phenomena than on our progress in understanding them. There were no signs of the pseudo-omniscience which often colours popular writing in astronomy and which does the subject no little harm with critical readers.

Among recent results announced at the meetings a few call for special mention. Photographs of the solar spectrum showing extremely clearly the variation of line shifts and line profiles over the coarse granulation have been made at the McMath Observatory with a new large grating spectrograph giving a resolving power greater than 500,000. Remarkable films of solar flares, also photographed at the McMath Observatory, aroused much interest. Recent rocket flights in the United States have provided photographs of the solar spectrum into the ultra-violet beyond $\text{L}\beta$. The rotation of the Large Magellanic Cloud has been measured at the Radcliffe Observatory, Pretoria. Evidence for the very recent formation of certain stars has been found by workers at the Lick Observatory. Photometric measures made at Mount Wilson of the old nova, *DQ Herculis*, now an eclipsing binary, have shown at some phases a remarkable regular pulsation with a period of a little more than one minute.

A few resolutions of more general interest may be mentioned out of the many submitted by commissions and approved by the General Assembly. With regard to notation, $\text{\AA}$ is to be preferred to $\text{\AA}$ as an abbreviation for the angstrom unit; 'kayser' is rejected in favour of cm^{-1} . Two proposals of the International Committee on Weights and Measures were endorsed, one relating to a re-definition of the metre in terms of the wave-length of the red cadmium line, the other (which may very soon be made obsolete by recent work with caesium resonators) defining the second as $1/31\,556\,925\cdot975$ of the tropical year for 1900-0. A number of recommendations were made concerning secondary wave-length standards of iron, neon, and argon. Strong support was given to the efforts of the International Scientific Radio Union to obtain frequency-bands for the use of radio astronomers, free of interfering radio transmissions.

The recognition that photoelectric image tubes may ultimately give considerably greater speed for faint sources than the ordinary photographic process, and that they promise to be of the greatest importance to astronomers, has led to the formation of a new sub-commission to encourage developments in this field. Other new sub-commissions have been formed on 'seeing', on meteorites, on variable stars in globular clusters, on the determination of the galactic pole and the zero of galactic longitude. Two commissions and four sub-commissions have been abolished.

The new president of the Union is to be Dr. A. Danjon, director of the Paris Observatory. He will hold office until the 1958 meetings, which on the invitation of the National Academy of Sciences of the U.S.S.R. will be held in Moscow. The U.S. National Committee has issued an invitation to hold the 1961 meetings in Pasadena.

At the concluding session of the General Assembly, warm appreciation was expressed of the hospitality of the Irish Government, of University College, the Institute for Advanced Studies, the Dunsink Observatory, and other institutions in Dublin. That the meetings were so successful and enjoyable was due in large part to the efforts of the Dublin organizers and their helpers, efficiently and energetically led by Prof. and Mrs. H. A. Brück. R. O. REDMAN

OBITUARIES

Prof. V. A. Dogiel

PROF. VALENTINE ALEXANDROVITCH DOGIEL, who died on June 1, was the most outstanding Russian protozoologist of our times. Born in Kazan on March 10, 1882, he was the son of the eminent histologist, Prof. A. S. Dogiel, whose investigations on the minute structure of the nervous system are known throughout the world. V. A. Dogiel received his training in protozoology from V. T. Schewiakoff, whom he succeeded in 1913 as professor of invertebrate zoology in the University of St. Petersburg (now Leningrad), a post which he occupied until the end of his days. On his election as corresponding member of the Academy of Sciences of the U.S.S.R. in 1939, Dogiel also took charge of the protistological laboratory of its Zoological Institute.

Among Dogiel's earlier works (1916-23), those dealing with the parasitic flagellates of termites are noteworthy; but his most important contributions concern the systematics, morphology, and evolution of the Ophryoscolecoid ciliates of ruminants. Dogiel's protozoological work culminated in the publication of a remarkable treatise on "General Protistology" (1951), providing a comprehensive, critical account of the fundamental principles and problems of protozoology.

From 1930 onwards Dogiel's researches were directed to the ecological aspects of parasitology, especially the effect upon the parasitic fauna of changes in the environment and physiology of their hosts. In 1941 he produced a "Textbook of General Parasitology", a second edition of which appeared in 1947. This book, which is devoted to the biology of parasites, is an outstanding contribution to parasitological literature, unique in conception and masterly in presentation. Dogiel was also the author of a "Textbook of Invertebrate Zoology" (four editions, 1934-47) and of a "Handbook of Comparative Anatomy of the Invertebrates" (1938-40), both of which are standard university text-books in the U.S.S.R. Finally, a year before his death (1954) he published a book on "Oligomerization of Homologous Organs: One of the Main Paths of Animal Evolution", in which he develops the idea that various groups of Metazoa have evolved by a gradual diminution, or oligomerization, in the number of homologous and homodynamic organs which were present in their ancestors.

During the forty-two years of his tenure of the chair of zoology in Leningrad, Dogiel built up a school of protozoology and parasitology, to which numerous students (including the present writer) owe their training in these subjects.

C. A. HOARE

Prof. C. F. W. McClure

PROF. C. F. W. MCCLURE, the distinguished American comparative anatomist and embryologist, whose death has recently been announced in his ninetieth year, was born in Cambridge, Massachusetts, in 1865. After an undergraduate career in Princeton, he studied at Columbia University in New York and in Berlin, Kiel and Würzburg. His academic career, however, was essentially linked with Princeton, where he was successively instructor in biology and assistant professor. In 1901 he was appointed to the chair of comparative anatomy in Princeton,