NEWS AND VIEWS

Prof. R. W. Wood, For. Mem. R.S.: Henry Draper Medallist

THE Henry Draper Medal of the National Academy of Sciences awarded to Prof. R. W. Wood, of Johns Hopkins University, at the 1940 annual meeting of the Academy, in recognition of his contributions to astronomical physics, was presented to him during the annual meeting in April last. Prof. Wood's contributions in the field of physics have been many and varied, and in the field of astrophysics three important researches, among many others, stand out especially. The first is Wood's pioneer work on resonance radiation and its applications to solar and stellar spectroscopy. A second is his development and skilful use of absorption screens of many types for astronomical and spectroscopic photography. Finally, and perhaps more important of all for the future of astrophysics, are the remarkable advances he has made in the construction of diffraction gratings. The use of the grating to produce a spectrum has been limited hitherto almost wholly to the sun and to bright sources in the physical laboratory ; by selection and shaping of the point of his ruling diamond, Wood succeeded in throwing as much as one half of the incident light into a chosen order of the spectrum. In addition, he was the first to achieve excellent results in ruling gratings on films of aluminium evaporated on glass. As a result, a modern Wood grating with high concentration of light is one of the most effective instruments of research in stellar spectroscopy. It has made possible the analysis of the spectra of the brighter stars on a large scale, has opened up the almost unexplored ultra-violet region of stellar spectra, and has already led to discoveries of interest regarding the constitution of the gases in interstellar space.

Sir C. V. Raman, F.R.S.: Franklin Medallist

DISSEMINATION of news in war-time is difficult and this somewhat belated intimation of the award of the Franklin Medal to Sir Venkata Raman is a result of the slowed-down process. It is good news, however, to hear that Raman has obtained this high honour "in recognition of his many brilliant contributions to physical science and of his leadership in the renaissance of scientific work and scientific education that has occurred in India during the last thirty years". Raman joins the very distinguished company of Franklin medallists, which includes Rutherford, Thomson, Marconi, Bragg, Planck, Arrhenius and T. W. Richards. Not only has Raman personally made important contributions to theoretical and experimental physical science, but he has also lit the torch of scientific research for a large number of his countrymen who are turning out much distinguished work.

Sir C. V. Raman has worked on many branches of physics—optics, acoustics, and more particularly on the light scattering, which, in his honour, is now almost universally referred to as Raman effect. His discovery of this effect in 1928 not only inspired its exploration by himself and his students, but also started physicists and physical chemists in every country of the world to investigate it. Through its investigation far-reaching conclusions regarding the structure of molecules can be adduced ; its utility and importance need not be stressed here, but are reflected in the large number of papers which have been, and continue to be, published on the subject. Raman has received many honours from learned societies and institutions and, in addition, a knighthood in 1929 and the Nobel Prize in physics in 1930. In congratulating Raman on his latest honour, we hope that he will continue for many years to exert his powerful influence in conducting and directing, with sustained distinction and success, the fundamental problems of physics in which he has so indelibly established his reputation.

Louis E. Levy Medal of the Franklin Institute

THE Committee on Science and the Arts of the Franklin Institute has announced that the Louis E. Levy Medal will this year be presented jointly to Profs. John M. Lessels and Charles W. MacGregor, both of whom are associate professors in the Department of Mechanical Engineering, Massachusetts Institute of Technology, for their paper entitled "Combined Stress Experiments on a Nickel-Chrome Molybdenum Steel". The Levy Medal is awarded annually "to the author of a paper of especial merit, published in the Journal of The Franklin Institute, preference being given to one describing the author's experimental and theoretical researches in a subject of fundamental importance".

John Moyes Lessels was born in Dunfermline, Scotland, on February 5, 1888. He was educated at Herriot Watt College and the University of Glasgow. During 1920–31, he was manager of the mechanical division of the research laboratories of the Westinghouse Electric and Manufacturing Company at East Pittsburg, and afterwards he was engineering manager of the South Philadelphia works. Since 1936 he has been associate professor of mechanical engineering at the Massachusetts Institute of Technology. He is technical editor of the *Journal of Applied Mechanics*.

Charles Winters MacGregor was born in Dayton, Ohio, on May 25, 1908. He attended the Universities of Michigan and Pittsburg, and during 1929–34 he was a research engineer with the Westinghouse Electric and Manufacturing Company at East Pittsburg. In 1934 he went to the Massachusetts Institute of Technology as instructor in mechanical engineering, and was appointed assistant professor in 1937.