# Books section



**THE CHEMICAL PHYSICS OF SOLVATION part B Spectroscopy** of solvation, Ed. Revaz K. Dogonadze, Erika Kalmany, Alexes A. Kornyshev and Jems Ulstrup *Elsevier* (1986) 559 pp.

Solvation plays an improtant role in the chemical behaviour of a species. However clearer ideas on solvation are emerging only of late. For the past 2-3 decades detailed study in the subject is being carried out at different centres using different probes. The importance of this field can be seen by the fact that the studies in physical and theoretical chemistry series is bringing out a three volume book on "the chemical physics of solvation" after two books on similar subject Ionic Hydration in Chemistry and Priophysics and 'Ions and molecules in solution'.

This title is in 3 volumes. Part A was edited by the same authors as the volume under review and deals with 'Theories of solvation'. The volume under review deals with spectroscopic studies of solvation. Spectroscopy constitutes the most important approach to the physics of solvation phenomenon. The different spectroscopic approaches are complementary to one another.

This volume on spectroscopy of solvation consists of 10 chapters. The chapter on spectroscopic approaches to the study of ionic solvation by Gunter Kalisch and Erika Kalman is followed by two chapters on Infra red methods-Interaction in and structure of Ionic solutions and polyelectrolytes. 'Infrared results' and 'Infrared Spectroscopic Results on solvate structures in crystals' both by Georg Zundel and Johannes Fritsch. The fourth chapter by Murray H. Brooker deals with Raman spectroscopic measurements of Ion Hydration. 'Quantum theory of electronic and vibrational spectra of impurity molecules in polar media' by Revaz R. Dogonadze and Tamaz A Marsagistvili is followed by' ultra violet and visible Light Absorption of solute molecules in condensed media' by Era M. Itskovitch. These are followed by 'NMR spectroscopy in Ionic solvation studies' by H. Gerhard Hertz, 'Dielectric Microwave spectroscopy' and 'Ultrasonic Absorption Spectroscopy both by Herman Farber and Sergio Petruci. The last chapter of this volume deals with other spectroscopic methods X-ray, Electron, and Neutron Diffraction studies of Ionic solutions by Erika Kalman and Gabor Palinkas.

Thus we can see that the different chapters are written by the experts in the field. The individual chapters carry extensive bibliography. The printing and get up of the book is as could be expected from Elsevier. The book is useful to members working in the field and thus deserves a place in any good, scientific library

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