

## **Accelerator Mass Spectrometry (AMS) Measurement Facility for $^{14}\text{C}$ At Inter University Accelerator Centre (IUAC), New Delhi, India**

A new  $^{14}\text{C}$  Accelerator Mass Spectrometry facility is being setup at Inter University Accelerator Centre, New Delhi. The  $^{14}\text{C}$  measurements are popularly performed to produce chronological data for studies in many frontier areas such as archaeology, climate change studies, oceanography, heritage studies but has many other applications in modern days science. A sample preparation laboratory is also being developed at IUAC with an automatic graphitization facility. The proposed system will also be able to perform  $^{10}\text{Be}$  and  $^{26}\text{Al}$  measurements in addition to  $^{14}\text{C}$  measurements. The key features of this facility are ; an automated 500 kV tandem ion accelerator with two Cs sputter ion sources capable of performing measurements of samples of few mg size with a good precision. This AMS facility at IUAC will support research from different fields of science and will also help in the capacity building of researchers in various associated fields in the country.