



NATIONAL INSTITUTE OF TECHNOLOGY

ROURKELA-769008 (ODISHA)

An Institute of National Importance under Ministry of HRD, GOI

NOTICE INVITING TENDER

Tender Notification No: NITR/PW/BM/2019/99

Dated: 27/02/2019

The National Institute of Technology, Rourkela invites bids from the eligible bidders for procurement of **Fluorescence Spectrophotometer** at NIT Rourkela.

Last date of Submission of Bid : 27/03/2019 at 11:00 AM

Date of Opening of Technical Bid : 28/03/2019 at 11:00 AM

For Details: http://nitrkl.ac.in/OldWebsite/Jobs_Tenders/9Equipment/Default.aspx

Contact: Dr. Nandini Sarkar, BM; Ph.: 0661-2462293

Email: sarkarn@nitrkl.ac.in

Bidding through: <https://eprocure.gov.in/eprocure/app>

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REGISTRAR



NATIONAL INSTITUTE OF TECHNOLOGY ROURKELA-769008, ODISHA

(OPEN TENDER NOTICE NO: NITR/PW/BM/2019/99

Dated: 27/02/2019)

(Procurement of Fluorescence Spectrophotometer at NIT Rourkela)

Sl. No.	Description of Goods/Service	Quantity
1.	Fluorescence Spectrophotometer (Detailed specification as per attached Annexure – I)	01

1. **Quantity required** : As mentioned above (All information provided in technical specification in Annexure I)
2. **Delivery** : Within **60 days** from the date of purchase order
3. **Last date of Submission of Bid** : **27/03/2019** at **11:00 AM**
4. **Opening date of Technical Bid** : **28/03/2019** at **11:00 AM**
5. The firm should not have been black listed at any time.
6. The submission of following bids by the tenderer should be through <https://eprocure.gov.in/eprocure/app> . Please follow the guidelines as per the portal.

Procurement of Fluorescence Spectrophotometer
(Tender Notice No: NITR/PW/BM/2019/99, dated- 27/02/2019) Due on 27/03/2019 at 11:00 AM

7. Liquidated damage clause will be charged for any delay in supply of goods.
8. The validity of the tender shall be **90 days** from the date of opening of the bids.
9. Detailed advertisement including all tender documents is also available in our website at http://nitrkl.ac.in/OldWebsite/Jobs_Tenders/9Equipment/Default.aspx
10. NIT reserves the right to qualify or deny prequalification of any or all applicants without assigning any reasons.

(REGISTRAR)
NIT, Rourkela
Fax No- 0661-2462022
Ph. No -0661-2462021

Fluorescence Spectrophotometer

Technical Specification

Application:

The system would primarily be used for taking fluorescence and absorbance spectra of samples.

Functional Specifications		
1.	The system should be two-in-one Fluorescence and Absorbance Spectrometer	
2.	The instrument must be capable to plot Absorbance / Transmittance Excitation Emission Matrix (A-TEEM).	
3.	Instrument Software should include data and results of fitting / processing of different acquisition parameters like excitation spectra, emission spectra, absorbance / transmission spectra etc; Full method details 2D/3D graphs; Instrument and user identification information; Full data and method traceability.	
4.	The instrument must have facility of acquiring simultaneously fluorescence data at right angle and absorbance data at straight line through the sample (two specialized individual detectors for simultaneous absorbance and fluorescence measurement).	
5.	The instrument must be a continuous Xenon arc lamp based system for highest sensitivity.	
6.	The instrument must have in-built excitation and emission cut-off filters for automated elimination of second order light.	
7.	The system must have Automatic Inner Filter Effect (IFE) Correction for quantitative fluorescence measurements at higher sample concentrations	
8.	The system should have standard cuvette holder and 2 nos. cuvettes should be supplied	
9.	The system should be supplied with suitable computer with preloaded software	
Technical Details		
1.	Wavelength Range for UV-Vis-NIR Fluorescence	250 nm to 1100 nm or better
2.	Wavelength Range for Absorbance	250 nm to 1100 nm or better
3.	Fluorescence Sensitivity	Water Raman SNR > 6,000:1 RMS or better, 350 nm Excitation, 5 nm slit
4.	Spectral Acquisition Rate	500,000 nm/min or better
5.	Fluorescence Bandwidth	At least 1, 2, 3, 5, 10, 20 nm (excitation and emission, both channel)
6.	Light Source	75W Xenon Arc Lamp or better
7.	Fluorescence Detector	CCD / Spectrograph
8.	Absorbance Bandwidth	At least 1, 2, 3, 5, 10 20 nm
9.	Absorbance Range	0 to 2 Abs or better
10.	Absorbance Accuracy	± 0.02 Abs or better
11.	Wavelength Accuracy	± 1 nm