

Autonomous Marine Technology

2025

ABSTRACTS & E.O.I FOR DEMONSTRATION

The Society for Underwater Technology (SUT) in collaboration with the Australian Hydrographic Society (AHS) are pleased to announce the **Autonomous Marine Technology** (AMT) Conference 2025, taking place in Perth between 28th and 30th October 2025. This conference will bring together global experts, innovators, industry leaders, defence representatives and government delegates to explore cutting-edge advancements in autonomous marine systems, their applications, challenges, and future potential.

This long running and well reputed conference continues to be one of the most globally important networking opportunities in this field.

Abstracts and Expressions of Interest for demonstrations are sought for the conference under the theme "Scaling the seas: Building and operating robust autonomous maritime systems".

Call for Abstracts:

We invite researchers, operators, and technology developers to submit abstracts for consideration. AMT 2025 aims to highlight new research, developments, and current real-world

applications of autonomous technologies in the marine environment. Particular attention will be given to established autonomous maritime systems that are currently transforming

the commercial, defence and research industries.

Topics of Interest:

Established Autonomous Vessels / Vehicles & Robotics:

- Case studies and technical advancements in established uncrewed surface vessels and autonomous underwater vehicles
- O Remotely operated vehicles (ROVs) performing autonomous operations
- Autonomous navigation systems

Defence Applications:

- O Military and defence-based autonomous systems in the maritime domain
- Explore the integration of autonomous platforms in naval operations for intelligence, surveillance & reconnaissance (ISR), and autonomous mine countermeasures
- O Uncrewed systems working together in defence operations for intelligence gathering, anti-submarine warfare, and maritime security
- O The role of autonomous technologies in anti-piracy measures, force protection, and surveillance in contested maritime zones

Artificial Intelligence & Machine Learning:

- The application of AI/ML for autonomous systems to improve route optimization, predictive maintenance, and decision-making processes in established systems
- Al for real-time data analysis from platforms for autonomous fleet management

Sensor Technologies:

- O Development and integration of advanced sensor systems for autonomous navigation, including LIDAR, radar, and sonar technologies
- O Advancements in underwater communication for the purpose of data transfer, and two-way command systems for automated control systems
- O Advancements in environmental monitoring sensors for oceanography, maritime logistics, and environmental protection within systems

Maritime Safety & Security:

- O Innovations in safety systems, which are enhancing safety and operational efficiency
- O The role of cybersecurity in autonomous marine operations, focusing on the integration of secure communication and data protection systems
- O Command and control infrastructure, processes, and pilotage of unmanned and autonomous systems

Energy Efficiency & Sustainability:

- O Autonomous systems contributing to sustainability through route optimization, energy management, and eco-friendly vessel design
- O Research on reducing greenhouse gas emissions through autonomous, fuel-efficient vessels

Regulation & Policy:

- O Discussion on current regulatory frameworks and their application to autonomous vessels
- O Ethical considerations and the development of universal standards for autonomous marine operations

Industry Case Studies & Applications:

 $\hbox{O} \qquad \hbox{Case studies of autonomous systems currently deployed in real-world maritime operations}. \\$

KEY DATES

Deadline for Abstracts & E.O.I: Friday, 11th April 2025

https://sut.org/event/perth-autonomous-marine-technology-amt-conference-2025/



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Expression of Interest (EOI) for Demonstrations:

As the maritime industry continues to evolve, the role of proven, trusted and scalable autonomous marine technology is becoming increasingly important.

As a key event in the AMT 2025 conference agenda, we are offering the opportunity for organisations with established autonomous systems to showcase their technology through live demonstrations, facility tours, and remote showcases. We are seeking Expressions of Interest (EOI) for tailored sponsorship opportunities that would help maximize your organisations presence at the conference, examples of which may include:

Live Demonstrations:

Showcase your autonomous marine technology in a live demonstration during the conference. This will offer attendees a unique opportunity to witness firsthand the capabilities of your systems, including real-time navigation, environmental adaptability, and remote operations.

Facility Tours:

In addition to demonstrations, we would be thrilled to offer conference attendees the chance to visit your operational facility for a guided tour. This will provide deeper insights into your processes and technologies, as well as an opportunity to engage with your team of experts.

Remote Operations Showcase:

As part of the event, we are particularly interested in featuring remote operations for marine autonomous systems. If your company offers remote operation capabilities, we invite you to share a demonstration of how your systems are remotely controlled and monitored, providing attendees with a comprehensive understanding of the full operational spectrum of autonomous marine technology. This could be a remote operations centre at your facility or may be a mobile / temporary setup at local site.

We believe that your participation will greatly enrich the event and offer valuable insights to conference attendees. The combination of live demonstrations, behind-the-scenes facility tours, and remote operations showcases will allow your company to connect directly with key stakeholders and industry professionals.

Please submit an EOI if you are interested in participating in these activities, or other suggestions you may have. We would be happy to provide further details and discuss how we can best integrate your contributions into the conference program.

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