

The Worshipful Company of Water Conservators

2022 WET10 Webinar:

"Managing Our Oceans - The Climate Change Challenge"

**Date: The Eve of World Water Day on Monday
21st March 2022 starting at 6pm**

Presentations & Speakers:

Harnessing The Oceans' Energy – Professor Deborah Greaves
OBE FREng, FICE, FRINA, Head of School of Engineering,
Computing and Maths, University of Plymouth

Managing The Impact of Climate Change On Our Coastline –
Professor Gerd Masselink, Professor of Coastal Geomorphology,
Associate Head of School of Biological and Marine Sciences
(Research) at the University of Plymouth, Co-Director of Coastal
Marine Applied Consultancy

Programme 6:00 - 7:45 pm:

Introduction

Presentation by Professor Deborah Greaves

Presentation by Professor Gerd Masselink

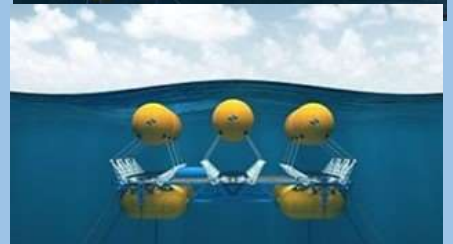
Question and answer session

Summary and close

[Booking your attendance](#)

To attend this webinar you will first need to register via the link below to Eventbrite. Attendance is free, there is no charge to attend. You will then receive a return email from Eventbrite with the details to join the webinar via zoom. You need to keep those details to join the webinar. Any problems contact rob.casey1@hotmail.com at least 24 hours before the start of the webinar.

Eventbrite link – <https://www.eventbrite.co.uk/e/262142283627>



Harnessing The Oceans' Energy – Professor Deborah Greaves

Offshore renewable energy (ORE) has long been recognised as having huge potential. The UK has the second-highest tidal range in the world and there are estimates that around 50% of Europe's tidal energy resource and 35% of European wave resource lies in UK waters. The UK's offshore wind infrastructure, meanwhile, contributed 9.8% of the UK's power in the third quarter of 2019 and the offshore wind capacity is set to quadruple in the next ten years. Professor Deborah Greaves will outline the key areas of research in developing our offshore renewable energy.

Deborah Greaves is a Professor of Ocean Engineering at the University of Plymouth, and one of the UK's leading offshore renewable energy researchers.

In a career spanning more than two decades, she has consistently pioneered the development of new technologies in offshore wind, wave and tidal power. This has included novel types of wave energy converter, analysis methods for offshore renewable energy farms and extreme wave-structure interactions.

In addition to her research, Professor Greaves has led high-profile national and international initiatives designed to ensure such technological advances can be applied in real-world scenarios to help meet the country's future clean energy demands.

She was selected by the Engineering and Physical Sciences Research Council to head its £9million Supergen ORE Hub, has provided expert advice to organisations across industry and society, and is a strong advocate for women in STEM subjects.

Professor Greaves was made an OBE in the 2018 Queen's Birthday Honours List for services to Marine Renewable Energy, Equalities and Higher Education.

In 2020, she was elected to the Fellowship of the Royal Academy of Engineering, and listed by the Women's Engineering Society (WES) among its Top 50 Women in Engineering: Sustainability.



Managing The Impact of Climate Change On Our Coastline – Professor Gerd Masselink

Prof Gerd Masselink is a world leading coastal scientist with a specific interest in the impact of coastal hazards, such as storms and sea-level rise, on coastal environments. For the past decade, his research has focussed on measuring and modelling the impacts of extreme storms and sea-level rise, with a specific emphasis on the southwest coast England, the Atlantic coast of Europe and Maldivian atoll islands. He has subsequently used the enhanced understanding of coastal impacts to develop methods and tools to predict future coastlines to help with identifying suitable climate change adaptation strategies. His talk will focus on the potential impact of climate change on our coastal environment and communities.

Prof Gerd Masselink is a Professor in Coastal Geomorphology at the University of Plymouth with over 150 refereed journal publications and over 25 years' experience in collecting and analysing coastal and nearshore morphodynamic data.

Gerd did his MSc degree in Physical Geography at Utrecht University (the Netherlands) from 1984 to 1990, and completed his PhD in Marine Science at Sydney University (Australia) in 1994. After a 4-year postdoc at the University of Western Australia, he started as a Lecturer at Loughborough University (UK) in 1998.

Since 2005, he has been working at Plymouth University, first in the School of Geography, then in the School of Marine Science and Engineering, and currently in the School of Biological and Marine Sciences.

Gerd has been (or is) a PI/CI on 15 UK research council funded projects and several EU-funded projects, all involving shoreline dynamics and nearshore sediment transport processes, and has been (or is) involved with supervision of PhD students.

