

## भारतीय प्रौद्योगिकी संस्थान कानपुर Indian Institute of Technology Kanpur

Dr. Thiruvancheril G. Gopakumar

Assistant Professor Department of Chemistry, IIT Kanpur Kanpur 208016 UP, India

\*## +91 (0)5122596830 e-mail: <a href="mailto:gopan@iitk.ac.in">gopan@iitk.ac.in</a>

URL: http://home.iitk.ac.in/~gopan/index.htm

Department office: 

★ +91 (0)5122596830

- +91 (0)5122596806

16 December 2015

Enquiry No. IITK/CHM/TGG/2015/005

Last date: 16<sup>th</sup> December 2015 Extended to: 23<sup>rd</sup> December 2015

Sub: Request for quotation for Ultra-High Vacuum (UHV) ready Scanning Tunneling Microscope (STM)

Dear Sir/Madam

Kindly send us a sealed quotation (technical and financial) for the following item. Quotations should be addressed to **Dr. Thiruvancheril G. Gopakumar, Department of Chemistry, IIT Kanpur 208016**, and must reach on or before 16<sup>th</sup> December, 2015. The last date is extended to 23<sup>rd</sup> December 2015.

Thanking you

T. G. Gopakumar

## Scanning Tunneling Microscope (STM)

This STM will be installed in an upcoming Ultra-High Vacuum (UHV) chamber. A commercial (RHK Technology, Inc.) scanning probe microscopy controller is available and the STM should be easy to integrate with it or provide interface options for easy integration of STM with existing control electronics.

Scanning Tunneling Microscope (STM) Specifications:

- 1. Operation capable for ambient environment
- 2. Ready to use in Ultra-High Vacuum (UHV) chamber
- 3. STM scan head:
  - XY: 5  $\mu m$  and Z: 0.60  $\mu m$
- 4. Resolution:
  - X,Y: 50 pm & Z: 5 pm
- 5. Thermal drift < 1 Å/min
- 6. Scan head flange (connecting to UHV): 6.0" OD CFF
- 7. STM should be easy to integrate with existing control electronics from RHK (Requires proof/examples of such integrated systems)
- 8. Viton vibration isolation for scan head
- 9. 1 ambient sample holders
- 10. 2 sample holders suitable for working with liquids (for solid-liquid interface applications). This should be further discussed while finalizing the purchase.
- 11. Installation and Training

## Terms and Conditions:

- 1. Price should include transportation and insurance until Kanpur
- 2. Warranty: 1 year or more