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Catalogue of the papers and correspondence of

# Sir Geoffrey Wilkinson FRS

(1921 - 1996)

by Peter Harper and Timothy E. Powell NCUACS catalogue no. 110/9/02

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Title:

Catalogue of the papers and correspondence of Sir Geoffrey

Wilkinson FRS (1921-1996), Knight, Chemist

Compiled by:

Peter Harper and Timothy E. Powell

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IMPERIAL COLLEGE OF SCIENCE, TECHNOLOGY AND MEDICINE LONDON

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#### **GENERAL INTRODUCTION**

#### **PROVENANCE**

The papers were received from the Chemistry Department, Imperial College London and Lady Wilkinson, 1998 and 2001, respectively.

## OUTLINE OF THE CAREER OF SIR GEOFFREY WILKINSON

Geoffrey Wilkinson was born in Springside, a village close to Todmorden in west Yorkshire on 14 July 1921. His introduction to chemistry came at a quite early age through his mother's elder brother who had married into a family that owned a small chemical company making Epsom and Glauber's salt for the pharmaceutical industry. He was educated in the local council primary school and after winning a County Scholarship in 1932, went to Todmorden Secondary School which is distinguished by having amongst its former pupils two Nobel Laureates, the first being the physicist, Sir John Cockcroft and the second, Wilkinson.

In 1939 Wilkinson obtained a Royal Scholarship for study at Imperial College London where he graduated in 1941. As it was wartime, he was directed to stay on and he started PhD research under the supervision of H.V.A. Briscoe, the only Professor of Inorganic Chemistry in Britain. His thesis was on 'Some Physicochemical Observations on Hydrolysis in the Homogeneous Vapour Phase', a title which disguised the fact that the compound studied was phosgene. In late 1942 F.A. Paneth was recruiting young chemists for the nuclear energy project which he joined. He was sent out to Canada in January 1943 and remained in Montreal and later Chalk River, Ontario, until 1946. He then joined Glenn T. Seaborg's research group at the University of California at Berkeley becoming the first non-American to be cleared by the US Atomic Energy Commission for work at the Lawrence Livermore Laboratory. For the next four years in Berkeley he was engaged mostly on nuclear taxonomy and made many new neutron deficient isotopes using the cyclotrons of the Radiation Laboratory.

Advised by Briscoe on a return visit to the United Kingdom in 1949 that he was unlikely to get an academic post in England in nuclear chemistry Wilkinson took the opportunity of a move to the Massachusetts Institute of Technology the following year to return to his first interest as a student transition metal complexes such as carbonyls and olefin complexes. In 1951 he accepted an Assistant Professorship at Harvard where he remained until his return to England in December 1955. It was here, together with the organic chemist R.B. Woodward, that he recognised the unprecedented molecular 'sandwich structure' of the organometallic compound now known as

ferrocene (bis-(cyclopentadienyl)iron, Cp<sub>2</sub>Fe). This was a crucial point in Wilkinson's career. He immediately set about investigating the fundamental ideas suggested by this molecular structure and there followed a forty year period of great productivity in which he revealed the great extent of this new field of organo-transition metal chemistry.

In June 1955, Wilkinson was appointed to the chair of Inorganic Chemistry at Imperial College London, which, at that time was the only established chair in the subject in the United Kingdom and took up the position in January 1956. Later the chair was renamed the Sir Edward Frankland Chair of Inorganic Chemistry to commemorate Frankland 'the father of organometallic chemistry' who was at the College from 1865. At Imperial Wilkinson worked almost entirely on the complexes of transition metals, much interested in the complex chemistry of ruthenium, rhodium and rhenium, in compounds of unsaturated hydrocarbons and with metal to hydrogen bonds, the latter leading to work on homogeneous catalytic reactions such as hydrogenation and hydroformylation of olefins.

In addition to Wilkinson's fundamental research he had a major influence on the subject through a number of largescale publications. In 1962 he published with one of his former American students, F.A. Cotton, the first edition of his pioneering text book *Advanced Inorganic Chemistry*. One of his last tasks was the completion of his contribution to the 6th edition of Cotton and Wilkinson in 1996. In 1982 the nine-volume *Comprehensive Organometallic Chemistry* was published under his editorship and in 1995, the much larger 14-volume supplement set, was a compelling tribute to the pace of advance in the subject that he had led for so many years.

He was elected FRS in 1965 (Royal Medal 1981, Davy Medal 1996), and was awarded the 1973 Nobel Prize for Chemistry (with E.O. Fischer) 'for their pioneering work, performed independently, on the chemistry of the organometallic, so called sandwich compounds'. He was knighted for his contributions to chemistry in 1976.

In 1951 he married a Danish plant physiologist, Lise Sølver, the only daughter of Professor Svend Aage Schou, with whom he had two daughters, Anne and Pernille. He died on 26 September 1996.

For a fuller account of Wilkinson's career and research see the memoir written for the Royal Society by M.H.L. Green and W.P. Griffith in *Biographical Memoirs of Fellows of the Royal Society*, vol. 46, 2000, pp. 595-606.

#### DESCRIPTION OF THE COLLECTION

The material is presented in the order given in the List of Contents. The papers cover the period 1943-1999.

Section A, Biographical, presents significant autobiographical writing and a number of shorter biographical writings by others, documentation of the award of the Nobel Prize including an extensive sequence of letters of congratulation and a useful photographic record which includes an early, 1943, photograph taken in Montreal and photographs of a number of later honours and awards not otherwise documented. The 1943 photograph includes Alan Nunn May who was later convicted of spying for the Soviet Union.

Section B, Imperial College London, presents a significant correspondence with Imperial College Rectors and other senior College administrators, 1978-1989 and records relating to the Chemistry Department, 1979-1993. The latter includes material concerning building plans, finance and funding and Wilkinson's post-retirement plans amongst other matters. There is also a sequence of requests to work in Wilkinson's laboratory, 1984-1993.

Section C, Research, has a considerable record of the funding of Wilkinson's research, 1977-1993, principally from the Science Research Council/Science and Engineering Research Council, and a small number of drafts by Wilkinson relating to patents, *ca* 1976-*ca* 1985.

Section D, Lectures and publications, presents documentation of only a very few of Wilkinson's public lectures or publications. The most significant group of papers relates to the journal *Polyhedron*, 1980-1993. Wilkinson was chairman of the editorial board of this new international journal for inorganic and metallo-organic chemistry which was published by Pergamon.

Section E, Societies and organisations, is slight. It documents Wilkinson's association with only seven British and international bodies. These include scientific societies such as the Royal Society and the Royal Society of Chemistry and two commercial concerns with which Wilkinson had advisory and consultancy arrangements, the Portuguese company Hovione Sociedade Quimica and the American company, Union Carbide.

Section F, Correspondence, presents a chronological sequence of correspondence, 1981-1993, reflecting Wilkinson's continuing interest in research, and two sequences kept separately by him: correspondence with politicians, 1972-1988 and correspondence arising from Russia's non-observance of International Copyright Conventions, 1969-1975. Wilkinson wrote to Prime Ministers, government ministers, opposition politicians and his local MP, Peter Brooke who was for a time Parliamentary Under Secretary of State, Department of Education and Science. He wrote on a variety of topics including science policy, university funding and Imperial College matters especially as they affected the Chemistry Department. The sequence kept together by Wilkinson under the heading 'Russia' was initiated by him when he learned in 1969 that the Publishing House of Mir in

Moscow had published a Russian edition of Advanced Inorganic Chemistry by F.A. Cotton and Wilkinson.

There is also an index of correspondents.

Peter Harper Timothy E. Powell Bath July 2002

| SECTION A | BIOGRAPHICAL A.1-A.63  |
|-----------|--|
| A.1, A.2  | Obituaries and tribute.  |
| A.1       | Obituaries:  |
|           | Independent, 1 October 1996. By Malcolm Green and Bill Griffith.   |
|           | The Times, 4 October 1996.   |
| A.2       | Polyhedron Symposia-in-print Number 18 'Sir Geoffrey Wilkinson as a Research Mentor', <i>Polyhedron</i> , Vol.16, no.22. 1997.   |
| A.3-A.8   | Autobiographical and biographical correspondence and papers, 1977-1994.  |
| A.3       | Photocopy of ?incomplete 17pp manuscript autobiographical account of Wilkinson's background and early career headed 'Kauffman ? for J Chem Edu.' and 'Never sent' and dated '13 May 83'. |
|           | Photocopy of 2pp manuscript headed 'Discovery of Molybdenum Diacetate' found with the preceding.   |
| A.4       | Autobiographical account <i>ca</i> 1940- <i>ca</i> 1957. First page headed '1940-1' and '20 July 1990: 50 years on'. Photocopy. Original retained in family.                             |
| A.5       | Shorter biographical accounts, entries for biographical directories, etc. 1977-1992 and n.d.   |
| A.6       | Requests for biographical information and historical reflections, 1986-1993.   |
| A.7       | Publications list for period 1984-1992 only.   |
| A.8       | Scientific family tree of Wilkinson sent to him in 1994.  In tube.   |

A.9-A.49A Career, honours and awards 1966-1996 A number of honours and awards are only documented by photographs see A.53-A.62. A.9 Two letters, 1983, from AERE Harwell re Wilkinson's war service, 1943-1945. One letter only, 1966, re the award of the degree of PhD to Wilkinson in 1946 as an external student of the University of London. A.10 Foreign Honorary Member, American Academy of Arts and Sciences, 1970. Certificate only. A.11-A.38 Nobel Prize, Chemistry, 1973. Wilkinson shared the 1973 prize with Ernst Otto Fischer 'for their pioneering work, performed independently, on the chemistry of the organometallic, so called sandwich, compounds'. A.11 Telegram announcing the award to Wilkinson; correspondence and papers re arrangements, 1973. Includes 3pp typescript biographical account. A.12-A.35 Letters of congratulation, 1973-1974. Presented in an alphabetical sequence. Unindexed. The sequence includes a very few carbons of replies from Wilkinson. A.12 A. A.13 B. A.14 C. A.15 D.

A.16 E.

A.17 F.

A.18 G.

A.19 H.

A.20 I.

A.21 J.

A.22 K.

A.23 L.

A.24 M.

A.25 N.

A.26 O, P.

A.27 R.

A.28, A.29 S.

2 folders.

A.30 T.

A.31 U, V. W. A.32 A.33 Y, Z. First names and unidentified. A.34, A.35 2 folders. A.36-A.38 Request for autographs, signed photographs, manuscripts, 1973-1975. 3 folders. Unindexed. A.39 Foreign Associate, National Academy of Sciences, 1975. Certificate only. A.40 Royal Medal, 1981. One letter only. Nomination of Wilkinson for the Edward Frankland Prize Lectureship of the A.41 Royal Society of Chemistry, 1982. A.42 Honorary Fellowship, Lady Margaret Hall, Oxford, 1984.

A.43 Robert Burns Woodward Visiting Professorship in Chemistry, Harvard University, for 1985-1986.

Declined by Wilkinson.

Brief correspondence, 1983.

Brief correspondence, 1983.

The Royal Society of Chemistry Dalton Division Symposium in Honour of A.44 Wilkinson on 'Some Current Advances in Inorganic Chemistry', Imperial College, London, 19 July 1988. Programme and application form. A.45 Appointment as Senior Research Fellow, Imperial College London, 1988. and re-appointment, 1993. Conferment of the title of Emeritus Professor of Inorganic Chemistry, 1988. A.46 Honorary degree, University of Essex, July 1989. Certificate, citation, correspondence and photographs. A.47 Polyhedron Prize for Creativity in Inorganic Chemistry, 1989. Certificate. For Wilkinson's correspondence and papers re Polyhedron see D.18-D.40. A.48 Messel Medal of the Society of Chemical Industry, 1990. Brief correspondence, 1989-1990. A.49 Admission to the Fellowship of Imperial College London, 1992. Certificate. A.49A Davy Medal of the Royal Society, 1996 Certificate. A.50, A.51 Personal correspondence, 1970-1999.

Includes replies to letters of congratulation and condolence.

Letters, 1998, 1999, addressed to Lady Wilkinson.

2 folders.

A.50 1970-1985. A.51 1986-1999. A.52 Press-cuttings, 1985-1986 and n.d. A.53-A.63 Photographs, 1943-1996. See D.46 for photograph of Wilkinson at 1973 Nobel Prize Ceremony. A.53 Correspondence re photographs of Wilkinson, 1988-1989. Includes correspondence re portrait painting of Wilkinson. A.54-A.58 Chronological sequence of photographs of Wilkinson, 1943-1996. Identified by Wilkinson on the back. A.54 With two colleagues Alan Nunn May and Leo Yaffe, Mount Royal, Montreal, Quebec, 1943. A.55 Presentation of American Chemical Society Centennial Fellowship, New York, April 1976. With Glenn T. Seaborg. A.56 Honorary degree, Columbia University, New York, 1978. Three photographs, one with other recipients and President McGill has manuscript identifications on the back. A.57 Award of the Royal Medal, Anniversary Meeting, Royal Society, November 1981. With the President, Sir Andrew Huxley and, in the background, the Physical Secretary, Sir Morris Sugden.

| A.58      | Presentation of Longstaff Medal of the Royal Society of Chemistry by the President, J. Lewis, 3 June 1987.  |
|-----------|---|
|           | At All Soul's College, Oxford on the occasion of honorary doctorate, 1996.                                  |
| A.59-A.62 | Undated photographs of Wilkinson.   |
| A.59      | Portrait photograph identified on back with Wilkinson's name and 'Contemporary British Chemists'.           |
| A.60      | Head and shoulders portrait of Wilkinson in front of blackboard.  |
| A.61      | Wilkinson in his office at Imperial College London.   |
| A.62      | Wilkinson at the Royal Society with fellow Nobel Laureates.   |
| A.63      | Photographs of Theodore W. Richard's desk, Harvard University 'at which I thought up "fluxional" molecule'. |

| SECTION B | IMPERIAL COLLEGE, LONDON B.1-B.36       |   |                            |
|-----------|---|---|----------------------------|
|           | B.1-B.17<br>B.18-B.36                   | THE RECTOR CHEMISTRY DEPARTME   | ENT                        |
| B.1-B.17  | THE RECTOR                              |   | 1978-1989                  |
| B.1-B.16  | Contents of filing correspondence and p | cabinet divider inscribed apers, 1979-1989.   | 'The Rector (Letters)':    |
|           | 1985) and E.A. Ash (                    | es correspondence with F<br>from 1985), the Secretary of<br>pers of the College administr | of the College, J.H. Smith |
| B.1       | 1979.                                   |   |                            |
| B.2       | 1980 January-Februar                    | y.  |                            |
| B.3       | 1980 April-December.                    |   |                            |
| B.4       | 1981 January-February                   | /.  |                            |
| B.5       | 1981 May.                               |   |                            |
| B.6       | 1981 October-Decemb                     | er.   |                            |
| B.7       | 1982.                                   |   |                            |
| B.8       | 1983.                                   |   |                            |
| B.9       | 1984.                                   |   |                            |

## Imperial College, London

| B.10      | 1985.   |  |              |
|-----------|---|--|--------------|
| B.11      | 1986.   |  |              |
| B.12      | 1987 March-May.                                 |  |              |
| B.13      | 1987 June.                                      |  |              |
| B.14      | 1987 September-Dece                             | mber.  |              |
| B.15      | 1988.   |  |              |
| B.16      | 1989.   |  |              |
| B.17      | Miscellaneous corresp<br>Rectors, 1978, 1983, 1 | ondence and papers with or about Impe<br>985, 1988.  | rial College |
| B.18-B.36 | CHEMISTRY DEPART                                | MENT   | 1979-1993    |
|           | B.18-B.20                                       | General correspondence and papers                    |              |
|           | B.21-B.27                                       | Finance and funding                                  |              |
|           | B.28  | Staff  |              |
|           | B.29  | Visitors   |              |
|           | B.30-B.36                                       | Requests to work in Wilkinson's laborator department | ry/          |

## Imperial College, London

| B.18-B.20 | General correspondence and papers 1979-1993  |
|-----------|--|
|           | Includes correspondence re chemistry building and Wilkinson's post-retirement plans.   |
| B.18      | 1979-1980, 1984-1985.  |
| B.19      | 1986-1987.   |
| B.20      | 1988, 1993.  |
| B.21-B.27 | Finance and funding 1979-1993  |
| B.21-B.23 | 'Departmental finance'. Contents of filing cabinet divider so inscribed: correspondence and papers, 1984-1988.   |
|           | Includes correspondence re the 'underfunding' of the Chemistry Department.   |
|           | A number of routine circulars have been discarded.   |
| B.21      | 1984-1985.   |
| B.22      | 1986.  |
| B.23      | 1987-1988.   |
| B.24      | 'Formula Vote'. Contents of folder so inscribed: correspondence and papers re formula financing of the Departments of the Royal College of Science, 1986-1988. |
| B.25-B.27 | Correspondence and papers <i>re</i> grant applications of members of the Chemistry Department, 1979-1993.  |
|           | 3 folders.   |
|           | For the funding of Wilkinson's own research see B.26 and Section C.  |

## Imperial College, London

| B.28      | Staff   | 1982-1987           |
|-----------|---|---------------------|
|           | Correspondence and papers re Chemistry Department sta                                     | aff.                |
| B.29      | Visitors  | 1986, 1989, 1992    |
|           | Correspondence re visitors to the Department.   |                     |
| B.30-B.36 | Requests to work in Wilkinson's laboratory/<br>department                                 | 1984-1993           |
|           | Principally from those wishing to undertake PhD resear postdoctoral positions. Unindexed. | arch or looking for |
| B.30      | 1984-1986.  |                     |
| B.31      | 1989.   |                     |
| B.32      | 1990.   |                     |
| B.33      | 1991.   |                     |
| B.34      | 1992.   |                     |
| B.35      | 1993.   |                     |
| B.36      | N.d.  |                     |

| SECTION C | RESEARCH   | C.1-C.37   |
|-----------|--|--|
|           | C.1-C.32<br>C.33-C.37                              | FUNDING PATENTS  |
|           |  |  |
| C.1-C.32  | FUNDING  | 1977-1993  |
|           | Correspondence and principally with the Scie       | papers re the funding of Wilkinson's research, nce and Engineering Research Council (SERC).                              |
| C.1-C.23  | Contents of filing cabine correspondence and pa    | et divider inscribed 'G.W.'s Expired S.E.R.C. grants': pers, 1977-1989.  |
|           | Includes applications, correspondence.             | notifications of awards, reports and related   |
| C.1       | List of SRC/SERC grant                             | s 1963-1985.   |
| C.2       | Complexes of Niobium,                              | GR/A/3657.7 for work on 'Alkyl and Hydrido Tantalum, Molybdenum, Tungsten and Rhenium' for er 1977 to 30 September 1980. |
|           | Correspondence and pa                              | pers, 1977-1981.   |
| C.3, C.4  | SRC grant reference Grant metal complexes' for 42  | R/A/67328 for work on 'Methylene-bridged transition months from 1 December 1978 to 31 May 1982.                          |
|           | Correspondence and pa                              | pers, 1978-1982.   |
|           | 2 folders.   |  |
| C.5       | SRC grant reference GR<br>six months from 1 July 1 | /B/15583 for work on 'Organometallic Chemistry' for 979 - 31 December 1979.  |
|           | Correspondence and paper                           | pers, 1979-1982.   |

C.6, C.7

SERC grant reference GR/B/16191 for work on 'NMR Studies at high field strength' for 36 months from 1 August 1979 to 31 July 1982.

Correspondence and papers, 1978-1979.

2 folders.

**C.8** 

SERC grant reference no. GR/B/06321 for work on 'Chemistry of Group VII Transition Metals' for 24 months from 1 October 1979 to 30 September 1981.

Correspondence and papers, 1979-1982.

C.9, C.10

SERC grant reference GR/B/49410 for work on 'Hydrogenolysis of Transition Metal Akyls' for 24 months from 1 October 1980 to 30 September 1982, extended to 6 March 1983.

Correspondence and papers, 1980-1983.

2 folders.

C.11, C.12

SERC grant reference GR/C/19370 for work on 'Applications of Multinuclear Fourier transform spectroscopy in Synthetic Chemistry' for 36 months from 1 July 1982 to 30 June 1985.

Correspondence and papers, 1982-1986.

2 folders.

C.13, C.14

SERC grant reference GR/C/19530 for work on 'Hydrido Complexes of Group VI and Group VII Transition Metals' for 24 months from 1 July 1982 to 30 June 1984.

Correspondence and papers, 1982-1985.

2 folders.

C.15, C.16

SERC grant reference GR/C/29775 for work on 'Mass Spectrometry of Organic and Organometallic Compounds' for 36 months from 1 December 1982 to 30 November 1985.

Correspondence and papers, 1982-1986.

2 folders

| C.17       | SERC grant reference GR/C/79008 for work on 'High Oxidation State Alkyls and Hydrides of Transition Metals' for 24 months from 1 January 1984 to 31 December 1985.  Papers, 1983-1986.                                    |
|------------|---|
| C.18, C.19 | SERC grant reference GR/D/51636 for work on 'Transition Metal Complexes' for 24 months from 1 October 1985 to 30 September 1987, extended to 31 March 1988.   |
|            | Correspondence and papers, 1985-1989.  2 folders.   |
| C.20, C.21 | SERC grant reference GR/F/41525 for work on 'Amido and Imido Complexes of Transition Metals' from 1 November 1989 to 30 June 1992.  Correspondence and papers, 1989-1992.   |
|            | 2 folders.  |
| C.22       | Papers re grant application for work on 'Chemistry of Iridium Organo and Coordination Compounds', 1991.   |
| C.23       | Correspondence and papers <i>re</i> research proposal on 'Nitrogen fixation under mild conditions by transition metal complexes' submitted with A. Flamini to the Italian Consiglio Nazionale delle Richerche, 1977-1978. |
|            | Papers found with Wilkinson's expired SERC grant papers.  |
| C.24-C.32  | Miscellaneous correspondence and papers re funding for Wilkinson's research, 1979, 1988-1993.   |
| C.24       | Correspondence and papers re grant applications to the Royal Society, 1979, 1989-1993.  |
| C.25       | Correspondence with Unilever plc <i>re</i> support for retired Professors, 1988-1989.   |

| C.26, C.27 | Correspondence and papers <i>re</i> SERC grant reference GR/E/54214 for work on 'Transition Metal Organo and Coordination Complexes' for 24 months from 1 October 1987 (revised starting date 1 April 1988), 1987-1990.  2 folders. |
|------------|---|
| C.28       | Application (rejected) to the SERC for work on the chemistry of iridium organo and coordination compounds, 1991.  |
| C.29       | Correspondence and papers <i>re</i> application to SERC for work on the chemistry of transition metal organo and coordination compounds, 1991-  |
| C.30       | Application to the SERC for a grant to work on the chemistry of high oxidation state transition metal complexes for 36 months from 1 January 1993.  |
| C.31       | Application to the SERC for a grant to work on the chemistry of high oxidation transition metal complexes for 48 months from 1 April 1994.  |
| C.32       | Letter from Wilkinson to the Commission of the European Communities refunding, 12 February 1993.  |
| C.33-C.37  | PATENTS ca 1976-ca 1985   |
| C.33       | Manuscript draft headed 'Commentary on draft agreement' and 'Johnson Matthey', n.d. [ca 1976].  |
|            | Relates to patent questions.  |
|            | 6pp manuscript.   |
| C.34       | Manuscript draft headed 'Initiation of Work on Homogeneous Fischer Tropsch Reactions', 25 July 1979.  |
|            | The work led to a draft patent application. See C.31.   |
|            | 7pp manuscript.   |
|            |   |

C.35

Manuscript with cover page inscribed 'Draft Patent on  $H_2$ /Co Abandoned as shown not fast enough by BP at Sunbury on Thames', n.d. [ca 1979].

The draft patent concerned the use of cobalt catalysts to synthesise alcohols.

17pp manuscript including examples.

C.36

Manuscript 'Original Draft for Syn[part of word illegible] Patent Nov 1979' with manuscript inscription at the top left of the first page 'Abandoned as BP [British Petroleum] showed too slow'.

The draft patent concerned 'specifically the use of metal carbonyls in the presence of polyether solvents for the reduction of carbon monoxide by hydrogen to ethanol and other oxygenated products'.

19pp manuscript including examples and tables.

C.37

Manuscript draft letter to the Patents Division of British Petroleum with 3pp manuscript draft on the early history of Rhodium catalysis, n.d. [ca 1985].

| SECTION D | LECTURES AND  | PUBLICATIONS   |
|-----------|---|--|
|           | D.1-D.3<br>D.4-D.13<br>D.14-D.44<br>D.45-D.56   | LECTURES  PUBLICATIONS  CORRESPONDENCE RE PUBLICATIONS  ILLUSTRATIVE MATERIAL  |
| D.1-D.3   | LECTURES  |  |
| D.1       | 'Aspects of the Transi Typescript of lecture p and Basel, Switzerland                 | 1972, 1985 and n.d.  tion Metal to Carbon σ-bond; Stable Binary Alkyls'  presented to the Chemical Societies of Fribourg, Zürich d, 7,8,9 November 1972.                       |
| D.2       |   |  |
| D.3       | 'Notes for Mond Lecture<br>6pp manuscript notes; 1                                    | typescript outline of career of Ludwig Mond.   |
| D.4-D.13  | PUBLICATIONS  | 1976-1993  |
| D.4       | 'Developments in Rhodii<br>Hydrogenation of Olefins a<br>Typescript draft dated April | um Catalysed Reactions: Hydroformylation and   |
| D.5       | Manuscript draft proposa  | dallic Chemistry, Pergamon, 1982.  al headed 'Comprehensive Organometallic 'The object is to provide a reference text field at the time of writing', n.d., but written on 979. |

| /          | Review, Chemistry in Britain, June 1983.   |
|------------|--|
| D.6        | Letter from Wilkinson to <i>The Times</i> on 'Scientists in the Civil Service', 9 July 1982.   |
|            | Wilkinson's carbon only.   |
| D.7, D.8   | Manuscript draft headed 'Polyhedron' with note on card attached 'Original manuscript of first ever platinum group of homoleptic allyls. JCS Dalton not Polyhedron', latest bibliographical reference 1985. |
|            | 2 folders.   |
| D.9        | Reviews by Wilkinson, 1985 and 1993.   |
| D.10       | 'Pentachloronitridoruthenate(VI) Synthesis: Warning'.  |
|            | Typescript with covering letter and photocopy of published version of this contribution to the Letters section of <i>Chem. Brit.</i> , 1990.   |
| D.11       | Comprehensive Organometallic Chemistry II, Pergamon, 1995.   |
|            | Wilkinson was one of the Editors-in-chief.   |
|            | Correspondence only, with fellow editors and contributors, 1991-1992.  |
| D.12, D.13 | Drafts and printed papers by others, 1977-1981 and n.d.<br>2 folders.  |
|            |  |
| D.14-D.44  | CORRESPONDENCE RE PUBLICATIONS 1980-1993   |
| D.14-D.41  | Correspondence re publications arranged alphabetically by journal or publisher.  |
| D.14       | Inorganic chemistry  |
|            | Includes referee's report.   |
|            |  |

| D.15      | Inorganic reactions and methods  Wilkinson was a member of the Advisory Board.   |
|-----------|--|
| D.16      | Interdisciplinary Science Reviews 1983-1987 Wilkinson was a member of the Editorial Board.   |
| D.17      | John Wiley & Sons, Inc.  1980-1993 Includes correspondence with publisher and collaborators re F.A. Cotton and Wilkinson eds, Advanced Inorganic Chemistry, 4th edition 1980 and 5th |
| D.18-D.40 | Polyhedron  1980-1993  Polyhedron was a new international journal for inorganic and metallo-organic chemistry published by Pergamon Mills.   |
| D.18-D.36 | General correspondence and papers with publisher, editors and authors,   |
| D.18      | 1980. Includes 'Draft Aims, Scope and Purpose'.  |
| D.19      | 1981 June-December.  |
| D.20      | 1982 January-March. Includes 'Draft statement for Polyhedron'.   |
| D.21      | 1982 April-June.   |
| D.22      | 1982 July-October.   |
| D.23      | 1982 November-December.  |

| D.24 | 1983 January-March.   |
|------|---|
|      | Includes draft announcement 'Historical Sketches - A New Feature'.  |
| D.25 | 1983 April-June.  |
| D.26 | 1984 February-September.  Includes note on the provenance of papers published in <i>Polyhedron</i> .                                    |
| D.27 | 1984 October.   |
| D.28 | 1984 November-December.   |
| D.29 | 1985 January-October.   |
| D.30 | 1986 June-December.   |
| D.31 | 1987 January-July.  |
| D.32 | 1987 September-December.  |
| D.33 | 1988 January-October.  Includes draft announcement of the <i>Polyhedron</i> Prize for Creativity in Inorganic Chemistry. See also A.47. |
| D.34 | 1989 February-September.  |
| D.35 | 1990.   |

| D.36       | 1991-1993.  |     |
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|            | Includes text of short appreciation of Robert Maxwell who died in 1991.   |     |
| D.37       | Correspondence and papers re Polyhedron Prize for the best papublished in 1987.                                     | per |
| D.38       | Correspondence and papers re <i>Polyhedron</i> Prize for the best paper published in 1988.                          | oer |
|            | Brief correspondence re the best paper prizes for 1989 and 1990.  |     |
| D.39, D.40 | Correspondence and papers <i>re</i> the 1991 <i>Polyhedron</i> Prize for Creativity Inorganic Chemistry, 1990-1991. | in  |
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| D.41       | Progress in Inorganic Chemistry 1987-199  | 91  |
|            | Wilkinson was a member of the Advisory Board.   |     |
| D.42-D.44  | Miscellaneous shorter publications correspondence, 1983-1993, n.d.  |     |
| D.42       | 1983-1986.  |     |
| D.43       | 1987-1989.  |     |
| D.44       | 1990-1993, n.d.   |     |
| D.45-D.56  | ILLUSTRATIVE MATERIAL N.d   |     |
|            | Contents of filing cabinet divider inscribed 'Slides', undated but with bibliographical references ca 1979-1987.    | 1   |

| D.45      | 'Slides - France May 18th'. Contents of folder so inscribed: illustrative material for slides.  |
|-----------|---|
| D.46      | 'Slides - Strasbourg'. Contents of folder so inscribed: illustrative material including photograph of Wilkinson at 1973 Nobel Prize Ceremony.   |
| D.47-D.55 | 'Pending for slides and publications'. Contents of folder so inscribed divided into nine for ease of reference: illustrative material including manuscript, duplicated and printed papers and film strips. N.d. |
| D.56      | Papers found loose in divider, n.d.   |

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|           |   | nvitation to be a member of the Scientific Co |          |
| E.1       | Principally information a programme for 1988-19 | about the Fondazione including its constitu   | tion and |
|           |   |   |          |
| E.2-E.6   | HOVIONE SOCIEDADE                               | QUIMICA, LDA 198                              | 87-1992  |
|           | Wilkinson advised this P                        | ortuguese chemical company in patent cases    | S.       |
|           | Correspondence and prom Hovione.                | apers including Wilkinson's answers to qu     | iestions |
| E.2       | 1987.   |   |          |
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## Societies and organisations

E.6 1992.

E.7, E.8 ROYAL SOCIETY 1983-1991

E.7 1983-1984, 1988.

Principally re Wilkinson's views on the admission of new Fellows.

E.8 1991.

Papers re visiting scientist under exchange agreement with USSR Academy of Sciences.

E.9-E.12 ROYAL SOCIETY OF CHEMISTRY 1982-1990

E.9, E.10 General correspondence and papers, 1982-1990.

2 folders.

E.11, E.12 References and recommendations re Royal Society of Chemistry

publications and awards, 1983-1990.

2 folders.

E.13 SCIENCE AND ENGINEERING RESEARCH COUNCIL 1985-1987

E.13 General correspondence and papers, 1985-1987.

## Societies and organisations

E.14-E.17 UNION CARBIDE CORPORATION

1978-1984

Wilkinson had a consultancy arrangement with Union Carbide.

E.14-E.17

Correspondence and papers, 1978-1984.

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At E.17 is an undated affidavit by Wilkinson found with the Union Carbide papers.

E.18-E.20

UNIVERSITY OF LONDON INTERCOLLEGIATE RESEARCH SERVICE (ULIRS)

1979-1989

E.18

Correspondence and papers re ULIRS X-Ray Service, 1979-1980.

Includes personnel questions.

E.19, E.20

General correspondence and papers, 1979-1989.

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E.20 includes letter from Wilkinson to Science and Engineering Council (SERC) re 'Outline Proposal for ESR/ENDOR service', 1988.

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|           | Chronological sequence                                  | e.  |            |
| F.1       | 1980-1982.  |   |            |
| F.2       | 1983 February-June. Includes report to Brit             | ish Council on a visit to Spain made by   | Wilkinson. |
|           | November 1982.  |   | •          |
| F.3       | 1983 July-December.                                     |   |            |
| F.4       | 1984 January-June.                                      |   |            |
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| F.17 | 1987 October-December.  |
| F.18 | 1988 January-June.  |
| F.19 | 1988 July.  |
|      | Includes broadcast notes for Open University television programmes. |
| F.20 | 1988 October-November.  |
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| F.23  | 1989 June-July.        |
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| F.29  | 1991 January-June.     |
| F.30  | 1991 July-December.    |
| F.31  | 1992.                  |
| F.32  | 1993 January-April.    |
| F.33  | 1993 May-December.     |

#### F.34-F.43

#### **CORRESPONDENCE WITH POLITICIANS**

1972-1988

Wilkinson's correspondence with Prime Ministers, government ministers, opposition politicians and his local MP (Peter Brooke who was MP for the City of London and Westminster South constituency from 1977). The correspondence was kept together by Wilkinson.

Wilkinson wrote on a variety of topics including parental assessment in respect of student grants, the discharge of radioactive wastes into the Irish Sea from Windscale and a number of science policy, university funding and Imperial College matters especially as they affected the Chemistry Department.

F.34

1972-1974.

Includes letter from Walter Annenberg, US Ambassador, 20 September 1972, in reply to a letter from Wilkinson (not present) on the desirability of the USSR becoming party to the International Copyright Conventions. See also F.44-F.53.

F.35

1975-1978.

F.36

1979.

F.37

1980.

Includes 'Report of a meeting between a deputation from Imperial College and Dr Rhodes Boyson, Parliamentary Under-Secretary of State, Department of Education and Science, 17 March 1980'.

F.38

1981.

Includes Ministry of Agriculture, Fisheries and Food Directorate of Fisheries Research Aquatic Environment Monitoring Report on 'Radioactivity in Surface and Coastal Waters of the British Isles, 1978' by G.J. Hunt, Lowestoft, 1980.

The report was sent to Wilkinson with a letter from the Prime Minister, 10 July 1981. This was in reply to a letter from Wilkinson (not present) about discharges of plutonium into the Irish Sea from Windscale.

F.39

1982-1984.

Includes letter from J.R. Knowles, Department of Chemistry, Harvard University, 25 September 1984, *re* tenure and non-tenure appointments at Harvard. This relates to correspondence on academic tenure with Peter Brooke who was both Wilkinson's local MP and Parliamentary Under Secretary of State, Department of Education and Science.

F.40

1985.

Includes government press release *re* report of Top Salaries Review Body, 18 July 1985, and related correspondence.

F.41

1986.

F.42

1987-1988.

F.43

N.d.

Wilkinson's undated manuscript drafts of letters to the Minister of Education Kenneth Baker, Peter Brooke, Margaret Thatcher and the Chairman of ICI Sir John Harvey Jones (first page only).

F.44-F.53

RUSSIA

1969-1975

Contents of filing cabinet divider labelled 'Russia'.

In 1969 the Publishing House of Mir in Moscow published a Russian edition of *Advanced Inorganic Chemistry* by F.A. Cotton and Wilkinson. As the USSR was not a party to International Copyright Conventions, the Soviet Publishing House was not under any material obligation to the authors. Wilkinson took up the question of the payment of royalties in connexion with a proposed visit to the USSR for the Fifth International Conference on Organometallic Chemistry, Moscow, 16-21 August 1971. In addition to the conference organisers in the Soviet Union he corresponded with scientific colleagues in the West, publishers, the Foreign and Commonwealth Office and the Soviet Embassy in London. He continued to pursue the question of royalty payments after his return from the conference.

F.44 Correspondence and papers, 1969-1970.

Includes photocopy of letter from Soviet Publishing House with translation confirming their publication of a Russian edition of Cotton & Wilkinson and invitation to deliver a Plenary Lecture at the Organometallic Chemistry Conference.

F.45-F.49 Correspondence *re* arrangements for visit to Moscow for the Organometallic Chemistry Conference and the question of royalty payments in connexion

with the visit, January-August 1971.

5 folders.

F.49 includes Wilkinson's report on visit to the Academy of Sciences, Institute for Organoelement Compounds, Moscow, 21 August 1971.

F.50-F.53 Correspondence arising from conference and continuing correspondence re

royalty questions, 1971-1975.

4 folders.

F.54-F.61 REFERENCES AND RECOMMENDATIONS

1984-1994

A chronological series of references and recommendations in respect of appointments, promotions, awards and prizes.

Unindexed.

F.54 1984.

F.55 1985-1986.

F.56 1987-1988.

F.57 1989.

F.58 1990.

F.59 1991-1992.

F.60 1993.

F.61 1994.

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