

ABOUT THE HACKATHON

Water quality monitoring is critical for environmental sustainability. AquaSense Hackathon 2026 aims to develop low-cost, deployable water quality sensing systems aligned with Unmanned Underwater Vehicle initiatives at Technology Innovation Hub. The program is structured to encourage solutions with real-world deployment potential.

Hackathon Structure

Phase 1: Registration (1 May - 20 May 2026)

Phase 2: Idea Submission (Deadline: 31 May 2026)

Phase 3: Shortlisting (By 10 June 2026)

Phase 4: Project Presentation (30 June 2026)

Phase 5: Prototype Development (15 July 2026)



Technology
Innovation Hub
IITG TIDF



AquaSense Hackathon 2026

*Development of Indigenous
Low-Cost Sensor Technologies for
Underwater Applications.*



ORGANISERS

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Venue

4th Floor, R&D
Building, IIT Guwahati



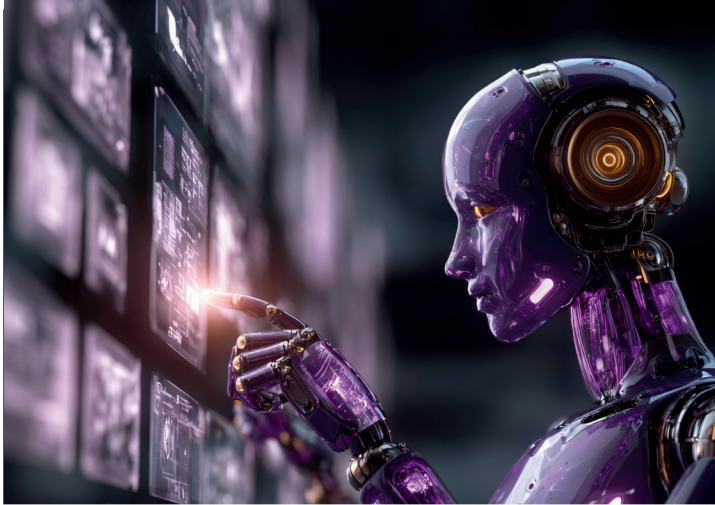
Prizes

- 1st: ₹25,000
- 2nd: ₹15,000
- 3rd: ₹10,000
- Special Prize: ₹5000 (5 groups)

Hackathon Coordinator

Dr. Abhijit Dey

Post-Doctoral Fellow,
Technology Innovation Hub (IIT Guwahati)



About IIT Guwahati & TIH



The Indian Institute of Technology Guwahati (IIT Guwahati), established in 1994, stands as a premier institution in India, renowned for its excellence in education, research, and innovation. Situated along the banks of the Brahmaputra River, the institute has been instrumental in fostering technological advancements and entrepreneurial initiatives, particularly in the northeastern region of the country.

Technology Innovation Hub (TIH) act as nodal centre spearheading the activities in the area of Cyber Physical Systems (CPS) and other domains in the field of Technologies for under water exploration and others, with leading edge knowledge, competencies and facilities which aims to harness the potential of this new wave of technology and expertise available nationwide and facilitate fostering research innovation, world class technology and product development.

OBJECTIVE



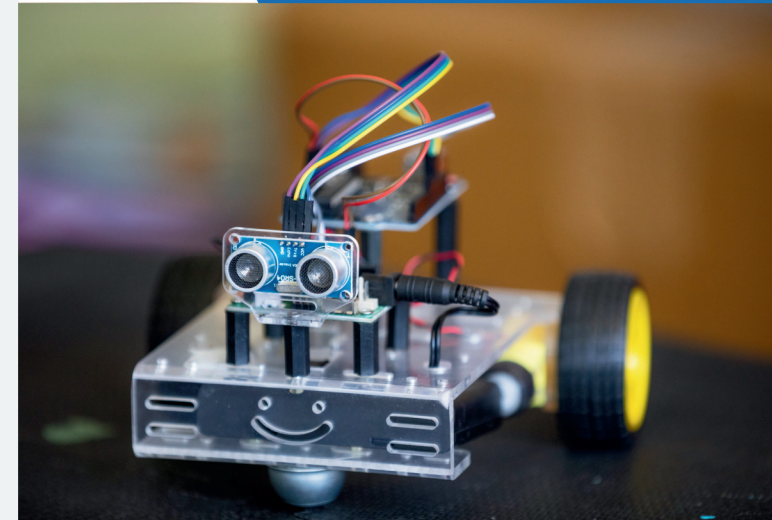
- ✓ Develop low-cost sensing solutions
- ✓ Enable real-time monitoring
- ✓ Integrate with robotic platforms
- ✓ Identify promising solutions for potential technology translation and startup development

FOCUS DOMAINS

Water Quality Sensing & Monitoring Systems

- ✓ pH
- ✓ Turbidity
- ✓ Dissolved Oxygen (DO)
- ✓ Total Dissolved Solids (TDS)
- ✓ Ammonia
- ✓ Electrical Conductivity (EC)

Registration Deadline: 20 May 2026



Technical Scope

Teams are expected to fabricate Low-Cost sensors (**maximum Rs. 5000**) from scratch and to develop innovative, low-cost sensing solutions.

Team Composition

- 2-3 members.
- Interdisciplinary collaboration is encouraged to enable robust system design.

Eligibility

- Engineering and Science Students (M.Sc, B.Tech, M.Tech, Ph.D. and equivalent) All Branches

Post-Hackathon Support

Selected teams demonstrating strong technical and implementation potential may be considered for further development support under TIH initiatives.

- Mentorship from domain experts
- Access to TIH lab facilities
- Funding support up to ₹2,00,000 for prototype development (based on evaluation) and start-up incubation at Technology Incubation Centre, IIT Guwahati