ANNOUNCEMENT

New ICP-MS National Facility at NGRI, Hyderabad
(Funded by DST & CSIR)

A new ICP-MS was procured and installed recently under this project at the Geochemical Laboratory of National Geophysical Research Institute, Hyderabad. The ICP-MS installed at NGRI is a quadrupole mass spectrometer with state-of-the-art features, such as Dynamic Reaction Cell (DRC), performance enhancing axial field technology, and other technical advances leading to extremely low background, better sensitivity and striking improvements in measurement precision which take the detection limits for most of the elements in the periodic table to pg/ml (ppt) and fg/ml (ppq) levels and make interference-free and accurate estimation possible in a variety of geological and environmental materials for different R&D applications. When coupled with appropriate sample preparation methods, ICP-MS can be effectively applied to the following:

(i) Accurate and precise estimation of rare earth elements (REE) and several other trace elements of importance in geochemical, cosmochemical, marine and hydrogeochemical studies.

(ii) When combined with appropriate fire-assay technique (Pb or NiS), ICP-MS can be used for accurate determination of extremely low concentrations of platinum group elements (PGE), and gold in mineral exploration studies.

(iii) ICP-MS is the best-suited method of analysis for the estimation of elements such as Cr, Ni, As, Se, Pb, Zn, Cd, Hg and a host of other trace elements in a variety of materials for environmental research.

(iv) The semi-quantitative analysis by ICP-MS provides a means for rapid (90 sec) multi-element determination of about 70 elements (Li-U) in a variety of geological and environmental samples with a precision <20% RSD with comparable accuracy. This feature is highly useful in reconnaissance studies in fields such as mineral exploration and environment.

Active groups or individual scientists/research students who are interested in using this facility at NGRI may contact Director, National Geophysical Research Institute, Hyderabad 500 007, through phone 040-27170141, Fax: 040-27170491 or 040-27171564, e-mail: dimrvp@rediffmail.com. For more details visit us at: www.ngri.org.in