

OBITUARIES

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Mr. J. H. Coste

JOHN HENRY COSTE died on January 3 at his home at Smallfield, near Horley, Surrey, in his seventy-eighth year. His death further reduces the dwindling number of old Finsbury Technical College students, for it was at this College during 1888-91 that he received, under Meldola, scientific training which served him in such good stead for a long and most useful life. He obtained his first appointment under John Augustus Voelcker, and three years later joined the staff of the Chemical and Gas Testing Department of the London County Council; he remained in this service until his retirement in 1936. His ability was soon recognized, and in 1908 he was appointed chief assistant and in 1912 promoted to the position which is now designated Chemist-in-Chief, Public Health Department. He was always a keen experimenter, and scientific literature, mainly *The Analyst* and the *Journal of the Society of Chemical Industry*, contains no less than fifty papers of which he was either the author or part author. A perusal of these contributions shows him to have been a very versatile worker, for the subjects include petroleum, paint, water, air, milk, coal, sewage, etc., and in addition he was the author of one and part author of two books, on the calorific power of gas, the chemistry of paint pigments and on fuel.

Necessarily the field of his activities was very wide, as covering the scientific aspect of all the work of the premier local government authority in the world. In his later years his chief interests centred in two matters intimately connected with public health, namely, atmospheric pollution and sewage treatment. He was a member of the original research committee of the Meteorological Office on the former subject, that work being transferred later to the Department of Scientific and Industrial Research. After his retirement he was still active in this field right up to the time of his sudden death. Naturally, too, as a successor to the pioneers W. J. Dibdin and Frank Clowes as the senior chemist in the London County Council's service, he was intimately concerned with the sewage disposal problem, and did original work on this subject and its related one of water pollution.

Mr. Coste was a fellow of the Royal Institute of Chemistry and of the Institute of Physics, and served for periods on the council of the former and also on that of the Society of Public Analysts.

His nature was kindly and he was always approachable and willing to help in any problem, official or personal, which was put to him. His sudden passing is a great loss to the many who were privileged to be counted among his friends. C. J. REGAN

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Prof. Egon von Schweidler

EGON RITTER VON SCHWEIDLER, formerly professor of physics in the University of Vienna, died on February 12, 1948, in his country home near Salzburg. His death has not hitherto been recorded in *Nature*.

Schweidler's name is familiar to all workers in radioactivity as the co-author of a manual of radioactivity which surpasses the well-known French and English standard works in this field by the range it covers and the completeness of its documentation;

the two editions of 1916 and 1927 have been most valuable to generations of physicists and chemists. It was written in collaboration with St. Meyer, with whom Schweidler's name is linked also in numerous experimental papers on radioactivity. Another field in which he worked as an experimental physicist and was an acknowledged authority is atmospheric electricity.

It was, however, a contribution to theoretical physics by which Schweidler exerted the strongest influence on the development of science. At the International Congress on Radiology held in Liège in 1905, he read a paper in which he gave the statistical interpretation of Rutherford and Soddy's law of radioactive disintegration. He showed that the statement that, per unit of time, it is always the same fraction of a radioactive substance which disintegrates, can be true only if the law of large numbers makes its levelling effect felt and obscures the deviations; but these must become obvious as soon as the number of atoms under observation is reduced sufficiently. These 'Schweidler fluctuations' were soon verified by experiment, and thus the chance character of the process of disintegration directly demonstrated.

This erratic behaviour of single atoms seemed in 1905 to be something completely out of step with the rest of physics and confined to radioactive disintegration. However, in 1917 Einstein used an analogous interpretation of the emission of light from an excited atom, and it is well known what a predominant role statistical interpretations now take in quantum mechanics. The credit must go to Schweidler, however, for having recognized the first case in a fundamental paper which, in his history of physics, von Laue calls "a step forward of incalculable importance".

Schweidler was born in Vienna on February 10, 1873; he was a student, a lecturer, and an assistant professor there before he was called to the chair of physics in Innsbruck. This he occupied from 1911 until 1926, when he returned to Vienna as director of one of the physics institutes there. This position he held until his retirement in 1939. He was a member of the Vienna Academy of Sciences and for several years also general secretary and vice-president.

The atomistic school of Vienna, famous for such names as Loschmidt and Boltzmann, has lost in Schweidler another worthy representative.

F. A. PANETH

Mr. G. P. Farran

H/c

GEORGE PHILIP FARRAN, who died at his home at Templeogue, Co. Dublin, on January 5 at the age of seventy-two, was connected for nearly fifty years with the Fisheries Branch of the Department of Agriculture there. After a distinguished career at Trinity College, Dublin, he joined the small group of scientific men working, under the late Ernest W. L. Holt, on fishery and marine biological problems in Ireland; and afterwards, in 1900, he entered the service of the Department of Agriculture and Technical Instruction as a naturalist. In 1938 he was promoted to chief inspector of fisheries, a post from which he retired in 1946.

Farran's early papers had ranged over a wide field; but later in life he more or less restricted his activities to the study of planktonic organisms, particularly copepods, and the Irish herrings. As a planktologist he was a recognized authority. For a period of more