



From the Director's Desk

The Issue 1 of RRCAT Newsletter for the year 2007, which is the first one being brought out by the new editorial team, is elegantly brought out. It covers major aspects of the progress made in the Centre over the later part of 2006 and early part of 2007. It contains notable contributions, like the progress of Indus 2, including first diffraction pattern that was recorded with the synchrotron light from Indus 2, development of high voltage generator to reach 750 kV with our DC accelerator, progress on building high power RF amplifier and the work done on high T_c current leads in partnership with RRL, Thiruvananthapuram. In the field of lasers, this issue reports the first laser based electron acceleration experiments, which were jointly carried out at RRCAT with a team from KEK, Japan, development of several technologies relating to recording of ultra short laser pulses and many phenomena connected therewith, progress on use of lasers for refractive index gradient measurement, development of fibre Bragg grating using CVL, as well as, semi conductor lasers using MOVPE facilities available at our Centre. A number of material science studies, that have been completed in the Centre are reported. There is a description of computing and information network that has been added. The theme articles on use of lasers for Nuclear Fuel Cycle applications, Industrial Electron Accelerators, as well as, TXRF technique, to detect trace amount of materials are also covered. The issue also carries a report on the Foundation Day Function held on February 19, 2007, in which Prof. P. Balaram, Director, IISc., was the Chief Guest. The issue also includes reports on National Laser Symposium and Asian Particle Accelerator Conference for which our Centre served as a host institution. The publications over the later half of 2006 are also included in this issue.

I am glad the Editorial Team has been able to put together a very informative issue in a commendable manner. I would like to record my appreciation for their effort in disseminating information about work going on in our Centre to a wider audience through the forum of this Newsletter.

V.C. Sahni
July 2007

From the Editorial Board

The new Editorial Board re-constituted in March 2007 has the pleasure to bring out the first issue of RRCAT Newsletter of 2007. The natural expectation from a new editorial board is not only that they maintain but also improve the standard, which by no means is a simple job, especially when the standard already set is high. Fortunately, the new team is lucky to get help from the previous board members Dr. G. S. Lodha and Shri J.K.Pattnaik, who have graciously agreed to be a part of the new team.

The enthusiastic response we got from every one in our effort to give the current issue of the RRCAT Newsletter its shape, has really enthused us about our programs. We feel privileged to be the first in getting the wholesome exposure of the wide spectrum of interesting results emerging from the various laboratories of RRCAT. Dr. V.C.Sahni, Director, RRCAT, in his column has provided a bird's-eye view of these activities, which is itself an interesting reading before one goes to the details of these various activities. The efforts that various scientists and engineers have put in to present their R&D programs in a condensed form, understandable even to non-specialist readers, are really praiseworthy; this is more so when one notes that very often scientists/engineers are not given training in literary skills.

We also notice that a significant number of contributions have come from the relatively young members of the RRCAT scientific community. This enthuses us to start a Young Scientist's Forum in the RRCAT Newsletter, which will contain a sort of 'theme article' based on the activity spearheaded by a scientist below forty years of age.

Last but not the least, we wish to express our sincere gratitude to Director, RRCAT and all other members of RRCAT community for their help and support that has been a source of strength for our efforts. We hope the readers will find the Newsletter informative and enjoy reading this issue.

Editorial Board
July 2007