## Honouring Ocean Science Pioneer Walter Munk



Organisers of the first Oceanology International North America (OINA) exhibition and conference, taking place from 14-16 February 2017 in San Diego, USA, have announced that ocean science pioneer and 'living legend' Walter H. Munk will feature in a special edition of the Catch the Next Wave (CTNW) conference which will be integral to next year's three-day programme. During the year of his 100th birthday, oceanographer Walter Munk, of Scripps Institution of Oceanography, will be honoured for his outstanding contribution to ocean science and technology.

Reed Exhibitions has confirmed a distinguished speaker line-up in which Scripps Oceanographer Munk will present on 'Acoustic Monitoring of Climate Change' within the Sensing with Sound session. Providing a fitting conclusion to CTNW and the OINA

conference schedule, the proceedings will culminate with a closing keynote address celebrating Munk's achievements by John Orcutt, Distinguished Professor of Geophysics for the Institute of Geophysics and Planetary Physics, Scripps Institution of Oceanography.

## **Physical Oceanography and Geophysics**

Munk is a professor emeritus of geophysics in the Cecil H. and Ida M. Green Institute of Geophysics and Planetary Physics at Scripps Institution of Oceanography at UC San Diego. His research includes physical oceanography and geophysics leading to the understanding of ocean currents and circulation, tides, wave propagation in solid and fluid bodies, and the rotation of the Earth. He pioneered the use of high-speed computers for analysing geophysical data.

Historically a standalone event, the fourth edition of the one-day conference has been incorporated into the OINA agenda as an addition to the final day of a debut programme set to attract leading experts and professionals from the ocean science and marine technology communities.

Entitled 'Celebrating the Past to Awaken the Future', to quote John F Kennedy, CTNW 2017 is designed for industry professionals and researchers with an interest in key disruptive technologies. The conference's aim is to explore some examples of the trajectory of technological innovation outside of the ocean community with the objective of sparking new ideas across disciplines and sectors.

## **Building on Topics**

It will continue the theme of past years by taking a longer term view of the capabilities that will shape our future ability to explore, understand, develop and protect the oceans, while also building on topics discussed during the main OINA conference.

The focus will be on the direction of aspects of ocean science that Munk has worked on in his long career, and how diverse technological innovations, including emerging robotic technologies and the latest developments in machine learning and autonomy, might contribute to progress.

The conference will commence with keynote addresses from Don Walsh, honorary president of the Explorers Club, and Bill Stone, CEO of Stone Aerospace, who will provide perspectives on the exploration of the oceans of the Earth and the technologies that will make possible the exploration of the oceans of other worlds.

## **Unmanned Vehicles and Vessels**

Further highlights include talks on: 'The Future Large Scale Use of Autonomous Vessels', by Jay McFadyen, senior vice president Ship Intelligence, Rolls Royce; 'Evolving Use of Machine Learning Technology in Ocean Applications', by Jules Jaffe, research oceanographer for the Marine Physical Laboratory, Scripps Institution of Oceanography; 'Future of Unmanned Aerial Vehicles for Atmospheric Studies', by Veerabhadran Ramanathan, director of the Center for Atmospheric Sciences, Scripps Institution of Oceanography.

There will also be award presentations including the OINA Lifetime Achievement Award, Vincent Cardone Memorial Prize and SUT Oceanography Prize.

The OINA conference programme will consist of three main parts; keynote end-user focused panel discussions, technical tracks and a full day dedicated to the CTNW conference, all aiming to provide a clear understanding of the present and future requirements and opportunities of the Blue Economy.

