## **INMARTECH 2018**

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# Research Vessel Technicians Meet their Peers at Woods Hole Oceanographic



Research Vessel Marine Technicians from all over the world gathered in Woods Hole, MA, USA, on 16-18 October for their biannual Inmartech 2018 conference. Organised by the Woods Hole Oceanographic Institution (WHOI), the conference was the largest to date. David Fisichella, conference chair, said 'As research vessel technicians, we work with scientists from all over the world on our vessels, but we don't often get to collaborate with our peers from different countries. What makes Inmartech so special to me, is the ability to collaborate with people from around the world that I would not normally collaborate with.

A selection of the topics presented and discussed included: Latest developments in ultraclean water sampling by <u>NIOZ</u>, Initiative to enhance the international

exchange of marine technicians by the University of Alaska, Discussion on synthetic alternatives for CTD-wires by WHOI and the Development of a 100% hydrogen zero emission research vessel by Scripps. Participants also had the possibility to meet and mingle with a wide range of suppliers of marine research equipment, and to participate in skillset sessions on a range of topics including Wire terminations or Debubbler installation and more.

#### **Satellite Communication**

Fisichella continued 'Personally I have been partial to the satellite communication sessions, because that seems to be the bottleneck for a lot of what we are trying to accomplish. We get the most complaints from our shipboard users on the internet experience at sea and we are trying desperately to make that better. For future Inmartech's, I would like to see more training and exchange sessions for technicians. We have quite a number of sessions to share and explore ideas and technology, but I would like to see that expand.'

### A look in the WHOI mooring workshop. (picture Marck Smit)

Chris Roper of Saab Underwater said 'This is my first Inmartech and I am very pleased with the caliber of people at the conference. What I see as the next step in ROV and AUV operations is to have them submerged for longer periods. In other words: resident presence and a stronger telepresence control. This enables us to get more knowledge at a better cost by having smarter technology available, less ships at sea, and keeping instruments longer in the ocean. Miniaturisation of electronics and advancements in computer control have made it possible to bring these operations to the next level. Resident presence and remote control are becoming more and more possible in subsea operations - we are delivering this technology today.'

#### Virtual Reality Simulator

Harsen Kocan, design engineer, load handling systems for research vessels at Triplex-Macgregor, said 'In deploying CTD's, you see more and more automation of the process, resulting in having less *hands on*. Improvements are made in the stabilisation of the CTD-rosette during launch and recovery by making improvements in the docking head system. By using a constant tension feature on the winch, you

are just driving the crane itself, and the winch will follow, whatever you do, in whichever direction you go. That makes things easier, faster and safer for the operators. Other improvements are seen by using snatch blocks in cable routes, making it easier for operators to reroute cables without disconnecting the termination. Finally, the development of a Virtual Reality Simulator containing full detail 3D models of all the equipment and the vessel. This way, the crew can have training in operations and maintenance. They can actually go inside the hydraulic power unit, to see all the parts for example, or have a look into complex trolley systems.'

Inmartech 2018 participants. (picture by Caitlin Mandel-UNOLS)

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