

## Tender Notification for the procurement of High Temperature diamond anvil cell for High Pressure Diffraction at a beamline of the Italian synchrotron centre, Elettra, Trieste

Dear Sir/Madam,

Your quatation should clearly indicate the terms and conditions of the quotations, delivery, delivery schedule, entry tax, payment terms, warranty coverage etc. The quatation should be submitted in two parts: Prat I (Technical bid) and part II (Commericial bid) and both should be submitted in a sealed envelope. Technical bid should be exactly same as commericial bid except that pries are not shown in the technical bid. Technical bid should have item wise compliance report of all specifications. The commericial bid should have pricing for the items quoated in the technic bid. Prices quoted should be inclusive of all taxes/ duties. The prices quoated should be inclusive of at least 60 days from the last date for submission of quotes. Your quotation duly signed and sent in sealed envelope should reach us at the following address by 20 Septmber , 2019.

Prof. D. D. Sarma Solid State and Structural Chemistry Unit Indian Institute of Science Bangalore 560 012, India Tel :+91-80-2293 2945, 23607576 Email: sarma.dd@gmail.com, sarma@iisc.ac.in

**Important:** The item will be installed at the Italian synchrotron centre Trieste, Italy and has to be delivered directly to C/o Dr. Boby Joseph , Laboratorio Fisica Applicata/Esperimenti Turbolenza del Centro di, Fisica Teorica Abdus Salam, presso Edifico ES3 della Sincrotrone Trieste S.C.p.A. Strada Statale 14 - km 163,5 in AREA Science Park, 34149 Basovizza, Trieste ITALY

## **Technical Specifications:**

- Pressure range : ambient to 50 GPa (DAC culet size 400 micron, Cell body with low thermal expansion material)
- Diamonds type II A
- Heat is delivered directly to the sample chamber (gasket) using a compact heater or a ring heater
- X-ray opening : minimum 60 degree
- Temperature maximum at the sample 1000 K (with external temperature on the DAC body not more than 500 K).
- Possibility to put the DAC cell inside a slim vaccum chamber to have a better thermal isolation is highly preferred. In such a case, vacuum shroud should be as slim as possible to permit the use of commonly available pressure ruby luminsence set up (focal spot from objective at 33 mm) for pressure measurements from the DAC inside the heater box.
- Otherwise, possibility to flush the interior of the DAC cell, and all exposed faces of the diamond anvils, with a mildly reducing (argon - 2% hydrogen mixture) for the protection of both the anvils and the interior of the cell from tarnishing.

The quotations should also include all the necessary acessories such as heater power supply, cooling tube connections etc.