OBITUARY NOTICE.

JOSEPH JOHN ACWORTH.

BORN 1853; DIED JANUARY 3RD, 1927.

DR. ACWORTH was born at Rochester in 1853 and died on January 3, 1927, aged 73. He was elected a Fellow of this Society on March 4, 1875, so that he had more than completed his Jubilee of fellowship. He was admitted a Fellow of the Institute of Chemistry in 1878, that is, the year after the Institute was founded.

Acworth was from his boyhood interested in experimental science, and after working in the Chemical Laboratories of the Royal College of Chemistry at South Kensington, he communicated a paper to this Society " On the Action of Nitric Acid upon Copper, Mercury, etc., and on the Influence of the Presence of Metallic Nitrates," which was published in the *Journal* for 1875. He appears to have continued working at this subject at the London Institution with Prof. H. E. Armstrong, and a paper in their joint names was published in the *Journal* two years later, " Researches on the Reduction of Nitric Acid and the Oxides of Nitrogen. Part I. On the Gases evolved by the Action of Metals on Nitric Acid." After this he passed to what proved to be his life work, namely, the manufacture of photographic sensitive materials. It was in quite the early days of the gelatine dry plate industry that he spent a few years in the laboratories of the Britannia Dry Plate Company (now the Ilford Company), and leaving there went to the University of Erlangen to work for the Ph.D. degree in Wiedemann's laboratories. His thesis was presented in May, 1890, and printed (*Ann. Phys. Chem.*, 1891, pp. 371—406) in 1891, " On the Relation between Absorption and Sensitiveness of Sensitised Plates," chiefly plates that had been sensitised for colour by dyes. A translation of the essential parts of this paper appeared in the *Photographic Quarterly* for April, 1891. Acworth was back again in England in 1890 (aged 37), and built a factory at Cricklewood for the manufacture of gelatine dry plates, and in March, 1892, the " Imperial " plates were advertised for sale. These works under his personal guidance, both technically and commercially, were probably the most prosperous of any in the country. Ill health led him to dispose of his interests in the company about the year 1917 (*Brit. Journ. Phot.*).

Eastman, in 1889, introduced commercially his transparent rollable film, the base being nitrocellulose. In 1890, Acworth was

granted a patent for a film base of gelatine rendered waterproof by passing it through a solution of nitrocellulose. This method does not appear to have been followed up. From 1892 to 1896, inclusive, he made four communications to the Royal Photographic Society and one to the Camera Club, which will be found in the respective Journals. In his technical work, he was very capably assisted by his wife, who, as Miss Marion Whiteford Stevenson, had taken the Associateship course at the Royal College of Science and received her diploma (A.R.C.Sc.) in physics in 1893. She was the third woman to earn the Associateship, and the first in physics.

Acworth was of a very kindly and genial nature, and he was in no sense " spoiled " by either his prosperity or his afflictions. He suffered for very many years from asthma and other troubles apparently associated with it. This may have tended to increase his inborn nervous and retiring disposition. Those who heard him on the few occasions when he spoke in public would hardly realise how distressing it was to him to do so, for he had the necessary strength of will and power of perseverance to succeed. C. J.