

## News and Views

## Medal Awards of the Royal Society

THE following is a list of those to whom the Royal Society has this year awarded medals. The awards of the Royal medals have received the King's gracious approval: *Copley Medal* to Prof. J. S. Haldane in recognition of his discoveries in human physiology and of their application to medicine, mining, diving and engineering; *Rumford Medal* to Prof. W. J. de Haas for his researches on the properties of bodies at low temperatures, and, in particular, for his recent work on cooling by the use of adiabatic demagnetisation; *A Royal Medal* to Prof. S. Chapman for his researches in kinetic theory of gases, in terrestrial magnetism and in the phenomena of the upper atmosphere; *A Royal Medal* to Prof. E. D. Adrian for his work on the physiology of nerve and its application to the problems of sensation; *Davy Medal* to Prof. W. N. Haworth for his researches on the molecular structure of carbohydrates; *Darwin Medal* to Prof. A. C. Seward in recognition of his work as a palaeobotanist; *Sylvester Medal* to Earl Russell for his distinguished work on the foundations of mathematics; *Hughes Medal* to Prof. K. M. G. Siegbahn in recognition of his work as a physicist and technician on long-wave X-rays.

## Council of the Royal Society

THE following names have been put forward for election as officers and council of the Royal Society for the ensuing year: *President*, Sir Frederick Gowland Hopkins; *Treasurer*, Sir Henry Lyons; *Secretaries*, Sir Henry Dale and Sir Frank Smith; *Foreign Secretary*, Prof. A. C. Seward; *Other Members of Council*: Prof. E. D. Adrian, Dr. E. J. Butler, Dr. W. T. Calman, Mr. D. L. Chapman, Prof. A. W. Conway, Prof. W. H. Eccles, Prof. T. R. Elliott, Mr. P. P. Laidlaw, Sir Gerald Lennox-Conyngham, Prof. J. C. McLennan, Dr. F. H. A. Marshall, Sir Charles Martin, Prof. G. T. Morgan, Prof. R. Robison, Dr. Herbert H. Thomas, Prof. E. T. Whittaker.

## A. P. Borodin (1834-77)

ALEXANDER PORFIREVIČ BORODIN, the distinguished Russian chemist who was born on November 12, 1834, was the natural son of Prince Guedeanov. At an early age he was attracted to music and is better known as a composer than as a man of science. He studied chemistry under Zinin at St. Petersburg (Leningrad), graduating in medicine in 1858. He had a brief career as an army doctor, and after being appointed as professor of chemistry, was sent abroad with Mendeléeff and others to study under Bunsen, Kekulé and Erlenmeyer in Germany and under Wurtz at Paris. Borodin also went to Italy with Mendeléeff and studied at Pisa. Before returning to St. Petersburg in 1862, to take up his duties as professor, he commenced a series of investigations on the condensation reactions of aldehydes and discovered aldol simultaneously with Wurtz. He prepared and studied numerous double inorganic

fluorides and a few organic fluorides. Altogether Borodin published about twenty chemical papers, the last few dealing with the higher fatty acids. His leisure was mostly given to music and his musical friends (his wife, Katerina Sergeievna Protopova, was a pianist), but he found time to urge the claims of Russian women regarding education, and from 1872 he gave free lectures in chemistry for the St. Petersburg Women's Medical School, of which he was one of the founders. He died on February 16, 1877.

## Sir Alfred Gilbert, R.A.

IN connexion with the death of Sir Alfred Gilbert, the sculptor, which occurred on November 4, at the age of eighty years, it is interesting to note that originally he contemplated adopting the medical profession as a career; early changed, however, for that of a sculptor. St. Bartholomew's Hospital Medical School recalls, with legitimate pride, that among medals attached to the foundation, one, instituted in 1897, was in honour of Sir William Lawrence (a colleague in his day of Abernethy), surgeon at St. Bartholomew's from 1824 until 1865, and president of the Royal College of Surgeons in 1846 and in 1855. The medal was designed and executed by Gilbert. Cast in gold and chased, and  $2\frac{1}{2}$  in. in diameter, it was exhibited at the Royal Academy in 1897, together with an enlargement in plaster of Paris. The gift is awarded annually in association with a valued senior studentship in medicine and surgery. The obverse depicts the head of Lawrence, not in profile, but within a sculptured circle, looking directly towards the spectator, an unusual medallion presentation. The reverse carries a beautiful composite design, also within a sculptured border; a youth in the centre has two draped females on either side personifying Wisdom and Science, and they whisper words of counsel, embodying a line from Homer. Sir William Lawrence, who was born in 1783 and died in 1867, is thus worthily commemorated through the art of Gilbert.

## Research and Development Lectures

IN 1933 the British Science Guild established the Research and Development Lectures, with the special object of directing public attention to the importance of scientific research and of the utilisation of its results in the service of mankind. The first lecture of the series was given in May 1933 by Sir Harold Carpenter, on "Metals in the Service of Human Life and Industry". Early in 1934 the suggestion was made by Lord Melchett, president of the Guild, that the lectures should be given in the theatre of the Royal Institution, in which special equipment and facilities exist for the experiments and demonstrations it was desired to have. The proposal was accepted by the managers of the Royal Institution and arrangements were made by which the British Science Guild had the use of the lecture theatre on two occasions in May. On

May 2 Sir William Bragg lectured on "Refrigeration" and on May 30 Lord Rutherford on "Helium and other Rare Gases". These two lectures were attended by many members of both Houses of Parliament, and others engaged in public affairs, and at the first of them the Prime Minister presided.

THE success which has attended these lectures has encouraged the belief that the continuance of the series is desirable. The intention is to afford those concerned in the public affairs and industries of the country an opportunity of keeping themselves informed of scientific developments and of the progress of scientific research, particularly in its social and economic bearing and its applications to industry. The managers of the Royal Institution have agreed to co-operate with the council of the British Science Guild in the arrangement of a further programme of four lectures. The subjects have been chosen from four branches of science—electricity, acoustics, metallurgy and biology—in which there have been specially interesting developments in recent years. In each case, the lecturer will describe some notable scientific principle or discovery and trace its consequences down to the point at which the practical and industrial applications which have flowed from it have become matters of national or even wider significance. The following lectures, for the first of which the invitations have now been issued, will be on Wednesdays at 9 p.m.: Mr. C. C. Paterson, on "The Liberation of the Electron: Its Industrial Consequences" (Nov. 21); Dr. G. W. C. Kaye, on "Sound and Noise" (Dec. 12); Prof. C. H. Desch, on "The Microscope and the Metal Industries" (Feb. 6); Sir Frederick Keeble, on "The Fertility of the Earth" (March 6).

#### Developments in British Air Transport

THE recent air race to Melbourne has focused attention upon the possibilities of air transport to that particular part of the British Empire, and Sir Philip Sassoon, Under-Secretary for Air, has stated that the Air Ministry, the Post Office and Imperial Airways have been working for many months on plans for further development of commercial air transport. He emphasised the fact that this action on the part of the authorities was not in any way attendant upon the result of this race, but was the natural culmination of continuous investigation and methodical application of the improvements in the technique of aeronautics to air transport problems. He stated that he hoped to be able to announce within the next month or two, in conjunction with the Dominions and Colonies, plans that will result in the flying time between London and the Empire capitals being progressively and drastically reduced, and also that steps towards the desiderata of reasonably constant loads in both directions will be taken by further developing air mail traffic.

AIR mail traffic probably offers the simplest form of experiment in the system of carrying by relays of fast machines, the obvious solution to the problem, as the question of personal fatigue of the passengers does not affect the case. Having established optimum

conditions for this class of traffic, it will be possible to investigate the variations in it necessary when dealing with the human element. This will possibly prove more expensive in the first instance, as it will call for the use of special mail-carrying aircraft, which will not be hampered, either in their design or their proportion of time in the air to time on the ground, by considerations of passengers' comfort. With this class of machine it should be possible rapidly to approach times of the order established during the recent race. The present system of designing for and operating with a mixed traffic of mails, goods and passengers, with the additional necessity of running the air line as a paying commercial proposition so far as is possible, always presents the vague and incalculable problem of the personal element of the passengers' requirements. This can only be solved by the relative slow method of short steps in introducing improvements with elimination of the unsatisfactory ones by trial and error.

#### England-Melbourne Air Race

THE official times now announced for the Centenary Air Race from England to Melbourne are: Scott and Black (D.H. Comet), 64 hr. 48 min. 49 sec.; Parmentier and Moll (Douglas D.C. 2), 76 hr. 38 min. 12 sec.; C. J. Melrose (D.H. Moth), 79 hr. 17 min. 50 sec.; Stodart and Stodart (Airspeed Courier), 79 hr. 32 min. 30 sec.; Macgregor and Walker (Miles Hawk), 82 hr. 43 min. 34 sec.; Hewett and Kay (D.H. Dragon), 85 hr. 42 min. 28 sec.; Hansen and Jensen (Desoutter), 87 hr. 45 min. 21 sec. Mr. C. W. A. Scott and Mr. T. Campbell Black have therefore been given the prize of £10,000 as winners of the speed race; they have also been awarded the British Silver Medal of the Royal Aeronautical Society for their flight.

#### Inland Water Survey

WRITING in reference to our leading article on "Inland Water Survey" in the issue of NATURE of October 27, Mr. Alan Chorlton, M.P., says that while generally supporting the project for the institution of a survey at an early date, he considers there are other factors which should be taken into account. To arrive at the total of the water supplies of Great Britain without proper relation to where they are likely to be called for would be, he fears, to create another break in the development of water supply in the country. He alludes to an air survey for the positioning of aerodromes and notes that town and country planning call for something to be done to bring the Ordnance Survey up to date. It seems to him that consideration should be given to the general interrelation of all these matters in order to ensure that they will ultimately be properly co-ordinated. "A water survey should, at least, be undertaken with relation to the areas the water is required for: that is, a combination of survey with the recommended allocation".

As regards water supply generally, Mr. Chorlton finds that a statutory central water authority is not