

## News and Views

## Prof. F. J. Cole, F.R.S.

PROF. F. J. COLE will be retiring from the chair of zoology in the University of Reading in September next, after a tenure of thirty-two years. Prof. Cole built up the Zoology Department from very small beginnings; to-day the University can regard with pride the results of his work and inspiration. The Museum of Comparative Anatomy, though small, is without a rival among those of the younger universities, and the preparations, dissections and models have been executed in the Department. Even the printing of the labels is done there. This Museum has justifiably achieved widespread fame; recently a former keeper of zoology in the British Museum (Natural History) referred to it as the "gem" among British museums of comparative anatomy. Although assisted by a very small, but efficient staff, the organization of the teaching side of the Department has always been of the first class. Until comparatively recently, few students entered a university with even the most elementary knowledge of zoology; but those who were fortunate enough to study the subject at Reading soon became infected with the enthusiasm of Prof. Cole and his staff, and by far the majority became sincere students of the subject, not merely candidates reading for an examination.

PROF. COLE'S researches on the nervous system and lateral line system of fishes and on the general morphology of the myxinoid fishes are well known. In recent years his strong literary bent, scholarly mind and acquisitive love of books have combined to interest him in the history of zoology. He has lectured and written on the biologists of the past, extending to them the same sympathetic understanding of their difficulties and mistakes that he offers to young people struggling along the paths of original investigation under his care, yet always, after the manner of Gibbon, relieving the tedium of instruction with an apt analogy or an appropriate anecdote. Last year, with the collaboration of Mr. Robert Gibbings, he produced a facsimile reprint of a very rare book—"Observationes Anatomicae Selectiores. Amstelodamensium. 1667-73" (see NATURE, 142, 235; 1938). His researches into the writings of Leeuwenhoek and Swammerdam have taken him to the old towns and museums of Holland. As a result several papers have appeared in the *Annals of Science* and other journals devoted to the history of science. As Prof. Cole will now be able to devote all his time to his unique collections of early medical books we look forward to more of his delightful studies of the biologists of the past.

## Prof. Otto Hahn

ON March 8, Prof. Otto Hahn, director of the Kaiser Wilhelm-Institut for Chemistry, at Dahlem near Berlin, will reach his sixtieth birthday. To mark this event, a special number of the *Zeitschrift für*

*physikalische Chemie* will appear, in which all the articles will be contributed by members of his laboratory. A celebration of a more intimate nature is also contemplated in the Institute itself. Prof. Hahn's friends in other countries, among whom are many readers of NATURE, will wish to join with his colleagues in offering their warmest congratulations. To workers and students in the field of radioactivity the names of Otto Hahn and Lise Meitner are almost indissolubly linked together. Readers of NATURE will remember that Frl. Lise Meitner celebrated her sixtieth birthday last November, and it is most fitting that where one has led the other should not be far behind. Prof. Hahn's first work in radioactivity was an investigation of the activity of thorianite, carried out under Ramsay at University College, London. This work led to the discovery of a new radioactive substance, radiothorium. Attracted by the rapidly growing fame of Rutherford, he then went to Montreal for a year (1905-6). There he discovered a new body, radioactinium, in the actinium series and showed that there were marked similarities between the products of thorium and actinium. On his return to Berlin, there followed the discovery of mesothorium and some striking experiments on the use of the recoil phenomenon as a method of separating radioactive products. It was at this time that his association with Frl. Meitner began. Together they examined the radiations from many radioelements and later, with von Baeyer, they discovered the presence of homogeneous groups in the  $\beta$ -radiation of some products, the first indication of the now well-known  $\beta$ -ray spectra.

Hahn and Meitner also made investigations on the origin of the actinium series and, in 1918, they discovered, simultaneously with Soddy and Cranston in Great Britain, the immediate parent of actinium, protactinium. Later Hahn prepared this new element in a pure state in quantity sufficient for an atomic weight determination. In pursuing his investigations of the disintegration products of uranium, Hahn found a very curious branching of uranium  $X_1$ , which gave rise to two bodies—uranium  $X_2$ , already known, and uranium Z, a new product of the same mass and charge as uranium  $X_2$  but with different radioactive properties. This was in fact the first example of a pair of nuclear isomers, many of which have recently been found as a result of artificial transformations. In recent years, much of Prof. Hahn's work has been devoted to a study of the artificial transformations resulting from the bombardment of uranium and thorium by neutrons. Only a few weeks ago he was able to show, on chemical evidence, that one of the products of the disintegration of uranium was not, as previously supposed, an isotope of radium but an isotope of barium, pointing to a really dramatic disintegration of the uranium nucleus. This startling conclusion has been confirmed by very striking

experiments in New York, Paris and other places. It will be evident from this very brief account of his work that Prof. Hahn's contributions to radioactivity have been of outstanding importance. He has also taken a prominent part, with his students and colleagues, in developing methods of studying chemical problems by the use of radioactive indicators.

#### Dr. C. D. Darlington

DR. C. D. DARLINGTON has been appointed to succeed Sir Daniel Hall as director of the John Innes Horticultural Institution, Merton. Dr. Darlington was educated at St. Paul's School, Hammersmith, where he was a Foundation Scholar, and the South-Eastern Agricultural College, Wye. He went to the John Innes Horticultural Institution in 1923, in Dr. Bateson's time. Here his interest was attracted to chromosome studies by the late W. C. F. Newton. As the importance of this kind of work in relation to breeding became recognized, it was considerably extended at the John Innes Institution, and in 1937 Dr. Darlington was appointed head of the Cytology Department. In 1929, he travelled to Persia and Transcaucasia to investigate the origin of cultivated forms of *Prunus* and *Tulipa*. During 1932-33, he worked in the United States for eight months as a Rockefeller Foundation Scholar, visiting Japan and India on his way home. In the winter of 1937-38, he was a delegate to the Indian Science Congress jubilee meeting. He is at the present time acting as recorder to the Cytology Section of the International Genetical Congress. Dr. Darlington, who is well known for his work in the field of genetics and cytology, has published "Chromosomes and Plant Breeding" (1932), "Recent Advances in Cytology" (1932; second edition 1937), "The Evolution of Genetic Systems" (1939), together with numerous scientific communications. He is a collaborating editor of the new journal *Chromosoma* (see p. 372 of this issue). The appointment takes effect from October 1, 1939.

#### Mr. James Henderson

THE Iron and Steel Institute has awarded the Bessemer Gold Medal to Mr. James Henderson. The Bessemer Medal was founded by Sir Henry Bessemer, and is awarded annually for distinguished merit in promoting the technical and metallurgical development of the iron and steel industry; it is the highest honour which the Institute can give. Mr. Henderson was associated for forty-five years with the technical development of the Frodingham Iron and Steel Co., Ltd., in North Lincolnshire and held all positions from chief metallurgist to managing director. During that period, the works became one of the most important in the country, and were associated with such important developments as the introduction of the Talbot direct metal process, the use of blast-furnace gas in blowing and power engines, and the installation of modern plate mills. Mr. Henderson is now deputy chairman of the renamed Appleby-Frodingham Steel Co., Ltd., and a director of the United Steel Companies, Ltd.; he is past-president of the British Iron and Steel Federation and of the Lincolnshire Iron and Steel

Institute. He is one of the only two Englishmen whose services to the industry have been recognized by nomination to honorary membership of the Verein deutscher Eisenhüttenleute.

#### Ludwig Mond, F.R.S. (1839-1909)

LUDWIG MOND, patron of the arts and sciences, was born on March 7, 1839, and the commemoration of his centenary is a convenient opportunity to recall something of what we owe to him. Originally German and later a naturalized British subject, he perfected and established in Great Britain the ammonia-soda process which brought into being the firm of Messrs. Brunner, Mond and Company, the nucleus of Messrs. Imperial Chemical Industries, Limited. He also devised satisfactory processes of nitrogen recovery and for the manufacture of producer gas, which latter process is the property of the Power Gas Corporation. No less well known is Ludwig Mond's process for the production of pure nickel, in which a newly discovered and unique compound immediately found important technical application. Throughout his life, he was pre-eminent as a chemist and investigator. His amassing great wealth was the result and not the object of his work.

SOME of Ludwig Mond's public benefactions for the encouragement of scientific investigation may be recalled. During his life he gave £100,000 for the founding and endowment of the Davy Faraday Laboratory of the Royal Institution, and £16,000 for the continuance and improvement of the catalogue of scientific papers of the Royal Society. He bequeathed £50,000 to the Royal Society "for the endowment of research in Natural Science more particularly but not exclusively in Chemistry and Physics". He also bequeathed a similar sum to the University of Heidelberg and £25,000 to Cassel, his native town in Germany. He gave to the nation, together with an endowment for its maintenance, the Mond Collection, chiefly of early Italian paintings, now well known as an important part of the National Gallery. This, and his bequest of £20,000 to the Munich Akademie der bildenden Künste, are memorials to Ludwig Mond's own appreciation of art and to the care he took that others should benefit by it. Truly, this was a great man.

#### Frederick Howard Marsh (1839-1915)

HOWARD MARSH, an eminent London surgeon and master of Downing College, Cambridge, was born on March 7, 1839, at Homersfield, near Bungay, Suffolk, the son of a gentleman farmer. He received his medical education at St. Bartholomew's Hospital, where he was a contemporary of Alfred Willett (see NATURE, 139, 61; 1937) and qualified L.S.A. and M.R.C.S. in 1861. Five years later he became F.R.C.S. and was appointed surgeon to the Queen Square House of Relief for Children with Chronic Disease of the Joints. In 1868, he was elected assistant surgeon to the Great Ormond Street Hospital for Sick Children, where he afterwards became full surgeon and consulting surgeon. Between 1865 and