

Contemporary Birthdays.

- October 15, 1884. Prof. Lewis Knudson.
 October 16, 1859. Prof. James Playfair McMurrich.
 October 17, 1872. Sir Cyril Reginald S. Kirkpatrick.
 October 19, 1856. Prof. Edmund B. Wilson, For. Mem. R.S.
 October 20, 1862. Prof. Thomas Hastie Bryce, F.R.S.
 October 22, 1876. Prof. Harold Hilton.

Prof. KNUDSON, who occupies the chair of botany at Cornell University, was born at Milwaukee, Wisconsin, U.S.A. His informative lectures on plant physiology have been particularly welcomed in recent years by Spanish men of science, notably at such centres as Madrid and Barcelona. His botanical studies comprise researches in fermentation, the organic nutrition of plants, germination of orchid seeds, and the diseases of the banana.

Prof. McMURRICH was educated at Upper Canada College, Toronto, at the University of the city, and at Johns Hopkins University, Baltimore. He has occupied posts in several universities of the United States, but since 1907 he has been professor of anatomy at Toronto. In 1922 Prof. McMurrich was president of the Royal Society of Canada.

Sir CYRIL KIRKPATRICK was educated at Repton. His engineering studies were conducted, in the first instance, at the Crystal Palace School of Engineering; afterwards he entered the service of the old London and North-Western Railway. Sir Cyril was chief engineer of the Port of London Authority from 1913 until 1924.

Prof. E. B. WILSON, distinguished as a zoologist, was born at Geneva, Illinois, U.S.A., and educated at Yale University, New Haven, and Johns Hopkins University, Baltimore. In 1883 he was a lecturer in biology at Williams College, fulfilling afterwards various important duties elsewhere until 1891, when he was appointed professor of zoology in Columbia University. Prof. Wilson is a foreign member of the Royal Society of London, and of the Linnean Society. In 1914 he delivered the Croonian lecture before the former body, taking as his subject "The Bearing of Cytological Research on Heredity." A member of the National Academy of Sciences, Washington, and of several English societies, he is Hon. Sc.D., Cambridge. Prof. Wilson is the author of a standard work, "The Cell in Development and Heredity"; originally issued in 1896, it passed recently into a third edition.

Prof. BRYCE was educated at Edinburgh Collegiate School. He graduated later at the University of Edinburgh. Lecturer on anatomy in the University of Glasgow from 1892 until 1909, he was then appointed to the chair of anatomy. The Royal Society of Edinburgh awarded Prof. Bryce its Keith prize in 1906 for his memoirs on the histology of the blood of the larva of *Lepidosiren paradoxa*. He is the author of vol. 1 of "Quain's Anatomy" and joint author of a work on the development of the human ovum.

Prof. HILTON, an old pupil of Lancing College, graduated at Hertford College, Oxford. Sometime assistant lecturer in mathematics in the University of Bangor, he afterwards joined the teaching staff of Bedford College. Since 1912 he has been professor of mathematics in the University of London. Prof. Hilton is the author of many papers in crystallography, especially the theory of crystalline structures.

Societies and Academies.

SYDNEY.

Linnean Society of New South Wales, July 28.—C. T. White: On a small collection of plants from the Rigo district, Papua. Two species, one of *Plectronia* and one *Jasminum*, are described as new.—C. P. Alexander: The Trichoceridæ (Diptera) of Australia. One genus and four species are described as new. A key is given for the determination of the genera.—R. H. Cambage: Notes on the native flora of New South Wales. Part xi. Moree to Mungindi and Moonie R., with a description of a new species of *Eucalyptus*. The paper contains notes on the early exploration, topography, etc., and a list of the plants noticed. A comparison of this flora is made with that of Tasmania, in view of the dominating influence of climate on plant distribution.—G. H. Cunningham: *Gasteromycetes* of Australasia. (v.) The genus *Calvatia*. The genus may be separated from *Lycoperdon* by the method of dehiscence, which is effected in *Calvatia* by the irregular falling away of the apical portion of the peridium; whereas in *Lycoperdon* dehiscence is effected by means of a definite apical stoma. The genus contains about eight species, of which four are present in Australia and New Zealand.—G. D. Osborne: Stratigraphical and structural geology of the Carboniferous rocks in the Mt. Mirannie and Mt. Dyrning districts, near Singleton, N.S.W. There are two volcanic series with associated clastic rocks, and separating these series is a set of sediments called the Main Clastic Zone. The major volcanic series comprises andesites, dacites, rhyolites and keratophyres, while the lavas in the other group are chiefly toscanitic and dellenic. The only glacial beds occur near the top of the Kuttung Series, and *Rhacopteris*-bearing strata are found on two horizons. The chief tectonic feature is the great Bridgeman Fault which separates the Kuttung Series from the Permian or Permo-Carboniferous Series. This is probably an overthrust. In addition there are many normal faults connected with the late Palæozoic diastrophism which folded the area and produced two basin-structures.

WASHINGTON, D.C.

National Academy of Sciences (Proc. vol. 12, No. 8, August).—R. J. Havighurst: The absorption of X-rays in crystalline compounds. The mass absorption coefficient in a compound is the sum of the mass absorption coefficients of the individual atoms and has been calculated from various empirical formulæ. Measurements upon crystalline compounds are subject to large experimental error on account of "selective absorption" due to reflection of the primary ray from certain atomic planes. Compressed slabs of powders (and also Wingardh's data from solutions) give results in good accord with the calculated absorptions for sodium chloride and fluoride and calcium fluoride and carbonate.—Carl Barus: (1) Acoustic pressures in case of soap bubbles. A series of soap bubbles were attached to the telephonic apparatus and pinhole probe. Pressure as measured by the fringe displacement of the interferometer always corresponded with the radius of the bubble. (2) Acoustic pressure promoted by co-operating quill tubes without pinholes.—Edwin H. Hall: Note on the temperature relations of photo-electric emission and thermionic emission of electrons. Hall's theory of "associated" and "free" electrons in metallic conduction indicates a slight increase with temperature in the work done in detaching completely an associated electron; this accords with the fact that