

Book Review

High Pressure Chemistry and Biochemistry (Edited by R. van Eldik and J. Jonas), NATO ASI Series C: Mathematical and Physical Sciences Vol. 197, D. Reidel Publishing Company, Dordrecht, Boston, Lancaster, Tokyo, 1987, vii + 468 pages, Dfl 220, \$96, £78. ISBN 90-277-2457-1.

This volume contains the proceedings of the NATO Advanced Study Institute on Advances in High Pressure Studies of Chemical and Biochemical Systems, which was held in Corfu, Greece, between 28th September and 11th October, 1986, and the editors and publishers are to be congratulated for getting this volume into print in less than one year.

The book is divided into three sections. The first, entitled general and physical aspects and emphasising instrumental design, contains articles describing modern aspects of high pressure chemistry (H.C. Drickamer), the physics of dense fluids (M. Ross), the properties of gases under high compression (B. Le Neindre), experimental studies of compressed fluids (E.U. Franck), high temperature - high pressure techniques for the study of fluid electronic conductors (F. Hensel), critical behaviour in fluid metals (F. Hensel), fluid phase separations in polymerizing systems at elevated pressures (L.A. Kleintjens, R. van der Haegen and R. Koningsveld), NMR and laser scattering techniques at high pressure (J. Jonas), X-ray and neutron scattering at high pressure (J. Voiron and C. Vettier), and pressure tuning spectroscopy (H.C. Drickamer). The second section deals with chemical aspects, and contains papers describing the kinetics of organic reactions at high pressure (W.J. le Noble), organic synthesis at high pressure (W.J. le Noble), the kinetics of solvent exchange reactions at high pressure (A.E. Merbach), high pressure studies of inorganic reaction mechanisms (R. van Eldik), and inorganic photochemistry (R. van Eldik). The final section deals with biochemical aspects, and the articles deal with high ented at a level suitable for graduate students and novices in the field; they are written to a consistently high standard, and the quality of the camera-ready copy is uniformly good. The subject index is reasonably detailed, and the whole book is a significant achievement, representing a remarkably up-to-date coverage of an important and expanding field. If this book is an accurate reflection of the ASI meeting, it must have been thoroughly enjoyable for all participants. This volume makes a perfect complement to the recent volume entitled *Inorganic High Pressure Chemistry: Kinetics and Mechanism* (also edited by R. van Eldik, but published by Elsevier; ISBN 0-444-42692-2), and

both books should be present in all chemistry libraries and available for final year undergraduates as well as postgraduates and research workers.

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