Docket #: S19-331

Durable and Immersible Network Enabled Ammonia Sensor for Water Monitoring

Stanford researchers have designed an ammonia sensor for water monitoring that is low cost, durable, immersible, and integrated into a cloud network. Capable of detecting down to 0.01 ppm, these sensors can be deployed in rivers, wastewater and possibly ocean waters for real-time, remote monitoring. By using chemically resistant platforms and a low power draw design, these sensors protect against fouling, which allows for longer immersion times and minimal field maintenance.

Stage of Research

- Prototype

Applications

- **Water quality monitoring via IoT:** ammonia detection
- **Harmful algae bloom prediction**

Advantages

- **Low power consumption**
- Low cost, off-the-shelf components
- Anti-fouling, fully immersible system
- Remote operation without the need for human intervention or interpretation

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