

# Challenger Wave



Monthly newsletter of the Challenger Society for Marine Science (CSMS)

## NEWS

### Highlights of the EGU General Assembly

In April, the EGU hosted a record-breaking number of participants at their annual General Assembly in Vienna. The meeting included over 16,000 poster, oral and PICO presentations in over 650 sessions, as well as a number of popular short courses and side events. The EGU are grateful to all participants, including conveners, the EGU Programme Committee, Copernicus Meetings, conference assistants, exhibitors, and ACV and EGU office staff, for making the meeting a success. If you participated in the meeting, the EGU especially welcome your suggestions and feedback (deadline: 9 June, [survey.zohopublic.eu/zs/crBBDD](https://survey.zohopublic.eu/zs/crBBDD)), which will be instrumental in ensuring an even more successful General Assembly next year (3rd to 8th of May 2020, Vienna).

Of special highlight at the meeting was a session on 'Science, Politics and European (dis)integration: A Conversation of Geoscientists with Ilaria Capua and Mario Monti', which motivated the EGU to issue a declaration supporting a united Europe for the benefit of global scientific research: [www.egu.eu/news/484/](http://www.egu.eu/news/484/).

In other news, the EGU launched a new journal, *Geochronology*, [www.egu.eu/news/472/](http://www.egu.eu/news/472/), as well as a science-policy competition for early career scientists (deadline: 15 May, [www.egu.eu/news/481/](http://www.egu.eu/news/481/)).

Finally, the EGU are currently accepting nominations for the 2020 EGU awards and medals, [www.egu.eu/news/473/](http://www.egu.eu/news/473/), including both the new Angela Croome Award and Katia and Maurice Krafft Award. To promote the best deserving geoscientists from around the world and increase diversity in the group of EGU

awardees and medallists, we encourage the EGU membership to consider gender, geographical, and cultural balance when nominating outstanding Earth, planetary and space scientists at various career stages. Please consider submitting a nomination by 15 June.

### EcoSummit call for symposia and side event proposals

EcoSummit 2020, see Calendar, is marking a milestone in sustainability. Many agendas, reforms, bills and actions were focused on this date. Have the sustainability milestones been achieved? What will the future hold for sustainability? EcoSummit 2020 aims to find solutions for pressing problems through the creative and outstanding input of its participants.

EcoSummit 2020 will be structured around symposia, sessions, workshops and forums to unite attendees in presenting, assessing and developing research and strategies dealing with pressing problems. From these events we would like to establish deliverables in the form of session reports and new ideas for policy makers and stakeholders. The EcoSummit 2020 Scientific Committee invites submissions of symposium proposals and side events: Following the conference theme BUILDING A SUSTAINABLE AND DESIRABLE FUTURE, the Scientific Committee is developing a program that will highlight the advances and research made to address the current environmental problems facing our changing world. A focus will be on the sustainable solutions to the most pressing problems of our time.

Sessions and side events will be considered that address one or more of the conference topics: <http://www.ecosummitcongress.com/>.

Who may submit a symposium or side event proposal? All who share an interest in ecological science, applications, or practice are invited to

submit symposium or side event proposals. We encourage proposals from scientists at all levels, university students, NGOs, and environmental practitioners.

Symposia proposals will be reviewed and evaluated by members of the Scientific Committee with primary consideration given to their scientific quality and relevance to the Congress themes. Proposals will be evaluated as they are received, so we strongly encourage submissions well in advance of the **28th June 2019** deadline. Acceptance decisions will be made no later than Friday 26 July 2019. An open Call for Abstracts will be issued in August 2019, with online abstract submission until 15 November 2019 and acceptance decisions until 24 February 2020. Visit the EcoSummit 2020 website: [ecosummitcongress.com](http://ecosummitcongress.com).

We welcome your participation and look forward to receiving your proposals. EcoSummit 2020 Co-Chairs:

Jan-Olaf Meynecke, *Griffith University, Australia*  
Robert Costanza, *Crawford School of Public Policy at Australian National University, Australia*  
B. Larry Li, *University of California, Riverside, USA*

## VIEWS

### Navigation system selected for new under-ice AUV

The UK's centre of excellence for oceanographic sciences, the National Oceanography Centre (NOC), has selected high-performance hybrid navigation technology from Sonardyne International Ltd. for the next generation of its Autosub autonomous underwater vehicle (AUV), targeted for under-ice operations.

The NOC, based in Southampton, will incorporate Sonardyne's highest performing SPRINT-Nav inertial navigation system (INS) into the new 2,000 metre depth-rated Autosub, which is being specifically developed for carrying high-performance sensors on the most demanding research missions under polar ice, hence its name Autosub2KUI, or A2KUI.

SPRINT-Nav combines Sonardyne's SPRINT INS sensor, Syrinx 600 kHz DVL and a high accuracy

intelligent pressure sensor into a single housing, making it one of the smallest combined inertial navigation instruments on the market. The SPRINT-Nav 700, selected by the NOC, is equipped with the highest performance sensors available, including Honeywell ring laser gyros and accelerometers, and has a conservative quoted accuracy of 0.04% 2dRMS (0.017% CEP50).

Geraint West, Global Business Manager Oceanographic, Sonardyne, said, "NOC selected SPRINT-Nav 700 to meet its requirements for an advanced dead-reckoning system in a single unit as the backbone of the A2KUI's navigation system. The capability to plug in other navigation sensors to aid the AUV's position was also critical and a second upward-looking Syrinx DVL is being incorporated to provide tracking on the underside of the ice. A2KUI will also be equipped for acoustic tracking using Sonardyne's Ranger 2 Ultra-Short BaseLine (USBL) system, which is fitted to the UK research vessels RRS *James Cook*, RRS *Discovery* and the new polar research vessel RRS *Sir David Attenborough*."



(L-R) Matt Kingsland, NOC and Paul Griffiths, Sonardyne, with the SPRINT-Nav 700 at the NOC robotics lab during Ocean Business

Dr Alex Phillips, Head of Marine Autonomous Systems Development, at the NOC, said, "The development of Autosub2KUI by the NOC builds on the successes of previous generations of Autosub, including Autosub3, which has previously penetrated up to 60km under the ice

from the ice-edge. Autosub2KUI will provide the UK science community with a next generation AUV, equipped with state-of-the-art sonars and camera systems to enable scientists to create detailed maps and establish habitat characteristics of the seafloor under the ice-covered polar regions. The missions planned for A2KUI are among the most demanding for any AUV in existence and Sonardyne's SPRINT-Nav will be fundamental to the AUV's ability to access the hostile under-ice environment in the polar regions. Gaining insights into these regions is critical to answering some of the biggest environmental scientific questions facing mankind, including climate change."

Geraint West added, "Sonardyne is extremely pleased to continue to support the internationally important mission of the NOC. The selection of SPRINT-Nav for A2KUI is the first time that we've provided an INS system to the Autosub programme and underlines its current position in the hybrid underwater navigation systems available."

## SALTS

### No news from sea this month I'm afraid

I know that this is a favourite section for many readers, where we get the inside information about life at sea, its thrills and spills. So please the next time you are at sea or carrying out any fieldwork, please remember that a simple paragraph or two will get you published here. – Ed

## CALENDAR

**10th – 11th May 2019: Arctic Circle Forum - China and the Arctic: Polar Silk Roads - Oceans - Transport - Energy - Science - Indigenous Dialogue - Governance**  
Shanghai, China

The Final Program of the 2019 Arctic Circle China Forum, is now available. The Program lists over 150 speakers from Asia, Europe and North America in 25 sessions on topics including the Polar Silk Road, science and innovation, oceans, transport, energy, and governance.

[www.challenger-society.org](http://www.challenger-society.org)



Hosted by the Ministry of Natural Resources of the People's Republic of China, the Forum will be organized in cooperation with the Polar Research Institute of China (PRIC), Shanghai Institutes for International Studies (SIIS) and the Shanghai Science & Technology Museum. The Forum is supported by the Ministry of Foreign Affairs of the People's Republic of China.

Participants will have the opportunity to visit the Polar Research Institute of China and Shanghai International Shipping Centre at Yangshan Deepwater Port.

The Arctic Circle provides an open, democratic forum for discussion and cooperation on Arctic Affairs, [china@arcticcircle.org](mailto:china@arcticcircle.org).

### 11th May 2019: Tides and the port of Liverpool Liverpool, UK

The Merseyside Maritime Museum is hosting a one day meeting on Tides and the port of Liverpool. This meeting marks the 100<sup>th</sup> anniversary of the world-famous Liverpool Tidal Institute. Founded at Liverpool University in 1919, before moving to Bidston Observatory on the Wirral, this was the precursor of the Proudman Oceanographic Laboratory and the National Oceanography Centre. It also marks the start of teaching and research in Oceanography at Liverpool University, the first oceanography department in the UK.

This meeting is organised by the National Oceanography Centre and the University of Liverpool, in association with the Centre for Port and Maritime History (University of Liverpool, Liverpool John Moores University and Merseyside Maritime Museum) and the Liverpool Institute for Sustainable Coasts and Oceans (National Oceanography Centre, University of Liverpool and Liverpool John Moores University).

The meeting will run from 10 am to 2 pm with free registration and free refreshments. For a list of speakers and to sign up, please go to: <https://conference.noc.ac.uk/ocean-tide-and-port-liverpool> and download a ticket. The National



Oceanography Centre building in Liverpool will also be open that day for you to see the machines which made tidal predictions before the days of digital computers; see the above web site for information on that also. Please sign up yourself and spread the word to your friends, schools etc.

### 17th May 2019: Structures in the Marine Environment Conference (SIME2019)

Glasgow, Scotland, UK

Registration is still open for the first "Structures in the Marine Environment" conference, and I very much hope you will be able to join us - [www.eventsforce.net/standrews/80/home](http://www.eventsforce.net/standrews/80/home)

If you have colleagues who missed the abstract deadline, I can still accept a few more posters, so please ask interested parties to get in touch. Please also let them know that a future funding call is to be described at SIME2019, so another great reason to join us at the conference.

The inaugural and successful INSITE Programme has led to a number of important studies concerning the ecology, connectivity and dynamics of man-made structures within the marine ecosystem (such as oil & gas platforms and pipelines). The programme has also identified that there are significant knowledge gaps for any new infrastructures that may be put in place over the coming decades (e.g. renewable energy structures), a robust evidence base is needed to support appropriate environmental management and policy/regulatory decision-making.

### 20th May 2019: Institute of Aquaculture Students' Association Careers Fair for Postgraduate Students

Stirling, UK

We would like to draw your attention to the event Aquaculture Careers 2019 organized by the Aquaculture Students' Association (ASA) at the Institute of Aquaculture, University of Stirling. This year the event is taking place a month later than usual, and will run from 09:15 – 16:00.

In the past the event has hosted some stands free-of-charge. However this year the students have decided to apply a nominal charge of £50 for a stand. This charge will contribute toward the sole significant overhead of the event, which is catering. Would this be of interest to any of your companies? In the last two years the event attracted 150 – 200 students of MSc/PhD level

with a keen interest in Aquaculture. If this would be of interest, please could you contact Carolina Fernandez [carolina.fernandez@stir.ac.uk](mailto:carolina.fernandez@stir.ac.uk) who is President of the ASA.

### 20th – 24th May 2019: 8th EGO Meeting and International Glider Workshop

Rutgers University, New Jersey, USA



Save the days, express your interest at [docs.google.com/forms/d/e/1FAIpQLSeEksxZdaYLtQc0Em9NMCsUaBWY6NEfZkY2ISu55i9CkkacuA/viewform](https://docs.google.com/forms/d/e/1FAIpQLSeEksxZdaYLtQc0Em9NMCsUaBWY6NEfZkY2ISu55i9CkkacuA/viewform).

### 13th - 14th June 2019: BLUEMED Mediterranean Research Infrastructures Stakeholders Conference

Paris, France

Participants will split into different small working groups to focus on key challenges that need to be solved in the Mediterranean Sea through development and synergies of research & innovation infrastructures. An efficient and coordinated use of RIs will enable to address these challenges, while at the same time, it will contribute to the implementation of BLUEMED SRIA priorities.

These discussions will be conducted in two phases:

- *First session:* brainstorming on the challenge raised within the working group. Participants think about projects they wish to put in place both to tackle key research infrastructures gaps/needs and Mediterranean Sea's challenges. These first proposals will aim at enhancing cooperation between countries and between different Mediterranean communities.

- *Second session:* proposal of common and concrete follow-up actions that would enable to face Mediterranean Sea's challenges in link with the implementation of BLUEMED SRIA key priorities.



- SAVE THE DATE! -

**blueMed**

**Mediterranean Research Infrastructures Stakeholders Conference**

**13th and 14th June 2019**

**PARIS**

TOTEM / Complex Systems Institute of Paris (ISC-PIF)  
11 Place Nationale  
75013 Paris

Research infrastructures in the Mediterranean are key to implement at best BLUEMED Strategic Research and Innovation Agenda priorities. This two-day event will be the opportunity for BLUEMED community, Mediterranean research infrastructures experts and key stakeholders involved in blue economy to elaborate recommendations to encourage policy-makers to further strengthen marine and research innovation and cooperation in the basin.

**REGISTRATION**

Supported by BLUEMED Coordination and Support Action (GA 727453) funded by the European Commission – DG Research and Innovation.

Each working group will designate a rapporteur who will present actions proposals and recommendations to policy makers and governments' representatives during the final plenary. These concrete proposals will also feed the BLUEMED RI Roadmap and contribute to the implementation of BLUEMED Strategic Research and Innovation Agenda.

## 17th – 21st June 2019: IMBER 2nd Open Science Conference

Brest, France

The 2nd IMBeR Open Science Conference.  
<http://www.imber.info/en/events/osc--imber-open-science-conference/osc-2019/2019-imber-open-science-conference>



Open Science Conference

**IMBeR**

**FUTURE OCEANS<sub>2</sub>**

Ocean sustainability for the benefit of society:  
Understanding, challenges and solutions

**Brest, France 17-21 June 2019**

@FutureOceans2

## 8th – 18th July 2019: 27th IUGG General Assembly

Montreal, Canada

Details of the P02 symposium, Physics and Biogeochemistry of Semi-Enclosed, Shelf Seas, and Coastal Zones can be found below and at this link <http://iugg2019montreal.com/p.html>.

This interdisciplinary symposium provides a joint forum for oceanographers whose research focuses on physical, chemical, and biological processes in coastal zones, semi-enclosed and shelf seas of the World, as well as their responses to climate change and anthropogenic impacts. These areas are often characterized by complex interactions between land, ocean, and atmosphere, they exhibit rich dynamics driven by a variety of feedbacks and forcing mechanisms. Marginal seas and coastal areas are particularly



vulnerable to climate change effects and anthropogenic stressors. Given their limited geographical extension and their sometimes constricted connection to the open ocean, these environments often exhibit shorter timescales in their responses to external forcing: this is why they are widely recognized as natural "laboratories" for studying oceanic processes and interactions between the physical, biogeochemical and climatic spheres. They also play an exceptionally important role in ecosystem services and socio-economic issues and require careful governance measures to avoid or mitigate environmental deterioration.

Gathering experts from different regions, the symposium will give a global perspective of the topic through comparison and elucidation of similarities and differences. Contributions on different regions are invited, related to themes such as innovative observational, theoretical, experimental and modeling studies of the hydrodynamics, marine biogeochemistry (e.g., nutrient dynamics, primary production, acidification, algae blooms) and the influence these regional seas and coastal zones exert on the adjacent basins/oceans and on the global scale. Studies of past, present and future climate variability are welcome, as well as interdisciplinary studies on the bio-physical interactions in semi-enclosed and shelf seas.

The convenor and co-convenors of this session are: Peter Zavialov (Russia), Jianping Gan (China), Osmar Moller Jr (Brazil), Katrin Schroeder (Italy).

#### 17th – 19th September 2019: IOCCP meeting, OceanObs '19

Honolulu, Hawaii, USA

For more details of the IOCCP OceanObs'19 meeting, please go to <http://www.oceanobs19.net/breakout-sessions/>.

#### 1st – 5th October 2019: Ecological Modelling Global Conference

Salzburg, Austria



This global conference, to be held at the Salzburg Congress Centre, is the 22nd biennial conference of The International Society for Ecological

Modelling (ISEM) and will bring together scientists from all professions and applications that deal with the use of ecological models and systems ecology. The Conference Chairs are:

*Gudrun Wallentin*, Department of Geoinformatics, University of Salzburg

*Tarzan Legović*, Ruđer Bošković Institute

*Brian Fath*, Department of Biological Sciences, Towson University

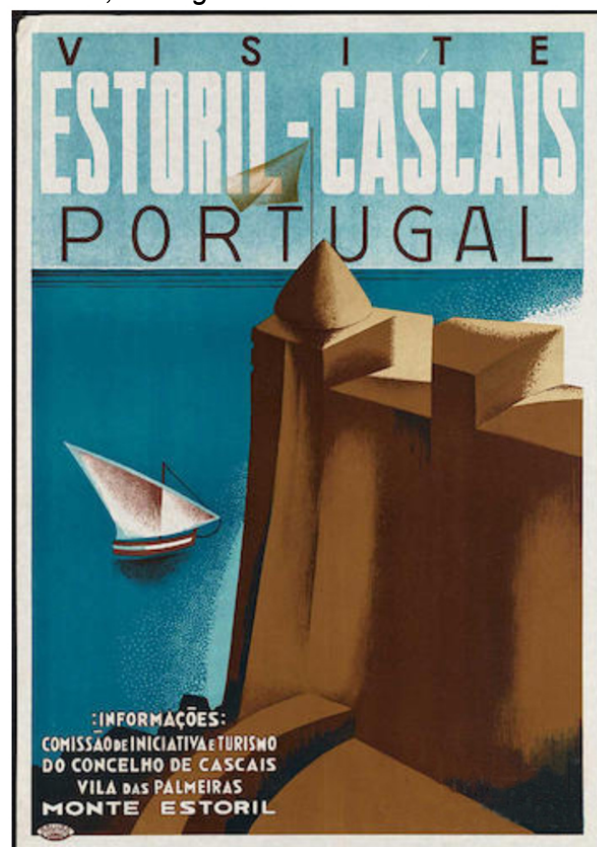
#### 2nd - 4th October 2019: MASTS ninth Annual Science Meeting (ASM)

Glasgow, Scotland, UK

The 9th ASM, will take place at the Technology and Innovation Centre, find out what you missed at the 2018 ASM by reading the "MASTS ASM Reflections" (<https://www.masts.ac.uk/media/36739/masts-asm-news-final-2.pdf>), or why not check out the video-casts here <https://www.masts.ac.uk/annual-science-meeting/2018-vidcasts/>. More details will follow about this event over the next month or so, but please get in touch before then if you would like to be involved.

#### 7th – 11th October 2019: 42nd CIESM Congress

Cascais, Portugal



We hope to see as many of you as possible next October in Cascais, where our Congress will zoom in on the Atlantic/ Mediterranean interface. Some 1000 scientists will be there to share and debate their findings and their views on marine issues.

Do not wait much longer: Cascais is a picturesque town, highly popular with tourists and so hotels and pensions in the vicinity will fill up quickly. Have a close look at the Congress web-page, [www.ciesm.org/](http://www.ciesm.org/). - **Cordially, The CIESM Congress Team**

### **10th – 13th October 2019: Seventh Arctic Circle Assembly** *Reykjavik, Iceland*

Following consultations with Arctic Circle partners and participants, it has been decided to open the Arctic Circle Assemblies ONE day earlier, on Thursdays. Plenary Sessions will end on Saturdays and the party for all participants will take place on the Saturday evening. On Sunday, thematic Excursions and Tours devoted to areas of interest to Arctic Circle participants will be offered.

Breakout Sessions will begin on Thursday morning and the Opening Session will be held after lunch on that day. In addition opportunities will be created for those who so desire to hold Breakout Sessions, working or networking meetings on Sunday morning. Pre-Events will consequently be on Wednesdays. Proposals are now being accepted for Breakout Sessions with a submission deadline of the 10th May 2019.



Participation will be granted based on session topic, area of focus, goals, and room availability at the Harpa Reykjavik Concert Hall and Conference Center. When proposals are submitted, 50% of speakers need to be confirmed. Programs from previous Assemblies, which list all past Breakout Sessions, may be found at [www.arcticcircle.org](http://www.arcticcircle.org). The Arctic Circle

provides an open, democratic forum for discussion and cooperation on Arctic Affairs.

### **21st - 25th June 2020: 6th International EcoSummit Congress, EcoSummit 2020 - Building a sustainable and desirable future: Adapting to a changing land and sea-scape, Gold Coast, Australia**

This conference series was founded in 1996 in Copenhagen, as a forum for scientists, practitioners, and policy-makers working across disciplines to solve the integrated environmental, social, and economic problems facing the world today. Since 1996, EcoSummits have occurred around the world (Canada, China, USA and Europe), with EcoSummit 2016 hosting 1400 participants from 87 countries in Montpellier, France.

EcoSummit 2020 will have a focus on coastal and marine ecosystems including adjacent terrestrial ecosystems and all habitats that are integrated within those ecosystems, including river networks, wetlands and catchments. We expect all aspects of environmental modelling, engineering, science, and policy to be covered under the focus of climate adaptation and the need for developing socio- economic and environmental resilience and sustainable prosperity around the world. Further focus will be placed on fragile systems that are more likely to suffer the consequences of climate change and anthropogenic pressure such as islands, coastal communities and arid landscapes.

In the current context of an increasing world population, in particular in coastal regions, it is evident that building sustainable cities and using resources sustainably is inevitable. It is envisaged that the Summit will produce a declaration encompassing its vision and policy recommendations. We welcome your participation and look forward to seeing you at EcoSummit 2020

#### **EcoSummit 2020 Co-Chairs:**

*Robert Costanza*, Crawford School of Public Policy at Australian National University, Australia.  
*Bai-Lian (Larry) Li*, University of California, Riverside, USA.  
*Jan-Olaf Meynecke*, Griffith University, Australia

Visit the EcoSummit 2020 website: [ecosummitcongress.com](http://ecosummitcongress.com)

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The CSMS email address is [info@challenger-society.org.uk](mailto:info@challenger-society.org.uk). Contributions for next month's edition of Challenger Wave should be sent to: [john@vectisenvironmental.com](mailto:john@vectisenvironmental.com) by the 31st May.

*We continue to send printed copies of Challenger Wave to members of the CSMS without email addresses. However it is in everybody's interest to send your email address to Jennifer Jones, [jxj@noc.ac.uk](mailto:jxj@noc.ac.uk), as soon as possible*

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**JOBS****Senior Research Associate (RA1616), University of East Anglia, UK****£33,199 per annum**

Applications are invited for the post of Senior Research Associate (SRA) to undertake research in oceanography in the Indian Ocean. The SRA will work with Professor Adrian Matthews, Dr Rob Hall and Professor Karen Heywood on the NERC-funded TerraMaris project.

TerraMaris is the UK contribution to the International Years of the Maritime Continent (YMC) programme. Its aim is to improve understanding of oceanographic and atmospheric processes that affect weather and climate over the Maritime Continent (Indonesia and neighbouring countries and seas) in order to improve weather forecast and climate models in this region. The first phase of TerraMaris is an observational field campaign on and around the island of Java from November 2019 to February 2020. This will involve oceanographic observations using ocean gliders and a surface autonomous vehicle (SAV), land-based measurements (including meteorological radar and radiosonde balloon ascents) on Java and Christmas Island in the Indian Ocean, and the deployment of the UK research aircraft to Java. The second phase of TerraMaris will involve the production and analysis of a hierarchy of coupled ocean-atmosphere model simulations.

The post holder will contribute to the project by assisting in deploying, operating and piloting the ocean gliders and subsequent analysis of the glider and SAV data; assisting in radiosonde observations on Christmas Island; gathering and analysis of supplementary oceanographic observational data sets; and evaluation of the oceanographic observations against the hierarchy of coupled model simulations that will be produced in TerraMaris, to understand the role of ocean-atmosphere processes on weather and climate.

The research will be based within the Centre for Ocean and Atmospheric Sciences (COAS) at University of East Anglia. The project is joint with University of Leeds, University of Reading, the Met Office, and partners in Indonesia.

Essential requirements for the post include a PhD or equivalent in physical oceanography, meteorology or climate science, and a publication record showing evidence of international quality. You should have excellent oral and written communication skills, with experience of presenting results at conferences. You should be able to meet the essential criteria set out in the Person Specification.

The full time post is for a fixed term of 41 months or until 31 March 2023, whichever is sooner and commences 1 September 2019, or as soon as possible thereafter.

**Closing date: 28 May 2019**

<https://www.jobs.ac.uk/job/BRV935/senior-research-associate>

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**Assistant Professor, Renewable Energy Technology  
Heriot-Watt University**

**Location:** - Orkney

**Salary range:** £32,236 - £48,677

**Category:** Academic

**Hours:** Full Time

**Closes:** 4<sup>th</sup> June 2019

The School of Energy, Geoscience, Infrastructure and Society at Heriot-Watt University, Edinburgh, is seeking to appoint an Assistant Professor in renewable energy to join a team of experienced and dedicated academic staff members in Institute for Life and Earth Sciences. This post will be based at the International Centre for Island Technology (ICIT) at Heriot-Watt University's Orkney Campus. ICIT is a specialist postgraduate teaching and research centre which focuses on the management of coastal and island resources. The successful candidate should have an excellent track record of research in renewable energy or energy systems and will take a leading role in the development and delivery of innovative teaching and research in this area.

There are a number of exciting opportunities associated with this post. Heriot-Watt University is known for its research-informed course delivery and the global multi-campus education it provides. ICIT delivers postgraduate teaching to a multinational cohort of students. The successful applicant will have a background in engineering, physics or related fields and be expected to deliver courses across in renewable energy technologies and their integration into energy systems. The post will suit candidates who enjoy working as part of a multidisciplinary team.

Informal enquiries should be directed to Dr Sandy Kerr, Director ICIT, [s.kerr@hw.ac.uk](mailto:s.kerr@hw.ac.uk)

For further information about how to apply can be found at:

[https://www.hw.ac.uk/about/work/jobs/job\\_SVJDMTg0ODk.htm](https://www.hw.ac.uk/about/work/jobs/job_SVJDMTg0ODk.htm)

**There are jobs on the IMBER web site**

<http://www.imber.info>



Integrated Marine Biosphere Research

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### Jobs and opportunities

- 5 Postdocs/track tenure positions: Flanders Marine Institute (VLIZ), Oostende, Belgium. Apply by 15 May
- Postdoc: Biogeochemical ocean modelling, Paris, France. Apply by 15 May
- 8 Junior research positions: Flanders Marine Institute (VLIZ), Oostende, Belgium. Apply by 15 May
- PhD: Aesthetic value of coral reef biodiversity, Montpellier, France. Apply by 15 May
- ISBlue Postdoc Fellowships, Brest, France. Apply by 9 Sep
- Research scientist: Chemical oceanography, National Oceanography Centre, UK. Apply by 26 May
- Call for EuroMarine Foresight Workshops and Working Group proposals. Deadline 31 May
- Postdoc: Ocean acidification coral reef science, University of Miami, USA
- Postdoc: Role of microbes in shaping ocean processes. Apply by 14 June
- JPI Oceans and JPI Climate call for proposals: Joint transnational next generation climate science for oceans in Europe. Submit proposals by 14 June
- PICES: Executive Secretary, Sidney, BC, Canada. Apply by 15 June
- Postdoc: Fisheries biology/conservation, UWA, Australia. No deadline given

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Visit the IMBeR Website

[imber@imr.no](mailto:imber@imr.no)