Report on the papers of SIR JOHN LENNARD-JONES, KBE, FRS (1894-1954)

deposited in Churchill College, Cambridge

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### CONTEMPORARY SCIENTIFIC ARCHIVES CENTRE

Papers of

SIR JOHN LENNARD-JONES, K.B.E., F.R.S. (1894 - 1954)

Listed by: Jeannine Alton
Harriot Weiskittel

Deposited in Churchill College Library, Cambridge 1973

## ADDENDUM

A collection of lecture notes taken 1928 - 32 deposited by Professor C.A. Coulson in Cambridge University Library (Shelfmark: Add. 7807) includes careful notes of lectures given in Cambridge by Lennard-Jones. Professor Coulson wrote (14 November 1973) "I suspect that these are the first lectures on theoretical chemistry (or perhaps more accurately quantum chemistry) that had been given in Britain."

#### Description of the collection.

The papers cover the years 1906 - 54.

They were received from Dr. John Lennard-Jones, Sir John's son, who had already selected and arranged them in roughly chronological order for a possible biography of his father. This order has been preserved as far as possible.

Sir John's daily journals for 1943 - 46 and 1952 - 54, the former covering his service as Superintendant of Armament Research and Director General of Scientific Research, Ministry of Supply, during the Second World War, are an important feature of the collection, and are listed separately (Items 22 - 29).

Very little scientific work remained (see Items 20,85), though some of the lectures and correspondence deal with scientific subjects.

Items 86 - 89 contain, in sealed envelopes, the private letters of Sir John Lennard-Jones to his wife for the years 1923 - 51. They may be consulted only with the written permission of Dr. John Lennard-Jones (son), 9, Well Road, \* London NW3, or of Mrs. R. Howard (daughter), Christ Church Vicarage, Reservoir Road, Prenton.nr. Birkenhead, during their lifetimes and thereafter without restriction.

#### Summary of career (cont)

1932 - 54	Professorial Fellow, Corpus Christi College, Cambridge
1933	Fellow of the Royal Society
1939	Key Scientist, Ministry of Supply (Mathematics Laboratory)
1940 - 45	Chief Superintendant of Armament Research, Ministry of Supply
1945 - 46	Chief Scientific Officer and Director General of Scientific Research, Ministry of Supply
1946 - 53	Chairman, Scientific Advisory Council, Ministry of Supply
1946	K.B.E.; Sc.D. Cantab.
1947 <b>-</b> 54	Service on Research Panel, National Gallery
1948 & 49	President of Faraday Society
1952	Appointed Principal, University College of North Stalfordshire
1954	President, Section B, British Association; Hon. D.Sc. Oxon.; Longstaff Medal, Chemical Society

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#### Handlist :

#### I. Biographical

- 1. Memoir, by Sir Nevill Mott. (Biographical Memoirs of Fellows of the Royal Society, Vol. 1, November 1955). Typescript list of published scientific papers and manuscript list of lecture notes, as received in collection.
- 2. School reports; letter from St. John's College, Cambridge 1906 12
- 3. Royal Flying Corps 1915

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	in a super with	1912 - 15
4.	University of Manchester, correspondence with Horace Lamb	
5•	University of Cambridge: correspondence with Horace Lamb and with Royal Commission for 1851 Exhibition re Lennard-Jones's work during tenure of Senior Studentship	1922 - 25
6.	Report on computing at University of Cambridge	1937 - 38
7.	Notes and correspondence re establishment of new college at Cambridge; application for grant	1946 <b>–</b> 48 1951
8.	Ministry of Supply: photograph, curricula vitae in Lennard- Jones's hand, newspaper clipping re appointment to Advisory Council	1939
9.	University College of North Staffordshire: Inaugural Address, newspaper clippings, drafts for two articles re University, article published in Cambridge Review, 7 March 1953	1952 - 54
10.	Obituaries	1954
11.	Miscellaneous Honours: 1932 Fellow, American Physical Society 1933 Fellow of the Royal Society 1946 K.B.E.	1932 - 53
	1947 American Medal of Freedom, Bronze Palm 1953 Hopkins Prize, Cambridge Philosophical Society 1953 Coronation Commemoration Medal	
12.	The Davy Medal, Royal Society	1953
13.	Miscellaneous photographs of Sir John Lennard-Jones, colleagues and departments.	
II.	Scientific and personal correspondence	
14.	Correspondence (scientific and personal)	1922 - 24
15.	Correspondence (scientific and personal)	1925
16.	Correspondence (scientific and personal)	1925 - 53
17.	Correspondence relating to Dr. P.R. Manning	1951 - 52
18.	Correspondence relating to Dr. P.R. Manning	1953 - 54
19.	Correspondence relating to University College of North Staffordshire	1953- 54
20.	*Some theoretical calculation of certain crystal potential constants and on the cubic crystal of least potential energy, (with A.E. Ingham), Proc. Roy. Soc. A, 107, 636. Proof with corrections	1925
21.	Correspondence with A.C. Hurley and others relating to papers by Hurley for Proc. Roy. Soc.	1953 <b>–</b> 54

# III. Personal daily journals

22.	Cambridge (11 November 1952 - 13 April 1953) numbered 1 - 3 by Lennard-Jones	1952 - 53
23.	Keele (14 April 1953 - 15 April 1954) numbered 1 - 18 by Lennard-Jones	1953 - 54
24.	17 September 1942 - 31 October 1943 numbered 1 - 20 by Lennard-Jones	1942 - 43
25.	1 November 1943 - 27 September 1944 numbered 21 - 35 by Lennard-Jones	1943 - 44
26.	28 September 1944 - 20 March 1946 numbered 36 - 61 by Lennard-Jones	1944 - 46
27.	21 March 1946 - 26 March 1953 numbered 62 - 80 by Lennard-Jones	1946 – 53
28.	Visit to Germany 14 - 23 July 1950	1950
29.	Progress of Work 2 April - 26 September 1942	1942
IV.	Lectures, sermons and addresses	
30.	*The Nonconformist Conscience, Leigh Baptist, 13 July	1921
31.	'The Religion of Healthy Mindedness,' sermon preached at Leigh Baptist Church, 24 December	1922
32.	Some Application of Crystal Measurements, Manchester, 20 February	1925
33.	'Forecasting the Weather'	1927
34•	*Concerning the Nature of Things, * Tyndale Literary Society, 27 February	1928
35•	'Theories of Light and Theories of Matter,' Mathematical Association, Bristol, 1 February	1929
36.	*Flight, Bristol Scientific Club, 1 March	1930
37.	Chemical Dinner, Bristol University, 5 December	1930
38.	!Modern Theories of Atomic Structure, Quintic Club, Adams Society, Cambridge, 14 February	1935
39•	*The Organisation of Scientific Workers in Peace and War, *Association of Scientific Workers, 2 November	1938
40.	*Chemical Equilibria at very high pressures; * 19 May	1942
41.	*The Organisation of Armament Research, * A.R.D. Memorandum	1945
42.	Address to the Staff, A.R.D.; Farewell Message to the Staff A.R.D., 28 August	1945
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43. 'Co-operation in Defence Science'	1945
44. *Evidence to Lord President's Committee on Scientif Manpower, *21 May	ic 1946
The Chemist in Government Service, Chemical Socie Cambridge, 12 November. Includes documents.	ty, 1946
46. Some War-time Experiences, Chemical Society, Cambridge March. Includes documents.	ridge, 1947
47. The new place of Science in Higher Education	n.d.
48. The new place of Science in the Universities, The Barlow Report.	n.d.
49. *University Courses for Scientists*	n.d.
50. The Scientist and the State, script of broadcast with Ms corrections.	talk n.d.
51. 'The Place of the Universities in the Community,' Branch Association discussion, 10 May	ritish 1947
52. 'The Scientist and the State,' Dundee Rotary Club, 2	28 August 1947
53. Cambridge Graduate Science Club, 28 May	1949
54. 'The Education of the Man of Science,' and related of	documents 1949
55. Faraday Society meeting, Liverpool University, 12 Ap	oril 1950
56. Cambridge Graduate Science Club, 27 May	1950
57. Faraday Society Dinner, Trinity College, Cambridge,	25 Sept. 1950
58. Corpus Dinner, Corpus Christi College, Cambridge, 5	December 1950
59. Faraday Society Dinner, Trinity College, Cambridge,	6 August 1952
60. 'University Education Today,' Keele	n.d.
61. Inaugural Address, Principal, Keele University. Not published address, and ceremony of inauguration.	es and 1953
62. G.A.C. Dinner, Keele, 28 May	1953
63. Lecturers Association, Keele, 9 June	1953
64. Speech on visit of Staffordshire County Council, 11	June 1953
65. Speech at opening of Bradwell County Primary School,	25 June 1953
66. Address at end of term service, 28 June, Keele	1953
67. Address to freshmen, Keele, 5 October	1953
68. Introductory lecture, Foundation Year Course, Keele,	8 Oct. 1953

69.	Staffordshire Society, 22 October	1953
70.	Pottery Federation, 29 October, Stoke	1953
71	Presentation to Dr. Jenkins, Keele, 31 October	1953
72.	Introduction to lecture by Mr. Brimble, Editor of 'Nature,' Keele, 13 November	1953
73.	10th Anniversary dinner, Armaments Research Establishment, Fort Halstead, Riverhead, 11 December	1953
74•	a a a a a a a a a a a a a a a a a a a	1954
75•	North Staffordshire Caledonian Society, Anniversary dinner, Keele, 25 January	1954
76.	Introduction to Morning Service, broadcast from University College, Keele, 31 January	1954
77.	Speech at dinner, Harwood Hall, Keele, 5 March	1954
78.	Speech at dinner, Senior Common Room, Keele, 22 March	1954
79•	Speeches of welcome, Conference of Directors of Education, Keele, 23 - 24 March	1954
80.	Speech of welcome, visit of headmasters and headmistresses, Keele, 26 March	1954
81.	Speech at degree day, Keele, 18 April	1954
82.	Speech to members of Staffordshire Society, Keele, 8 May	1954
83	Speech at Commemoration, Keele, 30 June	1954
84.	Sermon for new academic year, Keele, October	1954
85.	Lecture notes, Theoretical Chemistry, Cambridge (see note on file cover)	1938 - 52

### Private Correspondence

To be consulted only with the written permission of Sir John's family; (see note in general description of the collection, p.1)

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88. 1927 - 39

89. 1940 - 51

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