MEDALLISTS OF THE ROYAL SOCIETY

By Sir WILLIAM BRAGG

The Copley Medal has been awarded to Professor Paul Langevin.

Professor Langevin was one of the band of young pioneers who, in the closing years of the last century, were engaged in exploring the field which had been opened up by J. J. Thomson’s discovery of the electron. He spent a year (1897–1898) at the Cavendish Laboratory, and his Paris Dr ès Sc. thesis (1902) is dedicated to J. J. Thomson. The thesis, a notable one, was entitled “Recherches sur les Gaz Ionisés.” It dealt mainly with the recombination and mobilities of ions, their coefficients and the relations between them. It is a standard work on this subject. In it he also devised and applied new and elegant methods of measuring these quantities, which were an advance on all their predecessors and have not since been improved upon to any appreciable extent. Related to this, and coming later, were important contributions to the theory of the diffusion of gaseous ions and its relation to ionic mobilities.

Langevin’s greatest achievement is the foundation of the electron theory of magnetism. The theories of paramagnetism and of diamagnetism are still very much as he made them and left them over thirty years ago.

There are few branches of contemporary physics which he has not illuminated and improved by his writings, and his work generally has the qualities of breadth, clearness, elegance and completeness which stamp the master.

He has had a great international influence. He has been a prominent figure at all the meetings of the conferences arranged by the Institut International de Physique Solvay since they started in 1911. On the