

Council of Scientific and Industrial Research
National Environmental Engineering Research Institute
Nehru Marg, Nagpur-440 020



TITLE: Expression of interest and pre-indent conference for supply of Inductively Coupled Plasma – Optical Emission Spectrometer (ICP-OES)

This Institute invites Expression of Interest (EOI) for supply of **Inductively Coupled Plasma – Optical Emission Spectrometer (ICP-OES)**. The EOI must reach this Institute latest by **7th September 2010**. A Pre-indent Conference has been scheduled to be held at **11:00 hrs** on **09th September 2010** in the **Committee Room No. 02** of the Institute. The interested parties may depute their competent technical representatives to make presentation of their product / model(s) and discuss with the Technical Committee on the aspects of utility, technology, feature, literature, design, technical parameters, clientele and other related issues of the equipment. The Technical Committee shall also evaluate the credentials / technical capabilities / financial standings with track record of the companies / vendors attending PIC. The following documents duly signed and stamped must be invariably submitted by the bidders at the time of PIC.

- 1) Technical Compliance statement showing compliance of offered specifications with tentative specifications given in the EOI Notice.
- 2) Deviations, if any, in the offered technical specifications with the reasons/justification for deviations.
- 3) Printed technical literature in support of the offered specifications.

Technically competent and sound representative should be authorized for attending Pre Indent Conference.

The tentative specifications of the Inductively Coupled Plasma – Optical Emission Spectrometer (ICP-OES) are as follows:

Wavelength Range	170 to 780 nm or better with resolution of < 0.008 nm @ 200 nm.	
Polychromator	State of art Echelle based high resolution optical system	
Detector	Completely solid-state detector based on charge transfer / couple / injector / programmable array device for simultaneous measurement with necessary cooling / heating system, if required.	
RF generator	Fully Solid-state generator. Operating frequency - 27 MHz / 40 MHz, Adjustable power from 750 to 1300 Watts or better with coupling efficiency of >75%. Auto ignition and operation, preferably computer control power for set point to compensate changing sample matrix / impedance. Internationally approved radio frequency band certificate from competent authority. Necessary cooling system and safety interlocks.	
Argon plasma and sample input	Configuration	Dual view configuration to select axial or radial view with automatic switchover possibility and auto alignment.
	Torch	Demountable/Semi-demountable using quartz with suitable injector.
	Spray chamber	Glass spray chamber; Scott / Cyclonic type
	Nebulizer	Cross Flow / Concentric of chemically resistant material
	Peristaltic pump	Three or more channels to deliver a sample and reagent. Complete with necessary tubing for variable sample flow range in steps.
Plasma and other Gas control	Computer controlled Plasma, Shear / Auxiliary and Nebulizer gas controlled with Built-in Mass Flow Controller (MFC standard with quoted model, not optional).	
Hydride Kit	Continuous Hydride Generation Assembly with External Gas Liquid Separator	
Minimum detection limit	Cu – 5 ppb or better As – 1 ppb or better (with hydride generation)	
Data Station	Latest State-of-Art compatible data station preferably from manufacturer with latest hardware (Processor, RAM, HDD, DVD Writer etc.) with LCD/TFT display and Latest Laser Printer with automatic duplex printing facility	
Software	Windows based, Instrument operation and control, data handling and storage, report generation, calibration graph, results display and printing.	
Power requirement	230 Volt AC, 50 Hz Single phase	
Manuals	Operating and service manual	
Installation kit	Complete installation and test kit	
Exhaust Hood	Compatible exhaust hood system with full installation and testing	
Auto Sampler	Autosampler for minimum 100 samples capacity with integrated pump & rinse station	
Consumables (Optional)	Consumables for two years continuous operation (Quote separately)	

Interested parties may submit EOI addressed to Director, NEERI, Nagpur-440020 regarding the supply of **Inductively Coupled Plasma – Optical Emission Spectrometer (ICP-OES)** in the name of **Director, NEERI, Nehru Marg, Nagpur – 440020** by Fax on 0712-2249992 / Telefax : 0712-2249746 and/or email on st_pur@neeri.res.in as mentioned in the pointer advertisement in News Papers, TOI, Mumbai dated 30.08.2010..

Date: 27.08.2010

**Stores and Purchase Officer
NEERI, Nagpur**

