



31 December 2021

The [Tethys Engineering](#) Team here at the Pacific Northwest National Laboratory would like to wish you a wonderful New Year! This special edition of the *Tethys Engineering Blast* features a few announcements, opportunities, and upcoming events, as well as a brief look at some 2021 *Tethys Engineering* statistics!

[Announcements](#)

[Upcoming Events](#)

[2021 Tethys Eng. Stats](#)

Announcements

EnergyTech University Prize

The US Department of Energy's (DOE) Office of Technology Transitions recently launched the [EnergyTech University Prize](#), a collegiate competition challenging multidisciplinary student teams to develop and present a business plan that leverages DOE national laboratory-developed and other energy technologies. The Explore Phase will close on 31 January 2022.

Funding/Testing Opportunities

The US DOE is providing \$54 million for small businesses pursuing climate and energy research and development projects through its Small Business Innovation Research (SBIR) and Small Business Technology Transfer (STTR) programs. Letters of intent for the [SBIR/STTR Phase 1 Release 2](#) are due by 5:00pm EST (10:00pm UTC) on 3 January 2022.

The European Maritime, Fisheries and Aquaculture Fund has launched a Call for Proposals to support strategic collaboration in the Atlantic, Black Sea, and Western Mediterranean. Proposals for Topic 1, "[Innovative multi-use projects combining offshore renewable energy with other activities and/or with nature protection in the Atlantic](#)", are due 12 January 2022.

The US DOE's [Established Program to Stimulate Competitive Research \(EPSCoR\)](#) is now accepting applications for [Building EPSCoR-State/DOE-National Laboratory Partnerships](#). These partnerships will advance understanding of the physical world by supporting fundamental, early-stage energy research collaborations with the DOE National Laboratories. Pre-applications are due by 5:00pm EST (10:00pm UTC) on 13 January 2022.

The Horizon Europe Framework Programme has launched two funding opportunities titled, "[Next generation of renewable energy technologies](#)" and "[Innovative foundations, floating substructures and connection systems for floating PV and ocean energy devices](#)". Proposals for both are due 23 February 2022.

Student/Employment Opportunity

IMDC is looking for an experienced [Marine Engineer](#) to lead its "Blue Energy" Product in the management, technical execution, training of junior engineers, and quality assurance of its growing project portfolio. Applications are due 5 February 2022.

Upcoming Events

Upcoming Webinar

The US DOE and National Renewable Energy Laboratory are hosting an informational webinar on the [Inclusive Energy Innovation Prize](#) on 12 January 2022 at 1:00pm MST (8:00pm UTC). The webinar will cover details about the prize, ways to leverage the American-Made Network, and strategies for developing a successful submission package. Register [here](#).

Upcoming Summit

The International Energy Agency Ocean Energy Systems (IEA-OES) is hosting a Funders' Summit: Adoption of the IEA-OES Evaluation and Guidance Framework for Ocean Energy Technology on 26 January 2022 at 7:30am UTC (register [here](#)) and 4:00pm UTC (register [here](#)).

Upcoming Conferences

The Supergen Offshore Renewable Energy (ORE) Hub is hosting the [4th Supergen ORE Hub Annual Assembly](#) on 18-20 January 2022 in Plymouth, UK and online. To accompany the event, the Hub is also hosting an [Early Career Researcher Forum](#) on 18 January 2022. Register for free.

The Global Underwater Hub is hosting [Subsea Expo](#), a subsea exhibition and conference, on 22-24 February 2022 in Aberdeen, Scotland. Register for free [here](#).

The American Geophysical Union, the Association for the Sciences of Limnology and Oceanography, and The Oceanography Society are hosting the [2022 Ocean Sciences Meeting](#) from 27 February to 4 March 2022 online. Registration is now open [here](#).

The US DOE's Advanced Research Projects Agency-Energy (ARPA-E) is hosting the [ARPA-E Energy Innovation Summit](#) on 14-16 March 2022 in Denver, US. The conference and technology showcase will feature a program aimed at moving transformational energy technologies out of the lab and into the market. Register [here](#).

2021 Tethys Engineering Stats

Over the past year, the *Tethys Engineering* Team has added over 900 documents to the [Tethys Engineering Knowledge Base](#) and *Tethys Engineering* has been visited by over 24,000 users! The [Tethys Engineering Photo Library](#) also features over 400 marine energy photos and illustrations that are available for free third-party use! If you'd like to contribute, [email us](#)!

Top 10 Viewed Documents

1. [An International Evaluation and Guidance Framework for Ocean Energy Technology](#) – Hodges et al. 2021
2. [Wave and Tidal Energy](#) – Greaves & Iglesias 2018
3. [Lessons learnt from the design, installation and initial operations phases of the 6MW 4-turbine tidal array in Scotland's Pentland Firth](#) – Black & Veatch 2020
4. [Ocean Energy in Islands and Remote Coastal Areas: Opportunities and Challenges](#) – Ocean Energy Systems 2020
5. [Review of WEC-Sim Development and Applications](#) – Yu et al. 2020
6. [A review of deep learning for renewable energy forecasting](#) – Wang et al. 2019
7. [Study on power generation of single Point Absorber Wave Energy Converters \(PA-WECs\) and arrays of PA-WECs](#) – Murai et al. 2021
8. [Criteria for Optimal Site Selection for Ocean Thermal Energy Conversion \(OTEC\) Plants in Mexico](#) – Garduño-Ruiz et al. 2021
9. [State of technology and design guidelines for the Archimedes screw turbine](#) – Lashofer et al. 2012
10. [Numerical Study of an Oscillating-Wing Wingmill for Ocean Current Energy Harvesting: Fluid-Solid-Body Interaction with Feedback Control](#) – Balam-Tamayo et al. 2020

Top 10 Visiting Countries

1. India (5,595 users)
2. United States (4,564 users)
3. United Kingdom (1,704 users)
4. China (1,061 users)
5. Nigeria (551 users)
6. Malaysia (518 users)
7. Canada (474 users)
8. Philippines (445 users)
9. France (444 users)

10. Italy (427 users)

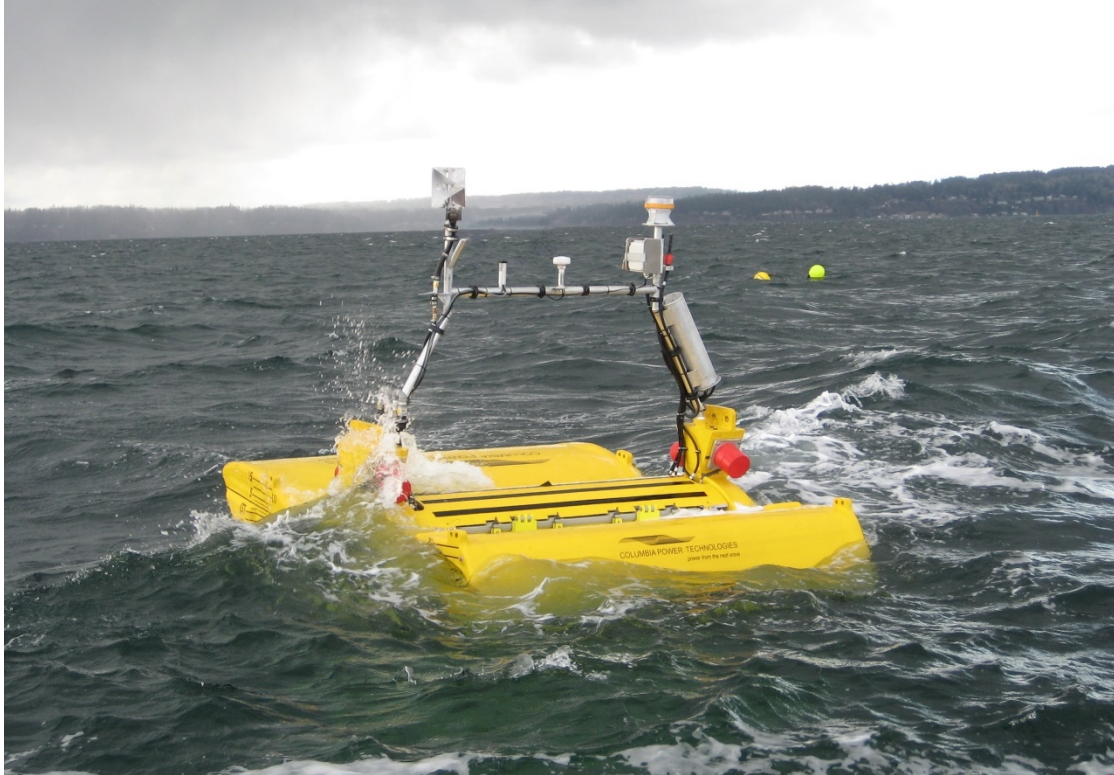
Top 10 Visiting Cities

1. Hyderabad, India (772 users)
2. Chennai, India (543 users)
3. Lagos, Nigeria (449 users)
4. Bengaluru, India (428 users)
5. Shanghai, SG (357 users)
6. London, UK (305 users)
7. Pune, India (268 users)

- 8. Ahmedabad, India (224 users)
- 9. Cheyenne, WY, US (186 users)

10. Kuala Lumpur, MY (157 users)

Top 3 Viewed Photos



Columbia Power – SeaRAY Sea Trials



OceanEnergy – OE Buoy Arrival in Hawaii



Crestwing – Tordenskiold at Sea

The *Tethys Engineering* Team

Tethys Engineering is made possible by an amazing team of researchers at the Pacific Northwest National Laboratory. Thank you to Andrea Copping, Alicia Gorton, Jonathan Whiting, Mikaela Freeman, Amy Woodbury, Dorian Overhus, Levy Tugade, Debbie Rose, Lysel Garavelli, Lenaïg Hemery, Cailene Gunn, Jamie Oman, and Chelsea Gonzalez for all of your time and effort! And a special thank you to Hayley Farr for compiling *Tethys Engineering* Blasts!