

IIT-Gandhinagar plans new lab to carbon-date artefacts

Runa Mukherjee Parikh, TNN | Mar 30, 2014, 12.46AM IST

AHMEDABAD: IIT Gandhinagar is set to become one of the few places in the country where a specialized technique called carbon dating will be done. A centre for archaeological sciences has been set up at the premier institute and it will see a multi-disciplinary approach to archaeology, along with the establishment of a carbon dating lab.

"We want to use science and technology to understand our heritage, our roots better. The centre will focus on application of archaeological sciences through a number of disciplines; civil, mechanical, electrical, chemical and material engineering as well as metallurgy," said Dr Sudhir Jain, director, IIT-Gn. The Archaeological Survey of India (ASI) is supporting and funding the laboratory, which will use modern chemical analysis and carbon dating tools to determine the age of artefacts from all parts of the country.

Carbon dating is a radiometric dating technique that uses the decay of carbon-14 to estimate the age of organic materials, such as wood and leather, as old as 58,000 to 62,000 years. Determining the date of one such sample costs around Rs 50,000-Rs 60,000 but IIT-Gn intends to do it either for free or at a nominal fee. "We want this science to be available to maximum number of people. Mostly, people shy away from carbon dating due to its cost. We intend to change that," said Dr Jain.

The first senior faculty joining the centre at IIT-Gn is V N Prabhakar, who was superintending archaeologist with the ASI for over a decade. "He will be interfacing with the archaeology industry, scientists and students. We will also have Padma Shri Dr R S Bisht joining us as guest faculty," said Prof S P Mehrotra, dean, research and development, IIT-Gn.