RESEARCH AT READING AND OXFORD	1960-1996
E.1-E.21	'Diamond Research Clarendon Financial & General Correspondence'	1974-1983
	Contents of box so inscribed.	
	Correspondence and papers.	
	Includes papers relating to work at Reading University. Mitchell moved to Oxford as head of the Clarendon Laboratory in 1978.	
E.1	'Proposals for diamond research in The Physics Department at Reading 1975-1980'	1974
	By Mitchell, 'January 28th, 1974'.	
E.2	1975-1976	
E.3-E.4	1977-1978	

E.5	'DIA S Africa visit Jan 1979'	October 1978 - January
	Contents of folder so labelled.	1979
E.6	'Proposals for diamond research in The Clarendon Laboratory, Oxford, 1979-1983'	1979
	By Mitchell 'January 5th 1979'.	
E.7-E.9	1979	
	3 folders.	
E.10	Conference 'The Defect Solid State '80', University of the Witwatersrand, Johannesburg, 14 July 1980	1979-1980
E.11-E.12	1980	
	2 folders.	
E.13-E.15	1981	
	3 folders.	
E.16-E.17	1982	
	2 folders.	
E.18-E.19	Correspondence and papers re joint study between the Clarendon Laboratory and IBM of laser hole burning in ionic crystals	1982
	2 folders.	
E.20-E.21	1983	
	Includes manuscript draft and duplicated typescript 'Diamond Research Clarendon Laboratory 1984-1989'.	

E.22-E.49	'Clarendon Diamond Technical Papers & Reports'	1972-1982
	Contents of box so inscribed.	
	Correspondence and papers.	
	Much of the material relates to the research programme of J. and E.M. Wilks at the Clarendon and includes correspondence and reports copied to Mitchell.	
E.22-E.24	1979	
	3 folders.	
E.25-E.32	1980	
	7 folders.	
	For manuscript notes and transparencies of talk by Mitchell on the physics of colour in diamond see E.28, E.29.	
E.33-E.37	1981	
2.00 2.07	5 folders.	
E.38-E.41	1982	
	4 folders.	
E.42-E.49	Duplicated and printed papers	1972- c.1979
	8 folders.	
E.50-E.56	'Diamond Research Clarendon'	1982-1985
	Contents of box so inscribed.	
	Correspondence and papers.	
	7 folders.	
	The papers were found in poor physical condition. As a	

	result of their physical condition they received minimal examination at the time of processing.	
E.57-E.64	'Diamond Technical Correspondence MkII'	1982-1985
	Contents of box so inscribed.	
	Correspondence and papers.	
	Much of the material relates to the research programme of J. and E.M. Wilks at the Clarendon and includes correspondence and reports copied to Mitchell.	
E.57	1982	
E.58-E.59	1983	
	2 folders.	
E.60-E.61	1984	
	2 folders.	
	At E.60 is programme of visit by Mitchell to De Beers	
	Diamond Research Laboratory.	
E.62	1985	
E.63-E.64	Duplicated and printed papers.	1983-1985
	2 folders.	
	Includes manuscript notes by Mitchell at E.64.	
E.65-E.85	'Diamond Papers Optical & Related'	1960-1983
	Contents of box so inscribed.	
	Correspondence and papers.	
E.65	1974-1977	

E.66	1978-1979	
E.67	1980	
E.68	1982-1983	
E.69-E.85	Duplicated and printed papers	1960-c.1981
	17 folders.	
	At E.69 are manuscript notes for lecture by Mitchell on diamond.	
		4005 4000
E.85A	De Beers and the Simon Instrument Group  Correspondence and papers <i>re</i> financial administration.	1995-1996
	Correspondence and papers 75 interioral administration.	
E.86-E.166	DIAMOND RESEARCH COMMITTEE/CONSULTANCY	1983-2002
E.86-E.166	DIAMOND RESEARCH COMMITTEE/CONSULTANCY	1983-2002
E.86-E.100	DIAMOND RESEARCH COMMITTEE/CONSULTANCY 'Diamond Cttee'	1983-2002 1986-1995, n.d.
		1986-1995,
	'Diamond Cttee'	1986-1995,
	'Diamond Cttee'  Contents of box so inscribed.  Correspondence and papers, including minutes, budgets	1986-1995,
E.86-E.100	'Diamond Cttee'  Contents of box so inscribed.  Correspondence and papers, including minutes, budgets and papers re Diamond Conferences.	1986-1995,

E.89 1990

E.90-E.91 1991

2 folders.

At E.91 is Mitchell's draft Report on De Beers / University

collaboration.

E.92-E.93 1992

2 folders.

E.94-E.95 1993

2 folders.

E.96-E.97 1994

2 folders.

E.98-E.99 1995

2 folders.

E.100 n.d.

E.101-E.166 General correspondence and papers 1983-2002

E.101 1983-1984

Reports on university research programmes.

Contents of binder.

E.102 1986

Diamond Research Reports from the University of Cambridge (J.E. Field) and Royal Holloway and Bedford New College (Moreton Moore), and related correspondence.

E.103 1990

Diamond Research Report from the University of Bristol (A.R. Lang) and Memorandum from DEBID on 'Potential for "new" diamond in heatsinking in electronics'.

E.104 1991

'The Next Decade A report prepared by Sir William Mitchell for The Diamond Research Committee and DEBID'.

E.105-E.106 1992

E.105 'Innovation in Diamond Technology Initiative (1)'

Report by B.L. Jones (DEBID) and Mitchell (Consultant to

DEBID), May 1992.

E.106 Report on '3rd European Conference on Diamond,

Diamond Like and Related Coatings', Heidelberg,

September 1992

E.107-E.107A 1992-1993

E.107 'University Visit Report Issue 1'

Reports on a number of university research programmes including Mitchell's visit to King's College, London, 29

October 1992.

E.107A University Visit Report Issue 2'

Reports on a number of university research programmes

including universities in South Africa.

E.108-E.121

1993

E.108

January

E.109-E.110

February

2 folders.

At E.109 is manuscript draft of report by Mitchell on visit to Diamond Research Laboratory, 25 January - 5 February 1993.

E.111-E.112

March-April

2 folders.

Includes papers re workshop on diamond coatings,

Bristol, 26 April 1993.

E.113

March - May

University Visit Reports.

E.114

June

Includes laser patent proposal sent to Mitchell for comment and photograph of members of the Diamond Committee (C.A. Brookes, T. Evans, Sir Charles Frank and J.E. Field) and B.L. Jones of DEBID. The Chairman

(Mitchell) was absent through illness.

E.115

July

Includes Mitchell's review of 'The properties of natural & synthetic diamonds' edited by J.E. Field for the Industrial

Diamond Annual Indiaqua.

E.116

August

Includes papers re work at Royal Marsden Hospital on use of thermo-luminescence in diamond as a radiation

monitor for medical use.

E.117-E.118

September

2 folders.

At E.117 is report on work at Royal Marsden Hospital on use of thermo-luminescence in diamond as a radiation monitor for medical use.

E.119

October

Includes report by Mitchell on visit to Royal Marsden Hospital on behalf of the Diamond Research Committee.

E.120

November

Includes report on visit by Mitchell to Clarendon Laboratory on behalf of the Diamond Research Committee.

E.121

December

Includes proposal relating to Diamond Electronics sent to Mitchell for comment and correspondence and papers *re* 1994 research budget.

E.122-E.128

1994

E.122

January

Includes report by Mitchell on Diamond Electronics, 11 January.

E.123-E.125

February

Correspondence and papers *re* meeting on 'cloud defects in synthetic diamond' held this month.

3 folders.

E.126-E.127A February - November

Correspondence and papers re 'Diamond Detectors'.

3 folders.

E.128 July

Correspondence and papers re Diamond Conference and

meeting of Diamond Research Committee, 11-13 July.

E.129-E.132 1995

E.129-E.131 February

'Half-Year Diamond Research Reports'.

3 folders.

E.132 July-November

Includes research proposal and covering letter on cathodoluminescence; '1995 University Budget',

November.

E.133-E.147 1996

E.133-E.134 January

Grant letters.

2 folders.

E.135 February - March

Correspondence and papers re visits to the Cavendish

Laboratory, Cambridge and University of Liverpool, etc.

Includes Mitchell's manuscript notes on diamond

research at the Cavendish.

E.136 April

Includes memorandum on the benefits of support for

university research.

E.137-E.138 May

Papers re Diamond Research Committee visit to King's

College London.

2 folders.

Mitchell's manuscript notes are at E.137.

E.139-E.140 May - June

Correspondence and papers re visit to Hull University.

2 folders.

Mitchell's manuscript notes are at E.139.

E.141-E.143 June

Correspondence and papers *re* visit to Electronic Materials Centre, Swansea University of Wales (E.141) and *re* 'Forward Look' document on UK University Research on Diamond sponsored by De Beers for the

period 1996-2001 (E.142-E.143).

3 folders.

E.144 July

Correspondence and papers re Diamond Conference and

Diamond Research Committee meeting.

E.145 August

Synopsis of research project with covering letter.

E.146 October - November

Includes grant letters.

E.147 December

E.148-E.153 1997

E.148-E.149 January

Includes correspondence re grants.

2 folders.

E.150 February - April

E.151-E.152 May

Includes research proposals.

2 folders.

E.153 June - August

Includes research proposal and programme of Diamond

Conference.

E.154-E.159 1998

E.154-E.156 May - June

Papers *re* work of J.F. Prins on diamond electronics including patent proposal sent to Mitchell for comment.

3 folders.

E.157 July

Includes 'Notes and Action Points from a Meeting on

University Research', 6 July

E.158 August

Includes report on 'N Doping' research sent to Mitchell for

comment.

October - November E.159

Includes 'Notes and Action Points from a Meeting on University Research', 21 October.

E.160-E.164 1999

E.160 January

Includes research report and research application.

E.161 February

E.162-E.164 March

3 folders.

Includes research report, papers for project meeting in Oxford and visit to Royal Holloway University of London.

E.165 2002

Printed-out email with news of death of J.P.F. Sellschop.

E.166 n.d.

Includes typescript draft of article by Mitchell 'What Price

Synthetic Gem Diamonds?'

SECTION F	PUBLICATIONS, F.1-F.74		1949-1997
	F.1-F.57	OWN PUBLICATIONS	
	F.58-F.74	EDITORIAL AND ADVISORY	
F.1-F.57	OWN PUBLICATIONS		1949-1997
F.1-F.34	Drafts		1974-1997
F.1, F.2		he occurrence of exponential tails es of disordered materials'. Not	1974
	Manuscript and typesc	ript drafts.	
	2 folders.		
F.3		ence of phonon spectra in alkali Raptis)'. Not listed in bibliography	n.d.
	Typescript draft, latest	bibliographical reference 1983.	
F.4	molten CsCl (with R.L	ering studies of collective modes in . McGreevy, F.M.A. Margaca and C.18 (1985), 5235-5247	1985
	Corrected proof.		
F.5		tering from alpha-Agl (with M.A. evy)', z. f.Phys. B., 62 (1985), 15-	1985
	Typescript draft.		
F.6-F.11	'Raman Scattering from Raptis)', J. Phys. C. 20	n molten Li and Rb halides (with C. (1987) 4513-4528	1985-1987
	Manuscript and typescr	ript drafts, correspondence etc.	1

<i>I</i>	6 folders.	
F.12-F.16	'The femtosecond optical Kerr effect in molten casesium chloride (with C.W.W. Bradley, R.A. Taylor, J.F. Ryan)', J. Phys. Condens. Matter 1 (1989) 2715-2719	1989
	Manuscript and typescript drafts, background material etc.	
	5 folders.	
F.17-F.30	'Reflections on global climate change', Physics World, August 1991	1989-1992
	Mitchell took a sceptical view of much current climate change discussion. His article begins: 'As a physicist I have worries about the misunderstandings which appear to be arising in the minds of the general public and politicians from the simplifications being introduced into the discussions of global climate change'.	
	For Mitchell's association with the Science and Environmental Policy Project and its Director S. Fred Singer arising from this article see Section H.	
	For the climate change meetings to which Mitchell was invited subsequent to the publication of the article see Section J.	
F.17	Typescript drafts, proofs, published version.	1991
F.18-F.24	Correspondence with readers of article and scientists and others to whom Mitchell sent copies of the article	1991-1992
	7 folders.	
F.25-F.30	Background material	1989-1992
	6 folders.	
F.31-F.32	'The structure and dynamics of molten salts'	1993-1994
	Synopsis of book of this title for Oxford University Press, correspondence with the Press etc.	1

1	2 folders.	
	Mitchell's proposal was accepted by the Press but it is not clear how far he was able to proceed with the writing. It was not published.	
F.33	'A great opportunity wasted', New Scientist, 26 August 1995	1995
	Typescript and published versions of article etc.	
	Mitchell's original title was 'Government responsibility for the research councils'.	
F.34	'Nevill Mott - some personal reminiscences'	1997
	Mitchell's contribution to 'Nevill Mott - reminiscences and appreciations' edited by E.A. Davis.	
F.35-F.57	Offprints	1949-1995
F.35-F.57	Offprints  Not a complete sequence.	1949-1995
F.35-F.37		1949-1995
	Not a complete sequence.	1949-1995
	Not a complete sequence.  1940s, 1950s	1949-1995
	Not a complete sequence.  1940s, 1950s 3 folders.	1949-1995
	Not a complete sequence.  1940s, 1950s 3 folders.	1949-1995
F.35-F.37	Not a complete sequence.  1940s, 1950s 3 folders.  At F.35 are manuscript notes found with the offprints.	1949-1995
F.35-F.37	Not a complete sequence.  1940s, 1950s 3 folders.  At F.35 are manuscript notes found with the offprints.	1949-1995

F.49-F.55	1980s	
	7 folders.	
F.56	1990s	
F.57	N.d.	
F.58-F.74	EDITORIAL AND ADVISORY	1987-1997
F.58-F.71	Oxford University Press	1987-1996
	Correspondence and papers.	
	Mitchell was a general editor in the Oxford Series on Neutron Scattering in Condensed Matter.	
	Correspondents include D. Degenhardt (for the OUP) and fellow editor S.W. Lovesey.	
F.58	1987	
F.59-F.60	1988	
	2 folders.	
F.61	1989	
F.62-F.64	1991	
	3 folders.	
F.65-F.68	1992	
	4 folders.	

F.69-F.70

1993

2 folders.

F.71

1994-1996

F.72

Philosophical Magazine A

1997

Report by Mitchell on paper submitted to the journal.

F.73-F.74

Royal Society Transactions A

1992-1994

Correspondence and papers *re* Mitchell's suggestion of a themed issue on 'Melting and the molten state'.

2 folders.

SECTION G	LECTURES AND BROADCASTS, G.1-G.51A	1964-1999
G.1	'The Science of Materials 1. What is this stuff'  Duplicated typescript of talk by Mitchell for BBC Radio programme Science Survey.	1964
G.2	'The Science of Materials 2. The Fascination of Imperfect Crystals'	1964
	Duplicated typescript of talk by Mitchell for BBC Radio programme Science Survey.	
G.3-G.10	'Neutron Scattering Lectures, Kings College [London] 1971 Rutherford Lectures 1971 + Reading Lectures 1971'	1971
	Contents of ring binder so labelled divided into eight for ease of reference: manuscript notes and drafts, transparency, correspondence.	
G.11-G.17	'Gallium Arsenide Lecture'  Contents of ring binder so labelled divided into seven for ease of reference: manuscript notes for talks at Warwick, Imperial College, Nice and Saclay, typescript paper and photocopies of published papers by Mitchell and colleagues, transparencies, correspondence.	1975-1978
G.18	'Notes for Cavendish Colloquium', 8 February 1977  18pp manuscript draft so titled.	1977
G.19-G.21	'What's new in solid state physics?', P.C.L. [? Physical Chemistry Laboratory Oxford], 14 February 1983  Manuscript draft, transparencies, offprints, etc.  3 folders.	1979-1983
G.22-G.24	'Hamburg Lecture'  Contents of folder so inscribed divided into three for ease	1982, c.1986

## Lectures and broadcasts, G.1-G.51A

	of reference: offprints, manuscript notes, transparencies.	
G.25-G.33	'Diamond', Royal Institution Friday Evening Discourse, 19 February 1988	1987-1988
G.25-G.27	Manuscript and typescript drafts of lecture, transparencies	1988
	3 folders.	
G.28-G.32	'Dia Lecture Misc Papers'  Contents of folder so inscribed divided into five for ease	1987-1988
	of reference: correspondence re arrangements, background material etc.	
G.33	'EWJM Transcript of your diamond lecture'	[1988]
	16pp typescript so headed.	
G.34	'A Policy for the Funding of Science in the UK', Tenth W.E.S. Turner Memorial Lecture, University of Sheffield, 5 May 1988	1988-1989
	Typescript draft, letter arising and published text: Glass Technology Vol 30 No 2 April 1989.	
G.34A	'Contribution from Professor E.W.J. Mitchell to the Prime Minister's Seminar on Global Climate'	1989
	5pp typescript, 2 pages at least appear to have been faxed on '4.25.1989'.	
G.35-G.38	'Molten Salts'	c.1990
	Contents of envelope so inscribed divided into four for ease of reference: manuscript notes and transparencies for lecture or lectures.	
	The envelope was postmarked with the date 13 December 1990.	

## Lectures and broadcasts, G.1-G.51A

G.39-G.42	Manuscript notes and drafts, transparencies etc for lectures on science funding, the SERC [Science and Engineering Research Council], European scientific collaboration, etc	1990
	Includes notes for lectures in Oslo and Edinburgh.	
	4 folders.	
	The Edinburgh occasion was held on 8 November 1990.	
G.43	'Physics - doing and funding', School of Physics and Space Research, University of Birmingham, 27 November 1991	1991
	Manuscript draft, transparencies, etc.	
G.44	'I.O.P [Institute of Physics] Speech', 26 January 1995	1995
	11pp typescript draft, letter of thanks from Institute of Physics President, Sir Arnold Wolfendale.	
G.45	'Fifty Years of University / Industry Collaboration', 50th Diamond Conference sponsored by De Beers, St Catherine's College, Oxford, 4-7 July 1999	, 1999
	16pp typescript and manuscript draft, transparency, offprint.	
G.46	Manuscript notes for speech at '50th Diamond Conference Banquet', St Catherine's College, Oxford, 4-7 July 1999	1999
G.47	'What Price Synthetic Gem Diamonds?'	N.d.
	13pp typescript draft.	
G.48	Transparencies for unidentified lecture.	N.d.

## Lectures and broadcasts, G.1-G.51A

G.49-G.51 Manuscript notes for after dinner speeches N.d., 1998
3 folders.

G.51A 'Record' of after dinner speech by M.S. Longair' sent to Mitchell, 23 October 1989

The topic of Longair's speech was 'Astrophysics Cosmology and Particle Physics. An Astronomical Perspective'.

SECTION H	SOCIETIES AND ORG	ANISATIONS, H.1-H.219	1973-1999
	H.1	ACADEMIA EUROPAEA	
	H.2-H.59	CERN	
	H.60-H.79	EUROPEAN SCIENCE AND TECHNO ASSEMBLY (ESTA)	DLOGY
	H.80-H.81	EUROPEAN SCIENCE FOUNDATION	N (ESF)
	H.82-H.90	HOUSE OF COMMONS SCIENCE AN TECHNOLOGY COMMITTEE	ND
	H.91	INSTITUT LAUE-LANGEVIN	
	H.92	INTERNATIONAL THERMONUCLEA EXPERIMENTAL REACTOR (ITER)	R
	H.93	NATO SCIENCE COMMITTEE	
	H.94-H.95	QUEEN ELIZABETH HOUSE (DEPARINTERNATIONAL DEVELOPMENT), OF OXFORD	
	H.96	ROYAL SOCIETY	
	H.97-H.108	SCHOOLS COUNCIL	
	H.109-H.117	SCIENCE AND ENVIRONMENTAL P PROJECT (SEPP)	OLICY
	H.118-H.196	SCIENCE RESEARCH COUNCIL / SCIENCE RESEARCH RESEARCH COUNCIL / SCIENCE RESEARCH RESE	The state of the s
	H.197	SCIENCE RESEARCH FOUNDATION	N
	H.198-H.219	UNITED KINGDOM ATOMIC ENERG ESTABLISHMENT, HARWELL	Y RESEARCH

H.1	ACADEMIA EUROPAEA	1990-1997
	In 1990 Mitchell was invited to contribute to the nominations process by serving on the advisory group for physics.	
	In 1996 Mitchell became an Emeritus Member of the Academy.	
H.2-H.59	CERN (European Organization for Nuclear Research)	1990-1994
	Mitchell was a member of Council, 1985-1993, Vice- President 1990, President 1991-1993.	
	The papers document relations with individual member countries and such issues as the US proposal for a Superconducting Super Collider (SSC) and CERN's Large Hadron Collider (LHC) proposal.	
	Mitchell's correspondents include the CERN Director General Carlo Rubbia, the UK Department of Education and Science / Cabinet Office, Office of Science and Technology and the US Department of Energy.	
H.2-H.3	General correspondence and papers	1990
	2 folders.	
	Includes papers re the US proposal for a Superconducting Super Collider (SSC) including 'Framework for International Participation' May 1990.	
H.4-H.7	Correspondence and papers re relations with Portugal	1991-1993
	4 folders.	
	Includes papers re visit of Mitchell as President of the Council to Portugal, May 1992.	
H.8-H.12	General correspondence and papers	March-May 1991

5 folders.

Includes papers *re* 'SC 33' Symposium and Commemorative Ceremony, 22 April and relations with Portugal and Spain.

The Synchro-Cyclotron or SC was CERN's first particle accelerator.

H.13

General correspondence and papers

June-August 1991

Includes papers re SSC, Large Hadron Collider (LHC), Portuguese contribution, etc.

H.14-H.16

General correspondence and papers

October-December 1991

3 folders.

Includes papers *re* Czechoslovak application for membership, CERN management structure, etc.

At H.16 is Mitchell's after-dinner speech given to CERN Council and Observers, 18 December, as revised for offering to *Physics World* for publication, and Council Resolution on LHC, December.

H.17-H.20

Correspondence and papers re relations with Greece

1991-1993

4 folders.

H.21-H.26

Correspondence and papers re relations with Japan

1992-1993

6 folders.

Much of the correspondence is between Mitchell and the UK Cabinet Office, Office of Science and Technology.

At H.25 is publication 'Presenting CERN to Japan', December 1992.

H.27-H.28

General correspondence and papers

April-June 1992

2 folders.

Includes papers re SSC.

H.29-H.30	General correspondence and papers  2 folders.  Includes papers <i>re</i> SSC, LHC, German contribution etc.	July-October 1992
H.31	Estimates for 1994	September 1992
H.32	Papers re 'CERN Day of Honour', Universal Exhibition Sevilla '92, Spain, 30 September 1992	
H.33-H.34	Correspondence and papers re award of 1992 Nobel Prize for Physics to Georges Charpak	October 1992 -January 1993
	2 folders.	1993
H.35-H.36	Correspondence and papers re collaboration between CERN and Russian research centres	December 1992-June 1993
	2 folders	
H.37	Correspondence and papers <i>re</i> US SSC project  Includes letter from Mitchell to UK Office of Science and Technology, 25 February, beginning 'I think I should place on record the absurdity of suggestions that the UK should join the S.S.C. project'.	February 1993
H.38	Correspondence and papers re relations with Spain	February- December 1993
H.39	Correspondence and papers re CERN and Serbian physicists	April-May 1993
H.40-H.44	Correspondence and papers <i>re</i> relations with Portugal 5 folders.  Includes papers <i>re</i> visit of Mitchell to Portugal as CERN	April 1993 - February 1994

President of Council, 25-27 October.

H.45-H.49	General correspondence and papers	February- December
	5 folders.	1993
	At H.46 are papers re relations between CERN and the US Department of Energy.	
H.50	Correspondence and papers re LHC	November- December 1993
H.51	CERN Council	December 1993
	Includes Special LHC Session.	1000
H.52	General correspondence and papers	January, June 1994
H.53-H.59	Miscellaneous papers	
H.53	Convention for the Establishment of a European Organization for Nuclear Research Paris, 1st July, 1953 As Amended	
H.54-H.56	'John Adams Engineer Extraordinary A Tribute by Michael Crowley-Milling'	
	Typescript draft.	
	3 folders.	
H.57	'Transparencies Book'	
	The transparencies cover the following topics: CERN general, User figures, CERN-USA Comparisons, User Participation in CERN programmes, CERN budgets & related data and LHC.	

related data and LHC

H.58-H.59

Transparencies

2 folders.

Relate to member contributions.

H.60-H.79

EUROPEAN SCIENCE AND TECHNOLOGY 1992-1997 ASSEMBLY (ESTA)

Correspondence and papers.

The European Commission decided, 16 March 1994, on the creation of the ESTA to advise it on the preparation, implementing and monitoring of Community policy in research and technology development.

Mitchell was a member of the Assembly at the outset and served on a working party on Inertial Confinement Options to Controlled Nuclear Fusion.

H.60

1994

Includes Commission decision to establish an ESTA and the rules of procedure for the Assembly.

H.61-H.69

1996

9 folders.

Includes drafts of report of ESTA working party on controlled nuclear fusion.

H.70-H.71

1997

2 folders.

H.72-H.79

Background papers *re* nuclear fusion, European science policy etc.

1992-1997

8 folders.

H.80-H.81

## **EUROPEAN SCIENCE FOUNDATION (ESF)**

1989-1992

Correspondence and papers.

2 folders.

At H.80 is Mitchell's 'Comments on the Structure of the ESF' prepared at the invitation of the ESF Board.

Mitchell served as Vice-President., 1989-1992.

H.82-H.90

# HOUSE OF COMMONS SCIENCE AND TECHNOLOGY COMMITTEE

1995-1996

Correspondence and papers *re* inquiry into the Particle Physics and Astronomy Council.

9 folders.

Mitchell gave oral evidence to the Committee on 27 March 1996.

H.91

#### INSTITUT LAUE-LANGEVIN, GRENOBLE

1974

Background papers only.

Mitchell was a member of the scientific council, 1973-1980.

H.92

# INTERNATIONAL THERMONUCLEAR EXPERIMENTAL REACTOR (ITER)

1995-1996

Letter and Interim Design Report.

H.93	NATO SCIENCE COMMITTEE	1996-1997
	Correspondence and papers <i>re</i> review of Outreach Programme and possible participation by Mitchell in the review.	
H.94-H.95	QUEEN ELIZABETH HOUSE (DEPARTMENT OF INTERNATIONAL DEVELOPMENT), UNIVERSITY OF OXFORD	1992
	Correspondence and papers re Queen Elizabeth House review committee.	
	2 folders.	
	Mitchell was a member of the Review Committee.	
H.96	ROYAL SOCIETY	1990, 1999
	Brief correspondence only re science policy and funding.	
H.97-H.108	SCHOOLS COUNCIL	1976
	'Schools Council 18 + Research Programme based on N & F Proposals' Reports.	
H.97-H.100	Reports of the Physics Commissioned Group 4 folders.	
H.101-H.108	Reports of the Mathematics Commissioned Group 8 folders.	

H.109-H.117

#### SCIENCE AND ENVIRONMENTAL POLICY PROJECT (SEPP)

1991-1997

Correspondence with Director S. Fred Singer and background papers sent to Mitchell for information.

9 folders.

Singer who took a sceptical view on global warming approached Mitchell after reading his article 'Reflections on global climate change' in Physics World, August 1991. See F.17-F.30. In a letter of 3 July 1992 Singer invited Mitchell to join the SEPP's Advisory Board. expressed willingness to do so 'for 3 years in the first instance so that I can see if I can cope'.

H.118-H.196

#### SCIENCE RESEARCH COUNCIL / SCIENCE AND **ENGINEERING RESEARCH COUNCIL**

1973-1996

From 1965 the Science Research Council was the agency in Britain responsible for publicly funded scientific and engineering research. In 1981 Engineering was added to its title. Its responsibilities included such national facilities as the Rutherford Appleton Laboratory.

Mitchell served as a Member of the Council, 1970-1974 and 1982-1985, and as Chairman, 1985-1990. He was Member, 1965-1970 and Chairman, 1967-1970 of the Physics Committee: Chairman of the Neutron Beam Research Committee, 1966-1974 (devised scheme for extensive University use of nuclear research reactors for condensed matter research); Member of the Science Planning Group for Spallation Neutron Source, 1978-1985; Member of the Science Board (formerly the University Science and Technology Board), 1967-1970; and Member of the Nuclear Physics Board, 1980-1985.

The papers principally relate to the provision of facilities for neutron science and to Mitchell's period as Chairman of the Council.

H.118-H.156 Neutron Science Facilities

H.157-H.196 Membership and Chairmanship of the

SERC

1973-1984

## Societies and organisations, H.1-H.219

H.118-H.156	Neutron Science Facilities
	Correspondence and papers.
	The papers were found together in considerable disorder. They are presented as far as possible in chronological order.
	The sequence includes papers of the Neutron Beam Research Unit, Rutherford Laboratory, the SRC Neutron Beam Committee, Rutherford Laboratory Proton Spallation Neutron Source Working Group and the SRC Science Planning Group for Spallation Neutron Source.
H.118	1973
H.119-H.120	1974
	2 folders.
H.121-H.126	1975
n. 12 1-n. 120	6 folders.
	o loiders.
H.127-H.129	1976
	3 folders.
	At H.127 is a copy of 'A Study Commissioned by ULCC to Identify the Computational Requirements of Research in the Field of Condensed Matter Physics' by Mitchell.
H.130-H.133	1977
	4 folders.
H.134-H.137	1978
	A full-sa

4 folders.

H.138-H.140	1980	
	3 folders.	
	At H.138 is conference handbook for conference on high resolution neutron spectroscopy, Oxford, 31 March-1 April 1980.	
H.141	1981-1984	
H.142-H.146	n.d.	
	5 folders.	
H.147-H.156	Printed and duplicated papers	1979-1984
	10 folders.	
H.157-H.196	Membership and Chairmanship of the SERC	1982-1996
H.157-H.196 H.157-H.166	Membership and Chairmanship of the SERC  General correspondence and papers	<b>1982-1996</b> 1982-1990
H.157-H.166	General correspondence and papers	
H.157-H.166	General correspondence and papers  1982, 1985-1986  Includes correspondence and papers <i>re</i> Mitchell's	
H.157-H.166 H.157	General correspondence and papers  1982, 1985-1986  Includes correspondence and papers <i>re</i> Mitchell's appointment as member and chairman of the SERC.  1987  'Report of Chairman's Visit to Japan 7-12 August 1987'	
H.157-H.166 H.157	General correspondence and papers  1982, 1985-1986  Includes correspondence and papers <i>re</i> Mitchell's appointment as member and chairman of the SERC.	
H.157-H.166 H.157	General correspondence and papers  1982, 1985-1986  Includes correspondence and papers <i>re</i> Mitchell's appointment as member and chairman of the SERC.  1987  'Report of Chairman's Visit to Japan 7-12 August 1987'	

H.161 1989 'Forward Look 1989 1990/91 to 1992/93' H.162 Bound volume H.163 'Report of Chairman's Visit to the People's Republic of China 25 March - 1 April 1989' H.164-H.166 1990 3 folders. H.167 Notebook Used by Mitchell from September 1985. H.168-H.176 Chairman's weekly diary sheets 1987-1990 The sequence begins with the week beginning 28 September 1987. 9 folders. H.177-H.180 Correspondence and papers re Directorship of Royal 1987 Greenwich Observatory 4 folders. H.181-H.186 Correspondence and papers re sale of Herstmonceux 1990-1996 Castle 6 folders. Papers principally relate to inquiry into the sale by the House of Commons Public Accounts Committee. Papers at H.183-H.186 are retained in original SERC folders. The sale followed the decision of the SERC supported by

	government to move the Royal Greenwich Observatory from the Castle.	
H.187-H.194	Later miscellaneous correspondence and papers re science policy and funding	1991-1995
	Includes articles by Mitchell for New Scientist and EPSRC online.	
H.187-H.191	1991	
	5 folders.	
H.192	1992	
H.193	1993, 1995	
H.194	n.d.	
H.195-H.196	Printed papers	1990-1992
	2 folders.	
H.197	SCIENCE RESEARCH FOUNDATION (SRF)	1995-1996
	Correspondence and papers	
	Mitchell resigned from the Council of the SRF in 1996.	
	The SRF's activities related to the establishment of a science research park in the Bristol area.	

H.198-H.219

UNITED KINGDOM ATOMIC ENERGY RESEARCH ESTABLISHMENT, HARWELL

1973-1978

22 folders.

These papers were found together in very poor physical condition. As a result of their physical condition they received minimal examination at the time of processing.

The papers are presented in the order as found which was a very approximate reverse chronological order.

Includes papers *re* neutron beam facilities, 'New Harwell LINAC' project, nuclear fusion, etc.

SECTION J	VISITS AND CONFERENCES, J.1-J.17	1963-1997
	For Diamond Conferences see Section E.	
	For visits and meetings in connexion with Mitchell's roles at CERN and the SERC see Section H.	
J.1	Symposium on 'Radiation Damage in Semiconductors', Paris, July 1964	1963, 1964
	Carbon copy of letter of invitation to C.A. Coulson with offprint of paper by Coulson and colleagues.	
	The symposium was held immediately preceding the biennial International Semiconductor Conference. Mitchell was a member of the organising committee.	
J.2	4th Annual Meeting of the Society of Magnetic Resonance, London, August 1985	
	Invitation from M.F. Wood, Oxford Instruments, to cocktail party held in association with the meeting.	
J.3	Visit to Prague, 1985	
	One letter only arising from visit.	
J.4	Symposium on 'Climate Research, Impacts Assessment and Policy Making', Green College, Oxford, 1-2 April 1992	
	Invitation with draft programme and invitation list from Sir Crispin Tickell	
	Mitchell was obliged to decline because he would be out of the country at the time of the meeting.	
J.5	Symposium on Global Environmental Accords, Massachusetts Institute of Technology, 24-25 September 1992	
	Invitation (declined) because of another meeting in Geneva.	

#### Visits and conferences, J.1-J.17

Visit to International Institute for Applied Systems 1991-1997 J.6-J.11 Analysis (IIASA), 5-6 November 1992 Correspondence re arrangements, schedule of visit, draft of Mitchell's lecture, background papers re the IIASA, etc. At J.11 is a 1997 enquiry re global climate change found with IIASA papers. 6 folders. Mitchell gave a seminar on 'Reflections on global warming'. Seminar on Environmental Studies, Oxford, 12 November J.12 1992 Invitation from Environmental Change Unit, programme and 'Database on Environmental Studies at the University of Oxford'.

J.13-J.14 Forum Engelberg on Energy and Environment: A Question of Survival, Germany, 16 - 19 March 1993

Correspondence *re* arrangements, list of participants, programme.

2 folders.

J.15 European Academy of Environment Affairs International Symposium on 'The Greenhouse Controversy', Leipzig, Germany, November 1995

Invitation for Mitchell to participate in the meeting.

J.16-J.17 'Symposium (to mark the retirement of Professor S.D. Smith) on 'Applications of Electromagnetic Radiation', Royal Society of Edinburgh, 27 March 1997

Correspondence re arrangements, programme, abstracts, etc

2 folders.

Papers relating to 1997 Diamond Conference at Heriot-

## Visits and conferences, J.1-J.17

Watt University, Edinburgh were found with the symposium material (see J.16).

SECTION K	REFERENCES AND RECOMMENDATIONS, K.1-K.46	1991-2001
K.1-K.30	Appointments, promotions, prizes, honours, etc.	1991-1999
	Unindexed.	
K.1	1991	
K.2	1992	
K.3	1993	
K.4-K.7	1994 4 folders.	
	4 loiders.	
K.8-K.15	1995 8 folders.	
K.16-K.18	1996	
	3 folders.	
K.19-K.22	1997	
	4 folders.	
K.23-K.29	1998 7 folders.	
K.30	1999	

## References and recommendations, K.1-K.46

K.31-K.38	Academia Europaea	1992-2001
	Membership proposals.	
	Unindexed.	
K.31	1992	
K.32	1993	
K.33	1998	
K.34	1998-1999	
K.35	1999	
K.36	2000	
K.37-K.38	2001	
	2 folders.	
K.39	Nobel Prize Committee (Physics)	1993
	Nomination.	
	Unindexed.	
K.40-K.46	Royal Society	1992-1999
	Elections etc.	
	Unindexed.	

## References and recommendations, K.1-K.46

K.40	1992
K.41	1995
K.42	1995-1997
K.43	1996-1997
K.44	1998
K.45	1999
K 46	Nd

## INDEX OF CORRESPONDENTS

ACADEMIA EUROPAEA	H.1
ALLEN, G.C.	E.111
ASH, Sir Eric Albert	G.30
ASHFOLD, M.N.R.	E.162
BAKER, Michael	E.98
BERGER, A.	F.21
BERRY, Sir Michael Victor	H.161
BLEANEY, Brebis	A.8, E.2
BOKSENBERG, Alexander	H.177-H.180, H.193
BONDI, Sir Hermann	F.22
BOURGOIN, J.	E.65
BOYER, Larry L.	F.72, F.73
BRAY, Jeremy	See H.82
BRITISH BROADCASTING COUNCIL	H.157
BROOKER, Geoffrey A.	C.6
BROOKES, Chris A.	E.97, E.134, E.139, E.150 See also E.146
BROOKES, Jill	E.145
BURGEN, Sir Arnold Stanley Vincent	H.1
CAMPBELL, E. Michael	H.92

CAMPBELL, E. Michael H.

CAMPBELL, James W. E.94, E.97, E.99, E.129 See also E.96

CASHMORE, Roger H.161

CAVENEY, Robert J.

E.3, E.4, E.5, E.7-E.9, E.11-E.17,
E.22-E.24, E.31-E.41, E.57-E.62,
E.68, E.86-E.92, E.97, E.98, E.108,
E.115, E.121, E.123, E.128, E.136,

E.146, E.147, E.150, E.153

See also E.94, E.96

CERN	H.2-H.59
CHARLES PHILIP ARTHUR GEORGE, HRH Prince	F.23
CHARLES, P.A.	H.177
CHARPAK, Georges	H.33
CHERNS, David	E.147
CLARK, David	H.189
CLAUS, Prince, of the Netherlands	H.158
COLLIER, John G.	F.19
COLLINS, Alan T.	E.132 See also E.134, E.146
COMMISSION OF THE EUROPEAN COMMUNITIES	
DIRECTORATE-GENERAL FOR SCIENCE, RESEARCH AND DEVELOPMENT	F.18
COOK, Sir Alan Hugh	H.177 See also H.179
COULSON, Charles Alfred	D.23 See also J.1
COULSON, Charles Alfred  CRAY RESEARCH (UK) LTD	
	See also J.1
CRAY RESEARCH (UK) LTD	See also J.1 H.166
CRAY RESEARCH (UK) LTD CURIEN, Hubert	See also J.1 H.166 H.1, H.49
CRAY RESEARCH (UK) LTD  CURIEN, Hubert  THE DIAMOND TRADING COMPANY LTD	See also J.1 H.166 H.1, H.49 E.135, E.151
CRAY RESEARCH (UK) LTD  CURIEN, Hubert  THE DIAMOND TRADING COMPANY LTD  DITCHBURN, Robert William	See also J.1 H.166 H.1, H.49 E.135, E.151 E.8, E.13
CRAY RESEARCH (UK) LTD  CURIEN, Hubert  THE DIAMOND TRADING COMPANY LTD  DITCHBURN, Robert William  DIXON, Maurice	See also J.1 H.166 H.1, H.49 E.135, E.151 E.8, E.13 D.18, D.19
CRAY RESEARCH (UK) LTD CURIEN, Hubert  THE DIAMOND TRADING COMPANY LTD DITCHBURN, Robert William DIXON, Maurice DOMB, Cyril	See also J.1 H.166 H.1, H.49 E.135, E.151 E.8, E.13 D.18, D.19 G.10
CRAY RESEARCH (UK) LTD CURIEN, Hubert  THE DIAMOND TRADING COMPANY LTD DITCHBURN, Robert William DIXON, Maurice DOMB, Cyril DUGDALE, J. Sydney	See also J.1 H.166 H.1, H.49 E.135, E.151 E.8, E.13 D.18, D.19 G.10 H.157 E.11

EUROPEAN SCIENCE AND TECHNOLOGY ASSEMBLY H.60-H.79

(ESTA)

EUROPEAN SCIENCE FOUNDATION H.80, H.81

EVANS, Stephen E.148, E.151

EVANS, Trevor E.2, E.3, E.91

EVENING STANDARD F.20

FIELD, John Edwin E.91, E.93, E.94, E.97, E.99, E.102,

E.128, E.129, E.144 See also E.134, E.146

FINNEY, John L. F.66

FRANK, Sir (Frederick) Charles E.91, E.144

FUJIWARA. Shuzo G.30

GORINGE, M.J. F.72

GREAT BRITAIN AND NORTHERN IRELAND

CABINET OFFICE

OFFICE OF SCIENCE AND TECHNOLOGY H.22-H.26, H.37, H.93

DEPARTMENT OF EDUCATION AND SCIENCE H.13, H.14, H.21, H.161, H.164,

H.189, H.191

**PARLIAMENT** 

HOUSE OF COMMONS SCIENCE AND H.82-H.90

**TECHNOLOGY COMMITTEE** 

GREAVES, G.N. E.151

GYORFFY, Balazs L. H.142

HALPERIN, A. E.66

HARLEY, Richard T. E.18, E.19

HASSARD, John E.126

See also E.127A

HAWKES, Nigel F.18

HENDERSON, Sir Denys F.21

HIGHFIELD, Roger	F.22
HOOGLAND, Walter	H.23
HOOPER, R.M.	E.93
HOPKINS, Harold Horace	A.14
HOUGHTON, Sir John Theodore	F.23
HOWARTH, Alan	H.13, H.188
HYLAND, Gerard J.	D.24
IBM (INTERNATIONAL BUSINESS MACHINES CORPORATION)	E.18, E.19
IMPERIAL CHEMICAL INDUSTRIES PLC	F.21, F.22
INSTITUT LAUE-LANGEVIN, GRENOBLE	H.91
INSTITUTE OF PHYSICS	A.37
INTERGOVERNMENTAL PANEL ON CLIMATE CHANGE	F.23
INTERNATIONAL CHAMBER OF COMMERCE	
OFFICE OF ENVIRONMENT AND ENERGY	F.18
INTERNATIONAL THERMONUCLEAR EXPERIMENTAL REACTOR (ITER)	H.92
JANOSI, Peter E. de	J.6
JARMAN, R.T.	F.20
JONES, Barbara L.	E.108, E.112, E.114-E.119, E.125
JONES, Harry	A.50
JONES, Reginald Victor	A.50
KALMUS, George	H.96, H.187
KENWARD, Michael	H.193
KLUG, Sir Aaron	H.96
KONDRATYEV, Kirill Ya	F.20
KOURILSKY, François	H.164

LANG, Andrew Richard E.103, G.30 LEIBNITZ, Heinz MAIER-A.50 LEWIS, Jack, Baron H.93 LOMER, Jennifer N. E.65 LONGAIR, Malcolm Sim H.157 LOUBSER, J.H.N. E.67 See also E.129 LOVESEY, Stephen W. F.59, F.61-F.63, F.69, H.142 McCOMBIE, Charles W. E.2 MAINWOOD, Alison E.127, E.128 MARSHALL, Walter, Baron A.8, H.157 MASSAM, Alan F.20 MERRISON, Maureen, Lady H.52 MILLEDGE, H. Judith E.101 See also E.121 MOORE, Moreton E.101, E.102, E.128, E.153 MOORE, Sir Patrick Alfred CALDWELL-H.157 MOORE, W. Henson H.13 MOTT, Sir Nevill Francis A.8 See also A.14 E.2 NABARRO, Frank Reginald Nunes NATIONAL SCIENCE FOUNDATION, Washington D.C. H.161 NATO SCIENCE COMMITTEE H.93 NATURE E.139 NELMES, Richard F.66 **NEW SCIENTIST** F.33, H.188 NEWBY, Sir Howard Joseph F.18 NEWTON, Mark E. E.148, E.152

RUBBIA, Carlo

SALTYKOV, Boris

#### Index of correspondents

O'FALLON, John R. H.46 **OXFORD UNIVERSITY PRESS** F.31, F.32, F.58-F.71 H.48 PEOPLES, John R. H.30 PERKINS, Donald Hill PETIAU, Pierre H.29 PHILIP, HRH The Prince, Duke of Edinburgh F.21 PHILOSOPHICAL MAGAZINE F.72 PILLINGER, Colin Trevor E.94, E.96, E.131 See also E.133, E.146 POUNDS, Kenneth Alwyne H.84 See H.82 PRINS, Johan F. E.154, E.156 H.94, H.95 QUEEN ELIZABETH HOUSE, OXFORD RAAL, F.A. ('Frikkie') E.2, E.7 RAPTIS, Costas F.7, F.8, F.10, F.11 RICHARDSON, Neville V. E.135 A.10 RICHARDS, Sir Rex Edward H.21, H.191 RICHMOND, Sir Mark Henry See H.166 ROSENBERG, Harry M. E.3, E.7 See also E.22, E.34 **ROYAL SOCIETY** A.16, A.36, F.73, F.74, H.80, H.96, H.187 ROYAL SOCIETY OF SOUTH AFRICA A.36

> H.3-H.7, H.9, H.17, H.18, H.23, H.25, H.29, H.33, H.34, H.39, H.40,

H.46, H.48, H.49, H.52 See also H.20, H.30, H.38

H.35

SCHOPPER, Herwig

J.13

SCIENCE AND ENVIRONNMENTAL POLICY PROJECT

H.109-H.117

(SEPP)

SCIENCE RESEARCH COUNCIL / SCIENCE AND ENGINEERING RESEARCH COUNCIL

SCIENCE RESEARCH FOUNDATION H.197

SEITZ, Frederick F.20

SELLSCHOP, Jacque Pierre Friedel A.36, E.4, E.5, E.151, E.160

See also E.8

H.3, H.21, H.118-H.196

SINGER, Siegfried Fred H.109, H.110, H.112, H.114, H.116,

H.117

SINGLETON, John D.26

SMITH, Sir Christopher Hubert LLEWELLYN H.28, H.30, H.84, H.191, H.194

SMITH, Sir Francis GRAHAM- H.179

SOUTHWOOD, Sir (Thomas) Richard (Edmund) F.22

STEEDS, John Wickham E.97, E.128, E.147, E.157, E.160,

H.197

See also E.133

STEWART, A.D. Garry E.135, E.136, E.142, E.150, E.154,

E.158, E.160

STEWART, Sir William Duncan Paterson F.18

STONEHAM, E. Marshall E.65

SUNDAY TELEGRAPH H.183

THATCHER, Margaret Hilda, Baroness H.164, H.166

THOMAS, Sir John Meurig G.30

TICKELL, Sir Crispin (Charles Cervantes) J.4

THE TIMES F.18

See also F.24

TREEN, John Pike and TREEN, Charles Pike F.21, F.22

TURNBULL, Andrew H.165

U.K. CENTRE FOR ECONOMIC AND ENVIRONMENTAL DEVELOPMENT	F.20
UNITED KINGDOM ATOMIC ENERGY AUTHORITY	F.18, H.198-H.219
UNITED STATES OF AMERICA	
DEPARTMENT OF ENERGY	H.13, H.46
VIANES, George	H.16
WALDEGRAVE OF NORTH HILL, William Arthur, Baron	H.192
WATSON, J.H.P.	E.150
WEIGHTMAN, Peter	E.147
WILCOCK, William Leslie	H.179
WILKS, Eileen M	E.9, E.15, E.16, E.22, E.31, E.34 See also E.38, E.40
WILKS, John	E.3, E.4, E.7, E.8, E.11-E.17, E.22- E.24, E.31, E.32, E.34-E.40, E.57- E.62, E.68
WOLFENDALE, Sir Arnold Whittaker	G.44, H.187, H.189
WOOD, Sir Martin Francis	J.2
WORLD SCIENTIFIC PUBLISHING COMPANY	F.69
WYNNE, Charles Gorrie	H.157
ZAHAC, Stefan	J.3
ZIMAN, John Michael	G.34
	DEVELOPMENT  UNITED KINGDOM ATOMIC ENERGY AUTHORITY  UNITED STATES OF AMERICA  DEPARTMENT OF ENERGY  VIANES, George  WALDEGRAVE OF NORTH HILL, William Arthur, Baron  WATSON, J.H.P.  WEIGHTMAN, Peter  WILCOCK, William Leslie  WILKS, Eileen M  WILKS, John  WOLFENDALE, Sir Arnold Whittaker  WOOD, Sir Martin Francis  WORLD SCIENTIFIC PUBLISHING COMPANY  WYNNE, Charles Gorrie  ZAHAC, Stefan