



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: [gopan@iitk.ac.in](mailto:gopan@iitk.ac.in)  
URL: <http://home.iitk.ac.in/~gopan/index.htm>

Department office:  
☎ +91 (0)5122597637  
☎ +91 (0)5122597436

10 February 2015

Enquiry No. **IITK/CHM/TGG/2015/002**  
Last date: 23<sup>rd</sup> February, 2015

**Sub.: Request for quotation for USB connected mini UV-Vis spectrometer, Cuvette and Lamp**

Dear Sir/Madam

Kindly send us sealed quotations for the following item. Preferably, provide us a combined quotation for both items. Quotations should be addressed to **Dr. Thiruvancheril G. Gopakumar, Department of Chemistry, IIT Kanpur 208016**, and must reach on or before Monday, 23<sup>rd</sup> February, 2015.

Thanking you

T. G. Gopakumar

## **Specifications for USB connected mini UV-Vis spectrometer:**

### **Spectrometer:**

1. Detector: linear array
2. Detector range: 200 – 1100 nm
3. Detector Pixels:  $\geq 3648$
4. Pixel size: 8  $\mu\text{m}$  x 200  $\mu\text{m}$
5. Pixel well depth:  $\geq 100,000$  electrons
6. Signal-to-Noise ratio:  $\geq 400:1$
7. A/D resolution: 14 bit
8. Fiber Optic Connector: SMA 905 (0.22 numerical aperture optical fiber)
9. Exposure time: 1.0 ms – 10 s
10. CCD reading time:  $\geq 10$  ms
11. Power consumption: 5 V from USB interface
12. Onboard memory capacity:  $\geq 64$  spectra
13. Data transfer speed: 200 ms / 100 ms (2 points binding)
14. Computer interface: USB 2.0,
15. Operating system: Windows 98/Me/XP/Vista/Windows7; 32/64b
16. Software: Full application software, drives

### **Light Source with Sample Holder for above mini spectrometer:**

1. Halogen/Other Light source: 200-1100nm
2. Sample/Cuvette Holder with SMA connectors
3. Optical fiber: < 400  $\mu\text{m}$  core diameter, Wavelength range 200-1200nm, perform absorbance and transmittance application, 1-2 m length, SMA-905 connectors
4. Hardware parts: 2 x USB cables, 2 x 1-2 meter optical fiber with SMA connectors

### **Cuvette and Cuvette holder**

1. Sample/Cuvette Holder with SMA connectors
2. Cuvette x 3

### **Terms and Conditions:**

1. Price should be CIP Delhi/Kanpur
2. Warranty: 1 year or more