



Indian Institute of Science

Centre for Sustainable Technologies



To

Dr.-Ing. Sreenivasan R.
Assistant Professor

Whom it may concern

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21 April 2021

revised on: 08 May 2021

Our reference: CST-SR-20210421
To be quoted in your response

Global Tender Enquiry for

Total Organic Carbon (TOC) – Total Nitrogen (TN) analyser with Autosampler

SusPaani Lab at CST, IISc focuses on R&D of (waste)water treatment technologies. The Lab has to be equipped with a TOC-TN analyser suitable for measurement in wastewater samples. Quotations are invited for the supply and installation of a TOC-TN analyser (with autosampler) which would meet our requirements.

Technical Requirements:

1	Capability for measuring	TC (total carbon), TIC (total inorganic carbon), TOC, NPOC (non-purgeable organic carbon), TN
2	In matrices such as	Water (including natural waters containing humic substances), wastewater, sea water and activated sludge
3	Oxidation method	High temperature (catalytic) combustion (temperature $\geq 680^{\circ}\text{C}$).
4	Application	Laboratory scale and research purpose. PC controlled instrument.
5	Compliance	The instrument must be suitable for determination of the above parameters according to established standard methods (APHA, EN and/or ISO).
6	Measurement range	0.050 to 30,000 mg C/L 0.10 to 100 mg TN/L
7	Analysis time	should be generally ≤ 10 min per sample
8	Autosampler	with capacity for at least 20 samples and for magnetic stirring is required. Sample rack, a set of sample vials and magnetic stir bars shall be provided.
9	Other accessories	The instrument shall be supplied with all necessary accessories (such as gas regulator, gas purification panel (if applicable), appropriate tubing, etc.) and consumables (gas cylinder, start-up kit, etc.) ready for installation.
10	Software	Suitable software (installation file and lifetime license) should be provided without any added cost. Provision of a suitable computer (with appropriate configuration, that is required by the software) is expected.

Terms & Conditions:

Quotation format:

- You should be a registered vendor with IISc. If not, you could become a registered vendor free of cost. The vendor code shall be mentioned in the quotation.
- The quotation must be addressed to: "The Chairman; Centre for Sustainable Technologies; Indian Institute of Science; Bangalore – 560012. Attention: Dr. Sreenivasan Ramaswami."
- Mention our reference number in your quotation without fail.
- The quotation should describe the specifications of the product, particularly addressing all the attributes considered in our technical requirements.
- Product brochure shall be enclosed with the quotation.
- The quotation must be valid for at least 90 days.

Pricing, delivery, & payment:

- The price quoted should be all inclusive and the different components must be shown separately:
 - Base price for the components
 - Discounts (if any)
 - Transportation and insurance (up to Bangalore airport)
- Customs clearance shall be taken care of by our authorized custom house agent.
- Free of cost installation & commissioning (by your trained personnel) is expected. Demonstration & necessary training shall be provided by your trained personnel without any added costs.
- Delivery period is to be specified. Delivery within 3 months is desirable.

Customer base, warranty & support:

- The instrument must have been supplied to laboratories in central government funded institutions (such as IITs, IISERs, NITs, CSIR Institutes, etc.). Please provide a list of 3 such references (with contact details of the user).
- Please provide details on the availability of trained & authorised service personnel in/around Bangalore. Details of branch offices with service engineers and availability of spares shall be furnished/stated.
- Two free of cost visits (by your service engineers) for any clarifications/training/troubleshooting (if needed) shall be offered (upon our request) within 1 year after installation.
- Warranty period of (i) 10 years on the furnace technology, (ii) minimum 5 years on the IR detector, and (iii) minimum 2 years on all other parts, from the date of installation is expected.

Operation & maintenance costs:

- Please state the measurement capacity (no. of samples that can be roughly measured) with the set of consumables (start-up kit) initially provided with the instrument and the cost of a second such kit.
- Please provide a rough estimate of operating cost (consumables' cost) for measuring both TOC and TN in 1000 saline wastewater samples containing 200 mg/L TOC, 50 mg/L TN and 30 g/L NaCl.
- Please provide details on AMC charges for the first 2 years post warranty and also the charges for a visit from your service engineer without an AMC beyond the warranty period.

The lab is located on the first floor and gas cylinder storage is situated on the ground floor (outside the building). ~~You are welcome to visit the lab for sighting purposes before submitting the quotation.~~ Any enquiry may be addressed to the undersigned.

~~Hard copies of the quotations (comprised of technical and commercial bids – duly signed & with seal – packed in separate envelopes) should reach us on or before Friday, 14th May 2021. All the above-mentioned aspects (technical as well as commercial) should be addressed in your bids, failing of which would disqualify the bid.~~

Revision (08 May 2021):

Due to the extension of lockdown in Karnataka state until 24 May 2021 because of the second wave of the COVID-19 pandemic, please send scanned copies of your technical bid (duly signed & with seal) via email (to

sreeni@iisc.ac.in) on or before Friday, 14th May 2021. If your technical bid meets our requirements, you shall be requested to submit your commercial bid.

Sincerely,
Sreenivasan Ramaswami