The Office of Technology Management

UNIVERSITY OF TEXAS 🗡 ARLINGTON

Tech ID: UTA 14:51

Measurement of Total organic carbon (TOC) species

INVENTOR: Dr. Purnendu K.Dasgupta

TECHNOLOGY NEED

Extremely pure water is a critical requirement in many modern industries such as semiconductor, Pharmaceutical etc. Ultra-pure water is treated to the highest levels of purity for all contaminants types including: organic and inorganic compounds. Hence, the measurement of Total organic carbon (TOC) is frequently performed in environmental, clinical, and industrial settings. However, with the current methods; it is difficult to trace the TOC that is present in the pure water. Hence there is a need for a technology that can continuously monitor the traces of TOC with real time output.

INVENTION DESCRIPTION/SOLUTION

Researchers here at UTA, have designed a novel method for the continuous measurement of total organic carbon in pure water. This method can be incorporated into pure water systems after knowing site specific calibration. Such a device can be used with a secondary analyzer and the potential sources of elevated TOC can be identified. This method also gives real time output that will detect when the system reached its equilibrium.

APPLICATIONS

- Process analyzer
 - -pH analyzer, Total organic carbon analyzer
- Ultrapure Water Purification systems



More about the Inventor: Dr. Purnendu K.Dasgupta

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-Used as front end cleaning tool in the Semiconductor industry -Pharmaceuticals and biotechnology

KEY BENEFITS

- Real time monitoring.
- Low cost and easy integration
- Continuous monitoring

STAGE OF DEVELOPMENT Prototyped and Tested

INTELLECTUAL PROPERTY STATUS Provisonal

RELATED TECHNOLOGY UTA 13:29 CAVITY ENHANCEMENT METHODS, SYSTEMS AND DEVICES, AND METHODS OF MEASURING SAME Our mailing Address: The Office of Technology Management 701 S Nedderman drive, Suite 333, Arlington, TX 76019

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