

¹⁴C Radiocarbon Dating

The Radiocarbon dating of the institute was established in 1974 to provide chronological inputs for Quaternary Palynology / Paleo-climatic reconstructions. The laboratory continues to provide reliable ¹⁴C dates to researchers/ archaeologists/ paleo-investigators across India and abroad. The Laboratory has Liquid Scintillation Counter where 1-3ml of liquid Benzene is counted for beta decay. The system has ultralow level counting system 'Quantulus' for more speedy work.



Liquid scintillation counter measures of activity of a sample having radioactive carbon that decays Beta particles (as photon emissions) in presence of scintillation agent.

Working Principle

The radiometric dating involves extraction of CO₂ from organic / inorganic material, its purification, conversion to Acetylene (C₂H₂) and tri-merization to liquid Benzene (C₆H₆). The liquid benzene is then kept in Liquid Scintillation Counter for counting decay rate of ¹⁴C content.



User Instruction

A variety of sample can be used for dating such as Charcoal (10-15g), Wood (~20g), Shells (30gm), Sediments (300gm) to get sufficient amount of analyte Benzene (~1 ml to 3 ml).

Charges excluding GST (18%)

For Institutional researchers	INR 5,000
For Other Institute/ University investigators	INR 10,000
For Industries purpose	INR 12,000

Contact Us

Email: rajesh.agnihotri@bsip.res.in;
rajagni9@gmail.com; director@bsip.res.in

Contact No : 0522-2742905, +91-9582570340