Catalogue of the papers and correspondence of

## SIR DAVID CHILTON PHILLIPS FRS

(b.1924)

Compiled by Jeannine Alton

**VOLUME III** 

Sections O - R Index of correspondents

Deposited in the Bodleian Library, Oxford

NCUACS 45/1/94

All rights reserved University of Bath 1994 (ABRC)

SECTION O

0.1-0.261

APPOINTMENTS AND PERSONAL 0.1-0.5 STRUCTURE AND MEMBERSHIP 0.6-0.14 RESEARCH COUNCILS 0.15-0.49 Heads of the Research Councils 0.15-0.20A Agricultural Research Council/Agricultural 0.21-0.25 and Food Research Council (ARC/AFRC) Medical Research Council (MRC) 0.26-0.30 Natural Environment Research Council 0.31-0.37 (NERC) Science and Engineering Research Council 0.38-0.45 (SERC) Social Science Research Council/Economic 0.46-0.49 and Social Research Council (SSRC/ESRC) UK SCIENTIFIC AND ACADEMIC INSTITUTIONS 0.50-0.58 **British Academy** 0.50 British Museum (Natural History) 0.51

- 0.52 Committee of Vice-Chancellors and Principals of the Universities of the United Kingdom (CVCP)
- 0.53 Fellowship of Engineering
- 0.54 National Advisory Board for Local Authority (later Public Sector) Education (NAB)
- O.55, O.56 Royal Society
- 0.57 Universities Funding Council
- 0.58 University Grants Committee

0.59-0.68	UK SCIENCE GROUPS	POLICY INSTITUTIONS AND PRESSURE
	O.59	Centre for Exploitation of Science and Technology (CEST)
	O.60	Civil Service College
	0.61-0.65	Council for Industry and Higher Education (CIHE)
	0.66, 0.67	Parliamentary and Scientific Committee
	O.68	Science Policy Support Group (SPSG)
0.69-0.79	PARLIAMENT	ARY SELECT COMMITTEES
	0.69-0.75	House of Lords
	0.76-0.79	House of Commons
	0.10-0.13	
0.80-0.97	GOVERNMEN	IT DEPARTMENTS
	O.80	Cabinet Office: Advisory Council on Applied Research and Development (ACARD)
	0.81-0.83	Cabinet Office: Advisory Council on Science and Technology (ACOST)
	0.84	Department of Trade and Industry: Technology Requirements Board
	0.85-0.97	Department of Trade and Industry: LINK Steering Group. With an introductory note
0.98-0.105	SCIENCE PC	DLICY STUDIES
O.106-0.120	REPORTS A	ND WORKING PARTIES
0.121-0.123	B SEMINARS	AND CONFERENCES

Advisory Board	d for the Resea	rch Councils (ABRC)
0.124-0.126	MISCELLANEO	US COMMITTEES AND SUB-COMMITTEES
0.127-0.141	INTERNATION	AL RELATIONS AND COLLABORATION
0.142-0.175	VISITS AND EN With an introdu	
	0.142-0.153	UK
	0.154-0.175	Overseas

- O.176-O.203 ABRC SUBMISSIONS AND ADVICE With an introductory note
- 0.204-0.219 1993 WHITE PAPER AND BOUNDARY STUDY

0.204-0.211	White Paper With an introductory note
0.212-0.219	Boundary Study With an introductory note

- O.220-O.234 MEMORANDA AND MEETINGS 1982-93
- O.235-O.247 GENERAL CORRESPONDENCE 1983-93

0.248-0.261 ADDENDUM

## APPOINTMENTS AND PERSONAL

0.1	Phillips's appointment as Chairman of ABRC in succession to Sir Alec Merrison, for four years from January 1983. The post at that time was regarded as part-time (two days per week).	
	Includes letter of appointment, letters of congratulation, arrangements with Oxford University for reimbursement of Phillips's professorial salary pro rata.	
	Similar material renewing appointment for a further four years from January 1987.	
0.2	Appointment to Higher Education Funding Council of England (HEFCE) 1992 and renewal 1993.	
0.3	Letters from former members of ABRC not re-appointed following reorganisation in 1989-90 (see O.8-O.11).	
0.4	Miscellaneous correspondence 1989-90 with members of ABRC.	
0.5	Shorter personal correspondence with members of ABRC, staff and colleagues 1985-93.	
STRUCTURE AND MEMBERSHIP		
O.6	Ideas and memoranda on organisation and role of ABRC, by members and officials 1982, 1983, 1984.	
0.7	Miscellaneous on secretariat 1985-86.	

## Restructuring 1988-90

	In response to the Morris report and ABRC discussions, Phillips put forward a letter to the Secretary of State (J. MacGregor) on 15 November 1989 recommending that 'the ABRC should be reconstituted as a smaller, more authoritative, body with a specific remit to promote greater harmonisation of the Research Councils' activities'. The advice was accepted on 19 January 1990, to take effect from 1 April. Phillips accepted the invitation to become the first Chairman of the new Board, on a full-time basis.
	See B.46 for Phillips's notes on meetings and discussions on restructuring.
O.8	Proposed study by Coopers & Lybrand for new model ABRC 1988.
O.9	Official letters and papers on restructuring recommendation, membership of new Board, implications for Research Councils etc. 1989-90.
O.10	Miscellaneous on Phillips's remit and grading as Chairman of new ABRC 1990.
0.11	Miscellaneous on appointments to new ABRC and on support staff. See also 0.116-0.119.
Membership	
0.12	Correspondence and papers 1982-88 on membership of ABRC: recommendations, appointments, renewals, resignations, discussions on balance of interests, representation, rotation etc. Includes miscellaneous membership lists.
O.13	Research Council appointments; papers for meeting with Chief Scientists to discuss appointments, especially to NERC and SERC, 16 January 1984.
O.14	Miscellaneous correspondence 1983-93 on appointments to Research Councils and other public offices.

## RESEARCH COUNCILS

## Heads of the Research Councils (HORCs)

	Correspondence and papers, some brief and formal, others more detailed, on meetings, discussions, possible research projects, funding bids etc. An important concern is inter-Council collaboration, with the concomitant establishment of Interdisciplinary Research Centres (IRCs).
0.15	1982-83.
0.16	1985-86. Mainly on Biotechnology as possible collaborative project within Research Councils.
0.17	1985-87. From September 1987 Phillips was invited to attend HORCs meetings on a regular basis.
O.18	1988. Mainly on IRCs and overlapping of Councils' interests in biological research.
O.19	1989.
O.20	1990-92.
O.20A	Agenda, papers and minutes of HORCs meetings September 1987 - April 1988, attended by Phillips and some with annotations by him.
Agricultural Researc	h Council/Agricultural and Food Research Council (ARC/AFRC)
0.21	Correspondence and papers September-November 1983, arising from reports on research and development in agriculture and food by the Joint

Consultative Organisation (June 1982 and April 1983) and the House of Commons Select Committee (May 1983). The material centres on a meeting

	with the Prime Minister 1 November 1983 to consider possible reorganisation and streamlining of agricultural research which had been considered over-administered. It includes letters and memoranda from individuals and institutions, briefings and suggestions from civil servants, note of the meeting.	
0.22	General correspondence and papers on ARC/AFRC affairs, meetings, structure and research, funding, appointments, a little social and personal 1983-85.	
0.23	Similar 1987-90.	
0.24	Similar 1991-93.	
O.25	AFRC appointments 1990.	
Medical Research Council (MRC)		
0.26	Correspondence and papers 1986-90 on the proposed National Centre for Clinical Research, combining on a single site the work and resources of the Royal Postgraduate Medical School (RPMS) at Hammersmith Hospital and the MRC Clinical Research Centre (CRC) at Northwick Park. The Hammersmith site was the unanimous choice of the consultative committee (Chairman: Sir Robin Nicholson) in April 1988.	
0.26	Clinical Research, combining on a single site the work and resources of the Royal Postgraduate Medical School (RPMS) at Hammersmith Hospital and the MRC Clinical Research Centre (CRC) at Northwick Park. The Hammersmith site was the unanimous choice of the consultative committee	
	Clinical Research, combining on a single site the work and resources of the Royal Postgraduate Medical School (RPMS) at Hammersmith Hospital and the MRC Clinical Research Centre (CRC) at Northwick Park. The Hammersmith site was the unanimous choice of the consultative committee (Chairman: Sir Robin Nicholson) in April 1988. Correspondence and papers 1985-87 on proposed MRC National Epidemiological Surveillance Centre for AIDS research, and proposed setting-up of two 'task forces' on vaccines (chaired by J.L. Gowans) and	
0.27	Clinical Research, combining on a single site the work and resources of the Royal Postgraduate Medical School (RPMS) at Hammersmith Hospital and the MRC Clinical Research Centre (CRC) at Northwick Park. The Hammersmith site was the unanimous choice of the consultative committee (Chairman: Sir Robin Nicholson) in April 1988. Correspondence and papers 1985-87 on proposed MRC National Epidemiological Surveillance Centre for AIDS research, and proposed setting-up of two 'task forces' on vaccines (chaired by J.L. Gowans) and chemotherapy (chaired by Phillips).	

## Natural Environment Research Council (NERC)

0.31	Papers for NERC Forward Look 1983, and presentation of reports to ABRC, including move from London and development of site at Keyworth, Nottinghamshire.	
0.32	Correspondence and papers 1984-87 on plans for British Geological Survey, and for Earth Sciences.	
0.33	Correspondence and papers 1984-85 on Ocean Drilling Programme.	
0.34	General correspondence and papers on NERC affairs, meetings, research projects, funding, a little social and personal 1983-87.	
0.35	Papers for NERC Seminar 'Considering the Future' 5 November 1987, including briefing for Phillips's introductory talk.	
0.36	General correspondence and papers on NERC affairs 1988-90.	
0.37	Similar material 1991-93.	
Science and Engineering Research Council (SERC)		
O.38	Correspondence and papers 1982-83 on the Nuclear Structure Review Committee, set up by SERC in October 1982 'to review the state of nuclear structure physics in the UK and to consider the future of the Nuclear Structure Facility' [at Daresbury]. The chairman was E.W.J. Mitchell.	
	Includes correspondence, copy of draft report, submissions from university physics departments.	

O.39	Correspondence and papers February-September 1983 on the International Subscriptions Working Group, set up by H.M. Treasury 'to consider the contribution of international scientific collaboration as a cost-effective way of doing research in the science and engineering field, and the implications of cash planning for participation '.
	The working group was initiated mainly to discuss and/or provide for difficulties experienced by SERC in funding international subscriptions (especially to CERN) which were vulnerable to exchange rate fluctuations.
	Phillips was a member. The chairman was J. Kelley (Treasury).
	Includes preliminary exchanges of correspondence and memos, meetings on 24 February, 14 June, 4, 25 July, 15 August, draft report, comments, final version.
O.40	Correspondence and papers 1983-87, mainly on membership and cost of CERN.
	Includes official documents, minutes of meetings and discussions, ABRC advice, visits to CERN, report of Kendrew Committee, and also representations from concerned physicists and departments, requests for meetings etc.
0.41	General correspondence and papers 1983-84 on SERC affairs, meetings, projects, funding. The material is more extensive than that for other Research Councils, partly because of the larger sums involved and the higher profile of the projects in question such as CERN and the Daresbury Laboratory. The correspondents include Council and committee officials and also an appreciable number of colleagues and academics writing on funding cuts, rejected grant applications and the implications of government policy for various branches of scientific activity.
0.42	Similar material 1985-86.
0.43	Similar material 1987-89.
0.44	Similar material 1990-91.
O.45	Similar material 1992.

## Social Science Research Council/Economic and Social Research Council (SSRC/ESRC)

O.46	General correspondence and papers on SSRC/ESRC affairs, meetings, research projects, appointments, change of name, a little social and personal 1983-84.	
0.47	Papers for Council meeting, Sunningdale, July 1984.	
O.48	General correspondence and papers 1985-87.	
O.49	Similar material 1990-92.	
UK SCIENTIFIC AND	ACADEMIC INSTITUTIONS	
British Academy		
O.50	Brief correspondence and papers 1986, 1987 on channels of funding for research in the humanities.	
British Museum (Natural History)		
O.51	Correspondence and papers 1983-90 on links with ABRC, funding, appointments of Trustees, corporate plan etc.	
Committee of Vice-C (CVCP)	Chancellors and Principals of the Universities of the United Kingdom	
O.52	Correspondence and papers on aspects of funding and research in higher education 1983-91.	

## Fellowship of Engineering

0.53	Correspondence and papers 1983-91 on funding and grants-in-aid, lectures
	and social occasions.

National Advisory Board for Local Authority (later Public Sector) Higher Education (NAB)

0.54 Correspondence, reports and papers 1983, 1987, mainly on funding and nature of research in public sector higher education.

### **Royal Society**

- 0.55 Correspondence, reports, memoranda on meetings and discussions on science policy and funding, including Royal Society 'Forward Look', relations with other organisations etc. 1983-88.
- O.56 Similar material 1989-93.

### **Universities Funding Council**

0.57 Correspondence and papers 1990-91.

### **University Grants Committee**

O.58 Correspondence, reports and papers on UGC matters, higher education structure and funding, review of UGC, ABRC strategy document, Biological Sciences Review, Research Selectivity Exercise etc. 1974, 1983-88.

### UK SCIENCE POLICY INSTITUTIONS AND PRESSURE GROUPS

### Centre for Exploitation of Science and Technology (CEST)

0.59 Correspondence and papers, minutes, meetings etc. 1990-92 relating to CEST, a private group with limited membership, established in 1988 to encourage links between science, technology and engineering, and with industry. It also prepared research reports. Phillips was a member of Council, of the CEST informal dining and discussion club, and of an advisory sub-committee.

#### Civil Service College, Sunningdale

0.60

0.62

Correspondence and papers, mainly on annual meeting of Permanent Secretaries, Home Civil Service, October 1986 to discuss Government policy for science and technology, opened by G. Porter. Phillips attended. Also a little later material 1991.

### Council for Industry and Higher Education (CIHE)

This was an independent body with membership drawn from major industrial companies, vice-chancellors, directors of polytechnics and heads of colleges. It was set up in 1986 under the chairmanship of James (later Lord) Prior 'to encourage industry and higher education to work together and to represent their joint thinking to government'. The Director was Patrick Coldstream.

Several of the papers develop the idea of 'Roundtable' meetings of industrial, academic and Whitehall policy-makers, on the model of those organised by the US National Academy of Sciences.

Material includes correspondence and papers, arrangements and official briefings for meetings.

0.61 March 1987. 'Strategy Document' entitled 'Towards a Partnership. Higher Education - Government - Industry.'

Discussion meeting with company heads of research October 1987. Papers, official briefing.

0.63	Council meeting May 1989. Plans for 'Roundtable'.
0.64	Mainly on 'Consultation' at Templeton College Oxford, June 1989, to discuss proposal to 'set up a high-level group to meet two or three times a year to take an overview of the real issues implied in making a reality of an industry/academia/government "partnership" in science and technology'. Correspondence, Phillips's notes, summaries of the discussions prepared by CIHE and by DES.
O.65	Correspondence and papers 1989-91 on formation of 'Roundtable' (Phillips was a member), first and second meetings, proposed meeting with Secretary of State.
Parliamentary and S	cientific Committee
	This is 'an unofficial group of members of both Houses of Parliament and British members of the European Parliament, representatives of certain scientific and technical institutions, some science-based companies and universities and polytechnics'.
	The ABRC was elected a member of the committee in November 1983, Phillips being its representative. He addressed the Committee on several occasions, became a Vice-President and Vice-Chairman, and also served on its Science and Technology Group and on the Editorial Advisory Board of <i>Science in Parliament</i> .
O.66	General correspondence and papers on meetings, functions, addresses etc. 1983-91.
0.67	Correspondence and papers 1985-91 relating to the Committee's Science and Technology Group, set up in June 1985, on which Phillips served, also proposed 'Office of Technology Assessment', fund-raising for 'Science and Technology Information Service for Parliament' (STISP), seminars etc.
Science Policy Sup	port Group (SPSG)
	and a state of the Contember 1006 on the initiative of the ESPC with

SPSG was established in September 1986 on the initiative of the ESRC, with Research Councils and other funding. It aims to promote research, analysis and information on the economic and social aspects of scientific and technical change, with a programme of seminars, study groups and publications. The founder chairman was J. Ziman.

0.68 Correspondence and papers 1987-92 on workshops, discussions, publications, appointments.

## PARLIAMENTARY SELECT COMMITTEES

### House of Lords

Correspondence, memoranda and papers relating to House of Lords Select Committee on Science and Technology and Phillips's evidence to its subcommittees. Includes some annotated and amended transcripts, briefings and notes.

- 0.69 1985-86 'The public support of civil science and technology in the UK'.
- 0.70 1988 Agriculture and food research.
- 0.71 1989 Science budget.
- 0.72 1990 International scientific programmes.
- 0.73 1992 Faraday programme.
- 0.74 1993 Priorities for the science base.
- 0.75 1993 Regulation of the UK biotechnology industry and global competitiveness.

#### **House of Commons**

0.76

1984	Education, Science and Arts Committee.	Science budget.
------	--	-----------------

0.77	1988 Education, Science and Arts Committee. DES and Office of Arts and Libraries (OAL) expenditure: science funding.
0.78	1990 Education, Science and Arts Committee. Science policy and the European dimension.
O.79	1992 Science and Technology Committee. Inquiry into the policy and organisation of the Office of Science and Technology.
GOVERNMENT DEPA	RTMENTS
Cabinet Office	
O.80	Advisory Council on Applied Research and Development (ACARD).
	The Council was set up in 1976 to advise and publish reports on applied research and technology, its secretariat and costs being met by the Cabinet Office. Phillips was appointed in April 1983 <i>ex officio</i> as ABRC Chairman. In 1987 ACARD was re-structured as the Advisory Council on Science and Technology (ACOST), see O.81-O.83, with the same chairman Sir Francis Tombs (later Sir Robin Nicholson).
	Correspondence and papers 1983-87, meetings, appointments.
O.81	Advisory Council on Science and Technology (ACOST)
	This was the successor to ACARD, from 1987 to 1993 when it was replaced (see 0.82).
	General correspondence and papers 1988-90, including material on ACOST Study Group on the Science Base, Phillips's notes for ACOST discussion with Prime Minister, meetings with ministers, comments on reports.
0.82	Similar material 1991-93 including letter May 1993 on replacement of ACOST by new Council for Science and Technology to be chaired by Chancellor of the Duchy of Lancaster.

O.83 Correspondence and papers 1988-89 on ACOST study of Global Environment Research (GER), chaired by G. Porter. Phillips served. Material includes arrangements for meetings, background papers and submissions, minutes, draft report and comments.

### Department of Trade and Industry

Technology Requirements Board, set up in November 1985 to identify the R & D requirements of industry and technology, and to advise the Department on strategy and the allocation of funds. The Chairman was Sir John Collyear. Phillips was appointed, initially for two years, on the inception of the Board. The Board's report, 'Focus on Innovation' was produced in July 1987. It was dissolved in June 1988 by Lord Young.

Correspondence and papers, minutes, conferences and meetings. Includes a little material on the LINK scheme (formerly 'pull-through').

0.85

0.86

0.87

0.84

LINK Steering Group (LSG).

This was set up in 1986 as a cross-government initiative to co-ordinate and promote collaborative LINK projects intended to bridge the gap between the science and engineering base and industry. Government was to contribute up to 50% of eligible costs. Phillips served on the Steering Group; Robert Malpas was Chairman.

The LINK secretariat was provided by the Department of Trade and Industry; several government departments, research councils and higher education institutions were involved as funding or evaluating agencies.

In the 1993 White Paper *Realising our potential*, responsibility for the LINK scheme, and hence for the LINK Steering Group and its secretariat, were transferred to the Office of Science and Technology. The Group was to report jointly to the Chancellor of the Duchy of Lancaster and the President of the Board of Trade to reflect the Department of Trade and Industry's considerable sponsorship of the scheme.

Correspondence and papers March-April 1986 on the setting-up and financing of LINK programme (earlier referred to as 'Pull-through', see correspondence and papers June and November 1986 in O.84).

First LSG meeting 8 May 1987.

Meeting 27 July 1987.

0.88	Meeting 17 November 1987.
O.89	Meeting 12 January 1988.
O.90	Meeting 15 March 1988.
0.91	Correspondence April 1988, Minutes of meetings 9 May, 6 July, 21 September 1988.
0.92	Miscellaneous papers October-November 1988. Meeting 24 January 1989.
O.93	Meeting 6 April 1989.
0.94	Meeting 13 June 1989.
O.95	Meeting 1 August 1989.
O.96	Meeting 26 September 1989.
0.97	Correspondence and papers 1990-92, including publication of first LSG report February 1992.

## SCIENCE POLICY STUDIES

After preliminary discussions, ABRC announced in July 1983 its intention to commission exploratory studies in various fields of science policy. The studies were commissioned by SSRC on behalf of the Council. Organisations in France and America were involved, but most of the studies were produced by the Science Policy Research Unit (SPRU) at the University of Sussex.

D.C. Phillips NCUACS 45/1/94	288
,	Advisory Board for the Research Councils (ABRC)
O.98	Preliminary papers and negotiations October 1982 - May 1983, meetings and proposals, comments on proposals (not all favourable).
O.99	Launch of proposal, meetings of Science Policy Studies Steering Group 1983, a little later material 1986-89.
O.100	Brief correspondence 1984 on SPRU publication Foresight in Science: Picking the Winners (written for ACARD).
0.101	Brief correspondence 1984 and draft of <i>Trends in British Scientific Performance: Some Myths Exploded</i> (supported by ABRC and Leverhulme Trust).
0.102	Correspondence 1985 and draft of <i>Bibliometric Analysis for Science Policy:</i> <i>Evaluation of United Kingdom. Research Performance on Ocean Currents</i> <i>and Protein Crystallography</i> (for ABRC and others).
O.103	Correspondence 1985 and draft of <i>The Limitations of Co-citation Analysis</i> (funded by ABRC via Royal Society).
	Brief correspondence 1986 on SPRU study for ABRC on Government funding of research (no other documentation).
O.104	Correspondence 1987 on various SPRU projects and reports, and on publication of ABRC report on bibliometric profiles.
O.105	Brief later correspondence with SPRU 1990-91.
REPORTS AND WOR	
O.106-O.108	Correspondence and papers 1983-86, 1989-90, on a proposed National Research Centre for nuclear magnetic resonance (NMR) imaging. At a meeting on 14 June 1983, in response to concern voiced by interested parties on the future of MRI in Britain, ABRC commissioned a study from

R.E. Richards, completed in December 1983. Lengthy negotiations followed on the feasibility and location of such a centre, the claims of Oxford University being canvassed and pressed; eventually, the work continued at Nottingham University under the direction of P. Mansfield.

The discussions involved individuals, university authorities, hospital and medical centres, research councils (MRC, SERC), government departments and instrument makers. The material includes research proposals, location costings and budgeting, notes of meetings, discussions, conversations etc.

O.106	1983
0.107	1984
O.108	1985-86, 1989-90.
O.109	ABRC study of commissioned research, undertaken on Phillips's initiative by Sir Ronald Mason July 1983, completed October 1983.
	Correspondence and papers including setting-up, draft and comments.
0.110	ABRC Working Party on Private Sector Funding (Chairman: P. Mathias), report submitted March 1986.
	Correspondence and papers 1985-86.
0.111-0.114	ABRC enquiry on 'Brain Drain', conducted by questionnaire and correspondence June-August 1985, the findings being reported by Phillips to Secretary of State in September 1985.
0.111	Questionnaire, summary of replies, Phillips's letter and report, press release.
0.112	Correspondence from colleagues and recipients of questionnaire (similar to
	material in 0.111 but may include replies and follow-up letters).

D.C. Phillips NCUACS 45/1/94	290
	Advisory Board for the Research Councils (ABRC)
0.113	Correspondence, memoranda and papers October-November 1985 relating to the enquiry and to meetings of Cabinet Committee Misc. 119 at which it was discussed (includes analysis of ABRC enquiry).
0.114	Papers for Royal Society Science Policy Forum on Brain Drain, July 1986.
O.115	ABRC commissioned study on 'The capacity for change in a Research Council: a study of the A.F.R.C.', conducted by R. Riley, begun December 1985, completed May 1986.
	Correspondence and papers, copy of report as submitted.
0.116-0.119	ABRC Review of Research Councils' responsibilities for biological sciences.
	The review group was set up in May 1988 (chairman J.R.S. Morris) and presented its report (the 'Morris Report') in April 1989. Its recommendations on the restructuring of responsibilities within the Research Councils, and a proposed single National Research Council with executive powers, aroused wide comment in the scientific community. A 'follow-up' meeting was held 13-15 October 1989 which led to the restructuring of the ABRC, but not to the adoption of a single national Council (see also O.8-O.11).
0.116	Setting-up of review group, membership and terms of reference, meeting arrangements, papers and submissions for meeting 27 October 1988, correspondence April-November 1988.
0.117	Draft report with Phillips's comments, April 1989.
0.118	Comments and reactions to report, May-June 1989.
O.119	Correspondence and papers for 'follow-up' meeting July-October 1989 (see also B.46).
O.120	Review Committee on 'The Future of University Biology', appointed by UGC in consultation with ABRC (Chairman T.R.E. Southwood) (see also 0.58).
	Draft report and comments 1989.

## SEMINARS AND CONFERENCES

Material may include correspondence, lists of participants, agenda/ programme, introductory, background or follow-up papers.

0.121 1983-84.

25 April 1983. Secretary of State (K. Joseph) seminar on UK research.

12 September 1983. Prime Minister's seminar on science, technology and industry.

July 1984. Prime Minister's science briefing.

2 November 1984. Seminar on the Research Councils, All Souls Oxford (organised by R. Jackson).

#### 0.122 1985-86.

10 January 1985. Seminar on research policy, Imperial College London (organised by B.H. Flowers).

1985. Ministerial meeting on 'Authority in science'.

28 November 1986. Seminar on 'Science and wealth creation', All Souls College Oxford (organised by R. Jackson).

0.123 1986-92.

16 February 1986. ABRC Seminar on 'Barriers to Growth'.

June 1992. Science seminar (organised by R. Jackson).

## MISCELLANEOUS COMMITTEES AND SUB-COMMITTEES

0.124 Inter-agency committee on Global Environmental Change (IACGEC). Phillips was chairman.

Setting-up papers, meetings and minutes, relations with other bodies, correspondence 1989-92.

Advisory B	oard for	the	Research	Councils	(ABRC)
------------	----------	-----	----------	----------	--------

0.125	Inter-agency committee on Marine Science and Technology (IACMST).
	Setting-up papers, a little correspondence 1991-92.
0.126	Interdepartmental committee on Large Experimental Facilities (ICLEF). Phillips was chairman.
	Papers for meeting 21 September 1987.
INTERNATIONAL REL	ATIONS AND COLLABORATION
0.127	Miscellaneous correspondence and papers March-November 1983 on international (mainly European) scientific collaboration, proposed visits, committee etc.
O.128	Correspondence, memoranda, meeting notes and papers 1983-87 on UK participation in European projects and facilities, mainly high energy and particle physics, CERN, ESRF, but also EMBL.
0.129	Tripartite talks on science (UK/France/Germany).
	Arrangements for, and notes on, meetings 1983, 1984.
France	
O.130	Correspondence, memoranda and papers, ministerial meetings 1982-83 on possible Anglo-French research association.
0.131	Delegation of French scientists from CNRS 1984.
0.132	Anglo-French seminar on the management of science, Windsor, 6-7 November 1985.
	Arrangements, participants, programme, information on UK and French organisation of science, Phillips's notes of meeting, UK note of 'Summary Proceedings', French 'Synthèse des Entretiens'.

0.133	Note of informal meeting with CNRS representatives 28 November 1988.
	Brief correspondence on Anglo-French collaboration on AIDS November 1988.
0.133A	Correspondence and arrangements, participants, programme, 'agreed conclusions' of UK-France roundtable, London 29 May 1991.
German Federal Rep	ublic
	The UK organisation of these meetings and seminars was undertaken by SERC.
O.134	Reports of visits to Germany by DES and SERC representatives to discuss Anglo-German scientific collaboration 1983.
O.135	Correspondence and papers 1986-87 on proposed Anglo-German seminar programme (organised by DES and SERC), discussion meeting October 1986, possible topics, participants, location.
O.136	First Anglo-German seminar, on national laboratory management, held at Cosenor's House Abingdon, 3-4 March 1987.
	Correspondence, programme, participants, discussion papers, note of meeting. Phillips gave the concluding remarks.
0.137	Seminar on molecular electronics, neural networks and biosensors, Braunschweig 3-5 December 1987.
	Correspondence, preliminary meeting and discussions, programme, participants.
	o to minute memory and of potional research centres Bonn 28-29
O.138	Second Seminar on management of national research centres, Bonn, 28-29 January 1988. Phillips chaired a session and contributed to the concluding remarks.
	Correspondence, arrangements, programme, participants, discussion papers.
0.139	Brief correspondence (only) on Anglo-German 'Round Table', Bonn, 1990.

Israel	
0.140	Correspondence and papers 1986-87 on various proposals for collaboration and scientific exchanges with Weizmann Institute via Weizmann Institute Foundation. Includes draft proposal for Exchange Fellowship Agreement between Oxford University and Weizmann Institute. See also 0.165.
Japan	
0.141	Papers on 'Japan 2000 Group' and Anglo-Japanese science and technology co-operation. 1986-87.

#### VISITS AND ENGAGEMENTS

The material is very varied in nature and extent. It ranges from official visits to institutions, laboratories, industrial companies or university departments, fully-prepared, briefed and documented, to relatively straightforward social events commemorating anniversaries, new foundations, opening ceremonies and the like. Many of the overseas visits were official, and are documented accordingly with current information on political or diplomatic factors.

The papers are arranged chronologically as far as ascertainable. They provide a full, but not exhaustive picture of this aspect of Phillips's responsibilities at ABRC, much of it at a period of officially 'part-time' service. Some of the Research Council files include similar events, and many visits to universities are subsumed in Section G or referred to more briefly in the general correspondence.

**UK visits** 

1983

0.142

10 January NERC Swindon.

22 April British Museum (Natural History).

12 May Rutherford Appleton Laboratory (SERC).

23 May Cranfield Institute of Technology.

25 May British Museum (Natural History); opening of permanent exhibition by Phillips.

November Technical Change Centre.

16 November Shell UK Research and Development Seminar.

12 December Investors in Industry.

#### 1984

0.143 2 February Institute of Petroleum (dinner).

8 February Hirst Research Centre (GEC).

7-8 March UKAEA Culham and Harwell and Rutherford Appleton Laboratory (SERC). ABRC visit deferred from September 1983. Full programme and documentation.

0.144

23 March UEI (Micro Consultants Group).

30 March Marine Biological Association (dinner).

12 April Unilever Research Colworth Laboratory. ABRC visit deferred from 28 February.

May ARC Thames Valley Institutes (dinner).

24 July British Geological Survey Keyworth. ABRC visit.

3 October Upjohn Company (dinner).

#### 1985

0.	1	45
•••		

24 April BP Research Centre, new laboratory inauguration.

11 October British Museum (Natural History) ABRC visit.

17 October ESRC 20th Anniversary Conference.

10 December IBM (UK) Laboratories.

	Advisory Board for the Research Councils (ABRC)
	1986
O.146	25 June Royal Postgraduate Medical School London.
	1987
0.147	28 January AFRC Institute of Agricultural Engineering (Silsoe, Bedford) and Silsoe College Cranfield Institute of Technology. ABRC visit. Full documentation.
0.148	24 February London (dinner).
	20 March University College London.
	22-23 June Northern Ireland.
	14 July Polytechnic of Central London.
	1988
0.149	8 February Central Office of Information/Foreign and Commonwealth Office.
	14 April UKAEA Board (lunch).
	4 October Central Electricity Generating Board (dinner).
	28 November Royal Postgraduate Medical School London. ABRC visit.

Note No documentation for UK visits in 1989.

#### 1990

 0.150
 1 May
 University of Leeds.

 8 October
 British Aerospace Advanced Computing (dinner).

 November
 Institute of Oceanographic Sciences (NERC).

 11 December
 Institute of Terrestrial Ecology Monks Wood Station (NERC).

#### 1991

0.151

12 February Sheffield.

19 April Oxford GlycoSystems.

29 May UK-France Round Table, Royal Society (see also 0.133A).

28 June Hewlett-Packard Laboratories, Bristol.

11 July John Innes Institute, Norwich.

10 October Daresbury Laboratory (SERC).

30 October Warwick University.

12 November ESRC facilities, Essex University. ABRC visit deferred from June.

26 November Aston University.

2 December NRSC.

#### 1992

0.152

January Smith System Engineering, Guildford.
 February Institute of Terrestrial Ecology, Furzebrook Dorset (NERC).
 February Institute of Freshwater Ecology, Windermere (NERC).
 February Leicester Polytechnic.
 March MRC Environmental Epidemiology Unit, Southampton.
 May Institute of Food Research, Reading (AFRC).

0.153

Advisory Board for the Research Councils (ABRC)

#### 1993

22 February Rutherford Appleton Laboratory CRAY Supercomputing Facility Inauguration (SERC).

22 March Leeds University.

7 May British Aerospace Sowerby Research Centre.

18 May Foundation for Science and Technology, Royal Society.

4 June Crystallography Group, Department of Chemistry, York University.

15 June Southampton Oceanography Centre, (NERC) time capsule laying ceremony.

## **Overseas visits**

#### Washington D.C. 15-23 September 1983

Phillips combined this visit with attendance at a conference in Bethesda, see G.271.

- O.154 Arrangements, itinerary, schedule of meetings and engagements, letters of thanks.
- 0.155 Phillips's notes, report on visit.
- O.156 Briefings and information assembled from UK Research Councils, government departments etc. on topics for discussion, and some sent from USA.
- 0.157 Official folder of Research Council briefing.

D.C. Phillips NCUACS 45/1/94	299
	Advisory Board for the Research Councils (ABRC)
	France 11-15 March 1984
O.158	Arrangements, itinerary, schedule of meetings, correspondence preceding and following visit, Phillips's notes.
O.159	Official folder of briefing and information.
	Sweden 6-12 October 1984
O.160	Itinerary and schedule of meetings, report on visit, letters of thanks, Phillips's notes.
	Netherlands 18-21 March 1985
0.161	Itinerary and schedule of meetings, information.
	Portugal 27 March 1985
0.162	Material for 'Seaday' seminar on board Royal Yacht 'Britannia': programme, participants, information.
	Tokyo/Tsukuba Japan 3-6 June 1985
O.163	Material for Council of Europe 6th Parliamentary and Scientific Conference: programme, participants, schedule, correspondence, Phillips's notes for speech.

Paris 22-24 September 1985

0.164	Material for Symposium 'Rise and fall of a priority field' organised by
	European Science Research Councils (ESRC) and Swedish Natural Science
	Research Foundation (NFR), held at Centre National de la Recherche
	Scientifique (CNRS): programme, participants, summary of discussions,
	papers submitted.

### Israel 19 December 1985 - 2 January 1986

0.165

Material related to visit by Phillips as guest of Israeli Minister for Science and Development, with visits to universities and research institutes and discussions of UK-Israel collaboration and possible science foundation: arrangements, itinerary and schedule of meetings, Phillips's report on visit, correspondence. See also 0.140.

#### Paris 13 March 1986

0.166

Opening of new Science Museum, La Villette (brief correspondence only).

#### Washington D.C. 27 April - 13 May 1986

0.167

Programme, schedule, correspondence. Mainly on collaboration and the US Government-Industry-Research Roundtable.

Washington D.C. 8-9 October 1987

0.168

Government/Industry/Research Roundtable, attended by Phillips, J. Fairclough and P. Coldstream. A session was given to 'New directions and current initiatives in British science and technology and higher education', at which they spoke. Main topics of the meeting were multidisciplinary research and university-industry research collaboration.

Correspondence, programme, participants, information, Phillips's notes, follow-up correspondence.

	Advisory Board for the Research Councils (ABRC)
	Soviet Union 2-9 October 1988
O.169	Correspondence, programme, report for visit with Secretary of State (K. Baker) to Moscow, Novosibirsk, Akademgorok, Leningrad.
	Boston and Washington D.C. 14-19 May 1989
O.170	Programme, itinerary, schedule of meetings, information.
	Washington D.C. 26-27 February 1991
0.171	Government/Industry/Research Roundtable on 'The Future of the Research Enterprise within the Industrialized Nations', attended by Phillips and W.D.P. Stewart as UK invited speakers.
	Correspondence, programme, participants, schedule, text of Phillips's remarks.
	Washington D.C. and California 2-7 June 1991
0.172	Programme, schedule of meetings, briefing, report on California visit.
	Berlin and Bonn 10-12 November 1991
0.173	Correspondence, arrangements, programme, report for visit with Secretary of State (K. Clarke).
	Brussels 12-13 February 1992
0.174	Participants, Phillips's report.

## Germany 15-17 June 1992

0.175 Brief correspondence only on visit to Germany to discuss and inspect Fraunhofer Institutes.

## ABRC SUBMISSIONS AND ADVICE

These folders comprise material relating to ABRC's official advice to successive Secretaries of State for Education and Science. This includes reports on 'Science and Public Expenditure' offered annually at the outset of each Public Expenditure Survey (PES), 'Forward Looks' and advance budgeting, and detailed allocation advice on the distribution of the science budget once the PES outcome was known at the end of the calendar year. This timetable could fluctuate under special political or economic events but was broadly adhered to.

The material is primarily official correspondence, memoranda, meetings and discussions, drafts and comments on the reports; it may, however, include representations, correspondence etc. from individuals and colleagues in addition to those from established scientific bodies.

The extent and proportion of the documentation varies. In years when ABRC recommendations appeared controversial and aroused sometimes intense public interest, the degree of 'outside' or private correspondence could be considerable. In such cases it has been retained along with the official material, and attention is drawn in the appropriate entries (see especially material for 1987 and 1990).

The papers are presented chronologically. Many or most of the topics referred to under Research Council or Government Department headings elsewhere are here brought together for decision.

1983

0.176 January-May. Includes draft PES submission.

O.177 June-September. Includes meeting notes, Phillips's memorandum to Secretary of State (K. Joseph) on his appraisal of British science after first six months at ABRC, draft Forward Look.

D.C. Phillips NCUACS 45/1/94	303
	Advisory Board for the Research Councils (ABRC)
0.178	September-October. Material and briefing for meeting with Prime Minister 19 October on 'maintaining the strength of the science base'.
0.179	October-December. Further bids, discussions. Includes letter from Secretary of State 8 December accepting ABRC's recommendations.
1984	
O.180	Correspondence, papers, memoranda.
1985	
O.181	Correspondence and papers, PES advice April, distribution advice November.
1986	
O.182	January-April. Meetings and memoranda in preparation for PES advice, correspondence and meetings on biotechnology and 'pull-through'.
O.183	March-June. PES 'strategy', draft advice April, comments and discussions, 'brainstorming' session to discuss strategy document on 10 June.
O.184	June 1986 - April 1987. Includes correspondence on allocations. The science budget had not met the increased allocations which ABRC had considered necessary for UK research and for international subscriptions (e.g. CERN). Phillips made private representations voicing the Board's concern. Secretary of State's (K. Baker) letter of April 1987 thanks Phillips for his work in achieving a fair distribution of the additional allocation.
O.185	Material prepared for meetings with Secretary of State (K. Baker) 3, 24, 27 June, 21 July.

1987	
	The material for this year is extensive. Phillips submitted his discussion document 'A strategy for the Science Base' to the Secretary of State (K. Baker) on 6 May. Consideration of the document was held up by the general election, and it was not published until 20 July.
	The document proved controversial. Among its recommendations were:
	the differentiation of higher education institutions into Type R (full range of research activity), Type T (teaching) and Type X (teaching and research in a limited range of fields);
	the development of inter-disciplinary research centres;
	responsibility for research support costs to be transferred from universities to the Research Councils thus ending the 'dual-support' funding system.
	These were the principal areas of comment and debate among the scientific and higher education communities. Many representations and comments, some very hostile, were received both at the time and in subsequent years.
	Because the ripples cast by the report continued for so long, the material in 0.189-0.193 extends beyond the strict limit of the calendar year.
O.186	February-April. Correspondence, memoranda, meetings, draft for strategy document.
O.187	April-August. Continuing comments, drafts, memoranda.
O.188	Material for meetings with Secretary of State (K. Baker), 26 March, 5 August, 28 October.
O.189	Comments on the 'Strategy Document'. Some are addressed directly to Phillips, some to officials or ministers and passed on to him. Some are brief notes, others are substantial documents. They are sent by individuals and colleagues, members of the Research Councils, academics and industrialists, some writing on their own behalf, some as representatives of learned societies, firms or public bodies. Some have carbon copies of Phillips's replies (often detailed). In addition, there are collections of comments assembled by DES Secretariat and passed on at intervals to Phillips.
	March-April 1987.

0.190	Similar material October 1987.
0.191	Similar material November-December 1987.
0.192	Similar material January-July 1988.
0.193	Correspondence and papers June 1987 - March 1989 on Interdisciplinary Research Centres, some commenting on the general principle, some suggesting projects for collaborative research, a few with specific submissions for IRC status.
1988	
O.194	Correspondence, papers, drafts, meetings February-November, press conference February 1989 at which a higher level of funding and the establishment of nine IRCs were announced.
1989	
O.195	Correspondence and papers February-November, including Forward Look meeting (March), briefings for meetings (July, November), correspondence with Secretary of State (J. MacGregor) on MRC Clinical Research Initiative.
1990	
	The ABRC advice for this year aroused controversy and hostile reaction. As the Government's science budget remained substantially the same in real terms as in 1990-91, reductions in some programmes had to be recommended. One of these was the termination of some projects at the Nuclear Structure Facility at Daresbury. This attracted much unfavourable comment both in the press and from scientific colleagues. Phillips wrote an article explaining the roles of ABRC and the Research Councils published in <i>New Scientist</i> (see 0.198).

0.196	Correspondence and papers July-December. The material is less extensive than in other years, but includes letter from Secretary of State (J. MacGregor) on flexibility margin (July), drafts of ABRC allocation letter (December), reply from Secretary of State (K. Clarke) (January 1991). The ABRC allocation advice was not published in this year, which exacerbated public agitation.
0.197	Correspondence, comment, representations etc. arising from PES advice, almost all relating to the Daresbury decision and its effect on physics research and education in UK. February-August 1991.
O.198	Correspondence, papers, press comment August-December 1991 mainly related to Phillips's letter published as 'Talking Point' in <i>New Scientist</i> 12 October under the title 'A balancing act for research priorities'.
1991	
O.199	January-July. Minutes, meetings, briefings, PES advice, resource management.
O.200	September-October. Minutes, meetings, briefings, dual support transfer, Phillips's notes, supercomputing, bids.
O.201	November. Meetings, minutes, papers, comments on allocations advice, Phillips's notes.
O.202	December. Drafts, comments, final version of allocation advice, Secretary of State's acceptance and agreement to publish.
1992	
O.203	Correspondence and papers on advice (May), flexibility margin (August), allocation (December).

### **1993 WHITE PAPER AND BOUNDARY STUDY**

The General Election of May 1992 was followed by the announcement of previously unheralded changes in government organisation of education and The Department of Education and Science (DES), to whose science. Secretaries of State Phillips had hitherto addressed the ABRC's advice. became the Department for Education (DFE), and responsibility for science and technology was transferred to the newly-created Office of Science and Technology (OST) under the Chancellor of the Duchy of Lancaster and Minister of Public Service and Science (W. Waldegrave) with a seat in the cabinet.

The Chancellor put in train a major review of the structure and funding of British science and its relationships with government, including the roles of its advisory bodies and the Research Councils. Submissions were widely invited (reputedly about 800 were received) from the whole range of institutions and individuals, and a White Paper Realising our potential. A Strategy for Science, Engineering and Technology was published on 26 May 1993 as Command 2250. The White Paper, the first major policy review of the field for over 20 years, met with general approval in the scientific community. Among its many recommendations were the re-organisation of the existing advisory bodies: ACOST was to be developed into the new Council for Science and Technology, and ABRC was to be subsumed into the OST with a new post of Director-General of Research Councils. The dual-funding system was to be maintained for the support of university research. The number of Research Councils was to be increased from five to six with a re-drawing of the boundaries between them and their detailed allocation of responsibilities.

The task of chairing the study of Research Council reconstruction and the determination of the areas of responsibility between the new Councils before they came into being in April 1994 was entrusted to Phillips by the Chancellor of the Duchy of Lancaster shortly after the publication of the White Paper, and was completed by mid-July.

The material below provides a detailed record of these events in British science policy. It is somewhat less full for the preparation of the White Paper (0.204-0.211) since this was compiled by OST and the ABRC input was only one, albeit crucial, source. For the Boundary Study, however, which was produced by ABRC itself, the information is much more diverse. The folders at 0.212-0.219 include institutional and individual correspondence and submissions as well as official material and drafts.

White Paper Realising our potential

0.204

ABRC Advice October, Executive Summary November 1992.

Attached here is a manuscript note by Phillips 19 October headed 'Draft for ABRC advice - not accepted in full' in which he puts forward the proposal for a single Research Council which was resisted as 'too centralist'.

0.205	DTI Input to White Paper December 1992.
	Drafts and papers 10, 16, 18, 19, 22 February 1993.
O.206	Discussions and drafts 23, 24 February, 3, 10 March.
0.207	Drafts and comments 2, 6, 13 April.
	At this time the working title was 'A new partnership: science and technology in the service of the nation'. The eventual title emerged in draft of 12 May.
O.208	Drafts, Phillips's notes, 22 April, 28 April.
O.209	Phillips's letter to Chancellor of the Duchy of Lancaster with comments on draft 11 May (includes copies of HORCs comments), meeting with Chancellor 12 May and subsequent draft and comments by Phillips and ABRC staff.
0.210	Draft 18 May (including list of comments incorporated), page proof 20 May (minor corrections), 21 May (with attached note of last-minute addition requested by Phillips but not made).
0.211	Copy of final revise as published.
Boundary Study	
	The entries here conform to the disposition of material as received in tagged bundles from Phillips. His descriptive titles, for some of the items, have
	been retained and are quoted as appropriate.
	Preliminary arrangements for the Boundary Study had been under way before the White Paper was published on 26 May; Phillips had been approached to chair the study and had agreed to do so, his appointment being announced to the House of Commons by the Chancellor of the Duchy of Lancaster on 16 June. He was asked to undertake the task 'as if fulfilling the role of the new Director General of the Research Councils' and not as Chairman of the ABRC, and was supported by the resources of the ABRC Secretariat and of the Science Base Group of the Office of Science and Technology (OST).

	The timescale was a tight one. Letters were sent to HORCs on 4 June requesting an analysis of their respective Council's interpretation of the White Paper in respect of the mission and areas of responsibility of the restructured Councils (replies to be forwarded by 11 June). On 7 June a similar letter was sent to Departmental Chief Scientific Advisers. On the basis of their replies, and of material already assembled for the White Paper, an early draft was prepared (23 June), which formed the basis of meetings with HORCs 25-29 June and was also circulated on 4 July to a considerable number of individuals and key organisations, members of research councils, advisory boards etc. requesting comments by 12 July.
	The replies (including some sent in unsolicited before the circulation of the draft report) were analysed by OST, and on the basis of these and all other material the final report was drafted and sent to the Chancellor on 16 July.
0.212	May-June. Preliminary discussions, drafts of remit, timetable and methods of work, membership of proposed group, letters sent out to HORCs and Chief Scientists. (A committee study had been envisaged with a report date of 1 October, but Phillips's letter of 4 June to W.D.P. Stewart sets out his own intended timetable and consultative method of work with the support of ABRC and OST officials, and a report date of 16 July, and these were followed).
0.213	'Evolution of draft boundary report and covering letter, sent to Councils on 23 June.'
0.214	'Documents used in discussions with RCs: 25/28/29-6-93. Includes bidding letters of 4 June (to HORCs) and 7 June.'
	Includes Phillips's notes on draft report discussed at meetings.
0.215	'Letters received in advance of circulation of the draft report.' From organisations, university departments, scientific, industrial and official representatives, June-July.
O.216	'Development of list of people to be consulted. We compromised on a rather long short list.' 29 June - 5 July.
0.217	'Draft report of 5 July circulated to HORCs, OGDs and numbers of concerned scientists, for comments by 12 July.' Includes revisions, discussions etc.

0.218 'Responses to 5 July consultation.' Also includes analysis of responses compiled by OST officials under Phillips's guidance, indicating affiliation, and areas of agreement or disagreement for each correspondent.

Most of the replies were received as requested, shortly after the 5 July letter. A few are in response to the final report and date from late July or August.

O.219 Final revisions, report as sent to Chancellor 16 July. In his Parliamentary Answer on the study, the Chancellor said 'I have accepted all of Sir David's recommendations and I have invited him to continue to oversee the further work of the Office of Science and Technology designed to effect a smooth transition to the new Research Council system by 1 April 1994.'

### **MEMORANDA AND MEETINGS 1982-93**

This material was received piecemeal from Phillips and is complementary to that included elsewhere under ABRC business and meetings. It comprises exchanges, whether in the form of letters or memoranda, with staff, officials and ministers, principally at ABRC and the Department of Education and Science, the Office of Science and Technology, and the Cabinet Office. Other ministries are occasionally also involved.

The 1982 material was sent to Phillips as background information before he took up his appointment in January 1983.

All topics are discussed: the membership, structure and function of the Research Councils and of ABRC, funding bids and PES advice, general science policy and specific matters under consideration such as Council collaboration, supercomputing, research centres and the university dual-support system.

Preparatory material and notes of meetings with senior civil servants, and advisers, Secretaries of State and the Prime Minister, as well as the regular meetings of ABRC, are also included.

0.220	1982.
O.221	1983.
0.222	1984.

D.C. Phillips NCUACS 45/1/94	311
	Advisory Board for the Research Councils (ABRC)
0.223	Meetings and correspondence 1983-85 with Secretaries of State and Prime Minister.
0.224	1986.
O.225	1987-88.
O.226	November-December 1989, possible merger of AFRC and NERC.
0.227	Miscellaneous memoranda April 1989 - April 1991 exchanged with J.M.M Vereker (DES).
O.228	Miscellaneous memoranda July 1990 - September 1991 sent by Phillips to P.J. Thorpe (Secretary ABRC).
0.229	1990.
O.230	1991.
O.231	Submissions and correspondence exchanged with Secretary of State (K Clarke). November 1990 - December 1991.
0.232	1992.
0.233	Submissions, meetings and correspondence exchanged with Chancellor of the Duchy of Lancaster (W. Waldegrave) April 1992 - November 1993.
0.234	1993.

١f

# GENERAL CORRESPONDENCE 1983-93

	This is a chronological sequence of letters and information sent to Phillips as Chairman of ABRC. They do not emanate from government sources, though some might be termed 'semi-official' such as requests to receive science representatives or distinguished visitors from abroad, or to attend gatherings or discussions on matters of general interest in the field of science policy. The content of the material is very miscellaneous. It ranges from relatively minor exchanges about reports, information, publicity, conferences, personal and social contacts to more substantial correspondence with colleagues in academia and industry, mainly in UK but also in USA, on research funding, PES decisions and the like.
O.235	Miscellaneous shorter correspondence 1983-86 on meetings and discussions with reporters and editors on Press relations.
O.236	1983.
0.237	1984. Includes copy of Phillips's letter 13 January inviting colleagues to join 'an informal preparatory group to help [him] to plan the work of the Board'.
O.238	1985.
O.239	1986.
O.240	1987.
O.241	1988.
0.242	1989.

0.243	1990.		
0.244	1991 January-April.		
0.245	1991 May-July.		
0.246	1991 August-December.		
0.247	1992-93.		
ADDENDUM			
	This contains material received too late for inclusion in the main sequence. It is presented in the same subject-order as shown in the list of contents and cross-references are provided where appropriate.		
APPOINTMENTS AND PERSONAL			
O.248	Correspondence 1990-92 on the restructuring of the Research Council system and of ABRC, Phillips's appointment as full-time Chairman, salary and conditions. (See 0.1, 0.9-0.12.)		
O.249	Correspondence 1992 on appointment to HEFC(E), 1993 on extension of appointment as chairman of ABRC to September 1993 and later to December 1993.		
O.250	Shorter personal correspondence, 1993.		

# AGRICULTURAL AND FOOD RESEARCH COUNCIL (AFRC)

0.251 Notes and draft for talk on 'The next ten years: a personal view' given at 'AFRC Directors' Conference', no date or place given but c.1984.

### SEMINARS AND CONFERENCES

- O.252 Information, correspondence, briefing, advice, points for discussion at meeting with Prime Minister 3 May 1984. Includes note of meeting. (See O.121.)
- 0.253 Similar material for meeting with Prime Minister at Chequers 8 July 1984, with list of participants and topics, timetable.
- VISITS

(to follow 0.175)

Washington 18-22 October 1993

0.254 Programme, extensive report by Phillips on visit.

ABRC SUBMISSIONS AND ADVICE

(to follow O.203)

1993

O.255 May. Agenda, Chairman's briefing, action notes, Phillips's notes for meeting 26 May.

O.256	July. Agenda, Chairman's briefing, Phillips's notes on Board's future work programme for meeting 14 July. Includes briefing for Chancellor of the Duchy of Lancaster who attended the meeting.
0.257	November. Briefing on Science Budget.
O.258	December. Drafts, correspondence for Science Budget Allocations 1994-97, 23 December. This is the final allocations advice from ABRC.
Boundary Study	
	(to follow 0.219)
	Papers, correspondence, memoranda 1993 arising from the recommendation in the Boundary Study that the Rutherford Appleton Laboratory and the Daresbury Laboratory should be combined in a single organisation within the Engineering and Physical Sciences Research Council and serve all the Research Councils instead of being owned by any one of them.
O.259	July-October.
O.260	October-December.
MEMORANDA	
	(to follow 0.234)
0.261	November 1993 (future organisation of OST).

### SECTION P CORRESPONDENCE

P.1-P.292 SCIENTIFIC AND GENERAL CORRESPONDENCE

Correspondence with individuals and organisations, in alphabetical order, dated and indexed, with an indication of any information of particular biographical, scientific or historical interest.

P.293-P.296 SHORTER SCIENTIFIC CORRESPONDENCE

Indexed, in alphabetical order.

P.297-P.304 UNINDEXED CORRESPONDENCE

In chronological order.

### INTRODUCTION

The folders in the main sequence at P.1-P.292 are essentially concerned with aspects of protein research in hand or projected, in UK or abroad. They may include ideas, drafts or data for research and publications, some in collaboration; arrangements for short or long term visits to Phillips's laboratory, or to conferences and meetings; career and appointments; some personal news may also be included.

The progress of Phillips's research interests can be seen in exchanges with colleagues at different periods; in this way the correspondence provides a useful complement to material elsewhere in the collection. Examples would be work on diffractometers (correspondence with U.W. Arndt), myoglobin (C.L. Coulter, J.C. Kendrew, M.G. Rossmann, B.E. Strandberg, H.C. Watson), lysozyme (R.E. Canfield, R.B. Corey, R. Diamond, R.E. Dickerson, P. Jollès, C. Tanford) and, latterly, science policy. On a personal level, the correspondence with long-term friends such as J.D. Dunitz and F.M. Richards is

P.1-P.304

of interest, and the extensive material relating to W.L. Bragg further testifies to the close contact made in the decade 1956-66 when Phillips worked at the Royal Institution while Bragg was Director.

Like other documents in the collection, many of the letters were circulated to leading colleagues in the laboratory for their advice and comment, and may bear notes from, in particular, C.C.F. Blake, L.N. Johnson and R.E. Offer.

The 'Shorter Scientific Correspondence' at P.293-P.296 is similar in content to that of the main sequence but less developed and more specifically concerned with research in hand. Brief exchanges such as requests for reprints or information, permission to borrow or quote from published materials, models and the like appear as unindexed correspondence at P.297-P.304.

It should be noted that while some of the folders may include references to science policy and funding, the main bulk of Phillips's correspondence on these matters is in Section O.

# SCIENTIFIC AND GENERAL CORRESPONDENCE

P.1	Abraham, E.P.	various dates 1969-88
	Correspondence 1969 is on the proposal laboratory in Oxford; correspondence 1983 is Chain for the Royal Society.	for a protein preparation on Abraham's Memoir of E.B.
P.2	Acharya, K.R. and others	1990-91
	Acharya was a member of the Oxford Lab appointment at Bath University.	oratory before taking up an
	Correspondence on research and publication	S.
P.3	Aldridge, W.N.	1969-76
	Research on rat and cat haemoglobin.	
P.4	Allen, K.W.	1984
	Scanning Proton Microprobe Project in Oxfor	rd.
P.5	Ambler, R.	1983-84
	Sequence data on B-lactamase.	
P.6	Andreeva, Natalia S.	1963-67
	Andreeva was a Russian crystallogra Correspondence on research, visits, translat lysozyme papers.	pher working on pepsin. tion into Russian of Phillips's
P.7	Anfinsen, C.B.	1965-72
	Correspondence 1965 refers to the American Atlantic City, September 1965, at which Continuing general correspondence on resea visits; Anfinsen spoke at the first 'Harden' of Society, organised by Phillips (G.63), and w times.	Phillips spoke on lysozyme. rch, publications, lectures and conference of the Biochemical

P.8, P.9	Arndt, U.W.	1957, various dates 1965-90
P.8	Madison where Arndt was spend	Arndt sent from University of Wisconsin ing a year in the Department of Physics. ublication of collaborative papers on al research and personal news.
P.9	1965-90. General correspond recollections of W.L. Bragg at Ro	ence on research, apparatus design, yal Institution.
P.10	Arnon, R.	1968-80
P.11	Arnott, S. and others Research, visits and appointment	1968, 1974-89 s, references and career.
P.12	Artymiuk, P.J. Work, data and publications on T	1990-91 IM, lysozyme and tri-N-acetylchitotriose.
P.13	Ashworth, J.M.	1969, 1978
P.14	Baker, B.R. and others Dimercurial compounds in enzym	1970 ne structure research.
P.15	Barnes, W.H.	1957, 1965
	Barnes was the head of the x- Council, Ottawa where Phillips w	ray laboratory in the National Research orked 1951-55.
P.16	Bateson, P.P.G.	1991

P.17	Bhargava, P.M.	1983-86
	Visits, invitations, lectures.	
P.18	Blakemore, C.B.	1988, 1990
	Research Centre for neurosciences in Oxford.	
P.19	Blow, D.M.	1964-87
	General correspondence on research, lectures and p recommendations, W.L. Bragg's original lysozyme sketch appointments.	ublications, visits, (September 1972),
P.20	Bodmer, W.F.	1985-86
	Science and medical research funding. Includes memor on 'Scientific value and the level of grant support' and House of Lords Select Committee on 'Priorities in medic	his submission to
P.21	Boycott, B.B.	1978, 1981
	Research funding, especially MRC.	
		1070
P.22	Bradbury, E.M.	1970
	α-lactalbumin.	
P.23	Bradbury, J.H.	1970-84
	Research and publications on lysozyme and $\alpha$ -l publications, recommendations and appointments.	actalbumin, visits,
P.24-P.29	Bragg, W.L. and others	1960-93

Correspondence with, and related to, Bragg 1960, 1963, 1965-71, 1991 P.24 Letter of 1960 is from New Zealand during a lecture tour by Bragg; letters of 1963 are from Bragg and Lady Bragg on the death of Phillips's father; letter of 1965 is on lysozyme structure. The bulk of the correspondence relates to 1967-71 when Bragg had retired from the Royal Institution and Phillips and his team had moved to Oxford. It deals mainly with arrangements for visits, lectures and meetings, filming, publications, comments on research in progress and the like. Reference is also made to the Hemming-Lee benefaction arranged personally by Bragg to make up the salary deficit at Oxford of former MRC-funded Royal Institution workers (see E.2) and to Bragg's obituary of Lee. Correspondence 1969-71 refers to Bragg's plans for his book on the development of x-ray analysis left unfinished on his death in 1971 and completed for publication by Phillips and H. Lipson (P.26, P.27). Despite their long and close association, Bragg continued to use the formal mode of address by surname until 21 March 1967 when he first ventured on to the more familiar 'David' (with a relapse to 'Phillips' in October 1970). Correspondence 1991 is a request for a Bragg autograph. Autobiographical writings by Bragg. Photocopies or carbon copies of P.25 unpublished material. Includes photocopy of Bragg's Royal Society Personal Record ('Green Book') to c.1970, photocopy of his autobiography to 1951, brief 9pp. personal account, manuscript notes, calendar of events and outline for autobiography. The Development of x-ray analysis P.26, P.27 This book was in an advanced state, but not completed, when Bragg died. One of his last acts before entering hospital in June 1971 was to send Phillips the manuscript for comment. After Bragg's death on 1 July Phillips undertook to see the book through the press, assisted (from October 1971) by H. Lipson. The manuscript proved to need a degree of editing and revision and, after various publication delays, was published by G. Bell in October 1975. Correspondence 1971-76, 1992 with members of the Bragg family, co-editor P.26 and publisher. Includes Bragg's last letters April-June 1971 about the book and his wish for Phillips to oversee the final publication. Correspondence

1991-93 is about corrections and arrangements for reprint published by Dover Publications 1992 and includes some corrections sent by colleagues

after original publication in 1975.

P.27	Miscellaneous redraftings of chapters, drafts for figure	es and legends.
P.28, P.29	Selections and reflections: the legacy of Sir Lawrence Phillips and J.M. Thomas.	e Bragg. Edited by
	This was a volume published by Science Reviews Ltd. centenary of Bragg's birth, and included some of reminiscences and assessments by colleagues and of reprint of Phillips's Royal Society Memoir.	of Bragg's articles,
P.28	Correspondence with colleagues, contributors and co- of published book 1990-91.	editor, some reviews
P.29	Manuscript or typescript copies of contributions from U. S. Chandrasekhar, J.D. Dunitz, D.C. Hodgkin (with Kendrew, R. King, A. Klug, N.F. Mott, L. Pauling, G. Por Bragg), A. Todd.	covering note), J.C.
P.30	Brändén, C-I.	1973, 1980-83, 1989
	Research, science funding.	
P.31	Brenner, S.	1982, 1986
	Correspondence 1982 includes report on biotechnolog	gy in Japan.
P.32	Brew, K.	1977-78, 1986
	Research on $\alpha$ -lactalbumin.	
P.33	British Council	1986
P.34	Broadbent, D.E.	1977, 1983, 1986
P.35	Brown, F.	1984-88
	Work on Foot-and-Mouth Disease Virus.	

P.36	Bunn, C.W.	1971-73
	Research on rennin at the Royal Institution.	
P.37	Burgen, A.S.V.	1976-77
	Ultrastructural research at National Institute for Medical Research	1.
P.38	Campbell, P.N.	1976-89
	Research on $\alpha$ -lactalbumin, biochemistry in China.	
P.39	Canfield, R.E.	1963-68
	Canfield worked on the amino-acid sequence of hen egg white lyse competiton with P. Jollès.	ozyme, in
	Research and publications on lysozyme.	
P.40	Capital Plant International Ltd.	1985-86
P.41	Capon, B.	1972-74
P.42	Carlisle, C.H.	1960-69
	Research, grant applications.	
P.43	Caroe, G.M. and others	1973-79
	Gwendolen Caroe was W.H. Bragg's daughter and W.L. (Sir L Bragg's sister. The correspondence relates to the biography of th which she and Bragg planned together and which she compl published as <i>William Henry Bragg</i> , 1862-1942. Man and Scien New York 1978).	eir father eted and
P.44	Chance, B. 1967-69	, 1983-86
	Research, visits, conferences, Chance's 70th birthday celebration	s (1983).

P.45	Chandrasekhar, S. and others	1962-69, 1976-87
	Research on liquid crystals, visits etc.	
P.46	Chapman, D.	1966-82, 1990
	Research, publications, visits, career and appointme	ents.
P.47	Cochran, W.	1962, 1965
	Correspondence 1965 is on biomolecular research i	n various UK centres.
P.48	Cohen, C.	1968, 1970, 1991
P.49	Cohen, P.	1978-79, 1984
P.50	Coppola, J.C.	1964-66, 1978
P.51	Corey, R.B.	1962, 1 <mark>9</mark> 65
	Lysozyme.	
P.52	Cotton, R.G.H.	1988
	Research on pterin antibodies.	
P.53	Coulson, A.F.W.	1984, 1988
	ß-lactamase	
P.54	Coulter, C.L.	1962-68, 1985, 1987
	Early correspondence is on myoglobin (Coulter had at Cambridge before returning to USA) and lysozym	worked on the project

P.55	Cray Research (UK) Ltd.	1984, 1988
	Supercomputing.	
P.56	Crick, F.H.C.	1976, 1978
	Appointments.	
P.57	Cruickshank, D.W.J.	1957-67
	Early correspondence is on research on anthracene a	and myoglobin.
P.58	Crumpton, M.J.	1964-70, 1983
	Antibodies of lysozyme, myoglobin.	
P.59	Dainton, F.C.	1991
	Research funding etc.	
P.60	Dannenberg, A.M. and others	1972-73
	Lysozyme substrates.	
		1960-67, 1975, 1987
P.61	Davies, D.R.	1900-07, 1975, 1907
P.62	Deranleau, D.A. and others	1969-71
1.02	Collaborative research on intramolecular charge-tran	
P.63	Diamond, R.	1964-74
	Model-building and listing programs for lysozyme, projects.	, and other research

P.64, P.65	Dickerson, R.E. and others	1961-79, 1989
P.64	2 October 1961 - 6 December 1962.	
	This period covers the research on lysozyme lead Phillips's team at 6Å resolution ( <i>Nature</i> <b>196</b> , 117 the research at the Royal Institution, similar work direction of Dickerson (Urbana, Illinois), R.B. Co Technology) and P. Jollès (Paris). The corre progress of research, exchanges of data, possible draft of the <i>Nature</i> paper and comments on it (in Perutz that it 'has already reached a state of myself unable to improve, and it only remains for this beautiful piece of work.'), draft of short no Dickerson <i>et al</i> intended for simultaneous public	73-1178, 1962). As well as a was proceeding under the prey (California Institute of espondence discusses the esimultaneous publication, acludes comment from M.F. perfection on which I find me to congratulate you on te on triclinic lysozyme by
P.65	1963-79, 1989	
	Continuing correspondence on research (ind lysozyme), lectures, publications, visits, appoint	cluding 2Å resolution of ments.
P.66	Dobson, C.M.	1973-93
	Research, career and appointments.	
P.67	Douzou, P. and others	1970-87
	Lysozyme research projects, publications.	
P.68	Drenth, J.D. and others	1961-88
	Research on papain, affairs of EMBL.	
P.69	Dunitz, J.D.	1957-89
	Dunitz worked at the Royal Institution 1955-57, the ETH Zurich. He became and remained a clo	ose friend of Phillips.
	Scientific, personal and career correspondence	

P.70	Dunnill, P.	1966-89
	Dunnill worked at the Royal Institution 1961- University College, London.	64, when he took up a post at
	Research, career, science policy, Biotechnole	ogy Joint Advisory Board.
P.71	Dwek, R.A. and others	1973-82
	Research funding and projects.	
P.72	Edmundson, A.B.	1972-75
		various dates 1963-90
P.73	Edsall, J.T.	vanous dates 1963-90
	Lysozyme, Protein Atlas project, visits.	
P.74	Edwards, J.H.	1980-81
P.75	Engel, P.C.	1987-88
	Funding for research projects on protein en	gineering.
P.76	Fasman, G.D.	1967-87
P.77	Feldmann, R.J. and others	1974-88
	Molecular graphics.	
P.78	Fenn, R.H.	1964-79
	Ruth Fenn was a research student of Phillips before taking up a post at Portsmouth C subsequently changed to Portsmouth Po Portsmouth University).	College of Technology (status

P.79	Finney, J.L.	1981
	Polarisability.	
P.80	Fischer, E.H.	1967-72
	Work on phosphorylase	
P.81	Fothergill-Gilmore, L.	1982-88
	Research, career and appointments.	
P.82	Frauenfelder, H.	1979
P.83	Freeman, H.C.	1971-74, 1981-82
	Research, appointments, visits.	
		1070 74
P.84	Frohlich, H. and others	1973-74
	Collaborative research on low frequency vibrations of p	proteins.
		ious dates 1966-91
P.85		
	Geis was the artist specialising in scientific subjects illustrations for Phillips's <i>Scientific American</i> article on ly correspondence is mainly on Geis's publication project below.	sozyme (F.11). The
P.86	Glusker, J.	1976-89
	Includes correspondence 1979 on Glusker's difficu- permission to reproduce the <i>Scientific American</i> artic 'Benchmark Papers in Crystallography'. Permission w after Phillips's intervention.	cle for a volume of

P.87	Grahame-Smith, D.G.	1987
	Plans for a Centre for Applied Neuropsychobiology at C	Dxford.
P.88	Green, D.W.	1971-72, 1976
	Includes letter from W. Cochran on Green's death, 1976	i.
		ous dates 1962-90
P.89	Gupta, M.P. vari	ous dates 1962-90
P.90	Gurd, F.R.N.	1966-84
	Collaborative research on myoglobin, lysozyme, TIM etc	
P.91	Gurdon, J.B.	1970, 1976, 1985
P.92	Gutfreund, H.	1967-78
	Research, publications, visits.	
P.93	Haas, D.J. and others	1966-69
F.30	Haas worked in Phillips's group at the Royal Institution	on 1965-66 before
	taking up posts at the Weizmann Institute and elsewher	re.
	Correspondence on research and career.	
		1001.04
P.94	Haddow, A.	1961-64
	Myoglobin model etc.	
P.95	Hall, L.D.	1983, 1987
	Appointment.	

P.96	Hamaguchi, K.	1972-88
	Kozo Hamaguchi, a physical biochemist, was a He was Phillips's host at the International Unio in Tokyo (1967) and became and remained a worked at Phillips's laboratory July-September exchange professor, working on aspects of lys 1980. He attended the Oxford meeting to ma 1991) and spoke at the dinner.	a close friend. Hamaguchi er 1973 as a Royal Society ozyme, and again May-June
P.97	Hanson, E.J.	1967, 1970, 1972
	Teaching of molecular biology, career, publica	tion.
P.98	Harding, N.G.L.	1987
	Organisation of health care in UK and Europe.	
P.99	Harris, H. and others	various dates 1971-90
	Scientific and personal correspondence. Inclu Harris ('Rationality in Science' and 'The City approaches to the cancer problem').	ides drafts of two papers by of Berlin and some modern
P.100	Harris, J.I. and others	1973-78
	Harris had been a fellow-student of physics wi they later collaborated in enzyme research as Welsh rugby. Includes Phillips's address at the June 1978.	well as sharing an interest in
P.101	Harrison, P.M.	1962-88
	Research on ferritin, career and appointments, etc.	grant and travel applications
P.102	Harte, R.A.	1967-68
P.103	Hazen, E.E.	1974-77

P.104	Hendrickson, W.A.	1980	
P.105	Higgins, C.F.	1989	
	Manpower crisis in biology.		
P.106	Hill, R.L.	1967-74, 1986	
	α-lactalbumin.		
P.107	Hill, R.W. and others	1986	
P.108	Hirsch, P.B. and others	1970, 1972-73, 1985, 1989	
	Electron microscopy in Oxford (197 Electron Microscopy (1972-73, with research on high performance mate	70); proposed lecturership in Theory of comments by colleagues); funding for erials (1989).	
P.109	Hodgkin, A.L.	1977	
	Includes notes on the 'single file notebook.	effect' taken from Hodgkin's 1952-53	
P.110	Hodgkin, D.M.C.	1960-61, 1965	
	Postcard of 1965 reads 'We have	Mainly brief correspondence about crystallographic research and equipment. Postcard of 1965 reads 'We have got a tentative, v. plausible-looking interpretation of Guy, Margaret and Eleanor's insulin map.'	
P.111	Hol, W.G.J.	1978-79, 1985	
P.112	Holmes, K.C.	1966, 1970-74, 1986	
	Phillips and his team, of which it ha	terial relating to the move to Oxford of ad been intended that Holmes should be a late stage from the move and the College (May 1966).	

P.113	Hoppe, W. and others	1970-76, 1982-83
	Visits, research. Includes correspondence and material on early history of non-conventional electron microscopy and scientific priority.	
P.114	Horecker, B.L.	1969, 1972
	Work on aldolase.	
P.115	Howlett, J.	various dates 1968-86
P.116	Huber, R.	various dates 1967-89
1.110	Research, equipment, career and appointments.	
P.117	Ibbeken, H.	1982-83
	Case of scientific fraud at Free University of Ber	rlin.
P.118	IBM	1979-90
	Work on computer graphics and other projects; sponsored by IBM.	conferences and meetings
P.119	ICI	1979, 1984, 1987
	Various collaborative projects.	
P.120	Institute of Biology	1973
	Working party on the mathematical needs of bio asked to chair the working party but declined fr	logy students. Phillips was rom pressure of work.
P.121	Jack, J.J.B.	1987, 1989

P.122	James, M.N.G.	1973-80, 1989-91
	Lysozyme research and publications, a little historical recollections.	personal correspondence and
P.123	Janssen Pharmaceutical Ltd.	1984-85
P.124	Jaton, J-C. Research on rabbit immunoglobin.	1975
P.125	Jeavons, A.P. Funding for Jeavons's research on a wire ch diffraction studies (in collaboration with Phil	1986 namber area detector for x-ray lips and J. Mulvey).
P.126	Jeffery, J. d'A. and others Research on dehydrogenase, career and app	1976-87 pointments.
P.127	Jenkins, J.G. On his book <i>The Bragg family in Adelaide:</i> Adelaide Foundation 1986). Correspondence, review of book.	1982-86 a pictorial celebration (Univ.
P.128	Jenness, R. Baboon α-lactalbumin.	1972-73
P.129	Jensen, L.H. Research on triclinic lysozyme, visits etc. Autobiographical recollections 1992.	various dates 1959-92

P.130	Johnson, L.N.	1980, 1990-92
	Louise Johnson was a research student of Phillips moving to Oxford in 1966 and becoming his succ Phillips Professor of Molecular Biophysics in 1990	essor as the first David
	Correspondence is mainly on matters arising from retirement. Many comments by Johnson on proje recommendations etc. are to be found in all section	cts, research proposals,
P.131	Jollès, P.	1965-90
	Various lysozyme research projects by Phillips, Jo on duck and goose egg-white lysozymes and on v	Ilès, Canfield, especially ertebrate lysozymes.
P.132	Jones, E.R.H.	various dates 1968-84
P.133	Kaiser, E.T.	1978-79, 1983-86
	Research, visits, appointment.	
P.134	Karpas, A.	1985-87
P.135	Karplus, M.	1976, 1980-85
	Collaborative research and publication on lysozym	ne dynamics.
P.136	Katchalski-Katzir, E.	1983, 1985
P.137, P.138	Kendrew, J.C.	1962-88, 1992
P.137	General correspondence on research, publications, EMBL etc.	1962-88, 1992
	Includes manuscript draft by Kendrew on myoglo diffraction and by chemical methods.	bin sequencing by x-ray

P.138	Correspondence, drafts and papers 1967-69 relating to the joint IUPAC/II Commission on Biological Nomenclature for the description of polypepti conformation, chaired by Kendrew, on which Phillips served. Further material relating to the Commission's work may be found in t manuscripts of J.C. Kendrew deposited in the Department of Wester Manuscripts, Bodleian Library Oxford (NCUACS catalogue no. 11/4/89)	
P.139	Kennard, O.	various dates 1962-87
P.140	Kenner, G.W.	1969-79
	Collaborative research on 'Synthesis of artifici discussions, grant applications.	al lysozymes': meetings,
P.141	Kent, P.W.	various dates 1964-87
P.142	Kim, S-H.	1973, 1976, 1977
P.143	Klotz, I.M.	1969, 1974
P.144	Klug, A.	1972-74
	Includes a little material relating to controversy	with A. Rich.
		1000.00
P.145	Knowles, J.R.	1969-89
	Enzyme research on TIM at Oxford and Harvard, Includes a little personal correspondence.	career and appointments.
P.146	Kornberg, H.L.	1969-89
	Personal and scientific correspondence. Includes Kornberg's comments (1970) on proposed EMBL, proposed research on pyruvate carboxylase and other research topics, publications, science funding.	

P.147	Koshland, D.E. and others	1965-74, 1990
	Research on tryptophan and lysozymes, appointments, le	ctures and visits.
P.148	Kraut, J.	1964-72
P.149	Kretsinger, R.H.	1970-74, 1981
P.150	Kronman, M.J.	1968, 1971
	Goat $\alpha$ -lactalbumin.	
		1000.07
P.151	Kuhn, N.J.	1986-87
	Calcium binding in $\alpha$ -lactalbumin.	
N MARY AND		1965-89
P.152	Langridge, R.	
	Work on computer graphics, visits, career and appointm	ents.
P.153	Latner, A.L.	1970
F.155	Possible x-ray analysis of human LDH-1.	
	Possible x-ray analysis of numan correct	
P.154	Layton, D.G.	1984
1.104	Possible Science Park at Oxford.	
P.155	Lazdunski, M. and others	1976-77
	Proposed visit to UK laboratories as EMBO lecturer.	
P.156	Levine, M.	1970, 1981, 1984

P.157	Levitt, M. and others	1968-87
	Lysozyme refinement, protein folding, career and a	appointments.
P.158	Levvy, G.A.	1971
	Aldonolactones as inhibitors.	
P.159	Liang, D-C.	1980, 1985
	Relations with Chinese scientists.	
P.160	Lienhard, G.E.	1971-75
	Research and publications on tetrasaccaride lacto	one, career.
P.161	Lipscomb, W.N.	1963-71, 1985
	Carboxypeptidase structure, problems of collabor	ation, equipment.
P.162	Liquori, A.M.	1967
	Lysozyme coordinates.	
P.163	Lyster, R.L.J.	1982-90
	$\alpha$ -lactalbumin from baboons and mares, appointm	nents.
P.164	MacFarlane, A.G.J.	1983-84
	'Strategic computing' and national computing cer	ntre.
P.165	MacFarlane, G.	1977, 1981, 1982
	Letters (from MacFarlane only) mainly relating to h Fleming and penicillin.	is writings on H.W. Florey,

P.166	McKenzie, H.A.	1972, 1986-90
	Research and publications on $\alpha$ -lactalbumin and ly	ysozyme sequences.
P.167	McMullen, A.I.	1967-72
P.168	Mandelstam, J.	1974, 1988
	RNA sequencing (1974), sequencing of genome of	f Bacillus subtilis (1988).
P.169	Maslen, E.N.	1965-67
	Research, appointments.	
P.170	Mason, R.	1964-78
P.171	Mathieson, A.McL.	1958-75
	Design of apparatus (1958), single-crystal intens (1963-69, see also K.24-K.27), research, visits.	ity measurement project
P.172	Matthews, B.W.	1967-88
	Lysozyme and other research projects, visits, app	ointments.
P.173	May, R.M. (see also L.34)	1983
P.174	Michael, P.C. and others	1984-88
	Technical and personal correspondence.	
P.175	Mills, O.S.	1964-66, 1975, 1982

P.176	Mitchell, P.D.	1982, 1990
P.177	Monod, J. Research ideas and papers (1967-69); Herbert Sp (1972-73).	1967-69, 1972-73 Dencer Lectures at Oxford
P.178	Moser, C. Mainly on meetings and workshops associate Européen de Calcul Atomique et Moléculaire).	various dates 1976-89 ed with CECAM (Centre
P.179	Muirhead, H.	various dates 1968-86
P.180	Némethy, G. Conventions for polypeptide conformation, resear on lysozyme ( <i>Nature</i> , <b>214</b> , 363-365).	1965-67 ch and collaborative paper
P.181	Neuberger, A. 1965-76, 1981 Lysozyme, Phillips's application for equipment for Oxford laboratory (Neuberger was assessor), drafts for papers, invitation (18 October 1967) to Phillips to serve on Committee of Biochemical Society, invitation (declined, 25 November 1970) to Phillips to serve on Editorial Board of <i>Biochimica</i> et <i>Biophysica Acta</i> .	
P.182	Neurath, H.	1968-69, 1976, 1981-83
P.183	Nicholson, B.H. Lactate dehydrogenase, RNA polymerase.	1970-75

P.184	North, A.C.T. and others	1961-91
	North, one of Phillips's long-term colleagues, I Institution in October 1955. He was a key memb to Oxford in 1966 and was appointed Astbury F Leeds in 1972.	er of the team who moved
	General correspondence on research, pu appointments, equipment and grant application policy.	Iblications, career and ns, research funding and
P.185	O'Konski, C.T.	1975-77, 1985
P.186	Owston, P.G.	1970-73
	Mainly on apparatus.	
P.187	Pasternak, C.A.	1975, 1986-91
	Mainly on proposed Biomedical Centre in Londo	on (later Oxford).
P.188	Pauling, P.J.	various dates 1966-89
P.189	Peacocke, A.R.	1965-69
	Research, lectures and meetings in Oxford.	
P.190	Perham, R.N.	1969-76
P.191	Perkins, S.J.	1974, 1991-92
	Later correspondence is on funding for neutron	research.
P.192	Perlmann, G.E.	1968-72

P.193	Perry, S.V.	1973-74, 1988
	Work on troponin C.	
P.194	Perutz, M.F. and others	1964-89
	Includes letter June 1965 from W.L. Bragg on the 'landmarks' in molecular biology.	
	General correspondence on research, visits, publ on organisation and funding of science.	lications and, in later period,
P.195	Peters, D.	1981-85
P.196	Pethig, R.	1980-82
	Dielectric properties of proteins.	
P.197	Piez, K.A.	1971-90
	Research on collagen structure.	
P.198	Pinkerton, J.M.H.	1969-70
P.199	Pogson, C.I.	1969-73
	Research on TIM, career and appointments.	
P.200	Poljak, R.J.	1963-75, 1980, 1985
	Poljak introduced the lysozyme problem to the left after the initial work of 6Å resolution.	Royal Institution (1960) but
	Correspondence of 1965 includes material on Phillips's announcement of it at Atlantic City in	the lysozyme structure and April of that year (G.11).

P.201	Pollock, M.R.	1966
	Models of lysozyme.	
P.202	Porter, R.R.	1967
	Collaborative teaching and research plans, departmental org Oxford.	anisation at
P.203	Post, C.B.	1987
	Distribution of lysozyme coordinates.	
		1965-66
P.204	Prothero, J.C.	1905-00
	Helical segments in lysozyme.	
P.205	Prout, C.K.	1976, 1990
	Correspondence 1976 is on purchase of x-ray diffractometer f Crystallography Department, Oxford.	for Chemical
P.206	Przybylska, M.	1961-67
	Maria Przybylska was a colleague of Phillips in Ottawa (1951-55) who subsequently worked on protein crystallography at the laboratories of the National Research Council, Ottawa.	
	Correspondence on diffractometer apparatus and various resea	arch projects.
D 007	Dition O.P. 19	979, 1986-88
P.207	Ptitsyn, O.B. 19 Visits, conferences.	
P.208	Pullman, B.	1983-84
	Proposed election of Phillips to French Academy of Sciences. own summary evaluation of his scientific career to date.	Includes his

P.209	Quiocho, F.A.	various dates 1968-91
	Research, visits, career and appointments.	
P.210	Qurashi, M.M.	1962-68
	Qurashi was a colleague of Phillips at the N Ottawa (1951-53).	lational Research Council,
	Correspondence relates to work 1966 on 'A or various aspects of exaggeration'.	uantitative analysis of the
P.211	Radda, G.K.	1972, 1979
	Correspondence 1972 is on space requirements, relations between biochemistry and biophysics	departmental organisation, in Oxford.
P.212	Raftery, M.A.	1968-72
	Research and publications on lysozyme.	
		1000.00
P.213	Ramachandran, G.N. and others	1963-90
	Includes news of, and congratulations on lysozyr researches, publications, conferences, visits etc	me structure (1965), various ).
P.214	Ramanadham, M.	1976-90
	Work on triclinic lysozyme.	
P.215	Ramaseshan, S.	1963-89, 1992
P.216	Rasmussen, S.E.	1970
	Monochromator design.	

P.217	Rees, D.A.	1970, 1981-88	
	Later correspondence on Research Council matters on human genome studies.	s, and discussion meeting	
P.218	Rérat, C. and others	1962-73	
	Lysozyme and prealbumin research, visits etc.		
P.219	Rich, A.	various dates 1963-86	
P.220-P.222	Richards, F.M. and others	1964-91	
	Richards, based in the Department of Molecular E Yale University from 1955 until his retirement in 1 oldest friends and colleagues. They collabora programmes, and on the proposed Atlas of Mole University Press (only partly achieved, see F.95, F	991, was one of Phillips's ated in various research ecular Biology for Oxford	
	Richards spent a year in Phillips's Department 199 at All Souls and was Hinshelwood Lecturer in 198 visitor to Yale when his travel schedule allowed. F were enthusiastic sailors, and Phillips joined them US Eastern seaboard (though not when they cro yacht on their way to their sabbatical leave in O2 other scientific and personal recollections of the recalled in Phillips's speech at Richards's Retire 1991 (G.427). Richards attended, and gave the meeting on Protein Structure and Function in ho in July 1991 (A.52).	wood Lecturer in 1985; Phillips was a frequent el schedule allowed. Richards and his wife Sally d Phillips joined them for sailing holidays off the gh not when they crossed the Atlantic in their sabbatical leave in Oxford). This episode, and al recollections of their long association, are a at Richards's Retirement Symposium in June tended, and gave the closing remarks at, the	
	Correspondence, mainly on scientific and public a little personal material and some letters from F	ation topics but including Richards's wife.	
P.220	1964-68		
P.221	1969-73		
P.222	1974-78, 1982-91		

P.223	Richards, R.E.	1967-69, 1983, 1986
	Correspondence 1967-69 on various science correspondence 1983 is on Richards's accept Directorship of Leverhulme Trust; correspondence D.C. Hodgkin.	ance of invitation to
P.224	Rigler, R.	1984-86
P.225	Rodríguez, R.	1988
	Pigeon lysozyme	
P.226	Rose, I.A.	1979-84
P.227	Rossman, M.G.	1964-85
	Rossmann had contributed to the haemoglobin a programmes, working in the MRC laboratory Cambri appointment at Purdue University, Indiana where structural studies of proteins and viruses.	dge before taking up an
	Correspondence on research, career, I.U.Cr. etc.	
P.228	Rowatt, M.E.	1966, 1979-85
	Lipopolysaccharide research.	
P.229	Rupley, J.A.	1964-74, 1980-84
	Rupley, who was based at the University of Arizona the Royal Institution in the summer of 1965 and spec Oxford Laboratory in 1970.	, worked with Phillips at nt sabbatical leave in the
	Research on lysozyme, visits, publications.	

P.230	Sakabe, K. and Sakabe, N.	1972, 1978-88	
	Visit to Oxford Laboratory to work on insul continuing scientific and a little personal cor research in various institutes.	Visit to Oxford Laboratory to work on insulin with D.C. Hodgkin 1973-75, continuing scientific and a little personal correspondence mainly on insulin research in various institutes.	
	Photographs of Chinese colleagues in Peking in 1979 and a group photograph 1986, sent	g and Shanghai taken on a visit to Phillips, are at A.75.	
P.231	Sarma, R.H.	1981-84	
	Sarma was a member of the 1965 lysozym Madras, 1963.	e team recruited by Phillips in	
	Mainly on publications.		
P.232	Sasisekharan, V.	1980-86	
P.233	Sawyer, L.	1978, 1983-88	
	Research and publications on B-lactamase,	lactoglobulin.	
P.234	Sayre, D.	1984, 1987	
P.235	Scheraga, H.A.	1968-89	
	Lysozyme co-ordinates, visits, $\alpha$ -lactalbumir	n.	
P.236	Scrutton, M.	1970-74	
P.237	Sharon, N.	1964-87	
	Research, meetings, publications on lysozy Laboratory 1968 and other visits.	yme, Sharon's visit to Phillips's	

P.238	Shaw, W.V.	1987-89
	Proposed Institute for protein science and er University.	ngineering at Leicester
P.239	Shotton, D.M.	1971-84
P.240	Sigler, P.B. Research, mainly on t-RNA, career.	various dates 1968-81
P.241	Skinner, H.C.W.	1963-64, 1984
P.242	Smith, A.D. and others	1965, 1982, 1986, 1989
P.243	Smith, D.S. Smith was appointed Hope Professor of Entomolo	1980-81 ogy at Oxford in 1981.
P.244	Smith, I. Model-building.	1969-71
P.245	Southwood, T.R.E. and others Southwood was appointed to the Linacre Chair succession to J.W.S. Pringle in 1979. He served a University 1989-93.	1978-92 and n.d. of Zoology at Oxford in as Vice-Chancellor of the
	The earlier material refers to Southwood's Department, research projects, grant applications later to more general matters of research supp outside.	s and appointments, and
	Many of the letters are manuscript and not all are be assigned a date from their content have bee place. A small group of undated letters has been sequence.	en left in their presumed

P.246	Sowden, B.	1989-91
P.247	Squire, J.M.	1988
P.248	Stein, W.H.	1966-79, 1989
	General scientific and personal correspondence.	
P.249	Steiner, L.	1965-67
P.250	Steinrauf, L.K.	1960-65
	Diffraction research at Ottawa; lysozyme.	
P.251	Steitz, T.A.	1970-90
	Research and career.	
P.252	Steward, E.G.	1968-77
P.253	Stewart, W.W. and others	1986-88
	Correspondence and supporting material about 's reported specific case of a published paper experimental results, sent to Phillips, and including co to whom he referred the material.	based on inaccurate
P.254	Strandberg, B.E. and others	1963-67, 1978, 1992
	Strandberg had been a member of the myoglo Cambridge; he refers to his early collaboration with 1 November 1978 and in the correspondence of 199	Phillips in his letter of
P 255	Strver, L.	1967, 1973-77, 1984

P.256	Sutton, L.E.	1973-75, 1980
P.257	Swinnerton-Dyer, H.P.F.	1978-79, 1983
	Mainly on higher education and funding.	
P.258	Sykes, B.E.	1972-78
P.259	Tanford, C.	1964-68, 1977, 1986
	Correspondence 1964-68 mainly on lysozyme r 1977 on Tanford's sabbatical year in Oxford; World Cultural Council.	esearch; correspondence correspondence 1986 on
P.260	Taylor, C.A.	various dates 1963-83
	Mainly on visits and contacts at University Colleg Professor of Physics.	ge Cardiff where Taylor was
P.261	Thoma, J.A.	1972-73
	Structure of lysozyme.	
P.262	Thomas, E.	1967
	Lysozyme.	
P.263	Thomas, J.	1978-86
	Thomas was a fellow student at Cardiff, 1942-44 on the same day as Phillips, and subsequently i	who joined the Royal Navy became Captain (RN).
	Sailing; scientific recruitment.	

P.264	Thomas, J.M.	1983, 1985-92
	General scientific and a little personal Director of the Royal Institution 1986-91 Pro-Chancellor of the University of Wales, to the affairs and funding of the Institutio (P.28, P.29) etc.	when he was appointed Deputy and some of the material relates
P.265	Thompson, M.P.	1982-88
	Work on $\alpha$ -lactalbumin.	
P.266	Thomson, A.R.	1981-82
	Biochemical technology at Harwell.	
		1978-80
P.267	Tigyi, J. Proposed UK participation in UNESCO biophysics.	
P.268	Tishler, M.	1970
P.269	Toyama, A.	1982
P.270	Tulinski, A.	1974-75, 1981
P.271	Upjohn Company	1986
	Support for research in Europe through programme.	'European Discovery Capability'
P.272	Vainshtein, B.K.	1963-70, 1980-86

P.273	Vallee, B.L.	1982-89
	Vallee, Director of the Center for Biochemical and Bio Medicine at Harvard Medical School, was the sci Harvard-Monsanto Research Agreement (see K.14 metalloenzymes and bioinorganic chemistry. He had Phillips through their common interest in the do structure analysis. Phillips and colleagues at Oxford in work on human tumor derived lysozyme, th published as an Appendix ( <i>Crystallographic &amp; NMR</i> s <i>derived lysozyme</i> ) to the paper by Vallee and othe secretory product of a human colon carcinoma cer 24, 1985.	ientific director of the 4-K.21) specialising in a long association with evelopment of protein d collaborated with him eir contribution being studies of human tumor ers, Lysozyme: a major
	Correspondence includes arrangements for collab results, publication, the Harvard-Monsanto Agreen Lectures at Harvard 1989 (G.365-G.367), personal r	nent, Phillips's Dunham
P.274	Vane, J.R.	1985-89
	Founding and development of the William Harvey F Bartholomew's Hospital Medical College.	Research Institute at St.
P.275	Vassileva-Popova, J.G.	1975-90
P.276	Vernon, C.A.	1967
P.277	Vijayan, M.	1969-93
	Vijayan held an SRC Research Fellowship at Oxford January 1968 - December 1970. The correspondent return to the Indian Institute of Science Bangalore. conferences, visits (including further visits to Oxfor 1986) and publications.	ce dates mainly from his . It deals with research
P.278	Vincentelli, J.B.I.	1967-7
	Vincentelli paid two short visits to Phillips's Labora lysozyme. Correspondence is on research plans, subsequent career.	tory in 1968, working or arrangements for visits

P.279	Watson, H.C. and others	1962-90
	Watson held an MRC staff appointment at the Molecular Biology December 1959 - June 1968 Kendrew's team from 1960 and collaborated wi Royal Institution on absorption corrections refinement of the myoglobin structure project Kendrew on establishing atomic coordinates. On contract he was appointed to the Department of	. He was a member of J.C. th Phillips and others at the and other aspects of the ct. He later worked with n the termination of his MRC
	The correspondence ranges widely, including ea later projects, visits and conferences, appointm	arly myoglobin research and nents and career.
P.280	Watts, A.	1986
	Research, funding, science policy.	
P.281	Webster, C.	1984-85
	Archive preservation.	
P.282	Wetlaufer, D.B.	1972-82
P.283	Whelan, W.J.	1967, 1971
P.284	Wierenga, Rik K.	1984-85
	TIM coordinates.	
P.285	Wilkins, M.H.F.	1973, 1975
P.286	Williams, J.O.	1975
	Research on acridine.	

P.287	Williams, R.J.P. and others	1966-89 and n.d.
	Williams was a lecturer in Inorganic Chemistry Wadham College when Phillips moved to Oxford held the Royal Society Napier Research Fellowsh Inorganic Chemistry Department at Oxford. He the Oxford Enzyme Group and was an enthusias other, collaborative research projects, while independence of mind towards the organisation at of university education at Oxford and in gen expression of them often brought him into conf Phillips, notably over the concept and creation of Centres.	(1966). He subsequently hip while still based at the was active in establishing stic participant in its, and retaining an outspoken nd funding of research and eral. His views and his flict with others, including Interdisciplinary Research
	The material includes grant applications, research and many manuscript letters or notes (sometime not all dated.	n reports, drafts and ideas, as more than one per day),
P.288	Willis, B.T.M.	various dates 1964-88
P.289	Wilson, A.J.C.	1957-82
	Wilson was Phillips's Supervisor at Cardiff.	
	Scientific and personal correspondence. Inclu Phillips's application for Fellowship of the Instit report on a visit to India (1980), arrangements f Wilson at the University of Birmingham November	tute of Physics (1957), his or a retirement supper for
P.290	Wolstenholme, G.E.W.	1976, 1981
P.291	Wood, M.F.	1983-89
	ABRC matters and meetings. Support for local Oxford Instruments Group.	research organisations by
P.292	Zeppezauer, E.	1969-70
	Lysozyme crystallisation.	

### SHORTER SCIENTIFIC CORRESPONDENCE

General exchanges on research ideas and projects, publications, visits and meetings, equipment and apparatus 1963-93. Similar in content to the main sequence but less developed and usually confined to one or two letters only.

In alphabetical order.

P.293	A-D
P.294	E-L
P.295	M-R
P 296	S-Y

P.296

#### UNINDEXED CORRESPONDENCE

P.297-P.300	Requests for reprints, information, data, references, models, atomic co- ordinates, samples of material, information on proposed or current research and publications, sent or received by Phillips. 1967-91. Material similar to, but less developed than, exchanges in E.128 and P.293-P.296.
	In chronological order.
P.297	1967-69 (excluding requests for reprints of <i>Nature</i> and <i>Scientific American</i> articles which are at F.7 and F.12 respectively)
P.298	1970-74
P.299	1975-79
P.300	1980-91 and undated

P.301, P.302	Requests from colleagues, authors, editors, publishers to quote, reproduce diagrams and figures, borrow models, slides, videotapes or films for use in books and articles, or in lectures and teaching, received by Phillips 1967-91. Includes some letters of thanks. In chronological order.
P.301	1967-72
P.302	1973-91
P.303, P.304	Shorter correspondence to accompany, or to acknowledge receipt of, reprints, articles, theses, draft papers, progress reports, books or samples of material. Mainly sent to Phillips by authors and publishers but a few requested by him; some include scientific information on research in progress or personal news.
	In chronological order.
P.303	1967-75
P.304	1976-93

D.C. Phillips NCUACS 45/1/94

SECTION R	REFERENCES	AND RECOM	MENDATIONS	R.1-R.159
	R.1-R.3	THESES AND	HIGHER DEGREES	
		R.1	Oxford University	
		R.2	UK Universities	
		R.3	Overseas Universities	
	R.4-R.6	UNIVERSITY	EXTERNAL EXAMINING	
	R.7-R.66	APPOINTME	NTS	
		R.7-R.21	Advisory and Electoral Boards	
		R.22-R.44	Evaluations and advice	
		R.45-R.66	Personal references	
	R.67, R.68	AGRICULTU	RAL RESEARCH COUNCIL / RAL AND FOOD RESEARCH COUN	ICIL
		R.67	Staff and appointments	
		R.68	Research grants	
	R.69-R.83	MEDICAL RE	ESEARCH COUNCIL	
		R.69-R.75	Staff and appointments	
		R.76-R.79	Cell Board research and equipm	ent grants
		R.80-R.83	Research grants and comments	
	R.84-R.104	SCIENCE RI SCIENCE A	ESEARCH COUNCIL / ND ENGINEERING RESEARCH CO	UNCIL

- R.105-R.125 UK FOUNDATIONS AND GRANT-GIVING INSTITUTIONS
- R.126-R.152 OVERSEAS FOUNDATIONS AND GRANT-GIVING INSTITUTIONS
- R.153-R.155 AWARDS, PRIZES, HONOURS
- R.156-R.159 PERSONAL

### THESES AND HIGHER DEGREES

The material may include invitation to examine a thesis or advise on the award of a higher degree, arrangements for oral examination, correspondence with a co-examiner or candidate, Phillips's notes on the thesis, suggestions for corrections, final report. Oxford University 1965-79. R.1 UK Universities 1964-89. R.2 Overseas Universities 1962-76, 1990. **R.3** UNIVERSITY EXTERNAL EXAMINING Leeds University 1972-76. R.4 Phillips was External Examiner in Biophysics 1972-75. Correspondence, draft papers for comment, arrangements. London University 1967-68. R.5 Phillips served on the Panel of External Examiners in Biophysics. Brief correspondence only. Portsmouth College of Technology (successively Portsmouth Polytechnic, **R.6** Portsmouth University) 1966, 1974-78. Correspondence 1966 is on the proposed new M.Sc. in Molecular Structure submitted for validation to the Council for National Academic Awards (CNAA). A B.Sc. Honours Degree Course in Biomolecular Science was established in October 1973 and Phillips was invited to serve as External Examiner for the new course 1974-78.

Correspondence principally with J.G. Scane, arrangements for examinations, comments, Phillips's assessment of the course.

# UNIVERSITY APPOINTMENTS

### Advisory and Electoral Boards

R.7	Cambridge
	John Humphrey Plummer Professorship of Biophysics (in succession to A.L. Hodgkin).
	Applications, commendations, correspondence October 1980 - August 1981.
R.8	Essex
	Chair in Biological Chemistry. Phillips and R.J.P. Williams were external assessors. The post was first advertised in 1978 but no appointment was made. It was re-advertised in 1981.
	Applications, commendations, correspondence December 1978 - October 1981.
R.9-R.11	Hong Kong
	Phillips was one of a three-man 'Consultancy to examine Equipment Requirements for the Hong Kong University of Science and Technology'. He accepted the invitation in March 1989, visited the university with other members of the consultancy on 24-26 July and contributed to the report submitted in September.
R.9	Official correspondence, invitation, schedule of visit, information.
R.10	Notes and comments on University's proposals and estimates by Phillips, members of his laboratory and other consultancy members.
R.11	Draft report, Phillips's appendix on equipment provision for life sciences, brief correspondence.

R.12-R.18A	London
	Phillips was frequently asked to advise the University on appointments and promotions, sometimes on an <i>ad hoc</i> basis and sometimes in a more formalised way as 'External Expert' on a Board of Advisors. Material includes invitations, correspondence, recommendations.
R.12	Board of Advisors/Standing Panel of Experts in Biophysics, 1968-76, 1980- 87.
R.13	Board of Advisors on Crystallography 1968-78.
R.14	External Expert in Biology 1971.
R.15	External Expert, Review of Crystallography, Birkbeck College 1974.
R.16	External Expert, second Chair of Crystallography, Birkbeck College 1975-76.
	Correspondence, applications, Phillips's notes.
R.17	Miscellaneous appointments 1976-77.
R.18	External Expert, Chair of Biophysics, King's College 1982.
R.18A	External Expert, Rank Chair of Physics in relation to Surgery, 1986.
R.19	Lund
	Chair of Molecular Biophysics. Phillips was one of the external expert members of the nomination committee.
	Correspondence, report and evaluations, appeal against the expert committee's findings 1987-88.

References and recommendations			
R.20	Portsmouth Polytechnic (later Portsmouth University).		
	Establishment of Professoriat 1979-80.		
R.21	Warwick		
	Second Professorship in Biological Sciences 1971.		
Evaluations and adv	ice		
	These folders contain assessments or recommendations made by Phillips in answer to requests from universities or other institutions wishing to make senior appointments or promotions.		
R.22-R.42	UK universities and institutions		
	Suggestions or evaluations for candidates for senior appointments, Vice- Chancellors, Principals, Professors, Directors etc.		
R.22	Aberdeen 1990		
R.23	Bath 1983		
R.24	Birmingham 1985		
R.25	Bristol 1983		
R.26	Cambridge University and Colleges 1977, 1984, 1991, 1992		
R.27	Durham 1989		
R.28	East Anglia 1986		

R.29	Edinburgh 1975, 1986, 1993
R.30	Essex 1986
R.31	Glasgow 1983, 1986
R.32	Hull 1990
R.33	Leeds 1970-71, 1990
R.34	London 1973, 1986, 1987, 1990
R.35	Manchester 1986, 1988
R.36	Open 1989
R.37	Oxford 1989, 1992-93
R.38	Prudential Corporation 1982
R.39	Reading 1975
R.40	Salford 1989
R.41	Sheffield 1989, 1993
R.42	Strathclyde 1990

#### R.42A Warwick 1992

R.43 USA universities and institutions

Suggestions or comparative evaluations of candidates for senior appointments, Chairmen or Heads of Departments, tenure promotions etc. 1968-91.

R.44 Requests to Phillips for suggestions for candidates for posts at postdoctoral or lecturer level, in new or expanding departments and research groups. Some in the UK but mainly overseas. Some scientific or general correspondence on research projects may be included. Many of the requests were circulated for information or suggestions to members of the laboratory and may bear their comments. 1963-89.

#### Personal references

These are Phillips's own references for individual candidates for appointments or promotions at colleges, universities and institutions in UK and abroad. Some may extend over several years and may include correspondence on research and careers, comparative evaluations, or updating of previous recommendations. They are presented in alphabetical order. The total timespan is 1958-93.

R.45	A	R.56	N-O
R.46	Ва	R.57	Pa-Pe
R.47	Bh-Bu	R.58	Ph-Pr
R.48	С	R.59	R
R.49	D-F	R.60	Sa-So
R.50	G-J	R.61	St-Su
R.51	Кі	R.62	т
R.52	Ku-L	R.63	U-V
R.53	Ма-Мі	R.64	Wa-Wh
R.54	Mo (1)	R.65	Wi-Wr
R.55	Mo (2)	R.66	x

## AGRICULTURAL RESEARCH COUNCIL / AGRICULTURAL AND FOOD RESEARCH COUNCIL

R.67 Staff and appointments 1978, 1979.

R.68 Research grants 1981-87.

MEDICAL RESEARCH COUNCIL

Staff and appointments 1967, 1974-77, 1984-90

R.69	Appointment 1967.
R.70	Training and Manpower Committee Annual Scientific Staff Salary Review.
	Correspondence, arrangements for meetings and recommendations 1974-76.
R.71	Training and Manpower Committee Special Panel on Non-Clinical Scientific Staff Career Structure.
	Correspondence, arrangements for meetings, reconsideration of decisions, Phillips's notes, various dates November 1974 - December 1975.
P.72	Correspondence, notes etc. on claim for unfair dismissal arising from panel decision. The claim was dismissed. Includes copy of Phillips's evidence given on behalf of MRC. 1979.
R.73	Salary reviews, appointments, promotions.
	Information, recommendations by Phillips and others. Various dates 1974- 77.
R.74	National Institute for Medical Research (NIMR) Computing Laboratory.
	Appointment 1976.

R.75	Salary reviews, appointments, promotions.
	Information, recommendations by Phillips and others. Various dates 1984- 90.
Cell board research a	and equipment grants 1974-78
	Applications for new grants, or for extensions or renewals of existing grants, with related correspondence and information, sent to Phillips for action as Chairman of the Cell Board.
R.76	August 1974 - February 1975.
R.77	June-August 1975.
R.78	September-October 1975. Projects related to the commissioned research programme (see N.4).

R.79 October 1975 - September 1976, October 1978.

#### Grant assessments and comments 1982-89

Includes grant applications, renewals and extensions and also Phillips's comments on research in progress at MRC funded establishments especially the Laboratory of Molecular Biology, Cambridge.

1982
1984
1985-86

R.83 1987-89

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

### Research, equipment and appointment assessment 1966-89

The material may include correspondence, information, recommendations by Phillips and others (including members of the Laboratory), notification of full, partial or declined awards, progress reports on long-term continuation SRC grants etc. The applications are referred from various of the Council's committees, such as the Biological Studies, Chemistry, Data Compilation, Enzyme Chemistry and Technology, and Neutron Beam Research Committees.

R.84	1966.
R.85	1967.
R.86	1968.
R.87	1969.
R.88	1970.
R.89	1971.
R.90	1972 (1).
R.91	1972 (2). Applications for SRC Studentships in Enzyme Chemistry and Technology.
R.92	1973.

R.93	1974 January.
R.94	1974 April-May.
R.95	1974 September-October.
R.96	1975, 1977.
R.97	1984 January.
R.98	1984 March-April.
R.99	1984. Applications for participation in proposed co-ordinated programme in protein engineering.
R.100	1984 October.
R.101	1985 January.
R.102	1985 February-October.
R.103	1986, 1987.
R.104	1988, 1989.

#### **UK FOUNDATIONS AND GRANT-GIVING INSTITUTIONS**

Material includes recommendations for specific projects, and may also contain some correspondence on funding policies.

#### **BP Venture Research Unit**

R.105 Correspondence 1986.

**Cancer Research Campaign** 

R.106 Correspondence 1979.

Imperial Cancer Research Fund

R.107 Correspondence, applications 1976, 1983.

Inter-University Council

R.107A Application 1971.

#### Leverhulme Trust

- R.108 Correspondence, applications 1981, 1982, 1984.
- R.109 Correspondence, applications 1986, 1987.

R.110	Correspondence, applications 1988, 1990, 1991, 1992.
National Fund for Re	search into Crippling Diseases
R.111	Applications 1980.
Nuffield Foundation	
R.112	Correspondence, application 1975, 1978
R.113	Correspondence, applications 1979
R.114	Correspondence, applications 1982, 1983, 1984.
R.114A	Correspondence, applications 1992-93.
Scottish Home Offic	e
R.115	Correspondence, applications 1984, 1988.
Wellcome Trust	
R.116	Correspondence, applications 1976, 1980-83.
R.117	Correspondence, applications 1984-86.
R.118	Correspondence, applications 1987-90.

### **Wolfson Foundation**

	Phillips was appointed a Trustee in September 1988 with periodic renewals. From that date the material includes meetings notes, information on funding projects and appointments.
R.119	Correspondence, applications 1983, 1986, 1987.
R.120	Phillips's appointment as Trustee, correspondence, meetings, projects 1988.
R.121	Meetings, projects, applications 1989.
R.122	Meetings, projects, applications 1990.
R.123	Renewal of Trusteeship, meetings, projects 1991.
R.124	Renewal of Trusteeship, projects, applications 1992-93.
R.125	Wolfson Family Charitable Trust: scholarships, awards, proposals, for laboratories and institutions in Israel 1989-92.

# OVERSEAS FOUNDATIONS AND GRANT-GIVING INSTITUTIONS

The material is presented in alphabetical order by country (or regional grouping, etc.), and by institution within each country.

### Australia

R.126

Australian Academy of Science. Election 1971.

R.127	Australian Research Council. Review of Institute of Advanced Studies of the Australian National University. Phillips accepted the invitation but the dates proved impossible for him and he withdrew. Correspondence and papers 1989-90.
R.128	Australian Research Grants Committee. Grant application 1978.
R.129	CSIRO. Grant application 1985.
R.130	Department of Education and Science Queen Elizabeth Fellowships Committee 1972.
R.131	National Health and Medical Research Council. Grant applications 1982, 1985.
Belgium	
R.132	Fondation Francqui. Invitations to serve on Jury of Francqui Prize 1988, 1990.
Canada	
R.133	Medical Research Council. Grant applications 1966, 1968.
Denmark	
R.134	Kai Linderstrøm-Lang Endowment Fund.
	Phillips was invited in 1976 to act as one of two Trustees appointed by the International Union of Biochemistry (IUB), the other being C.B. Anfinsen. Correspondence, information, recommendations for the Linderstrøm-Lang Prize etc. 1976-85.

R.134A	Natural Science Research Council. Evaluation of research in Crystallography. Phillips was invited to serve on the international panel but was obliged to decline. Correspondence, information 1985.
European Molecular	Biology Organization (EMBO)
R.135	Interview reports, references and comments on applications for EMBO Fellowships 1968-78, 1988, 1990.
Israel	
R.136	Technion Israel Institute of Technology. Harvey Prize in Science and Technology. Recommendations 1987, 1990.
R.137	Weizmann Institute of Science. Recommendations for appointments and promotions 1966-84, 1992.
R.138	Wolf Foundation. Recommendations for prizes 1987-91.
North Atlantic Treaty	Organization (NATO)
R.139	Correspondence, information, recommendations for NATO Advanced Study Institutes or Research Grants 1967, 1976, 1984.
Sweden	
R.140	Nobel Prize nominations and correspondence 1984, 1989, 1990.

#### Switzerland

R.141	Eidgenössische Technische Hochschule (ETH), Zürich. Appointment, application 1990, 1991, 1993.
R.142	Stanley Thomas Johnson Foundation, Berne. Application 1985.
United States of Ame	erica
R.143	American Cancer Society Inc. Grant application 1975.
R.144	American Chemical Society Petroleum Research Fund. Grant application 1975.
R.145	<ul> <li>General Motors Cancer Research Foundation.</li> <li>The Foundation awarded three annual prizes (the Alfred P. Sloan, the Charles F. Kettering and the Charles S. Mott Prizes) for contributions to cancer research, and also sponsored visiting professorships in oncology, meetings and publications.</li> <li>Phillips accepted an invitation to serve on the Awards Assembly in April 1985; he resigned for health reasons in April 1988 but continued to receive information and make recommendations.</li> <li>Correspondence and papers on nominations for prizes, professorships and committee members, meetings, Phillips's notes etc. 1985-91.</li> </ul>
R.146	Howard Hughes Medical Institute (HHMI) Correspondence, nominations for awards under the HHMI International Research Scholars Program 1990-92.
R.147	John D. and Catherine T. MacArthur Foundation. Recommendation for MacArthur Fellowship 1984.

R.148-R.150	National Science Foundation. Grant and award evalu	lations.
	R.148 1966-70.	
	R.149 1973-78.	
	R.150 1982-91.	
R.151	Protein Society Stein-Moore Award. Correspondend 1986-88.	ce, recommendations
World Cultural Cour	ncil	
R.152	Correspondence, recommendations for Albert Eins Science 1982-92.	tein World Award of
AWARDS, PRIZES, H	HONOURS	
R.153	Awards and prizes. Correspondence, recommendation	ons 1980-93.
R.154	Honorary Degrees at Oxford and Cambridge 1974, 1	982.
R.155	Honours 1990-93.	
PERSONAL		
	Requests for career advice, information or refer	ences received from
	individuals 1967-88. In alphabetical order.	
	R.156 A-F	R.158 P-S
	R.157 K-M	R.159 T-W

#### INDEX OF CORRESPONDENTS

A.43 ABEL, Edward A.51, E.127, E.169 ABRAHAM, Sir Edward Penley L.3, L.9, L.31, L.32, L.33, L.62 P.1, P.140 K.25, K.26, K.27 ABRAHAMS, Sidney C. E.100 ABRAHAMSSON, Sixten K.1 ACADEMIA EUROPAEA F.15, F.47, F.79 ACADEMIC PRESS F.48 ACCOUNTS OF CHEMICAL RESEARCH P.2, R.45 ACHARYA, K. Ravindra G.116, G.145 ACHER, R. F.1, F.2, F.3, F.4, F.49, F.50 ACTA CRYSTALLOGRAPHICA E.100, E.112 ADAMS, Margaret J. P.19, P.126, R.75 F.51 ADDISON-WESLEY PUBLISHING COMPANY A.39, A.41, G.366, K.20, K.21 ADELSTEIN, S. James F.52 **ADENINE PRESS** A.25, A.34, F.38, G.197 ADRIAN, Richard Hume, 2nd Baron L.17, L.18, L.34, L.37, 0.22 A.34, N.32, O.1 - O.261 ADVISORY BOARD FOR THE RESEARCH COUNCILS (ABRC) ADVISORY COUNCIL ON SCIENCE AND TECHNOLOGY A.51, O.81-O.83 (ACOST) AGRICULTURAL RESEARCH COUNCIL / AGRICULTURAL E.111, E.112, G.337, G.435 0.21 - 0.25, R.67, R.68 and FOOD RESEARCH COUNCIL (ARC/AFRC) A.25, F.6, G.240, G.386 AHMED, Farid R. 0.112 AITKEN, Murray G.35 AKABORI, Shiro F.90 ALBERTI, K.G.M.M. P.3 ALDRIDGE, W. Norman F.50 ALLEGRA, Giuseppe A.25, A.66 ALLEN, Sir Geoffrey G.115, G.321, G.334, G.403 M.1 P.4 ALLEN, Kenneth W, F.59 ALLEN, Mark R.45 ALMO, Steven Craig K.30 ALTMAN, Philip L.

# Index of correspondents

ALTON, Jeannine Beatrice	A.21, A.25, G.227, J.31
AMBLER, Richard	P.5
AMERICAN CRYSTALLOGRAPHIC ASSOCIATION	A.39, K.2
ANDERSON, John Stuart	G.131, L.61
ANDERSON, Roy Malcolm	0.81, 0.82
ANDREE, Piet Jan	G.216
ANDREEVA, Natalia S.	G.51, P.6
ANDREW, Richard J.	L.14, 0.215
ANDREWS, Anthony T.	G.328
ANDREWS, John	O.250
ANFINSEN, Christian Boehmer	P.7, R.134
ANNAN, Noël Gilroy, Baron	A.17
ARBER, Werner	K.3, K.4
ARCHIVES OF BIOCHEMISTRY AND BIOPHYSICS	F.53
ARGYLE, Michael	E.69
ARIGONI, D.	G.145
ARMSTRONG, Dennis	A.25
ARMSTRONG, Robert Temple, Baron	0.14, 0.60, 0.80
ARNDT, Ulrich Wolfgang	A.12, A.25, D.1, F.4 G.15, G.103, L.55 M.8, M.12, P.8, P.9, P.28
ARNON, Ruth	F.95, G.215, P.10
ARNOTT, Struther	A.12, F.96, G.422, P.11
ARNSTEIN, Henry R.V.	A.25, F.71, F.85, G.68, R.34
ARTAVANIS, Spyros	P.100
ARTUS, Ronald Edward	R.38
ARTYMIUK, Peter J.	P.12, P.284
ASCHAFFENBURG, R.	A.12, E.138, G.171
ASH, Sir Eric (Albert)	D.15, D.16, G.341, G.402 O.195, O.200, O.226, O.244 R.123
ASHBY, Eric, Baron	J.45
ASHLEY, Christopher	E.9, E.152
ASHMORE, Alick	M.8, M.10
ASHWORTH, John Michael	G.227, G.361, J.5 O.218, O.236, P.13
ASSOCIATION OF BRITISH SCIENCE WRITERS	A.43 See J.31A

# Index of correspondents

ASTBURY, William Thomas	F.32
ASTON, Trevor H.	A.12, A.25, E.7
ATIYAH, Sir Michael (Francis)	A.20, G.432, L.33A O.56, O.218
ATKINS, Edward	P.293, R.2
ATTWOOD, Theresa Keri	L.62
AVEY, Hugh P.	R.45

BACHRACH, Uriel	G.215
BADDILEY, Sir James	A.20, G.227 L.11, L.34, L.46, L.49, L.59 P.293
BAGNALL, Jack F.	R.46
BAILEY, Allen J.	A.43, G.297, G.328
BAILEY, Anita L.	G.347
BAILEY, Brian H.	J.16
BAKER, B.R.	P.14
BAKER, John Randal	L.14, L.18
BAKER, Kenneth (Wilfred)	A.43, O.1, O.187
BALDWIN, Jack Edward	A.51, O.42, O.112, O.215
BALL, Sir Christopher (John Elinger)	A.43, O.54, O.189
BALL, Michael	N.3, R.73
BALL, Wendy, Lady	A.39, G.351
BALTIMORE, David	G.451
BANKS, Barbara E.C.	R.46
BANKS, Leslie	G.230, P.118
BANNER, David W.	F.19
BANNISTER, Sir Roger (Gilbert)	A.43
BARBER, James	R.52
BARFORD, David	R.46
BARKER, Geoffrey R.	A.20, A.21, G.323, J.1, N.6
BARLOW, Sir William	0.53
BARNARD, Eric Albert	L.53, L.54
BARNES, William H.	F.6, P.15
BARTLEY, Walter	P.101

BARTON, Sir Derek (Harold Richard)	G.56
BASTIANSEN, Otto	G.45
BATCHELOR, Ivor R.C.	A.20, A.25
BATESON, Paul Patrick Gordon	P.16
BATTERSBY, Sir Alan (Rushton)	G.175, J.28, J.30
BAVISTER, E.J.	P.293
BAYLEY, John Hagan Pryce	E.169
BAYLEY, Peter Martin	E.168, N.44, R.46
BEAMENT Sir James (William Longman)	A.25, L.41
BEAUBIEN, Mark S.	G.271
BEAUMONT, John U.	E.105
BEER, Ian David Stafford	G.111
BEETLESTONE, J.	G.275
BEEVERS, C.A.	F.38
BEGLEY, Michael J.	G.285
BELL, Antony	O.260
BELL, George Douglas Hutton	L.11
BELL, Ronald Leslie	A.43
BENDALL, Derek S.	G.257
BENDER, Myron L.	F.7, G.196
BENDITT, Earl P.	A.36
BENTLEY, Ronald	R.44
BERG, Paul	F.87, R.43
BERGEL, Franz	A.12, A.25, D.11
BERGER, Arieh	E.130, G.51, G.53, K.49
BERLIN, Sir Isaiah	A.25, E.10, P.177
BERLINER, Lawrence J.	G.451
BERNAL, John Desmond	A.12, F.32, K.29
BERNHARD, Sidney A.	E.131, R.44
BERNSTEIN, Frances G.	P.293
BERNSTEIN, Joel	R.138
BERRY, Sir Colin Leonard	0.218
BEVERIDGE, Gordon S.G.	A.43
BEYCHOK, Sherman	A.14
BHARGAVA, Pushpa M.	G.306, P.17
BHAT, T.N.	R.47

BIGGS, Peter Martin	A.25, L.12, L.13, O.245
BINNS, Kenneth J.	0.218
BIOCHEMICAL SOCIETY	A.39, A.43 G.63, G.78, G.108, G.119 G.139, G.153, G.161, G.198 G.223, G.241, G.258, G.260 G.310, G.323, G.324, G.391 G.395 J.1
BIOCHEMISTRY	F.54, F.55
BIOCHIMICA ET BIOPHYSICA ACTA	F.56
BIOCHIMIE	F.57
BIOZENTRUM, BASLE UNIVERSITY	K.3-K.7
BIRD, Richard Herries	A.43
BISGÅRD, K. Maack	E.133
BIXLEY, Philip S.	F.38
BLACK, Sir Douglas (Andrew Kilgour)	N.29
BLACKBURN, G. Michael	F.95, K.8
BLACKETT, Patrick Maynard Stuart, Baron	L.40
BLACKSTONE, Tessa Ann Vosper, Baroness	G.426
BLACKWELLS SCIENTIFIC PUBLICATIONS	F.58
BLAKE, Colin Charles Frederick	C.53 E.83, E.107, E.115, E.168 E.171 G.18, G.53, G.219, O.107 P.279, P.287
BLAKE, Iván Ortega	E.128
BLAKE, Robert Norman William, Baron	F.46, P.293
BLAKEMORE, Colin Brian	E.142, K.47, P.18
BLASCHKO, Hermann Karl Felix	A.12, D.11, E.131, F.85, F.86
BLAXTER, Sir Kenneth (Lyon)	L.34
BLEANEY, Brebis	A.25, A.39, J.41, L.53
BLIN-STOYLE, Roger John	L.37
BLOBEL, Günter	A.36
BLOCH, Eric	G.86
BLOCH, Konrad Emil	L.3, R.43
BLOOMER, Anne C.	A.25, A.51, C.60 F.19, F.37, P.293
BLOUT, Elkan Rogers	A.36, G.367

BLOW, David Mervyn

**BLUNDELL**, Thomas Leon

BOAG, Jack W. BODEN, Margaret BODMER, Sir Walter (Fred)

BOK, Derek C. BOKSENBERG Alexander BONDI, Sir Hermann

BONE, Roger B. BONHAM-CARTER, Timothy BORISOV, Seva BOTT, Richard BOWEN, Edmund John BOWIE, Stanley Hay Umphray BOWMAN, John C. BOYCOTT, Brian Blundell

BOYER, Paul D. BOYLE, Edward Charles Gurney, Baron BP VENTURE RESEARCH UNIT BRADBURY, Edwin Morton A.12, A.39, C.52 F.50, F.81, F.95, F.96 G.51, G.53, G.54, G.109 G.139, G.142, G.143, G.197 G.237, G.240, G.255, G.290 G.293, G.430 J.6, J.8, J.12 L.4, L.18, L.47, L.55, M.3 0.33, 0.112 P.19, P.64, P.155 R.18, R.138 A.39, A.55 F.37, F.49, F.95 G.199, G.206, G.240 K.10, L.55, M.3 0.5, 0.24, 0.25, 0.112, 0.214 0.215, 0.218, 0.234, 0.259 L.4 0.3 A.25, A.43 E.24, E.38, E.66, E.70, E.142 G.219, G.351 L.2, L.7, L.12, L.32 N.4, N.7 0.4, 0.51, 0.189, 0.190, 0.237 P.20 K.14, K.15 0.246 A.43 0.15, 0.34, 0.109, 0.252, 0.253 0.218 0.215 P.293 E.130 A.12 L.13 0.34, 0.98 A.34 L.17, L.34, L.48, L.49 N.43, P.21 F.15, F.47 R.33 R.105 L.17, P.22, R.44

G.63, G.259, P.23 **BRADBURY**, James Howard A.51 BRADLEY, Clive C. J.43 BRADSTOCK, Paul A. A.20, A.25, F.34, F.46 BRAGG, Alice Grace, Lady P.24, P.26, P.43 A.20, A.25, F.34, P.26 BRAGG, Stephen Lawrence A.12, C.53 BRAGG, Sir (William) Lawrence D.1, D.2, D.3, D.4, D.11 E.6, F.3, F.7 G.12, G.14, G.21 P.24 - P.29, P.194 See also F.46, G.71, G.315 P.43, P.127 F.93 **BRAM**, Stanley P.30, P.279 BRÄNDÉN, Carl-Ivar G.382 BRANTON, Philip E. A.36 BRAUMAN, John I. K.40 BRAUNITZER, Gerhard G.74 BRAUNSTEIN, A.E. 0.118, 0.236 BRAY, Jeremy William P.293 BRAY, Robert C. A.36, A.39, G.46, L.7 **BRENNER**, Sydney N.6, N.31, O.58, O.112 P.31, R.153 G.60 BRETSCHER, Mark Steven P.32 BREW, Keith A.43 BRIGGS, Asa, Baron 0.50 **BRITISH ACADEMY** BRITISH ASSOCIATION FOR THE ADVANCEMENT F.59 G.48, G.138, G.155, G.164 OF SCIENCE G.177, G.275, G.299, G.307 G.311, G.321, G.351 - G.356 G.364, G.374, G.384 J.2-J.3 G.4, G.27, G.28, G.109, G.122 BRITISH BIOPHYSICAL SOCIETY G.130, G.157, G.182, G.202 G.236, G.246 J.4 J.5 BRITISH BROADCASTING CORPORATION G.146, G.388, G.390 **BRITISH COUNCIL** P.33

BRITISH CRYSTALLOGRAPHIC ASSOCIATION	A.39 G.255, G.267, G.285, G.330 G.412 J.6 - J.12
BRITISH MEDICAL BULLETIN	F.60
BRITISH MUSEUM (NATURAL HISTORY)	0.51
BRITISH SOCIETY FOR RESEARCH ON AGEING	J.13
BROADBENT, Donald Eric	J.5 L.11, L.12, L.14, L.47 O.48, O.135, P.34
BROCK, Michael George	A.25, A.39, A.43 E.10, E.142, G.319
BROCKLEHURST, Keith	0.116
BROOKE, Peter Leonard	0.113, 0.223
BROWN, Fred	L.57, P.35
BROWN, Sir (George) Lindor	A.12
BROWN, George M.	D.5
BROWN, John M.	0.91
BROWN, Peter	F.47
BROWNE, Win	A.39
BROWNING, Keith Anthony	0.215
BROWNLEE, George Gow	A.51, E.128, O.112, P.293
BRUNDIN, Clark Lannerdahl	G.326
BRUNORI, Maurizio	K.11
BUCHANAN, Robert Angus	J.31
BUCKINGHAM, Amyand David	R.26
BUDD, Alan	0.4
BULLER, Arthur John	A.25, A.34
BUNN, Charles William	A.12, A.20, F.50 G.51, G.53, L.18, P.36
BUNYAN, Peter J.	0.215, 0.218, 0.244, 0.246
BUNJE, Henry	L.14, N.6, N.7, N.39 R.73, R.74
BURCHAM, William Ernest	A.25, L.11
BURCKHARDT, G.Norman	F.38
BURGE, Ronald E.	E.128, G.391, O.80, R.50
BURGEN, Sir Arnold (Stanley Vincent)	A.20, A.25, A.43 G.280, K.1 L.16, L.18, L.49, L.59
BÜRGI, Hans-Beat	G.185, G.298

BURKE, Derek C.	A.43, R.21, R.156
BURLEY, Denis	G.336
BURLIN, Terence	A.43
BURNETT, John H.	A.67, P.108
BURTON, Kenneth	F.85, L.17, L.20
BUTLER, Arthur	O.66
BUTLER, Sir Clifford (Charles)	A.43, R.112
BUTLER, Sir (Frederick Edward) Robin	0.14, 0.232
BUTLER, John Alfred Valentine	A.12, D.2, D.8 F.14, F.101, G.13
BUTTERFIELD, William John Hughes, Baron	P.95
BUTTLE, Eileen	0.259
BUTZ, T.	G.216
BYCROFT, Barrie W.	0.215

CADOGAN, Sir John (Ivan George)	A.67, O.41, O.143
CAINES, Sir John	A.58, O.151, O.244, O.248 R.37
CAIRNS, John	L.47
CALDECOTE, Robert Andrew Inskip (Robin), 2nd Viscount	A.43, O.53
CALDIN, Edward F.	G.75
CALVERT, L.D.	G.240
CALVIN, Melvin	0.41
CAMBRIDGE CRYSTALLOGRAPHIC DATA CENTRE	J.14, J.40
CAMBRIDGE UNIVERSITY PRESS	F.61
CAMERON, A. Forbes	E.130
CAMPBELL, Sir Colin (Murray)	O.108
CAMPBELL, Peter N.	A.12, A.25, F.85 O.243, P.38, P.184
CAMPBELL, S.F.	0.215
CANCER RESEARCH CAMPAIGN	R.106
CANFIELD, Robert E.	G.11, P.39, P.64
CANN, Johnson Robin	0.32
CAPITAL PLANT INTERNATIONAL LTD.	P.40
CAPON, Brian	P.41

	0.010
CARERI, Giorgio	G.216
CAREY, Norman H.	J.17, J.19
CARLISLE, C. Harry	A.12, A.21, A.25, F.32 G.123, M.1, R.57
CARLISLE, Mark	A.25
CARLSON, William	F.96
CAROE, Alban	F.34, P.43
CAROE, Gwendoline (Gwendy) (née Bragg) M.	A.25, F.34, P.43
CARPENTER, Brian G.	0.189
CARTER, Cedric O.	N.4
CASPAR, Donald L.D.	L.50, N.37, P.69
CASSELS, Sir John	G.434A, G.438
CATALYSIS LETTERS	F.62
CATLOW, C.R.A.	0.243
CATON, Michael P.L.	0.215
CATTERALL, J. Ashley	0.43
CECIL, Rupert	E.128
CELLTECH LTD.	J.15 - J.24
CENTRE FOR EXPLOITATION OF SCIENCE AND TECHNOLOGY (CEST)	0.59
CHADWICK, Derek J.	A.43, A.51, G.374, J.30
CHADWICK, Henry	E.142
CHAIN, Sir Ernst (Boris)	L.47, N.29
CHANCE, Britton	G.388, K.31, K.36, P.44, P.65
CHANDRASEKHAR, Sivaramakrishna	A.25, G.6, P.45, P.57
CHAPMAN, Dennis	A.25, A.39, L.46, L.48, P.46
CHAPMAN & HALL LTD.	F.63
CHATT, JOSEPH	A.39, L.48
CHATTERJEE, Syama Das	L.56
CHEMICAL SOCIETY / ROYAL SOCIETY OF CHEMISTRY	A.20, A.25 G.67, G.75, G.115, G.118 G.124, G.131, G.153, G.183 G.270, G.328, J.25
CHIDAMBARAM, R.	E.130
CHIGNELL, Derek A.	E.134
CHILTON, L.V.	D.14
CHIPMAN, David	P.293
CHIRGADZE, Yuri N.	P.293

CHISHOLM, Malcolm Harold	G.398
CHRISTIAN, John Wyrill (Jack)	A.20
CHRISTOPHERSON, Sir Derman (Guy)	L.37
CHUKNYISKI, Peter	G.216
CIBA FOUNDATION	A.25, A.43 G.65, G.98, G.136, G.163 G.168, G.192, G.218, G.252 G.349, G.350, G.374, G.421 J.26 - J.30
CIBA LABORATORIES	G.30
CIVIL SERVICE COLLEGE	O.60
CLARINGBULL, Frank	J.33
CLARK, Brian F.C.	A.25, F.86 G.60, G.394, G.405
CLARK, Charles Anthony (Tony)	O.218
CLARK, Joan R.	P.293
CLARK, V. Malcolm	D.6
CLARKE, Bryan Campbell	O.215
CLARKE, Sir Cyril (Astley)	G.177
CLARKE, John	G.338
CLARKE, Kenneth	A.55, O.231
CLARKE, Patricia Hannah	L.31
CLARKSON, Richard	P.119
CLEMENTI, Enrico	G.401
CLOWES, F.A. Lionel	A.25, E.24, E.31
COAKLEY, W. Terence	G.284
COAST, Eileen M.	F.72, G.335
COCHRAN, William	A.12, F.38, G.2, L.62 P.45, P.47, P.88, R.2
COCHRANE, Sir Ralph	E.129
COGGINS, John R.	G.323
COHEN, Carolyn	P.48
COHEN, Fred E.	R.48
COHEN, Jack S.	R.44
COHEN, Jerome B.	J.6
COHEN, Louis	F.38, J.33, J.34
COHEN, Mendel	K.49
COHEN, Philip	G.219, G.232, P.49

COHEN, Sydney	A.25, N.7
COLDSTREAM, Patrick	A.43, G.438 O.58, O.61, O.62, O.63, O.64 O.65
COLE, Martin	P.293
COLE, R.J.	N.1
COLEMAN, Ronald Frederick	A.43, O.245
COLLEY, Derek C.	0.40
COLLIGAN, Ian C.	G.415
COLLYEAR, Sir John	A.43, O.84
COMMISSION OF THE EUROPEAN COMMUNITIES COMMITTEE FOR THE EUROPEAN DEVELOPMENT OF SCIENCE AND TECHNOLOGY (CODEST)	K.8, K.9
COMMITTEE OF VICE-CHANCELLORS AND PRINCIPALS (CVCP)	G.410, O.52
COMPREHENSIVE BIOCHEMISTRY	F.64
COMPUTER PHYSICS COMMUNICATIONS	F.65
CONNORS, Tom A.	G.227
CONTEMPORARY SCIENTIFIC ARCHIVES CENTRE (later NATIONAL CATALOGUING UNIT FOR THE ARCHIVES OF CONTEMPORARY SCIENTISTS)	J.31
CONTENT, Jean	G.27
CONYERS, Bernard	P.71
COOK, David	E.130
COOK, Peter	P.293
COOKE, Ian D.	N.5, N.6
COOPER, Garth	F.90
COOPER, T.	D.5
COPPOLA, James Ciro	P.50, R.48
COREY, Robert B.	P.51, P.64
CORNER, Edred John Henry	G.142
CORNFORTH, Sir John (Warcup) (Kappa)	A.20, A.25, A.66 G.48, G.270 L.9, P.293
CORPUS CHRISTI COLLEGE OXFORD	E.7 - E.9
COSTES, C.	G.176
COSTLEY-WHITE, Antony	J.42
COTTON, F. Albert	A.20, A.35, E.130, R.44
COTTON, Richard G.H.	P.52

COTTRELL, Tom Leadbetter	G.17
COULSON, Andrew F.W.	P.53, R.1
COULSON, Charles Alfred	E.134
COULTER, Charles Lumen	C.52, G.11, P.54
COUNCIL FOR INDUSTRY AND HIGHER EDUCATION (CIHE)	G.438, O.61 - O.65
COUPLAND, Rex Ernest	0.106
COWBURN, David	P.22
COWLEY, Stanley W.H.	0.215
COX, Sir (Ernest) Gordon	A.12, A.17, D.14, P.43
COX, John C.L.	0.245
CRAIG, Barbara	E.168
CRAWFORD, Bryce	A.35
CRAWFORD, Sir Frederick (William)	A.43
CRAWFORD, Theo	N.4
CRAY RESEARCH (UK) LTD.	P.55
CRC PRESS	F.66
CREIGHTON, Thomas Edwin	G.295, R.156
CRICK, Francis Harry Compton	G.60, G.142, G.143, G.219 L.46, P.56, P.157
CROKAERT, R.	G.41A
CROMBIE, Ian M.	A.33
CROOK, Eric M.	G.406, O.34, P.40
CROSS, Sir Barry (Albert)	E.128, L.14, R.67
CRUICKSHANK, Durward William John	A.10, A.25, A.39 G.227, G.430 J.32, K.29, L.33, L.52 P.57, R.1, R.138
CRUMPTON, Michael Joseph	A.25, G.142, P.58, R.107
CUELLO, A. Claudio	G.382
CULHANE, John Leonard (Celistus)	0.218
CUNNINGHAM, Daniel John	A.67, L.31
CURRAN, Sir Charles (John)	J.5
CURRENT OPINION IN STRUCTURAL BIOLOGY	F.67
CURRIE, Sir Alastair (Robert)	A.25, A.54 N.1, N.4, N.6, O.246
CURRIE, David	0.218

DACIE, Sir John (Vivian)	L.14
DAILY TELEGRAPH	F.68
DAINTON, Barbara, Lady	A.25, E.25, E.138, L.30
DAINTON OF HALLAM MOORS, Frederick Sydney, Baron	A.20, A.25, A.39, A.43, F.59 G.84, O.106, P.59, R.41
DALY, J.J.	K.26
DALYELL, Tam	O.198
DALZIEL, Keith	A.25, A.43, F.82, K.11 L.12, L.46
DANIELLI, James Frederic	A.12
DANNENBERG, Arthur M.	P.60
DARBY, Graham	0.27
DART, Ed C.	0.212, 0.218
DATTA, S. Prakash	F.71
DAVENPORT, Neil	P.55
DAVIDSON, Alan	0.215
DAVIDSON, James Norman	F.85, K.11, L.34
DAVIDSON, P.J.	0.218
DAVIES, Brian W.	M.3
DAVIES, David R.	A.36, G.11, G.78, G.240 J.1, P.61, P.203, R.44
DAVIES, E. Roy	F.37, F.39
DAVIES, Graeme John	0.2, 0.57, 0.230
DAWES, Eddie A.	G.57
DAWKINS, (Clinton) Richard	E.29
DAWSON, W.	0.215, 0.218
DAY, Peter	A.56, D.16, G.386, O.41
DEAN, Alastair C.R.	L.17
DEARING, Sir Ronald (Ernest)	0.2
DEARNLEY, Carles N.	G.149
DEDONDER, R.	G.73, K.8
DEGANI, Yair	A.39, P.293
DEISENHOFER, Johann	G.309
DENCE, Michael R.	G.382
DENMAN, H. Wynne	A.43 J.17, J.18, J.19, J.21, J.23
DENNIS, Alastair Wesley	G.413
DENTON, Sir Eric (James)	0.144

P.62 DERANLEAU, David A. G.355 DEVENISH, Robin C.E. P.293 DEWAN, John C. G.188 DE WARDENER, Hugh Edward 0.32 **DEWEY, John Frederick** C.52, G.267, J.11, N.31 DIAMOND, Robert A. P.63, P.157 F.37 DIBDEN, E.H. Kenneth L.48 **DICKENS**, Frank C.52, G.159, G.213 **DICKERSON, Richard E.** P.64, P.65 G.354 **DIXON**, Bernard R.87 DIXON, H.B.F. G.298 DOBLER, Max A.39, A.51, P.66, R.146 DOBSON, Christopher Martin L.11, L.34, L.51 DODD, James Munro (Jimmie) A.19, G.310, G.388, P.293 DODGSON, Kenneth Scott See also G.333 F.44, F.90 DODSON, George Guy G.131, K.10, L.33, M.3 0.192, 0.215, P.222 A.20, A.25, E.46 DOLL, Sir (William) Richard (Shaboe) 0.26, 0.149 DOLLERY, Colin T. 0.82 DONNACHIE, Alexander 0.112 DONOVAN, Robert J. 0.215 DOUGLAS, K.T. A.25, P.67 DOUZOU, Pierre A.25, E.7 **DOVER, Sir Kenneth James** J.11 DOVER, S. David N.1, N.6, N.7, P.157 DOWMAN, John R.70, R.73, R.78, R.79 R.11 DOWSON, Duncan L.18 DOYLE, Barbara G.38, G.51, G.53, G.102 DRENTH, Jan D. G.145, G.159, G.189, G.389 K.26, P.68, P.279 See also G.379 G.351 DRUCKER, Henry M. G.240 DUAX, William L.

DUNBAR, R.T. DUNCAN, John G. DUNCAN, W.A.M. DUNCAN, William DUNCOMB, Peter DUNHAM, Sir Kingsley (Charles) DUNITZ, Barbara DUNITZ, Jack D.

**DUNNILL**, Peter

DUPONT DE NEMOURS INTERNATIONAL DURANT, John R.

DVORETSKY, Aryeh DWEK, Raymond Allen

DYER, Bernard S.

DYSON, David J. DYSON, Freeman John

EABORN, Colin EASTWOOD, E.A. EBASHI, Setsuro EBERSON, Lennart EBNER, Kurt E. ECHLIN, Patrick EDMONDS, Donald T. EDMUNDSON, Allen Broderick

A.8 F.32, F.37, N.33, N.41 0.218 A.54, N.4, N.6 G.353 A.25, G.104 A.39, P.69 A.10, A.20, A.25, A.39 G.131, G.142, G.146, G.175 G.216, K.27, L.55 P.28, P.69, R.16 See also G.298 C.55, C.56 G.79, G.226, G.227, G.448 J.18 0.16, 0.182, 0.212, 0.215 0.218, P.70 E.121, G.389, G.401 G.278, G.325, G.339, G.351, G.352, G.354, G.356 0.243 A.39, K.49 A.25, A.39, A.43, A.51 F.89, 0.140 P.71, P.134 F.59 G.351, G.353, G.356, G.374 J.3 G.185 L.47

A.14, L.11, L.35 G.69 A.25, L.31 R.19 E.130 G.451 E.74, E.171 P.72

EDSALL, John Tileston	A.25, A.26, F.95 G.11, G.391, K.30 P.73, P.138
EDWARDS, John Hilton	A.25, E.55 G.219, G.227, P.74
EDWARDS, Sir Sam (Samuel Frederick)	J.2, 0.12, 0.112, 0.215
EGAMI, Fujio	G.35
EHRENBERG, Anders	G.261, G.403, L.33
EIGEN, Manfred	G.43, G.142, L.41
EISENBERG, David	G.213, P.65, P.294
EISENBERG, Robert S.	P.294
ELDERKIN, Erika	A.10, A.12, A.20, A.25
ELEY, Daniel Douglas	A.12, F.47, P.294
ELLIOTT, D.F.	G.30, J.1
ELLIOTT, Gerald F.	E.134
ELLIOTT, Katherine	J.26, J.27, J.28
ELLIOTT, Sir Roger (James)	A.25, A.43, G.364 O.193, O.194
ELLIS, Reginald John	E.131
ELLIS, Richard T.	R.22
ELMORE, Norman F.	G.203
ELSEVIER / ASSOCIATED SCIENTIFIC PUBLISHERS (ASP)	F.69
ELTON, Lewis R.B.	0.241
EMBO JOURNAL	F.70
ENGEL, Jürgen	G.216
ENGEL, Paul Cowper	E.169, G.383, P.75
ENGSTRÖM, Lorentz	G.45
ENGSTRÖM, Wilhelm	G.261, G.381
EPSTEIN, Sir (Michael) Anthony	A.43, G.382 L.16, L.33, L.33A
EPTON, Roger	G.373
EUROPEAN ASSOCIATION OF CRYSTALLOGRAPHY IN MOLECULAR BIOLOGY (EACMB)	K.10
EUROPEAN MOLECULAR BIOLOGY LABORATORY (EMBL)	K.11 - K.13, N.33 - N.38
EUROPEAN MOLECULAR BIOLOGY ORGANIZATION (EMBO)	G.42, G.43, G.72, G.99, G.120 G.173, G.214, G.216, G.295 K.11 - K.13, R.135
EVANGELOPOULOS, A.E.	G.63, G.399

EVANS, A.G. EVANS, Gerry EVANS, Phil R. EVANS, Robert C. EVANS, Simon A. EVERED, David Charles EVERED, Derek F. EWALD, Paul Peter G.151 A.34 G.214, G.219 F.2, F.36, F.37, F.39 E.132 A.25, G.349, J.28, J.29, J.30 A.43, L.34 F.39, P.26

FAIRCHILD, Beatrice M. (later MAGDOFF-FAIRCHILD)	R.49
FAIRCLOUGH, Sir John (Whitaker)	K.8 O.3, O.18, O.26, O.44, O.59 O.123, O.193, O.226, O.238 O.241
FAIRLEY, G. Hamilton	N.4
FAIRTLOUGH, Gerard Howard	A.43, A.51, G.336 J.15, J.17, J.18, J.19, J.20 J.21, J.22, J.23, J.24 O.215, O.239
FARAGO, Peter J.	F.74
FARRELL, Brian	E.7
FASELLA, Paolo	G.402, K.8
FASMAN, Gerald D.	A.25, F.66, G.22, P.76
FEBS LETTERS	F.71
FEDER, Ned	P.253
FEENEY, James	F.89, F.92A, R.1
FEILDEN, Geoffrey Bertram Robert	G.51, J.5, L.37
FEINSTEIN, Arnold	G.171
FELDBERG, Wilhelm Siegmund	G.50
FELDMANN, Richard J.	P.77
FELLOWSHIP OF ENGINEERING	0.53
FELSENFELD, Gary	G.389
FENDER, Brian Edward Frederick	G.131, G.167, O.128
FENDLEY, John A.	M.1
FENN, Ruth H.	P.78
FENNA, Roger E.	R.49

FERGUSON, George	K.27
FERSHT, Alan Roy	A.51, A.67, F.72, K.29, L.61 O.140, O.247
FIELDING, Sir Leslie	G.411
FINCH, Paul	E.130
FINDLAY, John B.C.	0.215, 0.218
FINGERHUT, John H.	E.122
FINNEY, John L.	O.44, P.79
FINNISTON, Sir (Harold) Montague	A.43, J.5, O.55
FISCHER, Edmond H.	F.55, G.47, G.392, K.5, P.80
FISH, Sir Hugh	K.8, O.34, O.36, O.183, O.193
FISHER, Sir Henry (Arthur Pears)	E.11, E.12, G.181 P.223, P.245
FISHER, Michael J.	N.6
FISK, David John	0.118, 0.215, 0.218, 0.226
FITZSIMONS, David W.	G.192
FLANAGAN, Dennis	F.11, F.104, P.86
FLEMING, Amalia, Lady	G.15
FLEMING, Graham R.	E.131
FLEMMING, John Stanton	0.184, 0.189
FLORENCE, Alexander T.	G.418
FLOREY, Margaret, Lady	A.25
FLORY, Paul John	K.15, K.16, K.17, P.138
FLOWERS, Brian Hilton, Baron	A.25, A.39, A.43 G.407, L.48 O.52, O.122, O.237, O.242 O.243
FOLLETT, Sir Brian Keith	L.33A, L.34, L.57, L.62 O.56, O.215, R.156
FORD, Norman C.	E.134
FORREST, Sir (Andrew) Patrick (McEwen)	A.34, A.67, R.145
FORSYTH, James M.	G.213
FORTNER, Joseph G.	R.145
FORTY, A. John	0.244
FOSTER, Brian	0.197
FOTHERGILL, John E.	E.132, G.80, G.232
FOTHERGILL, Linda A. (later FOTHERGILL-GILMORE)	G.260, L.20, P.81
FOWDEN, Sir Leslie	A.25, L.34, L.37, L.52

FOWLER, Jack F.	N.6, N.7
FOX, C. Fred	F.85
FOX, Leslie	E.55
FOX, Manfred	0.192
FRAENKEL, Dan	G.219
FRANK, Sir (Frederick) Charles	L.45, L.50
FRANK, Gerard W.	E.120
FRANKEL, Richard B.	G.269
FRANKLIN, Raoul N.	G.381, O.243
FRANKLIN, Trevor J.	P.119
FRANKS, Felix	L.33
FRASER, Sir William (Kerr)	0.244
FRAUENFELDER, Hans	A.36, G.216, P.82
FRAZER, Malcolm J.	J.2
FREEDMAN, Richard B.	G.409, O.119, P.77
FREEMAN, Hans C.	A.51, F.95, P.83
FREEMAN, Richard F.	E.128
FRENCH, Simon	A.25, A.52
FREY, M.	P.294
FRIDAY, James R.	D.15, P.43
FRIED, Josef	G.196
FRÖHLICH, Herbert	P.84
FRYER, Geoffrey	L.11, L.12
FRYER, Peter J.	0.218
FUESS, H.	K.23
FULLER, Keith W.	E.24, E.74, E.82
FULLER, Watson	G.157, G.291, G.293 K.32, M.10, R.44
FULTON, Brian R.	0.197, 0.198
FURBERG, Sven	G.45
FURTH, R. van	F.90
FUSSEY, David	0.218

GABATHULER, Erwin0.218GABRIEL, Alan H.0.142

GADIAN, David Geoffrey	E.169
GANGULY, Ashok S.	0.4, 0.218
GARDNER, Richard Lavenham	A.25, A.39, L.61, O.246, P.16
GARLAND, Peter Brian	G.223, G.227, G.334 J.16, O.241, O.243
GARMAN, Elspeth F.	0.197
GASSER, Robert	A.25
GAZE, Raymond Michael	L.47, N.35
GEE, Geoffrey	L.35
GEHRING, H.	G.216
GEIS, Irving	F.11, P.85
GEISOW, Michael	A.51
GELDER, Michael Graham	A.44, E.14
GELL-MANN, Murray	E.152
GENZEL, L.	P.84
GERISCH, Günther	G.142, G.143
GERSTMAN, Bernard S.	E.134
GHUYSEN, Jean-Marie	A.67, G.370
GIBBONS, Michael	G.428
GIBSON, Quentin H.	L.41
GILL, Edward W.	G.105
GILLETT, J.D.	A.44
GLASER, Robert J.	E.132
GLASSER, Lesley S. Dent	D.5, J.35, J.36, L.60
GLAXO-ASSOCIATION OF BRITISH SCIENCE WRITERS	J.31A
GLUSKER, Jenny Pickworth	F.44, G.205, G.304 P.26, P.86, R.45
GLYNN, Ian Michael	L.14, L.17, N.18, N.42
GŌ, Nobuhiro	E.131
GODFREY, Malcolm	A.25, A.34, A.39, A.44 N.4, O.1, O.26
GODWIN, Sir Harry	L.47
GOLDSMITH, Maurice	G.346
GOMES DE MESQUITA, A.H.	K.26
GOODALL, David	G.101
GOODENOUGH, Peter W.	G.435
GOODFORD, Peter G.	G.226

GOODMAN, Murray GOODWIN, Trevor Walworth GOODY, Roger Sidney GORDON, Roy E. GORDON, Siamon GORDY, Walter GOWANS, Sir James (Learmouth)

GOWING, Margaret Mary GRAHAM, Christopher Forbes

GRAHAME-SMITH, David Grahame GRAINGER, Colin T. GRATIAN, David GRATZER, Walter B. GRANT, Douglas F. GRAY, J.O. GRAY, Sir John (Archibald Browne)

GRAY, John C. GRAY, Ken GREEN, Cecil H. GREEN, David W.

GREEN, Leslie L. GREENE, Sir Hugh (Carleton) GREGORY, Roderic Alfred GREGSON, John, Baron GRIMSTONE, A.V. GRINYER, Peter H. GRUBER, Max GRUDER, Yaron R.43 F.85, G.129, J.1 F.91 0.107 E.128, F.90, G.437, P.98 D.6 A.25, A.39 F.69, G.342, J.19, L.14 N.1, N.43, N.44 0.15, 0.27, 0.28, 0.98, 0.107 0.108, 0.110, 0.183, 0.253 P.245 L.17 A.51 E.24, E.72, E.73, E.169 G.338, L.14, P.245 A.39, E.9, P.87 E.134 J.21, J.23 G.159, K.30, K.31 A.10, A.25, D.7, D.12, G.3 0.41 A.12, A.20, A.25, A.44 E.97, G.41, L.33 N.1, N.3, N.5, N.7, N.18, N.21 N.25, N.39, N.55, N.57 0.240, R.71 0.215 0.218 G.361 F.14, F.83, G.48, P.88, R.2 See also M.1 G.249, M.10, M.13 J.5 A.25, L.3, L.31 J.3 F.78 A.44 A.39, G.38 A.37

GUILLERY, Rainer Walter GUISE, George GUPTA, M.P. GURD, Frank R.N. GURDON, John Bertrand GUTFREUND, Herbert (Freddie)

GUTH, Oscar GUTHRIE, Roy David (Gus)

HAAS, David Jean HADDOW, Sir Alexander HAGLER, Arnold T. HAGUE, Sir Douglas (Chalmers) HAHN, Theo HAIDEMENAKIS, E.D. HAINES, Thomas H. HALL, Sir Arnold (Alexander) HALL, David A. HALL, David A. HALL, George Derek Gordon HALL, Laurance D. HALL, Robert Lowe (Baron Roberthall) HALVORSEN, Harlyn O. HAMAGUCHI, Kozo

HAMILTON, Sir James HAMLIN, Ronald C. HANCOCK, Sir David (John Stowell)

HANDLER, Philip HANLEY, John W. HANN, Brian F. HANSON, AI W. E.152 O.242 E.130, P.89, R.3 P.90 A.36, L.17, O.112, P.91 F.85, F.95 G.48, G.51, G.53, G.136 L.46, L.49, L.55 P.92, P.155, P.279 G.94, G.393 E.128

P.93 A.12, A.21, J.5, J.26, P.94 P.294 A.44, O.5, O.240 A.39, D.5, K.26 G.61 G.389 L.32 G.389, J.13 0.124 E.7, E.142 0.106, 0.107, P.95 E.2 G.372 A.26, D.7, F.12 G.36, G.103, P.96 A.26, 0.221 E.130 0.27, 0.221, 0.224, 0.238 P.107 A.14, A.15, A.65, G.29 K.14, K.16, K.17 G.83 F.6, P.294

HANSON, (Emmeline) Jean HARBISON, Earle H. HARDIE, D. Grahame HARDIE, William Francis Ross HARDING, Marjorie HARDING, Nigel G.L. HARDMAN, Karl D. HARDY, Sir Alister (Clavering) HARKER, David HARPER, John Lander HARPER, Peter HARRINGTON, William F. HARRIS, Sir Henry

#### HARRIS, John leuan

HARRIS, Martin HARRIS, Tim J.R. HARRISON, A. Victoria HARRISON, Brian H. HARRISON, Pauline May

HARRISON, Sir Richard (John) HARRISON, Stephen C. HART, Michael HARTE, Robert A. HARTLEY, Brian Selby

HARVARD-MONSANTO HARVEY, Ian A. HASCHEMEYER, Audrey E.V. HASLEWOOD, Geoffrey Arthur Dering HASNAIN, S. Samar A.12, P.97 K.21 G.232 E.7 D.5, E.130, R.44, R.50 P.98 R.44 A.12, A.20, A.21 A.26, D.11, E.120, E.130 A.36 J.31 A.36, A.67, G.8 A.39 E.14, E.134, E.157, E.161 F.36, K.11 L.3, L.7, L.11, L.14, L.18, L.32 L.34, L.43, L.46, L.51 N.30 P.99, P.108, P.184, P.253 R.145 A.12, A.20 D.11, F.19, G.48, N.27, P.100 0.151 0.218 R.80 E.7, P.207 A.26, G.269, G.383, J.11 M.12, O.189, P.101, R.146 A.21, A.34, L.34 P.294 0.218, 0.244, 0.258 A.16, G.11, P.102 A.26, E.138, F.85, F.86, F.95 G.51, K.11, L.46, L.48, N.28 0.112, R.2 K.14 - K.21 0.218, 0.244 E.130, K.11, R.143 J.1 0.151, 0.152

HASSEL, Odd	G.45
HASTINGS, J. Woodland (Woody)	E.130, G.87, G.136
HASTINGS, Max Macdonald	F.68
HAY, Alan M.	0.218
HAYES, William	A.12, L.47
HAYES, William	0.108
HAYWARD, John F.C.	G.368
HAZEN, Edward E. (Ted)	A.20, G.87, P.103
HEAD, John J.	F.16, F.17
HEALEY, Peter	0.68, 0.98
HEARN, John P.	G.337, O.23
HEATON, Eric William	E.169
HEDLEY, Ron H.	0.142
HEFFRON, James J.A.	G.241
HEILBRON, John L.	F.37
HELEN HAY WHITNEY FOUNDATION	E.120
HELLIWELL, John R.	F.91, F.92, G.267, G.430 M.8, M.9, M.10, M.12
HENDERSON, Richard	E.168, L.55
HENDERSON, Sir William McGregor (Gregor)	L.7, 0.21
HENDRICKSON, Wayne A.	P.104
HENSLEY, David	0.245
HENTON, Anthony I.P.	A.26, G.117, J.1
HERBSTEIN, Frank H.	A.37
HERMANS, Jan	G.401
HERRIOTT, Jon R.	P.294
HERZIG, David J.	G.11
HESLOP-HARRISON, John	A.26, A.34, L.3, L.37
HESS, Benno	G.63, G.219, K.40, K.43 P.279, P.282
HESS, George P.	A.39, R.44
HEY, Donald Holroyde	F.85
HIGGINS, Chris F.	O.242, P.105
HIGGINSON, Sir Gordon (Robert)	0.215
HIGHFIELD, Roger	F.68
HILL, David	A.12

A.26, A.39, A.51 HILL, Hugh Allen Oliver E.83, G.76, L.62 R.76 HILL, June R. F.47, P.106 HILL, Robert L. P.107 HILL, Ronald W. 0.247 HILLS, Sir Graham 0.143 HILSUM, Cyril A.12, A.20, E.2, E.6, G.50 HIMSWORTH, Sir Harold (Percival) A.36, A.48 HINDE, Robert Aubrey G.81, G.285 HINE, Ray G.216 HINZ, Hans-Jürgen G.59 HIRS, C.H. Werner A.20, A.44, E.168, L.6, L.11 HIRSCH, Sir Peter (Bernhard) 0.112, 0.143, 0.238, 0.241 P.108, R.154 E.122 HIRSCHMANN, Ralph F. G.124 HOBSON, John D. 0.243 HOCH, Paul E.128 HOCKADAY, T. Derek R. A.26, L.1, L.31, P.109, R.44 HODGKIN, Sir Alan (Lloyd) E.1, E.2, F.36, L.24, L.55 HODGKIN, Dorothy Mary Crowfoot P.28, P.64, P.110 See also F.44, G.412 E.8, P.294 HODGSON, Peter E. E.124 HOFFMANN-LAROCHE LTD. K.11, K.40, K.42, K.43 HOFSCHNEIDER, Peter Hans A.39, G.379, G.397, G.398 HOL, Wim G.J. P.111 0.1, 0.80, 0.220, 0.221 HOLDGATE, Martin Wyatt A.44 HOLLIDAY, Fred G.T. L.48 HOLLIDAY, Robin E.3, G.48, K.12, L.55, N.37 HOLMES, Kenneth Charles P.112 A.20, E.24, E.76 HOLMES, William G.50 HOLTZ, P. 0.243 HOLWELL, Peter G.43 HOPMANN, Rudolf G.72, G.99, K.11, K.40, P.113 HOPPE, Walter D.2, D.13, D.14

HOPTHROW, Harry Ewart

HORECKER, Bernie L. HORN, Gabriel HORNE, Nigel W. HORTON, Eric W. HOSKINS, Brian John HOUGHTON, John Theodore HOWARD, James Griffiths HOWARD, Judith A.K. HOWARTH, Alan Thomas HOWELL, P. Lynne HOWELLS, Eric R. HOWLETT, Jack HUBER, Carol HUBER, Robert

HUGHES, Anthony E. HUGHES, Philip HUMPHREY, John Herbert HUMPHREYS, Colin J. HURRELL, John G.R. HUTCHINSON, Franklin HUXLEY, Sir Andrew (Fielding)

HUXLEY, Hugh Esmor

IBBEKEN, Hillert IBM ICI ILES, John F. IMAHORI, Kazutomo IMPERIAL CANCER RESEARCH FUND INGRAM, Rupert H. INSTITUT DE LA VIE INSTITUT DE LA VIE A.16, A.36, G.86, P.114 0.215 0.218 N.4 0.218 0.241, 0.246 N.6 G.412, J.6 0.246 F.92 A.12 A.26, M.6, P.115 A.39 A.39, F.81, F.95, F.96 G.309, P.116 0.258, 0.260 E.130 J.45, N.7, P.294 0.44, 0.45 G.193 F.61, P.251 A.20, A.26, A.36, A.39, A.67 L.1, L.3, L.14, L.15, L.32, L.37 N.22, P.97, P.287 A.34, A.36, G.423, N.25, N.37 P.113, P.294

P.117 G.230, P.118 P.119 E.76, G.338 G.35 R.107 F.83 G.70, G.91, K.22 K.23

INSTITUTE OF BIOLOGY	P.120
INSTITUTE OF PHYSICS (IoP)	A.6, A.12, A.26, F.73 G.1, G.10, G.16, G.71, G.81 G.100, G.131, G.144, G.152 G.355 J.32 - J.37
INTERDISCIPLINARY SCIENCE REVIEWS	A.20, F.74
INTERNATIONAL UNION OF BIOCHEMISTRY (IUB)	G.35 - G.37, G.77, G.78, G.116 G.176, G.259 R.134
INTERNATIONAL UNION OF CRYSTALLOGRAPHY (IUCr)	G.3A, G.9, G.24, G.103, G.104 G.117, G.158 - G.160, G.240 G.387, G.393, G.401 K.24 - K.29
INTERNATIONAL UNION FOR PURE AND APPLIED BIOPHYSICS (IUPAB) Previously INTERNATIONAL ORGANIZATION FOR PURE AND APPLIED BIOPHYSICS (IOPAB)	G.13, G.26, G.62, G.157 G.197, G.290 - G.297, G.391 K.30 - K.37
INTERNATIONAL UNION FOR PURE AND APPLIED CHEMISTRY (IUPAC)	G.49, G.74, G.93, G.327 G.389
INTER-UNIVERSITY COUNCIL	R.107A
IRL PRESS	F.72, F.102, G.335
IVERSEN, Leslie Lars	0.28
JACK, David	0.12
JACK, Julian J.B.	P.121
JACKSON, John B.H.	A.44 J.17, J.18, J.19, J.20, J.21 J.22, J.23, J.24 O.239, O.240
JACKSON, Robert Victor	0.5, 0.121, 0.122, 0.123 0.192, 0.193, 0.197, 0.244 0.247, 0.260
JACOBSON, Carl-Olof	A.53
JACROT, Bernard	K.23
JAENICKE, Lothar	K.40, K.42
JAMES, Michael Norman George	E.130, G.382, P.122, R.50
JANIS	F.75
JANSONIUS, J.N. (Hans)	A.51, G.146, G.216, K.5 P.68, P.294
JANSSEN PHARMACEUTICAL LTD.	P.123

JANSZ, Hendrik S.	G.189
JARDETZKY, Oleg	E.132,
JATON, Jean-Claude	P.124
JEANLOZ, Roger W.	G.367
JEAVONS, Alan Paul	P.125
JEFFERIS, Roy	G.171
JEFFERY, Jonathan d'Ardern	P.126
JELLICOE, George Patrick John Rushworth, 2nd Earl	0.14, 0
JENCKS, William P.	F.95
JENKIN OF RODING, Charles Patrick Fleeming, Baron	0.25
JENKIN, John G.	P.127
JENNESS, Robert	P.128
JENNINGS, David H.	0.192
JENSEN, Lyle H.	C.52, F G.116,
	P.129,
JEPSON, John B.	G.68
JERNE, Niels Kaj	G.91
JINKS, John Leonard	P.245
JOHN, Robert A.	E.128
JOHNS, David J.	0.245
JOHNSON, Brian	G.225
JOHNSON, D. Gale	A.22
JOHNSON, Louise Napier	E.31, I
	E.124, F.19, F

JOLLÈS, Pierre

JOLLIFFE, Christopher JONES, Alun Denry Wynn JONES, Alwyn JONES, Sir Ewart (Ray Herbert) (Tim)

32, F.95, G.59, P.294 24 67 25 71 26 4, 0.29 5 25 27 28 192 52, F.80 16, G.131, G.173 29, P.214 68 91 245 28 245, 0.246 225 22 31, E.100, E.106, E.116 124, E.138, E.161, E.171 F.19, F.36, F.47, F.91, F.97 G.103, G.173, G.430 J.18, J.41, K.11 L.9, L.55, L.57, L.62 P.28, P.80, P.108, P.118 P.130, P.131, P.160, P.181, P.261, P.279 R.99, R.146 A.39, F.90, G.89, G.264 K.40, K.42, P.64, P.131 E.136 G.272, R.119 - R.121 P.294 A.12, E.14, E.24, E.26 L.9, L.40, M.1 0.112, P.132

JONES, Sir Harold Spencer	D.4
JONES, J.G. Watkin	G.318
JÖRNVALL, Hans	G.313
JOSEPH, Keith Sinjohn, Baron	A.67 O.1, O.98, O.100, O.121 O.122, O.140
JOURNAL OF THE AMERICAN CHEMICAL SOCIETY	F.76
JOURNAL OF APPLIED CRYSTALLOGRAPHY	F.77
JOURNAL OF CELL SCIENCE	F.78
JOURNAL OF MOLECULAR BIOLOGY	F.79 - F.81
JOURNAL OF THEORETICAL BIOLOGY	F.82
JOYNSON, Michael A.	A.26, G.406
JUDGE, Harry George	J.41

KÄGI, J. KAISER, Emil Thomas

KALB, A. Joseph KAMITSUBO, H. KANDLER, Otto KARLE, Jerome KARLSON, Peter KARNOVSKY, Manfred L. KARPAS, Abraham KARPLUS, Martin

KARTHA, Gopinath KATCHALSKY, Aharon KATCHALSKI-KATZIR, Ephraim KATO, Norio KATZ, Sir Bernard

KAUZMANN, Walter KAY, Sir Andrew Watt G.216 A.22, E.130, E.131 G.265, P.133 E.128 K.47 K.42 A.39, G.267 G.176 G.87 P.134 G.145, G.237, G.293 P.135 P.213 K.30 K.49, P.136 P.230 A.20, A.26 L.17, L.32, L.34, L.58 F.95, G.142 A.26

KEAY, Ronald William John

KEIL, Boja KEIR, Hamish M. KELL, Douglas B. KELLENBERGER, Edward KELLY, Anthony KELLY, Tom KEMP, Michael B. KENDREW, Sir John (Cowdery)

KENNARD, Olga (Lady Bergen)

KENNEDY, J.A.G. KENNER, George Wallace KENNY, Sir Anthony John Patrick KENT, Paul W. KEYNAN, Alex KEYNES, Richard Darwin

KIBBLE, Thomas Walter Bannerman KIDD, Charles V. KIERKEGAARD, Peder KILBURN, Tom KIM, Sung-Hou KING, Jim N. KING, Ronald A.26, G.219 L.1, L.7, L.11, L.14, L.17, L.31 L.32, L.33, L.34, L.49, L.61 L.62 0.12, 0.55, 0.124, 0.192 0.247 G.53 0.116, 0.190 0.215, 0.218 K.4, K.40, K.42 F.37, O.189, O.243 0.218 N.37, N.64 A.20, A.26, A.34, A.36, A.39 A.44 C.52, E.1, E.2 F.8, F.14, F.36, F.79, F.80 F.81, F.95 G.13, H.37 K.11, K.12, K.13, K.31 L.6, L.47, L.55 N.33, N.34, O.140 P.28, P.137, P.138 A.12, A.26, A.36, A.39, A.44 F.95, G.23, G.227, G.240 J.6, J.14, J.33, J.40 K.26, K.27 L.20, N.50, P.139 0.218 A.20, G.129, P.140 A.68 G.340, G.391, G.394, P.141 K.11 A.20, G.290, G.293, K.31 L.4, L.31, L.49 0.112 G.271 G.117, G.185, P.294 L.11 P.142 G.103, G.131, G.144 A.20, D.13, G.227, P.24

KINGMAN, Sir John (Frank Charles)

KINGSMAN, Alan J. KINGSMAN, Susan M. KIPLING, Jeff KIRKMAN, Charles A.

KISELEV, Nikolai KLÍMEK, Miroš KLOTZ, Irving M. KLUG, Sir Aaron

KLUGER, Ronald H. KLYNE, William KNAPMAN, Roger KNIGHT, C.S. KNILL, Sir John (Lawrence)

KNOWLES, Jeremy Randall

KNOWLES, Peter F. KNOX, Kerro KODICEK, Egon KOENIG, Donald F. KOETZLE, Thomas F. KOFFLER, Murray B. KORNBERG, Sir Hans (Leo) A.34, A.44 G.134, G.254, K.8 L.11, L.35, L.36 0.15, 0.16, 0.41, 0.42, 0.55 0.58, 0.98, 0.106, 0.118 0.128, 0.143, 0.148, 0.253 P.279 0.112, R.51 0.112, R.51 0.218, 0.234 J.5, J.15, J.16 N.1, N.2, N.3, N.5, N.6, N.7 N.18, N.19, N.31, N.32, N.42 N.55, N.59, N.60 A.66 A.51 F.95, P.143 A.20, A.39, C.52, F.79 L.6, L.18 P.113, P.144, R.2 G.184 G.183, P.138 0.218 E.128 A.44 0.5, 0.36, 0.37, 0.118 0.119, 0.124, 0.214, 0.218 A.36, A.39, A.51 D.9, E.155, E.168 F.19, F.95, G.53, G.219 L.18, L.48, L.49, L.55, L.59 P.145, R.1 G.246 K.27 F.86 G.11, P.294 P.139 K.49 A.17, A.26 F.85, F.86, F.87 G.345, G.372 L.13, L.32, L.33, L.45, L.46 L.53 0.110, P.146, R.26

KOSHLAND, Daniel Edward

KOTANI, Masao KRATKY, Christoph KRAUT, Joseph KREBS, Sir Hans (Adolf) KREBS, John Richard KRETSINGER, Robert Harvey KRONMAN, Martin J. KŪHN, Klaus KUHN, Nicholas J. KURTI, Nicholas

LACK, David Lambert LAMB, Joseph Fairweather LANG, Andrew Richard LANGFORD, J. lan LANGRIDGE, Robert LASKOWSKI, Michael LATNER, A.L. LAW, Harry D. LAYTON, Derek G. LAZDUNSKI, Michel LEACH, Syd J. LEADBETTER, Alan James LEDWITH, A. LEE, Sir Kenneth LEGGETT, Jeremy K. LEHMANN, Hermann LEHRER, Sherwin S. (Sam) LENNON, Derek C. LENNOX, Edwin S. LEONIS, J. LERNER, Richard A. LEVERHULME TRUST

F.81, F.95 G.47, G.93, P.147 G.197 E.130, P.294 P.148 E.2, E.6, L.43, L.59, P.194 E.138, G.338 F.109, P.149 P.150 K.39, K.40 P.151 A.26, L.31

A.12, E.24 J.44, O.190, O.245 A.20, A.26, A.44 G.263, J.6, R.52 P.152, P.251 G.11 P.153 A.32 P.154 P.155 P.180 0.151, 0.218, 0.259 0.218 P.24 0.33 L.18, L.45 G.22, P.294 P.40 F.86, J.24 G.41A G.361 R.108 - R.110

LEVINE, Michael	P.156
LEVITT, Michael	G.216, P.157
LEVVY, G.A.	P.158
LEWIS, Dan	R.63
LEWIS, David	G.144
LEWIS, Geoffrey	A.26 G.97, G.114, G.126, G.127
LEWIS, Jack, Baron	A.44, P.98
LEWIS, T.John	E.130
LIANG, Dong-cai	P.159
LIEBECQ, Claude	G.95
LIEBMAN, Michael N.	E.130
LIENHARD, Gustav E.	P.160
LIFSON, Shneior	P.138, P.157
LIGHTHILL, Sir (Michael) James	O.148, O.190, O.193, R.46
LILJAS, Anders	P.254
LILLEY, Derek M.J.	E.134
LILLFORD, Peter J.	0.218
LINDLEY, Peter F.	0.215
LIPMAN, Norman H.	0.41, 0.142
LIPSCOMB, William Nunn	G.11, G.51, G.53, G.302 P.161
LIPSON, Henry Solomon	A.12, A.20, A.26, A.66 E.131, F.3, F.35, F.49, F.50 G.191, L.42, L.46, L.56 P.26, P.27, P.127
LIQUORI, Alfonso M.	P.162
LISLE, J.C.	0.197
LISS, Peter S.	0.218
LLEWELLYN-SMITH, Christopher Hubert	0.40, 0.245
LLOYD, June (Kathleen), Dame	A.26, A.44
LOEUR, Gilda H.	P.294
LOMER, William Michael (Mick)	A.26, F.40, G.227, K.23
LONGUET-HIGGINS, Hugh Christopher	G.142, G.143
LONSDALE, Anne	G.368
LONSDALE, Kathleen, Dame	A.12, G.48, P.89
LORD, Richard C.	G.390
LORIMER, George Huntly	L.57

LOVE, Warner E.	D.5
LOWE, Christopher R.	O.218
LOWE, Gordon	A.26, A.44 D.9, G.51, L.62, P.60
LOWENSTEIN, Otto Egon	L.17
LOWEY, Susan	A.65
LOWY, Jack	A.12, E.105
LUBORSKY, Samuel W.	E.134
LUSH, Brandon	A.12, E.2, G.12, G.41, R.69
LŪST, R.	K.38, K.39, K.40, K.42
LUZZATI, Vittorio	F.23, F.81, P.218
LYNDEN-BELL, Donald	R.124
LYNTON, Harry	E.134
LYON, Mary Frances	A.36
LYSTER, Richard L.J.	E.130, P.163

McANUFF, John W.	D.15, D.123
McAULEY, Alex	G.67
McBEAN, Gordon A.	0.246
McCLEVERTY, Jon A.	0.218
McCRAE, Malcolm	E.128
McCREA, Sir William (Hunter)	A.67
McCRORIE, Peter	G.256
McCULLOCH, Jim S.G.	К.8
McDOWELL, M.R.C.	G.279
McFARLAND, David J.	E.67, G.338
MACFARLANE, Alistair George James	P.164
MACFARLANE, Gwyn	P.165
McGANDY, Ed L.	C.52
McGRAW-HILL BOOK COMPANY	F.83
MACGREGOR, John	0.248
MACHIN, Pella	A.26, G.222, G.276, G.399
McINTYRE, Michael Edgeworth	0.119, 0.243
MACKAY, Alan Lindsay	A.26, L.3, L.57
MACKENZIE, C.J.	F.40

#### D.C. Phillips NCUACS 45/1/94

#### Index of correspondents

McKENZIE, Hugh A. McLACHLAN, Andrew David McLAREN, Anne Laura, Dame

McMULLEN, A.I. MADDISON, Peter J. MADDOX, John Royden

MAHONEY, Richard J. MAKI, August H. MAKINEN, Marvin W.

MALMSTRÖM, Bo G. MALPAS, Robert MANDELSTAM, Joel

MANN, Thaddeus Robert Rudolph MANNERS, David J. MANNING, Geoff MANSFIELD, Sir Peter MAQUAT, Lynne MARCH, Norman Henry MARK, Kai-Keung MARKL, Hubert MAROIS, Maurice MARSH, D. John MARSH, J.T. MARSDEN, John MARSHALL, Robin D. MARSHALL OF GORING, Walter Charles, Baron MARTIN, Benjamin Raymond MARTIN, Sir David (Christie)

MARVIN, Donald A. MASEFIELD, Geoffrey B. MASLEN, Edward (Ted) N. MASON, Sir (Basil) John P.166 E.130, F.92A A.20, L.31, L.47, L.48 N.4, N.5, N.6, N.7, O.238 P.167 G.417 F.93, G.142, H.13 R.112, R.113 K.20 P.295 G.78 P.67, P.84, P.147, P.295, R.43 G.45, G.116, P.279, R.19 0.247 A.12, A.26, F.85 L.11, L.34 P.108, P.168, P.174 L.47 F.86 A.44, O.142, O.143 0.107 P.295 G.300 G.103 0.244 G.70, G.91, K.22 E.100 F.40 0.247 G.245, P.295 0.149, 0.238, 0.241 0.98 - 0.105 G.51, G.54, G.142, G.143 J.5, J.26 L.1, L.17, L.61 E.130, E.134, R.44, R.53 E.23, E.24, E.27 A.12, P.169 L.33, O.14, O.119

MASON, J. Stanley	0.218
MASON, Sir Ronald	A.12, A.20, A.26, G.207 L.47, L.48, L.61, N.5 O.109, O.221, P.170
MASSIE, Sir Harrie Stewart Wilson	F.36
MATHER, Paul M.	0.218
MATHIAS, Anthony P.	G.20A, G.25, G.78, G.95, J.1
MATHIAS, Peter	A.44, O.12, O.40, O.50, O.110
MATHIESON, Alexander McL (Sandy)	A.26, E.137 K.24, K.25, K.26, K.27
MATTHEWS, Brian W.	A.39, A.51 G.173, G.239, P.172
MATTHEWS, Drummond Hoyle	L.36
MATTHEWS, Paul Taunton	A.17, A.20, A.26 P.19, R.23
MAUNDER, Leonard	0.218
MAX-PLANCK-GESELLSCHAFT INSTITUT FÜR BIOCHIMIE	G.42, K.38 - K.44
MAXWELL, (lan) Robert	J.14
MAY, L.	E.128
MAY, Robert McCredie	P.173
MAYNARD SMITH, John	L.11, L.13, L.31, L.48, P.295
MEADOW, Henry C.	K.14, K.15, K.16, K.17, K.19
MEDAWAR, Sir Peter (Brian)	A.26
MEDFORD, R.D.	E.128
MEDICAL RESEARCH COUNCIL (MRC)	A.9 E.2, E.97, E.98, E.99, E.101 E.102, E.103, E.105, E.106 E.107, E.110, E.114, E.118 E.119 G.41, G.50, G.141, G.342 G.357 J.15, J.16 N.1 - N.64, O.26 - O.30 R.69 - R.83
MEDICAL AND TECHNICAL PUBLISHING CO. LTD. (MTP)	A.20, F.84 - F.87
MEGAW, Helen D.	F.40
MEHLER, Alan H.	E.132, P.295
MEISTER, Alton	A.36, K.21
MELLANBY, Jane	L.32
MELLOR, D. Hugh	G.257
MELVILLE, Sir Harry (Work)	F.23

MERCK SHARP & DOHME MERRISON, Sir Alec (Alexander Walter) MESSEL, Harry METCALFE, Jim C. METCALFE, John C. MEYER, Edgar F. MICHAEL, Sir Peter (Colin) MICHAELIS, Anthony R. MICHELSON, A. Michael MIDDLETON, Sir Peter (Edward) MIDGLEY, E. Graham MILDVAN, Albert S. MILES, Caroline Mary MILLEDGE, H. Judith MILLER, Andrew

MILLER, Jacques Francis Albert Pierre MILLER, Peter MILLER, Stewart C. MILLS, Owen S. MILNE, W.I. MITCHELL, Sir (Edgar) William (John)

MITCHELL, Peter Dennis MITCHISON, John Murdoch MITCHISON, Nicholas Avrion MIYAKAWA, Katsu MIYAZAWA, T. MIYAZIMA, Tatsuoki MOFFAT, Keith MOLE, Robin H. MONOD, Jacques MONTGOMERY, H. E.122 A.26, O.1 G.94 F.86, G.257, P.295 L.4 A.39, K.29, R.44 0.84, 0.144, P.174 A.26, A.36, F.74, G.177 G.66 0.224 A.17 G.219, G.389, G.390, P.295 G.351 D.6, G.125, G.204, R.3, R.119 A.51, E.168, E.171 G.226, G.227, G.332, G.419 K.12, K.23 L.18, L.62, 0.215 L.61 G.338 0.218 E.130, G.131, G.169, P.175 0.112 A.26, A.44, G.231 0.1, 0.5, 0.17, 0.18, 0.19 0.42, 0.43, 0.44, 0.58, 0.108 0.112, 0.118, 0.128, 0.135 0.183, 0.186, 0.193, 0.226 P.245, P.287 P.176 A.26, L.34, L.36 G.357, N.7, N.33 K.47 P.138 K.47 G.430, P.295 N.1 P.177 D.6

E.134 MOODY, Michael F. MOORE, Geoffrey Robert MOORE, John E. MOORE, Mary MOORE, Moreton MOORE, Stanford MORFFEW, Andy MORGAN, Walter Thomas James MORITA, Yuhei MORLEY, David W. MORLEY, John S. MORRIS, D.R. MORRIS, David MORRIS, Sir (James) Richard (Samuel) MORRIS, Shirley J. MOSER, Carl MÖSSBAUER, Richard L. MOTTRAM, Richard MOULT, John MOUNTFORD, Carolyn MOYLE, Jennifer MUIR, Isabella Helen Mary MUIRHEAD, Hilary MULVEY, John H. MURRAY, James Dickson MURRAY, Sir Kenneth MURRAY-RUST, Peter MURRELL, William G.

R.55 G.433 E.14 G.267, G.279, G.315, J.6 F.95, G.176, G.265 P.118 A.26 E.130 F.59 G.177, G.299, G.307, G.311 G.321, G.351 E.130, G.48 0.218 G.119 A.34, A.44 0.3, 0.5, 0.17, 0.119, 0.184 E.134 G.137, G.159, P.178 K.23 0.259, 0.260 F.80 A.26 L.31 A.26, E.130 G.219, M.3, P.179 J.44, O.40, O.190 L.3, L.16, L.19 G.357 E.131, P.295 E.134

NAIRNE, Sir Patrick (Dalmahoy) NARIN, Francis NATIONAL ACADEMY OF SCIENCES (WASHINGTON) A.44, O.243 G.349 A.35, A.36, F.88 - F.92A G.29, K.45, L.8

NATIONAL ADVISORY BOARD FOR LOCAL AUTHORITY HIGHER EDUCATION (NAB)	O.54
NATIONAL FUND FOR RESEARCH INTO CRIPPLING DISEASES	R.111
NATIONAL LABORATORY OF BIOMACROMOLECULES (BEIJING)	K.46
NATURAL ENVIRONMENT RESEARCH COUNCIL (NERC)	A.44, O.31 - O.37
NATURE	F.20, F.93
NATURE AMERICA	F.94
NEEDHAM, A.E. (Bob)	E.24
NEIDLE, Stephen	G.137
NEIL, Eric	F.99
NEILANDS, J.B.	A.14
NEILL, Sir (Francis) Patrick	A.40, A.44
NELMES, Richard J.	G.227
NEMETHY, George	P.138, P.180
NESSA, Qamrun	E.128
NEUBERGER, Albert	A.20, A.26, D.11 F.64, F.69, F.86 J.31, L.33, P.181
NEUHOFF, V.	G.120
NEUMANN, Eberhard	K.40
NEURATH, Hans	A.36, A.40, F.54, F.55, F.95 G.51, G.53, G.389, G.396 P.182, P.273
NEVILLE, A Charles	E.20
NEVILLE, Adam	0.218
NEWBOULD, Brian B.	0.215
NEWBY, Howard Joseph	0.9, 0.49, 0.118, 0.124 0.214, 0.218
NEWSHOLME, Eric A.	A.51, E.24, P.295
NEWTON, Guy F.	D.6
NICHOLSON, Bruce Heywood	G.227, P.183, R.39
NICHOLSON, Sir Robin (Buchanan)	A.67, K.8 0.21, 0.33, 0.34, 0.46, 0.80 0.81, 0.109, 0.128, 0.131 0.158, 0.218, 0.238
NISSENBAUM, Arie	K.49
NIXON, William Charles	0.112
NOBBS, Chris	C.52

NOBLE, David NOBLE, Denis NOBLE, Sir Fraser NONHEBEL, Derek C. NORTH, Anthony Charles Thomas

 NORTH ATLANTIC TREATY ORGANISATION (NATO)
 E.110

 NORTHUMBERLAND, Hugh Algernon Percy, 10th Duke of
 R.71

 NORTON, R. Christopher
 A.26

 N 1
 N 1

NOSSAL, Sir Gustav (Joseph Victor) NUFFIELD FOUNDATION

NUNN, A.J. NYBURG, Stan C. NYHOLM, Sir Ronald (Sydney) J.16, N.38, N.40 F.101, J.44, L.14 A.18 G.289 A.20 E.42, E.97, E.98, E.99, E.168 F.16, F.17, F.50, F.102 G.109, G.170, G.227, G.236 G.290, G.291, G.294, G.315 J.4, J.38, J.39 K.11, L.62, M.3 P.28, P.138, P.184, P.221 R.4, R.146 E.116, G.389, R.134 A.26, A.27 N.1, N.3, N.4, N.5, N.6, N.7 N.11, N.25, N.62 R.71 A.36 A.13, D.15, E.4, E.123, J.38 R.112 - R.114A E.129 R.157 G.19, G.39

OAKESHOTT, Sir Walter (Fraser)	P.184
OFFICE FOR SCIENTIFIC AND TECHNICAL INFORMATION (OSTI)	J.39, J.40
OFFORD, Robin Ewart	A.51, E.56, E.78, E.168, E.169 F.19, F.86, F.90, J.18
O'GRADY, Francis William	A.44
OGSTON, Alexander George	E.142, L.46
O'KONSKI, Chester R.	P.185
OLDHAM, J.W.H.	A.13, A.20, P.295
ONCLEY, J. Lawrence	A.14, G.11
ORD, Margery G.	E.23, E.25, E.27, L.32
ORMROD, Sir Roger	L.14
OSSERMAN, Elliott F.	E.128, G.86, G.106, G.107

O'SULLIVAN, William J.	E.128
OTLEY, T.R.	G.335
OTTESEN, Martin	R.134
OURISSON, Guy	J.14
OVCHINNIKOV, Yuri A.	G.400, G.401
OWEN, Samuel Griffith	A.26, N.1, N.7, N.37, R.72
OWSTON, Philip G.	A.13, G.186, J.32, J.35, P.186
OXBURGH, Sir (Ernest) Ronald	0.3
OXFORD SCHOOLS SCIENCE AND TECHNOLOGY CENTRE	J.41
OXFORD SEEDCORN CAPITAL FUND	J.42
OXFORD TRUST	J.43
OXFORD UNIVERSITY	E.1 - E.173 G.27, G.62, G.167, G.186

### OXFORD UNIVERSITY DELEGACY FOR EXTRA-MURAL STUDIES / DEPARTMENT FOR EXTERNAL STUDIES

OXFORD UNIVERSITY PRESS

E.1 - E.173 G.27, G.62, G.167, G.186 G.221, G.231, G.244, G.266 G.273, G.300, G.301, G.314 G.329, G.338

G.97, G.114, G.121, G.126 G.127, G.140, G.162, G.278 G.325, G.339

F.16, F.17, F.44, F.46 F.95 - F.97

F.17
G.430
E.134, G.130, G.286, L.4, R.1
O.107, O.108
E.130
0.243
G.327, G.395, G.396
G.387
A.34, A.44, P.252, R.33, R.58
0.66, 0.67
A.51
J.32
A.27, A.44, P.187
A.27

PATON, Sir William (Drummond Macdonald)	A.13, A.20, A.27, A.44 E.128, L.14
PATTEN, John Haggitt Charles	A.33, A.44, O.2
PATTENDEN, Gerry	0.215
PATTERSON, Elizabeth Knight	G.205, G.304
PATTIE, Sir Geoffrey (Edwin)	0.80, 0.84
PATTISON, J.R.	0.218
PAUL, John	F.85, F.86
PAULING, Peter Jeffress	P.188
PEACOCKE, Arthur Robert	P.189
PEARCE, Robert Penrose (Robin)	M.6
PEART, Sir (William) Stanley	L.17
PEASE, Rendel Sebastian (Bas)	L.52
PECKHAM, Michael J.	G.414
PEERDEMAN, A.F.	K.27
PENNEY OF EAST HENDRED, William George, Baron	A.17
PENTREATH, R.J.	0.218
PEPINSKY, Ray	K.25
PEPPER, Gordon	0.218
PEPYS, Mark B.	P.295
PEREIRA, Sir (Herbert) Charles	0.21
PERGAMON PRESS LTD.	F.14, F.98, F.101
PERHAM, Richard Nelson	A.27, A.44, A.51 G.143, G.153, G.216, G.219 L.55, P.190, R.57
PERKINS, Stephen J.	P.191
PERLMANN, Gertrude E.	P.192
PERRINS, Christopher Miles	A.44, E.24, E.25, E.27, E.67 G.338, L.13, L.14, P.295
PERRY, Samuel Victor	A.20, L.61, P.193, R.3
PERUTZ, Max Ferdinand	A.13, A.40, C.52, C.56 D.11, E.2, E.6 F.8, F.12, F.14, F.36, F.46 F.95, F.96 G.9, G.18, G.34, G.72, G.90 G.91, G.224, G.227, G.356 K.11, L6, L9, L.18, L.42, L.55 N.1, N.19, N.22, N.30, O.118 P.64, P.113, P.194, R.140
PERUTZ, Robin N.	L.62, O.189

P.195 PETERS. David Keith P.196 PETHIG, Ronald G.216 PETICOLAS, Warner L. A.27, F.19, G.430, P.67, P.77 PETSKO, Gregory A. G.372 PFEIFFER, John E. E.133, R.2 PHELPS, Charles E. A.13, A.20, L.17, P.108 PHILLIPS, Charles Garrett G.212, G.407 PHILLIPS, David 0.168 PHILLIPS, Don I. A.27, L.58 PHILLIPSON, John E.20, P.259 PHIZACKERLEY, Patrick J.R. F.99 PHYSIOLOGICAL REVIEWS P.197 PIEZ, Karl A. C.52, P.198 PINKERTON, Jean Mary Hamilton F.40, P.45 PIPPARD, Sir (Alfred) Brian F.100 PITMAN PUBLISHING 0.30 PLASTOW, Sir David (Arnold Stuart) A.27, C.60, F.19, P.198 POGSON, Christopher I. A.27, L.2 POLANI, Paul Emanuel G.142, P.64, P.200, R.47 POLJAK, Roberto J. 0.243 POLLARD, Raymond T. A.13, L.47, N.33, P.201 POLLOCK, Martin Rivers L.3 PONTECORVO, Guido G.34, G.389 PONTREMOLI, Sandro L.20 PONZI, Dagmar Ringe 0.239 POOLEY, Derek A.13, A.20, A.27, A.40, A.44 PORTER, George, Baron A.66, A.67 D.2, D.14, D.15 F.36, G.224, G.309, J.5, K.8 L.32, L.33, L.57 0.55, 0.56, 0.83, 0.118, 0.193 L.17 PORTER, Robert A.36, F.85, E.46, E.168, G.258 PORTER, Rodney Robert K.40, K.42, L.31, L.34, L.62 O.112, P.108, P.195, P.202 A.27 PORTER, Ruth G.65, G.163, G.192, G.218 G.226, G.227, G.252, G.269

J.5, J.26, J.27, J.28, J.29

PORTERFIELD, James	A.27
POSNER, Michael Vivian	0.15, 0.46, 0.98
POST, Carol B.	P.203
POSTE, George	0.218
POSTGATE, John Raymond	A.27, L.34, O.22
POTTER, R.	K.27
POTTS, Malcolm	0.124
POWELL, Gillian M.	G.333
POWELL, J.	A.27
POWLES, Ray	G.177
PRATT, Andy J.	E.128
PRESS, Frank	K.45, L.3
PRESTON, Reginald Dawson	D.8, R.4, R.33, R.88
PRICE, Christopher	0.190
PRIGOGINE, Ilya, Vicomte	K.48
PRINGLE, John William Sutton	E.2, E.4, E.6, E.20, E.56, E.76 E.126, P.245
PRIOR, James Michael Leathes, Baron	0.65
PROGRESS IN BIOPHYSICS AND MOLECULAR BIOLOGY	F.101
PROTEIN ENGINEERING	F.102, G.335
PROTHERO, John (Jack) W.	P.204
PROUT, C. Keith	G.131, G.185, G.186, P.118
PRYCE, G. Terry	0.218
PRYCE, Robert J.	0.218
PRZYBYLSKA, Maria	P.206
PTITSYN, Oleg Borisovich	G.216, G.295, G.335 L.33, P.207
PULLMAN, Bernard	G.274, P.208
PURNELL, J. Howard	F.45
PUTTICK, Keith	A.13, A.65
PYKE, David A.	A.54A
PYKE, Magnus	G.177

QASBA, Pradman K. QUAYLE, John Rodney P.2 L.49, L.50, O.243

QUIOCHO, Florante A. QURASHI, Mazhar M. G.303, P.209 A.13, L.39, P.210

RABIN, B. Robert RACKER, Ephraim RADDA, George Karoly

RAE, Allan A.S. RAFTERY, Michael Augustine RAISMAN, John M. RAMACHANDRAN, Gopalasamudram Narayana

RAMAGE, Robert RAMANADHAM, M. RAMASESHAN, Sivaraj RAMSAY, David J. RANDALL, Sir John (Turton) RANDLE, Sir Philip (John)

RAPHAEL, Ralph Alexander RAPLEY, Chris G. RASHBASS, Barbara

RASMUSSEN, Svend Erik RATCLIFFE, John (Jack) Ashworth READ, Colin M. REECE, Sir Charles (Hugh) REES, Anthony Robert

REES, Charles Wayne REES, Sir David Allan (Dai)

**RERAT**, Claude

F.95, G.25, G.48, L.17, N.6 F.85 A.51, E.136, G.142, G.177 L.55, O.112, P.211 A.27, A.45 L.3, P.212 G.400 G.6, G.24, L.3 P.137, P.138, P.213, P.277 G.419 P.214 F.41, G.240, P.215 G.121 A.13, A.27, K.23, R.44, R.108 A.20, A.51, F.86 N.1, N.5, N.7, N.18, N.19, N.32, P.279 A.20, A.45, J.14, O.112 0.215, 0.218 A.27, N.6, N.7 R.79, R.119 - R.125 G.193, P.216 F.36, F.41 0.258 0.42, 0.226 A.40, A.47, E.31, E.171, F.102 G.335, G.417 L.24, 0.122 A.45, G.122, L.52, N.43 0.18, 0.19, 0.26, 0.28, 0.29

0.18, 0.19, 0.26, 0.28, 0.29 0.30, 0.112, 0.120, 0.190 0.193, 0.214, 0.217, 0.218 0.226, 0.258, 0.259 P.217, R.146

P.218

REYNOLDS, George T. RICE, David RICH, Alexander

RICHARDS, Brian RICHARDS, Frederic Middlebrook

RICHARDS, Graham RICHARDS, John H. (Jack) RICHARDS, R.W. RICHARDS, Sir Rex (Edward)

RICHARDS, Sarah (Sally) W. RICHARDS, W. Graham RICHARDSON, Martin J. RICHMOND, Sir Mark (Henry)

RICHMOND, Timothy J. RIEMERSMA, J.C. RIGLER, Rudolf

RIKEN FRONTIER RESEARCH PROGRAM (JAPAN) RILEY, Patrick A. RILEY, Sir Ralph

RINGERTZ, Nils R. RITCHIE, Donald Andrew RITCHIE, Joseph Murdoch RIVERS, Paul S. ROBERTS, Derek Harry ROBERTS, Gareth Gwyn L.62, P.295 0.215 A.27, A.36, A.40 G.65, G.87, P.219 0.218, 0.242 A.27, A.36, A.40, E.168 F.80, F.86, F.92, F.95, F.96 G.8, G.22, G.93, G.106, G.159 G.252, K.34 P.220 - P.222, P.251, P.255 See also A.52, G.427 P.71, P.152 R.43, R.44 0.218 A.13, A.20, E.13, E.168 G.76, L.9, L.52 0.6, 0.107, 0.239 P.223, R.109, R.110 P.220, P.222 R.59 G.335 A.45, A.67, L.7, L.49 0.44, 0.45, 0.198, 0.212 0.218, 0.250, 0.259, 0.260 R.35 R.75 G.38 G.261, G.313, G.403 K.30, P.224 K.47 A.13, A.27, E.129 A.27, A.36, A.45 E.111, L.3, L.11 0.1, 0.6, 0.21, 0.22, 0.109 0.115, 0.221, 0.223, 0.252 0.253 K.40 0.43, 0.218 L.47 C.26, C.34, C.58 0.108, 0.244, 0.245, 0.246 G.424

F.89, F.92A, G.174, G.216 **ROBERTS, Gordon Carl Kenmure** F.65 ROBERTS, K.V. L.37 **ROBERTS**, Paul Harry A.27, A.66 ROBERTSON, John H. G.48 ROBERTSON, John M. G.322 ROBERTSON, John M. 0.82 ROBERTSON, John M. **ROBERTSON, John Monteath** P.295 **ROBINS**, A. Brian A.20 ROBINSON, F. Arnold A.27 **ROBINSON, Garth ROBINSON, Geoffrey Walter** G.177 **ROBINSON**, Michael H. **ROBSON**, Barry RODGER, Chris R.2 RODGERS, Philip S. P.225 RODRIGUEZ, Rosalia ROE, Anthony M. ROGERS, Don A.13, D.14 ROGERS, M.A.T. A.67 ROITH, Oscar ROLLETT, John S. ROOKE, Sir Denis (Eric) 0.259 ROOT, Keith D.J. A.51 ROSE, David ROSE, Irwin (Ernie) A. A.27, E.74 **ROSENBERG**, Harry Max A.35 ROSENBLITH, Walter A. K.4 ROSENBUSCH, Jürg P. G.14 **ROSS, Sir James Paterson** G.87 ROSS, John G.77 **ROSSI-FANELLI**, Alessandro **ROSSMANN**, Michael G.

F.37, F.41, F.50, F.97 G.131, G.144, G.185, G.227 J.33, J.34, J.35 D.6, F.41, F.84, P.28, R.3 A.45, O.205, O.218, O.236 E.134, P.157 E.84, E.105 G.105, O.241 A.13, A.40, D.6, D.12 E.71, E.97, E.128 G.186, J.39 A.45, G.384, O.53 F.19, G.219, P.226 A.27, A.36, A.40, A.45, A.51 C.52, F.81, G.173, G.219 K.28, P.64, P.100, P.227

ROSSOTTI, Francis J.C.	0.112
ROTHFIELD, Lawrence L.	F.85
ROTHSCHILD, Nathaniel Mayer Victor, Baron	O.109
ROTT, R.	K.42
ROWATT, M. Elizabeth	P.228
ROWE, Albert Percival	F.41
ROWE, Arthur J.	E.133
ROWLINSON, John Shipley	A.33, A.51, L.55, O.112, R.44
ROY, Polly	A.45, L.62, P.295
ROY, Rustum	0.192
ROYAL INSTITUTION	A.8, A.27, A.45, A.54 D.1 - D.16 G.15, G.212, G.224 - G.228 G.281, G.309
ROYAL SOCIETY	A.11 - A.13, A.20, A.21, F.33 G.18, G.21, G.51 - G.54 G.142 - G.143, G.195, G.207 G.219 - G.220, G.251, G.258 G.269, G.290, G.299, G.360 G.364, G.430, G.432 L.1 - L.62, O.55, O.56
RUFFLES, P.C.	0.218
RUMBALL, Sylvia Sheat	P.295
RUMEN, Nevenka M.	E.128
RUNCORN, Stanley Keith	0.32
RUPLEY, John Allen	F.15, G.18, G.106, G.139 P.60, P.229
RUTTER, A. Jack	E.133
RUTTER, William J.	E.128
RYDON, H.N.	G.118
RYMAN, Brenda Edith	G.188

A.13, A.27

A.40

G.401

G.103

K.25

G.193, G.392, G.394

SABINE, Peter	
SACHS, Leo	
SACKMANN, E.	
SADANAGA, R.	
SAHA, N.N.	
SAITO, Yoshihiko	

A.27, P.230 SAKABE, Kiwako A.27, P.230 SAKABE, Noriyoshi A.13, A.20, A.21, A.40, A.68 SALAM, Abdus G.46 H.37, P.296 SALATA, Ted A.27, G.143, G.387, L.3 SALTON, Milton Robert James G.56 SAMMES, Peter G. P.245 SAMRAOUI, B. A.27, E.2 SANDFORD, Sir Folliott Herbert K.11, L.46, L.47 SANGER, Frederick A.27 SANGER, Ruth Ann (Mrs. R.R. Race) G.238, G.400, G.402, P.231 SARMA, Ramaswamy H. G.305 SARMA, V. Raghuparthy G.103 SASADA, Yoshio G.306, P.232 SASISEKHARAN, Viswanathan 0.192 SAUL, Samuel Berrick J.44 SAVE BRITISH SCIENCE A.27, A.45, P.233 SAWYER, Lindsay G.191 SAXON, Richard G. F.44, G.185, G.240, G.285 SAYRE, David P.234 A.32, R.6, R.20 SCANE, James G. G.59, G.271 SCHACHMAN, Howard Kapnek K.4, K.6, K.7, K.42 SCHATZ. Gottfried G.394 SCHECHTER, Alan N. E.130, G.367, P.138 SCHELLMAN, John A. A.36, F.47, F.95 SCHERAGA, Harold Abraham P.138, P.235, R.44 K.40, K.42 SCHÖGL, K. K.15 SCHNEIDERMAN, Howard A. G.343 SCHNEK, A.G. 0.44 SCHOMBERG, Michael G. P.64 SCHROEDER, K.W.A. K.50 SCHWAB, Klaus E.134 SCHWARTZ, A. Truman E.133 SCHWARTZ, Arnold K.42, P.62 SCHWYZER, Robert

SCIENCE POLICY RESEARCH UNIT (SPRU) SCIENCE POLICY SUPPORT GROUP (SPSG) SCIENCE RESEARCH COUNCIL / SCIENCE AND ENGINEERING RESEARCH COUNCIL (SRC / SERC)

SCIENTIFIC AMERICAN SCOFFONE, Ernesto SCOTT, F. Alan SCOTTISH HOME OFFICE SCOULOUDI, Helen SCRUTTON, Michael SEHON, Alec SELA, Michael

SELBORNE, John Roundell Palmer, 4th Earl of SEMENZA, Giorgio SEXTON, Stuart SEYMOUR, Donald E. SHACKLETON, Nicholas John SHALLICE, Tim SHALTIEL, Shmuel SHANKS, Ian Alexander SHARON, Nathan SHARPEY-SCHAFER, John F. SHATTOCK, Mike L. SHAW, William V. SHEARD, Brian SHELL INTERNATIONAL SHEMYAKIN, M.M. SHEN, T.Y. SHEPPARD, Norman SHEPPARD, Philip Macdonald SHERFIELD, Roger Mellor Makins, Baron SHIELDS, Robert

0.98 - 0.105 0.68 E.113, E.115, E.117 G.110, G.132, G.134, G.154 G.169, G.178, G.222, G.235 G.249, G.276, G.287, G.399 G.409 K.8, M.1 - M.13 0.38 - 0.45, 0.135 - 0.139 R.84 - R.104 F.10 - F.12, F.104 E.134 E.43, E.55 R.115 F.36 E.130, P.236 G.49 A.27, E.130, G.210, G.215 K.30, K.42, K.49 A.45 A.23, E.130, G.78 G.377 J.21. 0.240 0.226 0.218 A.40 0.4, 0.56, 0.125, 0.218, 0.246 A.27, A.40, G.31, P.237 0.197 0.151 P.238, R.44, R.54 E.128, P.119 E.125 G.51 E.134 0.192 L.34 A.45, O.69, O.238 N.3, N.4, N.5, N.7

SHIMAZONO, Norio SHORE, VI SHORT, M.A. SHORT, Roger Valentine SHOTTON, David Michael SHULMAN, Robert G. SHUSTER, Sam SICHER, J. SIEFF, David Daniel SIEFF OF BRIMPTON, Marcus Joseph, Baron SIGLER, Paul Benjamin SIM, George A. SIMONS, Kai SIMPSON, Esther SINGER, Aubrey E. SKAPSKI, Andrzej C. SKINNER, H. Catherine (Cathy) W. SLATER, Edward Charles SLOMAN, Sir Albert (Edward) SLUYTERMAN, L.A. SMALL, R.W.H. (Sam) SMIT, Jan Derk G. SMITH, A.J.

SMITH, (Anthony) David SMITH, Sir David (Cecil)

SMITH, David Spencer SMITH, Emil L.

SMITH, Harry SMITH, Ivor SMITH, K.C.A. SMITH, Philip M. SMITH, Stanley Desmond G.35 A.27, A.45 K.26 N.4, N.6, N.7, N.58 E.152, E.168, E.169, E.171 E.173, G.51, P.239 F.89 L.14, N.3, N.4, N.5, N.6, R.78 G.44 A.40, A.48, K.49, O.140 K.49 P.240 G.255, J.6 K.35, K.36 A.13, A.27, A.45 F.41, J.45, J.46 J.5 G.267, J.6, J.8, J.9, J.10, J.12 D.11, G.11, P.241 A.20, E.128, L.31, L.45, L.47 0.52, R.8 G.51 D.9, G.152, K.26, K.27 G.216 0.34 A.51, P.242 A.27, A.54, A.67, E.28 L.11, L.12, L.13, L.34 0.19, 0.80, 0.226, 0.243 0.246 A.45, P.243, P.245 A.36, C.52 E.130, E.134, P.248 G.227, L.37, R.24 P.244 0.112 K.45 K.8, O.80, O.190

SMYTH, David Henry	A.27, L.31
SNATZKE, Günther	G.242
SOBELL, Henry M.	D.11, E.130, E.131, P.296
SOBER, Herbert A.	G.8
SOCIAL SCIENCE RESEARCH COUNCIL / ECONOMIC AND SOCIAL SCIENCE RESEARCH COUNCIL (SSRC / ESRC)	0.46
SOCIETY FOR THE PROTECTION OF SCIENCE AND LEARNING	J.45
SOCIETY FOR VISITING SCIENTISTS (SVS)	J.46
SOLOMON, Arthur Kaskel	K.30, R.43
SOLVAY INSTITUTES	K.48
SOUTH AFRICAN JOURNAL OF SCIENCE	F.104A
SOUTHERN, Edwin Mellor	E.152, O.112
SOUTHWOOD, David J.	0.218
SOUTHWOOD, Sir (Thomas) Richard (Edmund)	A.34, A.40, A.45 E.69, E.76, E.84, E.138 E.143, E.171, E.173, L.34 O.17, O.58, O.116, O.142 P.243, P.245
SOWDEN, Björn	P.246
SPECK, John C.	P.147
SPIER, Ray E.	G.348
SPRIGGS, P.H.	J.36
SQUIRE, John M.	G.330, P.247
SRINIVASAN, R.	D.6, G.193, G.390, P.213
STAAB, Heinz A.	K.43
STALLWORTHY, Sir John (Arthur)	E.128
STALLYBRASS, Oliver G.W.	G.15
STANBURY, Howard J.	F.96, F.97
STANLEY, Eric	A.13, A.20, A.27, A.65, R.61
STANSFIELD, Jim R.	A.13
STAROS, James V.	G.427
STEC, Boguslaw	P.296
STEIN, Wilfred D.	G.393
STEIN, William Howard and STEIN, Phoebe	A.27, A.40, G.34, P.248
STEINER, Daniel	K.16, K.17, K.20
STEINER, Lisa	A.13, P.249
STEINER, Robert E.	0.106, 0.107

### D.C. Phillips NCUACS 45/1/94

### Index of correspondents

STEINRAUF, Larry K. STEITZ, Thomas A. STELLAR, Eliot STERNBERG, Michael Joseph Ezra

STERNLICHT, Himan STEWARD, Edward G. STEWART, Sir Frederick (Henry) STEWART, Walter W. STEWART, William Duncan Paterson

STILEMAN, Richard STOCKEN, Lloyd A. STODDART, J. Fraser STODDART, John STOKER, Sir Michael (George Parke) STOWE, Sir Kenneth (Ronald) STRANDBERG, Bror E. STRONG, Maurice F. STROUD, Robert M. STRYER, Lubert STUBBS, Sir William (Hamilton) SUBAK-SHARPE, John Herbert SUBRAMANIAN, E. SUNDARALINGAM, Muttaiya SUNDARAM, K. SUSSMAN, Joel L.

SUTCLIFFE, Brian T. SUTTON, Brian SUTTON, Leslie Ernest

SUZUKI, Tomoji SWANN, Michael Meredith, Baron F.6, P.64, P.250 G.219 K.45 A.40, A.45, E.55 F.24, F.47, F.92A, P.135, R.61 P.147 A.13, A.27, G.33, P.252 0.32 P.253 A.34, A.45 0.12, 0.23, 0.29, 0.118 0.119, 0.133A, 0.218, 0.226 0.232, 0.234, 0.244, 0.245 0.250 F.63 E.17 0.215 A.46 J.17, J.19, L.11, R.64, R.107 0.243 C.52, F.95, G.26, P.254 K.50 G.213 A.36, E.120, P.255, R.63 0.118, 0.242, 0.246 L.7 G.240 A.40, A.51, R.44, R.45 G.193 A.48, E.128 G.193, G.210, K.49 0.243 F.92A, R.158 A.20, A.27 G.113, G.142, P.256 G.36 E.2, 0.236, 0.240

SWINNERTON-DYER, Sir (Henry) Peter (Francis)	A.45, G.272, K.8 L.10, L.11, L.15, L.31 M.3 O.38, O.58, O.98, O.109 O.190, O.193, P.257
SYKES, Brian E.	P.258
SYKES, Sir Charles	F.41
SYKES, Richard B.	0.215, 0.218
SYMONDS, Neville	A.14, L.4
SYMONS, Martyn Christian Raymond	G.142
SYRETT, Philip J.	G.391
SZENT-GYORGYI, Andrew G.	R.43

TABLES RONDES ROUSSEL TAMM, Christoph TAMM, Igor TANFORD, Charles TANNER, Brian K. TANNER, David Williamson TANNER, Neil W. TAO, Terence TATA, Jamshed Rustom TATHESEN, Daniel TAYLOR, Charles A.

TAYLOR, Garry L. TAYLOR, John Gerald TAYLOR, Keith W. TAYLOR, W.H.

THEORELL, Axel Hugo Teodor THOM, Ian R.M. THOMA, John A. THOMAS, Emrys THOMAS, J. Gareth

G.112, G.145, G.180 K.4, K.5, K.6, K.7 G.265 P.93, P.259, R.58 G.255, J.6, M.12 A.45 P.107 E.120 F.85, L.45 G.367 A.13, A.19, A.20, A.27 G.82, G.227, G.267, G.275 G.285, G.392 J.10, J.37, P.260 E.76, R.62 P.296 G.256 A.8, F.35, F.36, F.37, F.41 G.3A, G.9, G.71 P.254 G.272 P.261 P.262 A.19, A.25

THOMAS, Jean Olwen	A.27, A.67
THOMAS, John (Jack)	P.263
THOMAS, Sir John (Meurig)	A.40, D.15, F.62 G.309, G.446, L.37 P.28, P.264
THOMAS, John O.	E.134
THOMAS, Sir Keith (Vivian)	A.40, A.43, A.45, E.9
THOMAS, Lance	O.215
THOMPSON, Marvin P.	P.265
THOMPSON, Sir Michael (Warwick)	A.68, O.43
THOMSON, Alan R.	P.266
THOMSON, Angus M.	N.6
THOMSON, David Paget	A.13
THOMSON, Sir George (Paget)	F.41
THOMSON, Patience	A.27
THORNTON, Janet	A.27, G.420
THORNTON-DUESBURY, Julian Percy	E.10
THORPE, Peter J.	G.360
THRODAHL, Monte C.	K.16, K.20
THRUSH, Brian Arthur	G.429
TIGYI, J.	P.267
TIMMS, David	G.192
TINBERGEN, Nikolaas	A.18, A.20, A.21, A.27, A.40 A.66 E.24, F.74, J.5
TINSLEY, Thomas W.	A.20, A.27
TISHCHENKO, Galina	P.296
TISHLER, Max	E.122, P.268
TISSIÈRES, Alfred	F.85
TODD, Alexander Robertus, Baron	A.27, L.1, L.31, L.48 O.242, R.47
TOMBS, Francis Leonard, Baron	A.45, G.440 O.1, O.5, O.80, O.81
TOOZE, John	F.73, K.11, P.155, P.157
TOPPING, R. Malcolm	G.192
TOY, F.C.	F.41
TOYAMA, Atsuko	P.269
TRAUB, Wolfie	A.37, A.40, F.80 G.210, G.226, R.44

TREDGOLD, R.H.	P.296
TREGEAR, Richard T.	E.24, L.18, L.20, R.159
TREHARNE, Kenneth J.	A.45, G.337
TREISMAN, Michel	E.69
TRENAMAN, Nancy Kathleen	A.20, A.27, E.142
TRENTHAM, David Rostron	G.430
TRESS, Ronald Charles	R.15, R.108
TRUEBLOOD, Ken N.	D.6
TRUTER, Mary Rosaleen (Jackie) (Lady Cox)	A.20, A.27, A.45, D.5, E.111 G.142, G.143, R.53
TSAI, Chun-che	G.143
TSOU, Chen-Lu	K.46
TUBBS, Philip K.	G.48
TUCK, Mary	0.218
TULINSKY, Alexander	P.270, R.44
TUNSTALL, Norman	F.41
TURNER, David	F.93
TURNER-WARWICK, Dame Margaret (Elizabeth Harvey)	G.42
TYRRELL, David Arthur John	L.34

K.25, K.26
0.57
O.58
P.271
P.296
L.14

VAINSHTEIN, Boris K.	G.398, G.399, G.400 L.33A, P.272
VALLEE, Bert Lester	A.27, A.36, A.40, A.41 G.51, G.53, G.365, G.366 K.14, K.15, K.16, K.17, K.19 K.20, P.273

VAN CAUWELAERT, F.

P.296

VANE, Sir John (Robert) VAN GUNSTEREN, Wilfred F. VASSILEVA-POPOVA, Julia G. VAUGHAN, Sir Gerard (Folliott) VENABLES, John A. VENKATESAN, K. VENNING, Geoffrey R. VEREKER, John Michael Medlicott VERNON, Charles A. **VERNON**, Kenneth **VESSEY**, Martin Paterson VICKERS, Tony

VIJAYAN, Mamannamana VINCENT, Colin A. VINCENT, Julian F.V. VINCENTELLI, Jean Bertrand Iser VINEN, William Frank VISCHER, Ernst VOGLER, K. VOGT, Marthe Louise Von KRAUSE

A.27, A.36, G.211, L.12, L.13 0.243, P.274 G.216, G.401 P.275 0.66, 0.67 0.242 P.213 G.336 A.45 P.276 A.13, D.2 A.27, A.45 G.48, J.15, L.7 N.1, N.3, N.5, N.6, N.7, N.22 N.29, N.31, N.34, N.43, N.48 N.49, N.53, N.54, N.58 R.76, R.77, R.78, R.79 A.40, G.306, P.277 G.422 0.218 P.278 G.263 A.27 E.124, G.58 L.3 K.39

WADE, H.E. (Jim)	P.296
WAGNER, Gerhard	G.216
WALDEGRAVE, William (Arthur)	0.14, 0.82, 0.233, 0.249 0.260
WALDEN, George Gordon Harvey	A.40
WALEY, Stephen Gerald	A.45, F.19, F.22, F.81, F.92
WALKER, Deryck G.	J.1
WALKER, Nigel	E.130
WALKER, Peter Martin Brabazon	N.25

WALKER, Robert J. WALKER, Stuart R. WALLENFELS, Kurt WALLWORK, Stephen C. WALTON, Alan WALTON, John Nicholas, Baron WARD, Jamie B. WARNOCK, Sir Geoffrey (James) WARREN, Bert E. WARREN, Peter T. WARWICK, Diana D.11 WATERS, Neil A.54 WATERSTON, Charles D. WATKINSON, Anthony R.K. WATSON, David WATSON, Herman Charles WATSON, James Dewey WATSON, Ken J. WATTS, Anthony WATTS, Bernard N. WAYNE, Richard P. WEATHERALL, Sir David (John) WEAVER, David WEBSTER, Charles WEDDERBURN, Dorothy Enid Cole WEEDON, Basil Charles Leicester WEIGHTMAN, Peter WEINER, David WEIZMANNN INSTITUTE OF SCIENCE AND WEIZMANN INSTITUTE FOUNDATION WELLCOME TRUST WELLS, Michael

0.215 P.242 G.55, G.146 D.6, F.42, G.255 J.6, J.7, J.8, J.32, K.26 C.52, E.131 A.27, A.45, G.351, N.40 0.215 0.108 F.37, F.42 A.27, A.45, A.51, G.360 L.9, L.11, L.32, L.33 A.40, A.43 F.47, F.63, F.97, G.176, L.17 0.218 A.13, C.52, F.95 G.48, G.202, G.219, G.290 G.291, G.293 K.11, L.4, L.5, M.3, P.279 R.2, R.73 G.90, P.28, R.44 A.13, D.5 G.296, P.280, R.64 0.112 0.41 E.165, G.227, L.6, O.112 R.145 G.312 P.281 G.404 A.20, A.27, P.140 0.218 K.49 A.48, G.210, K.49, O.140 R.137 R.116 - R.118 C.52

WELLS, P.B.	K.8
WEST, Richard Gilbert	L.17
WESTHEIMER, Frank H.	R.43
WESTPHAL, Otto	G.55, P.116
WETLAUFER, Donald B.	P.282
WHATLEY, Frederick Robert	E.72, E.111, L.55, P.108
WHEATLEY, Peter J.	K.26, K.27
WHELAN, Robert C.	O.59
WHELAN, William J.	A.27, A.36, F.85, F.86 P.283, R.49, R.134
WHIFFEN, David Hardy	A.8, G.400
WHITE, David C.S.	0.215
WHITE, John W.	A.27, G.391, K.23
WHITE, Steve	G.305
WHITTAKER, Eric J.W.	A.27, G.32, G.186, J.32
WHITTAM, Ronald	A.20
WHITTENBURY, Roger	G.326
WHITTERIDGE, Gweneth	L.31
WIDDAS, Wilfred F.	P.296
WIERENGA, Rik K.	P.284
WIGINGTON, Ronald L.	J.14
WILCOCK, Bruce	A.13, A.27, F.44, F.95 - F.97
WILD, M.	G.146
WILEY AND SONS LTD	A.13, F.105
WILHELM, Louise B.	A.40
WILKIE, Douglas R.	F.99
WILKIE, Thomas D.B.	A.43, P.194
WILKINS, Maurice Hugh Frederick	G.26, N.24, P.28, P.285, R.2
WILKINSON, David	A.68
WILKINSON, Sir Denys (Haigh)	A.20, E.42, O.128
WILKINSON, Sir Geoffrey	L.37, 0.112
WILKINSON, George R.	G.243
WILKINSON, Gordon	G.277
WILKINSON, Jim	A.27
WILLIAMS, Alan Frederick	P.253
WILLIAMS, Sir Alwyn	A.45, J.44, O.186, O.189 R.31

WILLIAMS,	Sir Bruce
WILLIAMS,	Carrington Bonsor
WILLIAMS,	Carroll M.
WILLIAMS,	David L.
WILLIAMS,	Gareth L.
WILLIAMS,	J.O.
WILLIAMS,	Paul Randall
WILLIAMS,	Peter Michael
WILLIAMS,	Sir Robert (Evan Owen)
WILLIAMS,	Robert Joseph Paton

WILLIAMS, Roger WILLIAMSON, Robert WILLIS, B. Terry M. WILSON, Allan Charles WILSON, Arthur James Cochran

WILSON, Herbert WILSON, Ian A. WINTER, Alan WINTER, Michael R. WINTERTON, Nick H.

WOLF FOUNDATION WOLFENDALE, Arnold Whittaker WOLFENDEN, Richard V. WOLFSON COLLEGE OXFORD WOLFSON FOUNDATION WOLFSON, Leonard Gordon, Baron WOLPERT, Lewis WOLSTENCROFT, J.H. WOLSTENHOLME, Sir Gordon (Ethelbert Ward)

WOOD, Bernard

G.272 L.47 K.17 G.177 G.331 P.286 0.197, 0.218, 0.259 0.107, 0.218 G.15, G.20 A.20, A.27, A.40, A.51 E.11, E.24, E.152, E.171 G.51, G.192, G.227, G.269 G.293 L.30, L.46, L.48, L.55, L.61 O.108, O.193, P.287, R.1 0.218, R.159 0.17, 0.112 F.50, G.132, P.288 E.130, E.134 A.13, F.1, F.42, G.159 J.6, J.40, P.24, P.289 A.27 C.29, C.30 - C.41, C.60 F.61 E.130 N.3, N.4, N.5, N.6, N.7, N.8 N.9, N.11, N.12, N.13, N.14 N.15, N.16, N.17 A.37 0.244, 0.246 E.134, G.184, R.65 E.10 - E.12, G.181 R.119 - R.125 A.45, R.120 F.82 L.14 A.20, A.21, A.27, F.72 G.98, G.136, G.168 J.26, J.27, L.7, P.290 0.215, 0.218

WOOD, Harry B.	P.14
WOOD, Sir Martin (Francis)	E.53, L.57 O.12, O.53, O.87, O.106 O.107, O.163, P.291
WOOD, R.G.	F.37, F.42
WOOD, Ronald Karslake Starr	L.13
WOODFORD, F. Peter	J.26
WOODHEAD-GALLOWAY, John	L.18, N.7, R.78
WOODRUFF, Sir Michael (Francis Addison)	A.27, L.11, L.12
WOODS, John David	0.37
WOOLFSON, Michael Mark	A.27, A.40, F.49 G.185, G.225, G.267, J.6 L.33, L.55
WOOLHOUSE, Harold W.	0.112
WORK, Thomas S.	F.85, J.1, R.46
WORLD ECONOMIC FORUM	K.50
WRIGHT, H. Tonie	G.106
WRIGHT, Sir Norman (Charles)	G.48
WRIGHT, Pearce	J.31A
WRIGHT, Peter H.	G.361
WRIGHT, Sewall	L.3
WRIGHT, William V.	E.130
WRINCH, Dorothy M.	A.64
WROTH, Peter	E.52
WÜTHRICH, Kurt	F.89, F.92A G.216, G.290, G.293 K.36, K.37
WYCKOFF, Harold Winfield (Hal)	G.240
WYMAN, Jeffries	G.397, K.11
XUESONG, Lu	P.296

YAGER, E.S.M.	P.296
YAGI, Kunio	G.176

E.129
R.44
G.312, R.49
E.130, G.193, G.210, G.215
E.4, J.38
A.20, A.27, J.26, L.41
A.27, J.25
A.27, G.103, R.44
E.26, E.27, E.122

ZACCAI, G.	E.134
ZACHAU, Hans Georg	G.389, N.37
ZAHN, H.	G.43
ZEPPEZAUER, Eila	P.292
ZIMAN, John Michael	G.339, O.68
ZINBERG, Dorothy S.	0.245
ZUCKERMAN, Solly, Baron	0.239
ZWANZIG, Frances R.	F.89