

obituary

Dr J. F. Heremans, Professor of Internal Medicine at the Catholic University of Louvain, died on October 29, aged 48. He received his medical degree with highest distinction, at Louvain in 1952, and after specialising in internal medicine, worked with Professor Waldenström in Malmö (1957–1958), and with Professor Kunkel at the Rockefeller Institute (1959). He became Professor at Louvain in 1965, and was one of the founder members of the newly created International Institute for Cellular and Molecular Pathology in Brussels. His expertise was recognised by the award of several national scientific prizes, and he was a member of many learned societies throughout the world, notably the European Society for Clinical Investigation, of which he was elected President in 1971.

While interested in all aspects of experimental medicine, his major re-

search interest was immunoglobulins. The most significant of his discoveries in this field was the isolation and characterisation of IgA.

Having established its chemical similarity to the other two major types of antibody molecule, he proposed the term 'immunoglobulin' as descriptive of all three, and afterwards played a large part in the development of our present unified concept of antibody structure and function.

Professor Heremans was always aware of the need for accurate quantitation of proteins, whether in the research or clinical fields, and it was under his direction that the Mancini Radial Immunodiffusion Technique was developed. More recently, a variety of automated immunoassay techniques suitable for such diverse applications as plasma protein screening and drug and hormone measurement have originated in his laboratory.

His encyclopaedic knowledge of protein structure and function is best illustrated by the compendious 'Molecular Biology of Human Proteins', written before his 40th birthday, in collaboration with Professor H. E. Schultze. Now a standard reference work, it also demonstrates his extraordinary linguistic ability; he was completely fluent in five European languages, and conversant with several others.

Professor Heremans was a man of very wide-ranging interests; he was a pianist of considerable talent and a keen amateur lepidopterist. He maintained a lively interest in the work of these in his laboratories, to whom he was always available to give advice. He leaves a wife and five children, by whom, as well as by his scientific colleagues and friends, he will be greatly missed.

John Peters-Dickie

announcements

International meetings

January 8–9, **Molecular developmental biology**, Glasgow (Department of Zoology, University of Glasgow, Scotland).

February 18, **Materials microanalysis with less than 1,000 Å spatial resolution**, Churchill College, Cambridge (The meetings secretary, The Institution of Metallurgists, Northway House, Whetstone, London N20 9LW, UK).

February 20, **Great women in science**, Boston (American Association for the Advancement of Science, 1176 Massachusetts Avenue, NW, Washington DC, 20036, USA).

February 25, **Professional metallurgists in Europe**, Imperial College, London (The meetings secretary, The Institution of Metallurgists, Northway House, Whetstone, London N20 9LW, UK).

Reports and publications

Other Countries

United States Department of the Interior: Geological Survey. Water-Supply Paper 2133: Surface Water Supply of the United States, 1966–70. Part 12: Pacific Slope Basins in Washington. Vol. 2: Upper Columbia River Basin. Pp. viii+674. Water-Supply Paper 2171: Ground-Water Levels in the United States, 1969–73. Southeastern States. Pp. v+250. (Washington, DC: Government Printing Office, 1975.) [311]

United States Department of Agriculture. Index-Catalogue of Medical and Veterinary Zoology. Supple-

ment 19, Part 5: Parasite-Subject Catalogue—Arthropoda and Miscellaneous Phyla. By Jane D. Rayburn, Martha Walker Hood, Margie D. Kirby and Judith H. Shaw. Pp. iv+403. (Washington, DC: US Government Printing Office, 1975.) \$4.60. [411]

A Selected and Partially Annotated Bibliography of Society, Ethics and Life Sciences. Compiled by Sharon Soltito and Robert M. Veatch. Revised by Diane Fenner. Pp. 56. (Hastings-on-Hudson: Institute of Society, Ethics and the Life Sciences, 1975.) [411]

United States Department of the Interior: Geological Survey. Bulletin 1211-F: Geologic Reconnaissance of a Proposed Power Site on the Maktoutof River near Sitka, Southeastern Alaska. By Alexander A. Wanek. Pp. iii+22+1 plate. Water-Supply Paper 2142: Quality of Surface Waters of the United States, 1969. Part 2: South Atlantic Slope and Eastern Gulf of Mexico Basins. Pp. x+625. \$4.35. Water-Supply Paper 2146: Quality of Surface Waters of the United States, 1969. Part 7: Lower Mississippi River Basin. Pp. xi+540. \$3.85. Professional Paper 813-C: Summary Appraisals of the Nation's Ground-Water Resources—Upper Colorado Region. By Don Price and Ted Arnou. Pp. vi+40+2 plates. \$3.15. Professional Paper 908: Simulated Effects of Oil-Shale Development on the Hydrology of Piceance Basin, Colorado. By John B. Weeks, George H. Leavesley, Frank A. Welder and George J. Saulnier, Jr. Pp. vii+84+1 plate. \$3.15. Professional Paper 930: A Hydrologic Assessment of the September 14, 1974, Flood in Eldorado Canyon, Nevada. By Patrick A. Glancy and Lynn Harmsen. Pp. vi+28. (Washington, DC: Government Printing Office, 1974 and 1975.) [411]

United States Department of the Interior: Geological Survey. Water-Supply Paper 2111: Surface Water Supply of the United States, 1966–70. Part 4: St. Lawrence River Basin. Vol. 1: Basins of Streams Tributary to Lakes Superior, Michigan and Huron. Pp. viii+754. \$5.10. Water-Supply Paper 2132: Surface Water Supply of the United States, 1966–70. Part 12: Pacific Slope Basins in Washington. Vol. 1: Pacific Slope Basins in Washington Except Columbia River Basin. Pp. viii+640. \$4.40. Water-Supply Paper 2148: Quality of Surface Waters of the United States, 1969. Parts 9 and 10: Colorado River Basin and The Great Basin. Pp. ix+348. \$2.65. (Washington, DC: Government Printing Office, 1974.) [611]

World Meteorological Organisation. Technical Notes. No. 136: Mulching Effects on Plant Climate and Yield. By J. W. Davies. Pp. v+92. No. 137: Meteorology and the Colorado Potato Beetle. By G. W. Hurst. Pp. iv+51. No. 138: Drought and Agriculture.

Report prepared by C. E. Hounam, J. J. Burgos, M. S. Kuli, W. C. Palmer and J. Rodda. Pp. vi+127. No. 139: Climatological Aspects of the Composition and Pollution of the Atmosphere. By G. C. Holzworth. Pp. vii+43. No. 140: Upper-Air Sounding Studies. Vol. 1: Studies on Radiosonde Performance. By A. H. Hooper. Vol. 2: Manual Computation of Radiosonde Winds. By R. E. Vockeroth. Pp. xii+160. No. 141: Utilisation of Aircraft Meteorological Reports. Prepared by S. Semplicio. Pp. iv+34. (General World Meteorological Organisation, 1975.) [611]

Australia: Commonwealth Scientific and Industrial Research Organisation. Annual Report of the Minerals Research Laboratories, 1974/1975. Pp. 68. (Melbourne: CSIRO, 1975.) [611]

Australian Academy of Science. Report No. 19: A National System of Ecological Reserves in Australia. (Proceedings of a Symposium, Canberra, 31 October 1974.) Edited by Frank Fenner. Pp. 114. (Canberra: Australian Academy of Science, 1975.) [611]

CERN—European Organisation for Nuclear Research. CERN 75-12: A 256-Channel Pulse-Height Analyser. By J. C. Bersel, G. Delavallade and J. Lindsay. Pp. v+45. (Geneva: CERN, 1975.) [611]

Mitteilungen aus der Biologischen Bundesanstalt für Land- und Forstwirtschaft, Berlin-Dahlem. Heft 164: Der Gelbrost, *Puccinia Striformis* West. IV. Epidemiologie-Bekämpfungsmassnahmen. Von Prof. Kurt Hassebraut und Prof. Gerhard Robbenlen. Pp. iv+183. Heft 165: 40. Deutsche Pflanzenschutz-Tagung in Oldenburg i.O., 6–10 Oktober 1975. Pp. 227. (Berlin-Dahlem: Biologischen Bundesanstalt für Land- und Forstwirtschaft, 1975.) [1011]

Smithsonian Contributions to Zoology, No. 185: Bredin-Archbold-Smithsonian Biological Survey of Dominica. The Family Dolichopodidae with Some Related Antillean and Panamanian Species (Diptera). By Harold Robinson. Pp. iii+141. (Washington, DC: Smithsonian Institution Press, 1975. For sale by US Government Printing Office.) [1011]

United States Department of the Interior: Geological Survey. Bulletin 1390: Monazite Placers in the Southeastern Atlantic States. By John B. Mertie, Jr. Pp. iv+41. 80 cents. Water-Supply Paper 1969: Water-Supply Development and Management Alternatives for Clinton, Eaton, and Ingham Counties Michigan. By K. E. Vanlier, W. W. Wood and J. O. Brunett. Pp. vii+111+3 plates. \$3.20. Professional Paper 437-H: Land Subsidence in the San Joaquin Valley, California, as of 1972. By J. F. Poland, B. E. Lofgren, R. L. Ireland and R. G. Pugh. Pp. v+78. (Washington, DC: Government Printing Office, 1973 and 1975.) [1011]