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Catalogue of papers and correspondence relating to

ROBERT SPENCE CB, FRS

(1905 - 1976)

Compiled by

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DESCRIPTION OF THE COLLECTION

The material was received via the Records Officer, AERE, Harwell.

There are a few items relating to Spence's early career; they include (Item 1) a copy of his 'Final report to the Commonwealth Fund' on his three-year tenure of a Harkness Fellowship at Princeton, 1928-31, which is an interesting account of his views on Britain and America.

Most of the material, however, consists of letters, narratives and addresses assembled by E. Glueckauf for his memoir of Spence (Biographical Memoirs of Fellows of the Royal Society, 23, 1977), often containing recollections of or information about Spence additional to those directly quoted in the published text. Some of the documents are original letters or typescripts, some are photocopies; many bear Glueckauf's pencil annotations or editorial indications for use in the Memoir.

BIOGRAPHICAL NOTE

Robert Spence was born and went to school in South Shields. He graduated from the University of Durham in 1926 and began his research career there on oxidation reactions. A formative event was the award in 1928 of a Commonwealth Fund Fellowship which took him to Princeton for three years (see Item 1). He was appointed lecturer in physical chemistry at Leeds University in 1931, and served during the Second World War as Chemical Warfare Adviser to the R.A.F. on various projects. In July 1945 he joined the atomic research team in Montreal to lay the foundations for plutonium and fission product separation processes, becoming the team leader in January 1946, playing an important part in the design of a chemical separation plant for the U.K. atomic energy programme and preparing staff and buildings for the opening of the research division at Harwell. Spence was the head of the Chemistry Division from 1946, and was appointed Chief Chemist in 1948, Deputy Director in 1960 and Director from 1964 to 1968. Projects with which he was especially associated at Harwell include research on polonium and proactinium, the attempt to extract uranium from sea water, and the development of a rotary extractor.

In 1968 Spence resigned from Harwell and accepted an invitation from the University of Kent at Canterbury to go there as Professor of Chemistry and Master of Keynes College. He retired in 1973.

Spence was appointed as a Commander of the Order of the Bath in 1953 and elected to the Fellowship of the Royal Society in 1959.

6. Crabtree, D. 1976
On Spence's period as Professor of Chemistry and Master of Keynes College, University of Kent. Letter and account, both annotated and edited by Glueckauf for use in Memoir (pp.522-524).
Also enclosed here is a copy of a published 'Tribute to Professor Bob Spence' on his retirement as Master, by Keith Carabine.
7. Grainger, L. 1976
On Harwell Directorate (Memoir, pp.519-522).
8. Hinton, C. (Lord Hinton of Bankside) 1976
On design and engineering of chemical separation plant at Harwell (Memoir, pp.507-509).
9. Jackson, R.F. 1976
On Harwell Directorate (Memoir, pp.519-522).
10. Jones, R.G. 1977
Recollections of Spence as Professor of Chemistry, University of Kent (Memoir, p.524).
With annotations and editorial indications in pencil by Glueckauf.
11. Lane, E.S. 1976
3pp. ms. account of 'Spence and the Oyster Project'. Photocopy (Memoir, pp.515-516).
12. McIlroy, R.W. n.d.
4pp. typescript 'Recollections around the Oyster Project, 1952-65'.
Includes a photograph of 'The first gram' of uranium from sea water (Memoir, p.516).

13. Maddock, A.G. 1976
14. Nicholls, C.M. 1976
- 1p. and 4pp. notes, made after discussions with Glueckauf, recollecting Spence's service as Chemical Warfare adviser, Middle East Headquarters, R.A.F., and later in Canada and at Harwell.
15. Roberts, L.E.J. 1977
- On conference on Technology of the Sea and the Sea-bed, and setting up of 'Marine Technology Support Unit ' (MATSU) at Harwell (Memoir, p.522).
16. Searby, P.J. 1977
- On Harwell Directorate.
17. Streeton, R.J.W. 1976
- 3pp. typescript note on various research projects at Harwell, including rotary column and Oyster Project.
18. Wild, W. 1976
- 11pp. typescript address at presentation for Spence on his leaving Harwell for Canterbury, 1968 (transcript of a tape made and sent by F.J. Stubbs).
19. Wright, J. 1976
- Mainly on CO₂/graphite reaction.