Science education gets new dimensions

By Siddhartha D. Kashyap/TNN

Pune: A new experiment in science education will begin in India this July when the ambitious Indian Institute of Science Education and Research (IISER) will begin the admission process for 50 students.

The nSERs — to be established by the Centre in Pune and Kolkata at an investment of Rs 500 crore each — aim at promoting higher studies and research in basic science.

'The basic idea behind the IISER is to encourage students to go into research instead of dropping out after completion of their bachelor's degree*

While the curriculum for the integrated five-year M.Sc. programme has been designed by *a* team of eminent scientists headed by C.N.R. Rao, the institute will offer a unique inter-disciplinary approach towards basic science at the undergraduate level

Being set up on the National Chemical Laboratory (NCL) premises here, the institute will gradually shift to its own campus, to be built on a 100-acre land given by the NCL, S. Sivaram, director of the NCL, told TOI.

When fully established, the total strength of the M.Sc. programme in each institute will be 1,000, besides 1,055 doctoral and post-doctoral students.

Admission for the foundation course will be done on the basis of nationally-held competitive examinations like the IIT-JEE. "From next year onwards, the institute will have its own evaluation system for admission," Sivaram said. For this year, students passing the IIT-JEE will have to appear for a screening process which will test them for general aptitude in basic science.

Eminent radio-astronomer Govind Swarup — who, along with V.G. Bhide, former vice-chancellor of the University of Pune, was instrumental in conceiving the IISER — said the basic idea is to encourage students to go into research instead of dropping out after completion of then- bachelors degree.

Eventually, IISERs will integrate undergraduate and post-graduate education and research under the same umbrella. It will interact with national laboratories and other research institutes to develop a synchronous environment for research.

Many areas of basic science eventually evolve as applied sciences, viz., in lasers, super conductivity semiconductors, nano-material etc. Research in such areas can generate significant intellectual properties.

These institutes will also contribute to the creation of a highly competent and trained manpower that would be a major catalyst for technological human resource revolution.