Day 2 Theme 3 The Vehicle
Session Chair Maaten Furlong NOC

Keith Wallace
Chief Commercial Officer - Blue Ocean Monitoring (Australia)
kwallace@blueoceanmonitoring.com

The use of highly economic, lighter class AUV's for shallow water infrastructure surveys

Keith Wallace has a global reputation for his work as a Marine Scientist with over 18 years of experience in energy and engineering industries, developing technical teams and delivering projects across the globe. More recently Keith joined Blue Ocean Monitoring, headquartered in Perth, Western Australia, as Chief Commercial Officer and has played a significant role in the development of the group today. Blue Ocean Monitoring are now established as a world leader in the development and application of ocean-going autonomous technology, working directly with many major energy companies around the world to increase operational efficiencies, whilst driving environmental awareness and compliance.

Alex Johnson, BASc, P.Eng.
Mechanical Department Manager, Mechanical Engineer – ISE
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25 Years of AUVs Under Ice: The Technology of the 2019 Expedition to Send an ISE Explorer AUV Under the Sørsdal Glacier Ice Shelf

Alex joined ISE in 2008 as a mechanical engineer, and is currently the Mechanical Department Manager at ISE.   He was part of the AUV team during the NRCan AUV project Cornerstone 2009-2010.He designed the prototype Explorer Variable Ballast system for operations in the Arctic in 2010, 2011, and 2015. Alex also designed the ramp Launch and Recovery System for use with the Explorer AUV and oversaw the development from concept design to delivery and installation on two different customers' ships. In 2014, Alex was the project manager for the design and delivery of two actively controlled Towfish for the Royal Canadian Navy. In 2015, Alex led the mechanical design of several new AUV sub-systems, including a variable ballast and parking system. He is also regularly involved with AUV field maintenance and operational support. Between 2017 and 2018 Alex was the project manager for two 3000m rated Explorer AUV build projects and is currently managing a project to build a 6000m rated Explorer AUV.

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James Cowles
Commercial Technical Sales Manager - L3Harris
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Revolutionary Autonomous Subsea Inspection Capability: Reducing Ship Time, Increasing Safety and Reducing Costs.

Responsible for bringing L3Harris' Autonomous Surface Vehicle (ASV) solutions to market for survey and offshore energy applications. James has over 10 years' experience in business development and project management, drawing on core engineering skills and experience from a range of other industries.

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Adrian Woodroffe
Business Development Manager – Cellula Robotics
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Early results from an experimental fuel cell powered, long range, autonomous underwater vehicle with anchoring capability

Adrian Woodroffe, PEng, is the business development manager at Cellula Robotics. Adrian has 20 years of engineering & business experience from space missions to deep sea projects and off shore operations.

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Miquel Massot-Campos
Senior Research Assistant at University of Southampton
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Driftcam: A lagrangian float for scalable and low cost wide area seafloor imaging

Miguel Massot is a senior research assistant within Engineering and the Physical Sciences at the University of Southampton. His research focuses on underwater robotics, seafloor mapping and imaging techniques for a better understanding of our oceans. He is currently working on DriftCam project, designing Lagrangian floats to visualy explore the oceans without the need of a mothership whilst lengthening underwater ranges and decreasing mission accessibility costs. Before joining Southampton, he was doing his PhD at the University of the Balearic Islands on laser-based seafloor three-dimensional reconstructions.

Matt Bates
Director -Saab Seaeye
Matt.Bates@saabgroup.com

Developments of Resident and Hosted Underwater Vehicles

Matt joined Saab Seaeye in 1993 with an Honours Degree in Engineering Systems and eight years' previous experience in underwater engineering with GEC Underwater Weapons Division.

Since joining Saab Seaeye he has been involved in the introduction of pioneering technologies in underwater robotic systems that have helped expand their global potential across many sectors. His current responsibility is for sales and business development management across commercial markets worldwide.

In this role Matt determines likely future needs of customers, markets and applications and the system concepts needed to satisfy them.

Matt believes that the vast potential existing for everyone involved in robotics across the underwater industry is best served by creating future-adaptive technologies that keep solutions at the leading edge.

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MATS 2019

Professor Karen J. Heywood
Professor of Physical Oceanography - University of East Anglia
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Using one robot to deploy another robot: deploying an ocean glider in remote locations

Karen Heywood is a physical oceanographer at the University of East Anglia, Norwich. In 1995 she became the UK's first (and still the only?) female professor of physical oceanography. She leads research into marine physics, ocean circulation, and ocean processes that are important for understanding climate, marine ecosystems and biogeochemical cycling. She focuses on ocean observations, with a particular interest in Antarctic processes and the interactions between ocean and ice. She is an enthusiastic early adopter of new technologies. Since 2009 she has led UEA's ocean glider research group, owning and operating a fleet now exceeding 10 Seagliders. She recently took delivery of UEA's first wave-propelled surface vehicle, the AutoNaut Caravela.

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Iain Vincent
Business Development & Sales Manager
Planet Ocean Limited
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ecoSUB AUVs – multi-vehicle networks & smart navigation

Iain Vincent is a graduate in Marine Environmental Science from the University of Portsmouth, UK. In his current role with the marine science technology supplier Planet Ocean, he has the privilege of working with key marine science institutions across the UK, as well as international manufacturers of sensor technology, and benefits from many productive relationships with members of the science community. Iain has led programs to secure funding for the development of ecoSUB AUVs and has been involved in the concept design, stakeholder engagement, project overview and direction of the ecoSUB program. In 2016, Iain was appointed Director of ecoSUB Robotics Limited, the company formed to spin out the low cost AUV technology developed in collaboration between Planet Ocean and the National Oceanography Centre (NOC)