

Preface

This volume of Conference Proceedings contains contributions presented by invited participants of the **First National Conference on Recent Advances in Materials and Technology-2012 (NCRAMAT)**. The conference was conducted by the Department of Physics, Sathyabama University, Chennai during January 6-7, 2012. This special issue of the Proceedings of the Indian National Science Academy perpetuates the Silver Jubilee of Sathyabama University, formerly known as Sathyabama Engineering College which was established by JEPPIAAR EDUCATIONAL TRUST in the year 1988.

The Conference provided a setting for the discussions on recent developments in a wide variety of topics including metallic, composite, ceramic, polymeric, magnetic, dielectric, opto-electronic and bio materials, nanomaterials and processing, computation of materials, environmental and energy materials, surfaces, interfaces, thin films and finally crystal growth of advanced materials and materials characterisation. The NCRAMAT-2012 conference attracted nearly 75 registered participants, from various parts of India. The programme was comprised of one plenary, 14 invited, 3 special and many contributed talks. The conference has been a good opportunity for participants to present and discuss topics in their respective research areas.

The organizing committee believes that members of reviewing committee maintained a high standard as we reviewed papers, provided feedback and now presenting a strong body of published work in this collection of proceedings. The ultimate aim of this proceeding has been to present high quality work in an accessible medium, for use in the teaching and further research of all people associated with material characterisation. To achieve this aim, all abstracts were double blind reviewed, and full papers were subjected to a rigorous reviewing process.

Guest Editors:

M. Sundareswari
A. Joseph Arul Pragasam
Helen Merina Albert
S. Ravichandran