

## Foreword

The XI National Conference on Atomic and Molecular Physics (XI NCAMP) was convened by the Indian Society of Atomic and Molecular Physics (ISAMP) at the Indian Institute of Technology, Chennai from December 17 to 20, 1996. The NCAMP, as readers would know, is held once every two years, and it has now attained a significant international character. Leading scientists from India and abroad get together to present their latest research at these meetings. The growth of ISAMP is well documented in a few reports in a recent issue of the ISAMP News Letter (Vol. 1, No. 2, June 1997). Starting from a 'workshop' format, the NCAMP has now come a very long way. With *Pramana – Journal of Physics* bringing out this special issue of articles written by distinguished scientists who were invited to deliver talks at the XI NCAMP at IIT, Chennai, ISAMP celebrates today a very special landmark.

The XI NCAMP was a wonderful experience at IIT, Chennai. Senior scientists interacted closely with upcoming youngsters in a lively atmosphere. The keynote inaugural address was delivered by Dr D D Bhawalkar (CAT, Indore) which was followed by a very lively session on 'Atomic and molecular photoabsorption processes using synchrotron radiation'. There were subsequent exciting sessions on 'Atomic/molecular structure and fundamental interactions', 'Novel computational techniques in atomic/molecular collision/photoabsorption processes', 'Light (or heavy) ion-atom/molecule collisions, electron/positron collisions with atoms/molecules in ground or excited states', 'Polarized electron scattering; Photoelectron spin polarization processes', 'Instrumentation in high-resolution spectroscopy techniques' and 'Collisions involving clusters, condensed matter and high-energy interactions'. The present issue of *Pramana* contains articles by most of the scientists who spoke at the XI NCAMP. Also, a large number of new results in frontier areas were presented in stimulating poster sessions leading to productive discussions, and in fact, some research papers resulted from the meeting through the interaction that took place. In addition, there was the 'S. N. Ghosh Award' presentation, a panel discussion on 'Atomic, Molecular and Optical Physics in India: Past, Present and Future', and a special session was held to honour some senior members of the ISAMP: Professor D Basu, Professor N C Sil, Professor S P Khare and (Late) Professor S K Mitra. Also, there was a special session for graduate students to present a summary of their doctoral research work.

Several individuals and agencies have enabled the release of this issue. Special mention should be made of the institutions and funding agencies which contributed to the XI NCAMP: Indian Institute of Technology, Chennai; Indian Association for the Cultivation of Science, Calcutta; Board for Research in Nuclear Sciences, Mumbai; Department of Science and Technology, New Delhi and Tamilnadu Academy of Sciences, Chennai. ISAMP's National Organization Committee and the Local Organization Committee of the IIT, Chennai made all the arrangements for the XI NCAMP.

Professor Rajaram Nityananda and Mr. Chandramohan of the editorial office of the journal have been extremely efficient and helpful in bringing out this special issue of *Pramana*. I have been very ably supported in this task by my distinguished colleagues on the *Guest Editorial Board* of this issue from ISAMP: Dr M K Srivastava (University of Roorkee, Roorkee), Dr S A Ahmad (BARC, Mumbai) and Dr E Krishnakumar (TIFR, Mumbai).

**P C Deshmukh**  
Guest Editor