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**ABW**

Papers of A B Wood re his work on radioactivity,  
and his work for the Admiralty, 1912-1980

**ABW**

**A Handlist of the papers of A. B. Wood, OBE., DSc. IB90 - 1964, Admiralty Scientist**

These papers were deposited in the Library in 1984 through the good offices of R.J. Gossage and G.W. Wood. The majority of A.B. Wood's papers relating to his Admiralty work are held in the Public Record Office, Class ADM 218.

Accounts of A.B. Wood's work appear in

- a) The relevant material on this list
- b) W.D. Hackmann. *Seek & strike: and the Royal Navy, 1914-54. Sonar, anti-submarine warfare* London: HMSO, 1984.
- c) Briefly, in the following obituaries:
  - i) *Nature*, vol. 203, Sept. 19, 1964, p. 1224 (the name should be Albert Beaumont Wood).
  - ii) *Journal of the Acoustical Society of America*, vol. 36, Nov. 1984, pp. 2248-2249.
  - iii) *Bulletin of the Institute of Physics and the Physical Society*, vol. 16, June 1965, pp. 241-242.

**1 History and recollections (see also 6/1)**

- |     |           |   |
|-----|-----------|---|
| 1/1 | 1965 July | Albert Beaumont Wood Memorial Number.<br>Journal of the Royal Naval Scientific Service,<br>vol. 20, no.4.<br>Contains:<br><br>1) appreciations by former colleagues<br><br>2) ABW's history From Board of Invention and Research to Royal Naval Scientific Service (originally published in 5 issues of the journal between May 1961 and Jan. 963). |
| 1/2 | 1961-1963 | Author's offprint's of the original paper comprising From B.I.R. to R.N.S.S., (see above).  |
| 1/3 | 1959-1961 | /1 Correspondence with George W. Wood concerning GWW's visits to  |

ABW in England, and ABW's forthcoming visit to the USA.

/2 Transcript of ABW's reminiscences, which were taped by GWW during Oct.-Nov. 1960. Typescript, with ABW's ms. annotations.

1/4            1945

Stephen Butterworth, OBE. - an appreciation. Typescript of ABW's contribution to the JRNSS of Jan. 1946, to mark Butterworth's retirement from Admiralty service. With portrait HS photograph of Butterworth [an Admiralty applied mathematician]

## **2 Education (see also 6/1)**

2/1            1912-1913    File of notes and miscellaneous papers from ABW's educational diploma course at the University of Manchester.

2/2            1915            Address, reports and abstracts of papers of Section L of the British Association for the Advancement of Science, Manchester meeting, 1915. [ABW's copy].

Last 2 pages are: The military training of youth in schools: a review of the systems of training in the British Empire and in various foreign countries. By A.B. Wood, MSc.

## **3 Radioactivity, 1914-1921**

3/1            1914-1915    6 papers published by Wood, concerning radioactivity (kept together by him):

/1 (with Barratt, T.) Volatility of thorium active deposit. Proc. Phys. Soc., vol. 26, 1914, pp. 248-260.

/2 The volatility of thorium 0: with a note on the

relative activities of thorium C and O. Phil. Mag., vol. 28, 1914, pp. 808-818.

/3 Volatilisation of extremely thin radioactive deposits. Proc. Roy. Soc., vol. 91, 1915, pp. 543-560.

/4 (with A.I. Steven) Investigation of the photographic effect of recoil atoms. Proc. Phys. Soc., vol. 27, 1915, pp 189-192.

/5 The velocities of the  $\alpha$  particles from thorium active deposit. Phil. Mag., vol. 30, 1915, pp. 702-710 & plate 17.

/6 (with W. Makover). The recoil of radium O from radium C. Phil. Mag., vol. 30, 1915, pp. 811-815.

3/2            1919-1921    File concerning ABW's publication of:

Long-range particles from thorium active deposits. Phil. Mag., vol. 41, 1921, pp. 575-584.  
Contains:

- i) ABW's experimental notes,
- ii) typescript ms of paper,
- iii) background papers,
- iv) correspondence between ABW in Helensburgh and Rutherford in Cambridge (8 letters R. to W., 3 draft/copy letters W. to R., 1919 Oct. - 1920 July)
- v) offprint of Wood's paper,
- vi) offprint of Rutherford's Bakerian lecture of 1920,
- vii) 4 mounted mica/aluminium

screens for absorbing - particles,  
in envelope (screens  
damaged/corroded).

#### **4 Admiralty Work**

4/1            1913-1925    File: "Letters of appointment  
etc.". includes appointment to  
Oliver Lodge Fellowship in  
Physics, University of Liverpool,  
1914 and appointment as civilian  
scientist to the Admiralty Board  
of Invention and Research, Oct.  
1915.

4/2            1923-1932    Offprint's of ABW's published  
papers on the development of the  
cathode-ray oscillograph, with  
distribution lists.

Papers are:

i) The cathode ray oscillograph.  
Proc. Phys. Soc. 35, 1923, p.109-  
123.

ii) The cathode-ray oscillograph.  
J. I. E. E. 63, 1925, p. 1046-  
1055.

iii) Trade catalogue: Cathode ray  
oscillograph  
(Dr. A.B. Wood's), issued by H.  
Tinsley & Co.,  
1929 Sept.

iv) Recent developments in cathod-  
ray oscillographs. J.I.E.E. 11,  
1932, p.41-82.

#### **4/3 - 4/5 Echo Sounders**

4/3            1929-1944    File "Magnetostriction".  
Contains chiefly offprints of  
published papers by Admiralty  
workers and others, relating to  
design principles for  
magnetostriction on transducers  
("oscillators").

4/4            1930s        File "Echo Sounders".



unveiling of memorial plaque to  
ABW at the school, 12 Dec. 1970

- 6/2           ca. 1970-  
              1980       Mrs. Wood's file re the A.B. Wood  
                          Medal of the Institute of Physics.
- 6/3           1964-1970       Admiralty Research Laboratory file  
                          "A.B. Wood Memorial File",  
                          possibly kept by W. Burrows,  
                          Superintendent ARL. Includes  
                          correspondence with M.o.D., the  
                          Institute of Physics, and the  
                          U.S.A.
- 6/4           ca. 1963-  
              ca. 1973       Mrs. Wood's file re the Research  
                          Vessels A.B. Wood and A.B. Wood  
                          II, operated by MAS (Marine  
                          Acoustical Services Inc.) of  
                          Miami, Florida.

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