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Crystallographers

J. Appl. Cryst. (1982). **15**, 359

This section is intended to be a series of short paragraphs dealing with the activities of crystallographers, such as their changes of position, promotions, assumption of significant new duties, honours, etc. Items for inclusion, subject to the approval of the Editorial Board, should be sent to the Executive Secretary of the International Union of Crystallography (J. N. King, International Union of Crystallography, 5 Abbey Square, Chester CH1 2HU, England).

Professor **N. V. Belov** died on 7 March 1982. A full obituary will be published in *Acta Crystallographica* Section A in due course.

Professor **Katharina Boll-Dornberger** (née **Schiff**), who died on 27 July 1981, aged 71, was the most prominent X-ray crystallographer in the German Democratic Republic. Drs H. and K. Fichtner write that she started her X-ray work with V. M. Goldschmidt at Göttingen in the early thirties and took her doctor's degree in the city of Vienna after her escape from Germany. After her emigration to England she had the opportunity to work with J. D. Bernal and D. Hodgkin. Returning to Germany after World War II, she established X-ray crystal structure analysis in the GDR. In 1956 she became Professor of Physics at Humboldt University in Berlin. From 1958 to 1969 she was director of the Institute of Crystal Structure Research of the Academy of Sciences of the GDR. She worked in inorganic crystal structure analysis and in protein crystallography. Her OD theory, created in the 1950's, is a geometrical approach to polytypism and stacking disorder. She introduced the concepts of partial coincidence operations and groupoids into crystallography. Crystallographers have lost a colleague of critical intelligence, deep knowledge and decisive influence on a considerable number of scientists in the GDR and in other countries.

Venkatraman Subramanian, a post-doctoral research fellow at the Crystallography Centre of the University of Western Australia, died tragically on 27 December 1981 at the age of 30 as a result of a swimming accident. Dr S. R. Hall, University of Western Australia, and Dr K. Seff, University of Hawaii, write that Subramanian was born in Bombay. He obtained a BSc in Chemistry at Madras University in 1972; an MSc at Birla Institute of Technology in 1974; and a PhD in Chemistry at the University of Hawaii in 1980. In 1974–75 he was a CSIR Research Fellow at the Indian Institute of Science in Bangalore and in 1980 was appointed as an ARGC research fellow at the University of Western Australia for the development of crystallographic computer software for the XTAL System. Subramanian was a diligent research worker with a care for detail. He was highly respected by his colleagues and admired by the many students he went out of his way to assist.

Dr U. W. Arndt, of the Medical Research Council Laboratory of Molecular Biology, Cambridge, Professor **J. D. Birchall**, Senior Research Associate at ICI, Runcorn, and Professor **M. Hart**, Wheatstone Professor of Physics, King's College, London, have been elected Fellows of The Royal Society.

Professor **Gunnar Hägg**, University of Uppsala, Sweden, has been awarded the 1982 Gregori Aminoff Gold Medal by the Royal Swedish Academy of Sciences for his pioneering applications of X-ray crystallography in inorganic chemistry. He will receive the Medal at the June session of the Academy. This is the third time that the Aminoff Prize has been awarded, the first recipient being Professor **P. P. Ewald** in 1979 and the second one Sir **Charles Frank** in 1981.

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Structure Reports

Volume 46A of *Structure Reports* has recently been published. It covers the literature for metals and inorganic compounds for 1980 (464 pages) and costs 153 Netherlands guilders for subscribers with standing orders. The full price for individual copies is 180 guilders but personal subscribers may buy a copy for their own use at 90 guilders. Orders for these publications may be placed direct with the publisher, D. Reidel Publishing Company, PO Box 17, 3300 AA Dordrecht, The Netherlands, or with any bookseller. Trade orders should be sent to Reidel.

Book Reviews

Works intended for notice in this column should be sent direct to the Book-Review Editor (J. H. Robertson, School of Chemistry, University of Leeds, Leeds LS2 9JT, England). As far as practicable books will be reviewed in a country different from that of publication.

J. Appl. Cryst. (1982). **15**, 359–360

Advances in X-ray analysis, Vol. 24: Proceedings of the 29th annual conference on the application of X-ray analysis, Denver, Colorado, August 1980. Edited by *D. K. Smith, C. S. Barrett, D. E. Leyden & P. K. Predecki.* Pp. xx + 428. New York: Plenum Press, 1981. Price US $ 49.50.

During the 29th Denver Conference on Applications of X-ray analysis, 74 papers were read, 56 of which are published in this volume. Following the tradition of the conferences there are reports on X-ray diffraction analysis (XRD) and X-ray spectrometry [XRS; mainly X-ray fluorescence analysis (XRF)]. It is difficult to review all the essential results and ideas contained in this volume, but a short summary will be given here.

Nowadays it is possible to obtain refined values of crystal-structure parameters from powder diffraction data by the Rietveld method, including a least-squares refinement procedure for fitting calculated and observed powder diffraction patterns. An example is given for human tooth enamel. Further, advances in the interpretation of diffraction data from amorphous materials are outlined. Qualitative and quantitative phase analysis, collection of crystallographic data, precision and reproducibility of Guinier powder patterns, and the level of XRD in Europe are discussed. The great importance of continuously scanning position-sensitive detectors in modern XRD work is demonstrated by the ten papers on this topic. Application, use and accuracy of such detectors are described; they are capable now of scanning speeds of several hundred degrees per minute, and