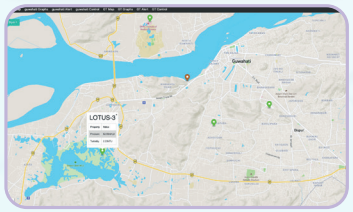
The LOTUS solutions

The LOTUS solutions include an innovative multi-parameter sensor and tailor-made decision support tools.

The LOTUS sensor's core technology is an electronic tongue based on functionalised carbon nanotubes. It measures temperature, pH, conductivity, chlorine, arsenic, magnesium, glyphosate and nitrate.

LOTUS develops software tools that:

- Collect and process measurements and data
- Offer high quality visualisation of data and results
- Connect to other important tools (e.g. EPANET) for smart water management
- Can be used for strategic and operational purposes



Example of data visualisation

The LOTUS sensor is unique !

It is less expensive

It consumes less energy

It is 10 times smaller

Core parameters : temperature, electrical conductivity, active chlorine and pH

Secondary parameters (research in progress) : arsenic, magnesium, fluoride, iron, glyphosate and nitrate

About the LOTUS project

- **Start date:** 1st February 2019
- **Duration:** 48 months
- **Budget:** 3,69 million €
- **Aim:** Co-creation of innovative low-cost technology for India's water quality challenges

22 partners in Europe and India

G.A.C. GROUP · Université Gustave Eiffel · University of Thessaly · technische universität dortmund · egm · University of Exeter · HYDROCONTROL CONSULTANTS · AUTARCON · JALAKAM SOLUTIONS · EUREKA FORBES · Aaranyak · dfm infoanalytics · Suyati · ABB · JAIN · TISS · GUWAHATI JAL BOARD · FCAI · Just Paani

For more information, please visit our website:

www.lotus-india.eu

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LOTUS

LOw-cost innovative Technology for water quality monitoring and water resources management for Urban and rural water Systems in India

The background

India faces challenges regarding water quality:

- Only 30% of the Indian population has access to treated drinking water
- 37.7 million Indians are affected by waterborne diseases each year, including a large number of children

The objective

The LOTUS project aims at co-creating, co-designing and co-developing:

- An innovative multi-parameter sensor
- Tailor-made decision support tools for water management

The approach

LOTUS develops and tests in several use cases both solutions for early detection of water quality problems and decision support for countermeasures and optimal management of drinking and irrigation water systems.

LOTUS

Irrigation System Management

City Water System Management

Tanker-based Water Distribution System

Groundwater and River Water Monitoring System

Monitoring and Control of Wastewater Treatment