



IEEE Oceanic Engineering Society

Statement from IEEE Oceanic Engineering Society

As participants in the UN Oceans Conference, the IEEE Oceanic Engineering Society respectfully submits this statement. As one of IEEE's 46 Technical Societies and Councils, the Oceanic Engineering Society deals specifically with all aspects of technology related to bodies of water.

While ocean science developments are essential to power the Decade, it is engineering that will enable scaling up of ocean knowledge and convert scientific discovery into solutions that will ultimately take the aims of the Decade forward. Thus, we believe engineering is a key pillar in the transformational change needed for the Decade to meet its goals. The IEEE has a critical part to play in connecting science to technology, innovation and the private sector. The IEEE Oceanic Engineering Society expresses our sincere desire to contribute substantially to the UN Ocean Decade and future UN Ocean conferences. Our objective is to facilitate more engineering transformations to the Ocean Decade. As a conduit with IEEE that spans many engineering disciplines which could contribute to the technology evolution needed, we would like to see how we can help fulfill this role.

We participated in the UN Ocean conference 2022 with the primary objective of making the networks needed to lay the groundwork for IEEE to play a bigger role in the years to come. We also aimed to assess the state of engineering-related discussions and developments being brought up as part of the Decade. The conference has been a valuable venue for us to meet like-minded stakeholders, as well as reach out to leaders from academia, industry, governmental agencies and philanthropic organizations, with whom we can work for our future efforts. The conference has provided a cross-section of the different efforts ongoing as part of the Decade and has been a great opportunity for us to work towards our goal.

While it is encouraging to see the diversity represented at this conference in terms of geography and technical areas, the representation from Asia and South America feels lacking. There should also be more discussion on technology to support informed policy and solutions in future conferences. The representation from early-career ocean professionals (ECOPs) has been encouraging too, and the participation from policy-makers and philanthropic organizations has been healthy. The role of ECOPs will be all-important in the years to come, and critical to retain the momentum of this movement beyond the Decade. Their role in the Decade should be further encouraged, as has been iterated by many at the conference. IEEE with its Young Professional group can contribute further to this cause of reaching out to the youth, not just within ocean science but from a broader array of engineering fields. In solidarity with this cause, we had an

ECOP representative at this event too, and it has been encouraging to see the cohesion and open cordial communication amongst the ECOP community.

The needs for quality calibration, systematic procedures and best practices are a foundation for new and innovative processes for understanding our future ocean. IEEE is committed to supporting the creation and documentation of standards and best practices through the IEEE Standards Association and the Ocean Best Practices System. We saw some important discussions on marine data and interoperability at this event, and we hope to help in the process of taking this discussion further to encompass best practices.

In future editions of this conference, as well as other Decade-related conferences, we hope to play a bigger part including hosting side events to facilitate important discussions necessary for the Decade. IEEE Oceanic Engineering Society already has several Decade Actions, and will continue to work to be more closely engaged with the Ocean Decade. Our experience during this conference will inform our discussions on how to do this best.