SCIENTIFIC EVENTS

FARADAY'S DISCOVERY OF BENZENE[1]

IN his discourse at the Royal Institution, on Friday, June 12, on Faraday as a chemist, Sir William Pope reminded his hearers that Faraday devoted his life to experimental research in chemistry and physics in the Royal Institution, and, at his death in 1867, he was mourned as one of the greatest natural philosophers of the early part of the nineteenth century. Faraday made his advent as a scientific investigator at a moment when striking advances in chemistry were imminent and were indeed to be foreseen; the work of his immediate predecessors, Lavoisier, Davy, Dalton, Berzelius and Avogadro, had made of chemistry an exact science, and such a genius as Faraday was needed for the development of experimental methods. He worked on a variety of chemical subjects for several years, and on June 16, 1825, laid before the Royal Society the results of his study of the liquid deposited from compressed oil gas, in the course of which he had discovered the compound of carbon and hydrogen now known as benzene. At this centenary of his discovery, we celebrate the anniversary of the initiation of a large branch of organic chemistry which in later years became of great scientific importance and, in addition, became the foundation of the several vast industries. Among these latter are to be numbered not only the manufacture of coal-tar dyes, but also important sections of the pharmaceutical, photographic and petroleum industries. Faraday was the first to make a quantitative study of the chemical changes which result from electrical action, and discovered certain electrochemical laws which are of profound chemical significance. He also carried on numerous investigations on optical glass, steel alloys, the transparency of very thin sheets of gold and the so-called colloidal solutions of metallic gold in water.

On June 16, the centenary of Faraday's discovery of benzene was celebrated at a full gathering in the historic lecture-theater of the Royal Institution. His Grace the Duke of Northumberland presided, and in his opening remarks directed the attention of the rising generation to the motives which had inspired Faraday's life, to his profound trust in facts of observation and to his scientific use of the imagination. Although manufacturers have come to recognize the value of such work as Faraday's, in government circles there is still failure to link up scientific methods and discoveries with the public service. His Grace then presented diplomas of honorary membership of the Royal Institution to Professor E. Bertrand (Paris), Professor E. Cohen (Utrecht), Prince Ginori-Conti (Italy) (through his representative Dr. G. A. Nasini), Professor J. F. Norris (Boston), and Professor G. Sakurai (through Professor M. Katayama), who were introduced individually by Sir Arthur Keith, secretary of the institution. Appreciations of Faraday's work were delivered by Professor H. E. Armstrong, who dealt mainly with the organic chemical aspect, and Professor Ernst Cohen, who spoke as a physical chemist. Professor Armstrong stated that the committee organizing the celebration had decided to award at intervals—perhaps sexennially—a medal for conspicuous achievement having some relation to Faraday's discovery of benzene. The first award would be made to Mr. James Morton, of Grangemouth, for distinguished work in connection with the manufacture and applications of anthracene dyestuffs.

[1] From *Nature*.

FREEDOM OF TEACHING

AT a meeting of the Southern California Sigma Xi Association held at the University of Southern California on June 2 the following resolution was unanimously adopted and the secretary of the association directed to transmit copies to the several papers published in Los Angeles and also to the editor of SCIENCE with a request that publication be made in order that the position of the association might become known:

Resolved, That the Southern California Association of Sigma Xi view with amazement and concern the propaganda that is going on in certain parts of the country, having as its object the restriction of the freedom of teaching in science. We would remind the thinking public

(1) That our civil, religious, intellectual and economic progress have resulted very largely from this freedom within the schools, colleges and universities of the land. To attempt to take away this constitutional right is to return to the methods of the Middle Ages.

(2) We call attention to certain essential characteristics of the method of science:

(a) The sincere search for truth without reference to the effect of such truth upon previous opinion or belief.

(b) That any statement of the findings of science is in the nature of the case a statement of the balance of evidence and not a dogmatic assertion of finality. Even the "law" of gravity is subject to revision or restatement.

(c) That there is and can be no conflict between religion and science: to assert the contrary is to misunderstand the scope of both.