

## News and Views

## Dr. Alfred Harker, F.R.S.

ON February 19, Dr. Alfred Harker, emeritus reader in petrology in the University of Cambridge, attains his eightieth birthday, and petrologists throughout the world will join in offering their congratulations. Graduating from St. John's College in mathematics in 1882, he had already come into contact with Prof. McKenny Hughes, and was shortly appointed to the staff of the Woodwardian Museum. His earliest original work dealt with the development of cleavage in slates; but he soon turned to petrographic work on the igneous rocks of North Wales, with a series of publications culminating in the Sedgwick prize essay on "The Bala Volcanic Series". In the Lake District, he began (with J. E. Marr) a study of the Shap granite and its aureole, and later of Carrook Fell. During this period also appeared the first edition of "Petrology for Students", now in its seventh edition. From 1895, Harker was for ten years attached to the Scottish branch of the Geological Survey of Great Britain, and worked in Skye and the Small Islands of Inverness-shire, collaborating in the production of the official maps and memoirs, and writing a special memoir on "The Tertiary Igneous Rocks of Skye". Much of this work was necessarily descriptive, and the genetic considerations to which it gave rise were brought together in "The Natural History of Igneous Rocks", a pioneer work on petrology in its treatment of rock-magmas as complex solutions. As president of the Geological Society, he expanded further in his address in 1917 the significance of igneous activity as an integral part of the historical geology of Britain. The central themes of his address the following year, that metamorphism is to be conceived as a progressive change, and that Great Britain offers unique opportunities to investigate such changes, find fuller expression in his book, "Metamorphism", published in 1932. Since his retirement, Dr. Harker has remained actively associated with the petrological collections at Cambridge, where the Harker collection of rock-slides now numbers forty thousand sections. He was awarded the Wollaston Medal of the Geological Society of London in 1922 and a Royal Medal of the Royal Society in 1935.

## Prof. František Nušl

IN honour of Prof. F. Nušl, director of the National Observatory of Prague and professor in the Charles University, who has entered on his seventieth year, a composite work has been compiled with the title "Práge věnované Dr. Františku Nušlovi". Prof. Nušl's interest in astronomy is well known; he was vice-president of the International Astronomical Union for the Leyden meeting held in 1928. His circumzenithal instrument for the determination of time was described before the Czech Academy in Prague (see NATURE, 68, 376; 1903) and also in a number

of other papers. Twelve authors have contributed to the volume and their papers embrace a wide range of subjects. Z. Kopal discusses the two-bodies problem where the central body is an oblate spheroid, not homogeneous, and shows that a steady advance of periastron will take place. V. Guth develops a graphical method for determining the heights and paths of meteors, and J. Štěpánek has a most interesting paper showing the results of photographing Comet Finsler (1937 *f*) from July 13 until August 15, 1937. It is easy to follow the developments of various parts of the head and tail of the comet by examining these photographs, and also the variations of the different luminous rays. J. Procházka explains his method for investigating the stability of the Bouy meridional telescope at Paris by means of two auxiliary telescopes provided with micrometers, and has found that the stability of the instrument is excellent. J. Svoboda supplies a detailed account of his experimental method for finding the personal error in observations with the Nušl-Frič circumzenithal instrument. Z. Horák deals with Svoboda's method for determining the radiant of a meteor stream with a minimum of error, and towards the end of his paper shows how very satisfactory results can be obtained by a graphical method. These as well as the other papers, with all of which it is impossible to deal in the limited space, form most interesting reading.

## Centenary of the Cell Theory

THE centenary of the cell theory is marked by an article from the pen of Prof. William Seifriz, professor of botany in the University of Pennsylvania, in the recent issue of *Chronica Botanica* (4, No. 6, December 1938). The original theory as propounded by Schleiden and Schwann was faulty; but the immediate theory was, like many other theories, of far less value than the truths which it has been instrumental in ultimately bringing to light. The authors advanced the theory that all organisms are aggregations of structural units or cells; but in his cautiously worded article Prof. Seifriz warns biologists that disciples of the theory tend to attach far more meaning to this than perhaps even its originators intended. The theory established a universal principle of development in living matter; to follow the principle slavishly, in the light of modern knowledge, is wrong; but there is, according to Prof. Seifriz, a tendency to do so. Many biologists seem averse to remoulding their speculations with the advancement of knowledge. Another weakness in the theory is that the cell is viewed as an elementary individual with an autonomy all its own. But this conception is very limited, since the cell is invariably influenced by its environment, such as solutions, temperature, and even the proximity of other cells. That is, the cell is far more plastic than the cell theory would