

Department of Civil Engineering, NIT Calicut

TOC/TN ANALYSER

Photo of Instrument:



Instrument Name	TOC/TN Analyser
Instrument Model & Serial No.	Model: TOC – L CPH
Instrument Make	Make: Shimadzu
Category of Instrument	Testing and characterization
Description of Instrument	TC, IC, NPOC and TN measurement Measurement range from 4 µg/L to 30,000 mg/L 680 °C Combustion, Catalytic Oxidation/ NDIR Detection Method for TOC at 720 °C
Instrument Technical Description and Major Specifications (This Specifications Limited to Major 5)	The TOC-L series adopts the 680°C Catalytic Combustion Oxidation Method, which was developed by Shimadzu and is now used worldwide. While providing an ultra-wide range of 4 µg/L to 30,000 mg/L, these analyzers boast a detection limit of 4 µg/L through coordination with NDIR. This is the highest level of detection sensitivity available with the catalytic combustion oxidation method. In addition, the catalytic combustion oxidation method makes it

Department of Civil Engineering, NIT Calicut

	possible to efficiently oxidize not only easily-decomposed, low-molecular-weight organic compounds, but also hard-to-decompose insoluble and macromolecular organic compounds.
Application of Instrument (Limited to Major 4 or 5)	Total organic carbon analysers measure the amount of organic, inorganic, or total carbon in water or soil samples. TOC is an important indicator of disinfection byproducts and the byproduct rule requires drinking water facilities to measure TOC removal.
Type of Sample Required for Analysis / Testing (Quantity, Pre-Preparation, State etc.)	Type of Samples to be Analysed: Water, Maximum No. of Samples Accepted at a Time: 8 Minimum No of Days Required for Analysis: 1
Guidelines for Sample Submission – User Instructions	TOC monitoring includes the following analytes. Raw water sample: ALKALINITY, TOTAL and CARBON, TOTAL Finished water sample: CARBON, TOTAL
Types of Analysis / Testing	Total organic carbon (TOC), TIC, TC
Faculty In-Charge Name / Email / Contact	Dr. George K Varghese / gkv@nitc.ac.in , 9744341214 & Dr. Bhaskar S / bhaskars@nitc.ac.in / 9742720843
Technical Staff Name / Email / Contact	Amardip Kumar Vishvakarma / amardeepvns786@gmail.com
Location of Instrument	Environmental Engineering Research lab
Other Details	N/A

Department of Civil Engineering, NIT Calicut

User Charges:

S.NO.	Type of Analysis / Testing	Internal - within Department of NITC	Internal - Other Departments NITC	External Academic Educational Institutes	National R&D Labs	Industry
1		100 per sample	100 per sample	200 per sample	200 per sample	500 per sample

Slot Booking and Payment Work Flow: