

**IEEE OCEANIC ENGINEERING SOCIETY
DISTINGUISHED LECTURE**

By

Dr John R Potter

Professor, Norwegian University of Science &
Technology



**Listening at the speed of light: what
could Distributed Acoustic Sensing do
for you?**

Abstract: The idea of sensing acoustic field by measuring the strain they induce on Fibre Optic (FO) cables has been an exciting dream for two decades. Known as Distributed Acoustic Sensing (DAS), interrogator technology has now matured to the point where we are able to use it for a broad range of practical applications, measuring earthquakes, city parades, battlefield activity, avalanches, road and rail traffic, whales, ships and distant storms 10,000km away. The range of potential applications is staggering and we have only just started to exploit the >1 million km of FO cables that are already laid on the ocean floor and across continents. This talk will touch on some of these, supported by recent data collected by the Centre for Geophysical Forecasting and its Partners

About the Speaker

Dr. John R. Potter earned a Joint Honours Maths and Physics BSc. from Bristol and a PhD. in Glaciology and Oceanography from Cambridge studying the Antarctic ice mass balance, where he spent four consecutive summers. He was awarded the Polar Medal for this work by Queen Elizabeth II in 1988. Dr. Potter worked in Italy on propagation fluctuations in underwater acoustics from 1986-1991, found and married his lifetime soulmate then sailed across the Atlantic and through the Panama Canal with her to San Diego where he worked at Scripps Institution of Oceanography on Ambient Noise Imaging and marine mammal acoustics. In 1995 Dr. Potter sailed (with his growing family) on to Singapore where he founded the Acoustic Research Laboratory (ARL) and co-founded the Tropical Marine Science Institute (TMSI). John headed the ARL and was an Associate Director of the TMSI for 12 years, working on passive acoustic imaging, marine mammal acoustics, autonomous sensing, underwater communications networking and co-operative behaviour. In 2004 he took a year's 'seabatical' with his family to circumnavigate the Indian Ocean by sailboat on a sponsored voyage of research, public outreach, and education. In 2007 he returned to Italy, first as a consultant and then as project leader at the CMRE on communication networking. He then served as the Principle Strategic Development Officer at CMRE, before leaving in 2018 to work on his boat, following which he took up a Professorship at NTNU in Trondheim, Norway.

Dr. Potter is a Fellow of the IEEE and MTS, IEEE OES Distinguished Lecturer, Associate Editor for the IEEE JOE, PADI Master Scuba Diver Trainer and an International Fellow of the Explorer's Club, among other things. It is no longer true that he neither owns nor operates a television.

How to Attend

In Person

S2S Conference Room, Tropical Marine
Science Institute, National University of
Singapore, Singapore-119227

Virtual Link

[https://nus-sg.zoom.us/j/85247188672?
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Time: 10 AM



**IEEE Oceanic Engineering Society,
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