IISER THIRUVANANTHAPURAM

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Advt. No. IISER/PUR/EOI/2&3/15 31st October 2015

NOTICE INVITING EXPRESSION OF INTEREST (EOI)

Expression of Interest (EOI) is invited for the following equipments:

I. IISER/PUR/EOI/2/15
Vibrational Circular Dichroism

Vibrational Circular Dichroism [VCD] is a spectroscopic technique which detects differences in attenuation of left and right circularly polarized light passing through a sample. It is the extension of circular dichroism spectroscopy into the infrared and near infrared ranges. Because VCD is sensitive to the mutual orientation of distinct groups in a molecule, it provides three-dimensional structural information. Thus, it is a powerful technique as VCD spectra of enantiomers can be simulated using ab initio calculations, thereby allowing the identifications of absolute configurations of small molecules in solution from VCD spectra. As a simple example of the experimental results that were obtained by VCD are the spectra data obtained within the carbon – hydrogen [C-H] stretching region of 21 amino acids in heavy water solutions. Measurements of vibrational optical activity [VOA] have thus numerous applications, not only for small molecules, but also for large and complex biopolymers such as muscle proteins (myosin for example) and DNA.

II. Circularly Polarised Luminescence [CPL]

Spectroscopy Is the emission analog to circular dichroism [CD] SPECTROSCOPY. CPL spectroscopy gives information about the chiral properties of these molecules in their excited state. CPL has primarily been focused on studies aimed at investigating the chiral structures and solution dynamics of luminescent lanthanide complexes. Applications of CPL aims at getting quantitative and/or qualitative chiral structural information of selected systems that do not racemize on the emission time scale.

III. IISER/PUR/EOI/3/15
UHV CRYO FREE PROBE STATION

UHV Cryo free probe station [10K to 400K] with 6 probes and microscope. The probe should be able to manipulate in few microns to 100's of micron. The substrate size vary from 25mm x 25mm to 5mm x 5mm.

TERMS & CONDITIONS:

1. **Separate EOIs shall be sent for I A, I B & II.**
2. **EOI shall contain profile of the manufacturer and supplier (agent or dealer if any), Technical details of the product and other necessary inputs such as list of installations in India and abroad (with contact details of end users) where similar equipment is supplied.**
3. **Shortlisted sources may be invited for presentation/ discussion which will be informed later.**
4. **EOI shall be sent to the Deputy Registrar (Purchase & Stores), IISERTVM at the above address in sealed cover/packets superscribing Adv.No. IISER/PUR/EOI/2&3/15 and name of the Equipment and the due date. Due date for submission of EOI is 26th November 2015 upto 4.00 PM.**

DEPUTY REGISTRAR
[PURCHASE & STORES]
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