

SAMAP

Submarine Air Monitoring Air Purification Conference

Resurgence in Submarine Shipbuilding

AGENDA



4th - 6th November 2019

Crowne Plaza Newcastle, Newcastle, UK

Sponsored by

ANALOX



Sunday 3rd November

Arrivals

13:00 – 17:00 Registration desk

Monday 4th November

07:30 – 08:30 Registration desk & refreshments

08:45 **Welcome address Cpt Martyn Boyes**, Royal Navy

09:00 – 10:00 **Keynote speaker – Tom Limero**
Subs in Space, Johnson Space Centre, Houston., USA.

10:00 – 10:30 **Atmosphere Monitoring – Assessing functional limits of detection**
Alan Chapman; Maritime Life Support, QinetiQ, Haslar Marine Technology Park, Gosport, Hampshire, PO12 2AG, UK.

10.30 – 11:00 **Refreshments**

11:00 – 12:00 **A brief history of submarine air quality**
W. Mazurek; Australia

12:00 – 12:30 **Contaminant Detection in the Submarine Environment**
M. Leist; Defence Science & Technology Group, 506 Lorimer St, Fishermans Bend, Victoria 3207, Australia

12.30 – 13:30 **Lunch**

13:30 – 14:00 **Novel Approaches for the Investigation of Submarine Air Quality**
A.V. Qualley, B Vaught, L Beardslee, D.M. Fothergill and H.M. Rubenstein; UES, Inc., Air Force Research Laboratory, 711th Human Performance Wing/RHMO, 2510 Fifth Street, Area B, Building 840, Wright-Patterson AFB, OH 45433, USA; United States Navy Naval Submarine Medical Research Laboratory, Naval Submarine Base, Bldg. 141, Trout Ave, Groton, CT 06349, USA; United States Air Force 711th Wing – Air Force Research Laboratory, 711th Human Performance Wing/RHMO, 2510 Fifth Street, Area B, Building 840, Wright-Patterson AFB, OH 45433, USA

14:00 – 14:30 **Acute Exposure to Diesel Exhaust Emissions: Irritants**
W. Mazurek; Australia

- 14:30 – 15:00 **Refreshments**
- 15:00 – 15:30 **Carbon Monoxide Release From Whole Bean Roasted Coffee in Storage**
Alan McCarrick and Benjamin Letter, Shannon O’Dwyer, Matthew Knighton, Sara Jane Neal
- 17:00 – 20:00 **Evening reception – Boat ride along the River Tyne**
(17:30 board time – 18:00 sail time)

Tuesday 5th November

- 09:30 – 10:00 **An Evaluation of Monoethanolamine (MEA) Degradation and Mitigation under the Conditions used in Submarine Carbon Dioxide Removal Plants**
Charles Cummings, Timothy Taylor. QinetiQ, Haslar Marine Technology Park, Gosport, Hampshire, PO12 2AG, UK
- 10:00 – 10:30 **Volatile Organic Compound Interaction with High and Low Temperature Carbon Monoxide/Hydrogen Oxidation Catalysts**
Gareth Toft, Charles Cummings and Tina Goodall; QinetiQ, Haslar Marine Technology Park, Gosport, Hampshire, PO12 2AG, UK and Ministry of Defence (MOD), Abbey Wood, UK
- 10:30 – 11:00 **Refreshments**
- 11:00 – 11:30 **Design Improvements to the MPOG Oxygen Generator**
Peter Hutchinson, Molecular Products, Parkway, Harlow, Essex, UK
- 11:30 – 12:00 **Monitoring the CO₂ Levels within a CO₂ Scrubber to give an Indication as to when to Change the Scrubber**
M.Richardson, Analox Sensor Technology, 15 Ellerbeck Court, Stokesley Business Park, Stokesley, North Yorkshire, UK, TS9 5PT
- 12:00 – 12:30 **Test Results of two New Non-Regenerative Carbon Dioxide Scrubbers**
Peter Row and Thomas Daley; TPG Maritime Ltd., UK; and Micropore Inc., USA
- 12:30 – 13:30 **Lunch**
- 13:45 **Buses depart for trip to HMS Trincomalee**
- 16:00 **Return to host hotel, evening on own**

Wednesday 6th November

- 09:30 – 10:30 **Open forum discussion on the future of submarines**
Facilitated by W. Mazurek and V. Pigg
- 10:30 – 11:00 **Refreshments**
- 11:00 – 12:00 **Open forum discussion**
Facilitated by W. Mazurek and V. Pigg
- 12:00 – 12:30 **A History of CO₂ Scrubbing onboard Walrus Class Submarines**
Toon Mariën, Ministry of Defence, NL
- 12:30 – 13:30 **Lunch**
- 13:30 – 14:00 **Why use a DSVDS for Submarine Rescue?**
Jos Bogaert; SMERAS Consultant. Den Helder, The Netherlands
- 14:00 – 14:30 **Closing speeches**
Cdr Gill & W. Mazurek