

he became President of the Grupo Español de Cristalografía.

Professor **G. A. Somorjai**, of the Department of Chemistry, University of California, has been elected a member of the USA National Academy of Sciences.

Professor **R. A. Young** retired as Editor of the *Journal of Applied Crystallography* in August 1978. Professor **A. Guinier** has written the following appreciation of his work – Professor Young was appointed a Co-editor of the *Journal of Applied Crystallography* when it was created in 1968 and succeeded me as Editor at the end of 1969. He kindly invited me to continue as a Co-editor and I am happy to record what a pleasure it has been to work with him for so many years. His influence in these first years of the *Journal of Applied Crystallography* has been considerable and he is largely responsible for the present image of the journal: its domain is clearly distinct from that of *Acta Crystallographica* but its scientific standing is the same as the Union's other publications. As a Co-editor, and still more as Editor, Professor Young has succeeded in attracting many important papers to his journal, ensuring high scientific standards with the assistance of a group of competent and devoted referees. Hence the *Journal of Applied Crystallography* progressively gained its now well established reputation and became, in its own specific domain, one of the main vehicles of scientific communication.

The community of crystallographers, and especially applied crystallographers, is profoundly grateful to Ray Young for his considerable and most efficient work. His departure from the editorship is regarded by everyone as a great loss, but we realise that his decision to retire was based on his generous and wise feelings for the very long-term interests of a journal to which he has become so devoted.

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.

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Space groups for solid state scientists. By **G. Burns** and **A. M. Glazer**. Pp. xiii + 278. New

York, San Francisco, London: Academic Press, 1978. Price £ 9.40, US \$ 14.50.

As the authors mention in the preface, the intention of their book is not to be a standard crystallographer's approach, as this is well documented in many other books. On the other hand, there has grown an increasing interest in various solid state problems during the last three decades, and this will certainly go on growing in the future.

With respect to this, there is a lack of literature for chemists, engineers and physicists who deal with problems of the solid state such as structure and bonding, questions of band theory, lattice dynamics, spectroscopy, etc. For many of them this book will be a very fortunate and well articulated introduction, and in some cases they will be enabled to avoid reading the overwhelming *International Tables for X-ray Crystallography*. Particularly students will find this book fairly easy to read and understand, although they will need some fundamental knowledge of vector and matrix calculation.

Five chapters, dealing with symmetry operations, crystal systems, Bravais lattices, crystallographic point groups and the description of the space groups, give a transparent introduction to symmetry operations with precise definitions of symbols and many well explained tables, and they lead to chapter 6, which shows in a simple and clear way how to use *International Tables for X-ray Crystallography*. The authors have presented a very useful book which should be recommended to students as well as to scientists who are employed with solid state chemistry, engineering and physics.

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Glass, 1977. Vols. I and II. Edited by **J. Götz**. Pp. 423 and 614. Amsterdam: North-Holland, 1977. Price: Vol. I, Dfl 160.00; Vol. II, Dfl 240.00; Vols. I and II together, Dfl 330.00.

These two volumes of reprints of the *Journal of Non-Crystalline Solids* (**25** and

26, 1977) contain the lectures delivered on invitation at the XIth International Congress on Glass held in Prague in July, 1977. The review articles have been written by renowned experts in the field of glass science and technology.

Volume I comprises eleven articles and is essentially concerned with glass science, i.e. the structure and properties of glasses. The first three articles describe recent theoretical and experimental studies in research on the structure of glass and its formation. The next four articles deal with various aspects of relaxation phenomena, phase separation, nucleation and crystal growth and diffusion in glasses. These papers also provide valuable information on the various applications of the results of investigations for the solution of a variety of practical problems (e.g. determination of optimum annealing schedule of glass articles, selection of optimum components for glass sealings) and for the production of new materials (e.g. vycor glass and glass ceramic materials). The mechanical and electrical properties of glasses, glass fibres as optical waveguides and physical chemistry of glass surfaces are discussed with reference to current findings in the last four articles.

Volume II includes fifteen articles. The first eleven are mainly devoted to various aspects of the technological problems of glass manufacturing processes: problems of heat transfer, design of glass melting furnaces, refractories, raw materials and batch preparation, forming machines and processes, automation and environmental pollution. One can obtain comprehensive technical information on the respective problems and related matters. In the last four articles are mentioned the diverse present and future applications of glasses – in the field of energy, in electronics, as bioactive materials, in constructional work, etc. The possibilities are numerous and exciting.

These two volumes present a good overall view of developments in research during the last decade, and will be of interest to any scientist working in these fields. Each article has also a full list of up-to-date references which will be very useful for the study of the problems in greater detail.

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