International Association for the Physical Sciences of the Oceans (IAPSO)

http://iapso.iugg.org

INTRODUCTION

IAPSO has the prime goal of ‘promoting the study of scientific problems relating to the oceans and the interactions taking place at the sea floor, coastal, and atmospheric boundaries insofar as such research is conducted by the use of mathematics, physics, and chemistry.’ IAPSO works mainly through 1) biennial scientific assemblies; 2) working groups; 3) commissions; 4) services; and 5) website information. Of special importance to IAPSO is the involvement of early career scientists as well as those from least developed countries.

IAPSO maintains formal liaison with other scientific commissions and committees. These include the ISC's Scientific Committee on Oceanic Research (SCOR), and UNESCO's Intergovernmental Oceanographic Commission (IOC). For more information see http://iapso.iugg.org/.

ADMINISTRATION

The IAPSO Bureau was renewed in July 2019 during the IUGG General Assembly in Montreal and two additional members were added in 2020 after an online election.

It comprises:

President: Trevor McDougall (Australia)
Past President: Denise Smythe-Wright (UK)
Secretary General: Stefania Sarnocchia (Italy)
Treasurer: Ken Ridgway (Australia)

The Executive Committee comprises the Bureau members and

Vice-Presidents: Agatha de Boer (Sweden)
               Hans van Haren (The Netherlands)

Members: Edmo Campos (Brazil)
          Juliet Hermes (South Africa)
          Rick Lumpkin (USA)
          Yukio Masumoto (Japan)
          Jae-Hun Park (Republic of Korea)
          Alejandra Sanchez-Franks (UK)
          Christa von Hillebrandt-Andrade (USA and Puerto Rico)
          Peter Zavialov (Russia)
The IAPSO office is located at the Institute of Marine Science of the National Research Council of Italy, Trieste and day-to-day business is managed by Secretary General (SG), Stefania Sparnocchia. The SG is responsible for the IAPSO website. A page on the Facebook social network is also active with the aim of facilitating the spreading of information in the community (see https://www.facebook.com/iapso.iugg.org).

IAPSO finances are managed by the Australian-based Treasurer, Ken Ridgway.

ACTIVITIES

**Virtual Atmosphere-Cryosphere-Ocean seminar series (VACO-21), 19-23 July 2021**

VACO-21 replaced our postponed joint assembly with IAMAS and IACS in Busan (South Korea). Rather than having a general call for abstracts, VACO-21 consisted of a reduced number of invited speakers. The program was organized over 5 days from Monday 19 July to Friday 23 July 2021. Over the week, 187 individuals joined the audience. Recordings of the excellent presentations are available here: https://www.youtube.com/channel/UCP3bCxu-NlglNmeoHgGxEQ/videos. IAPSO contributed with the talks of 4 invited speakers.

One day of VACO-21 was dedicated to the presentations of the Early Career Scientist Awardees, which for IAPSO were the two ECS medal winners:

<table>
<thead>
<tr>
<th>Name</th>
<th>Topic</th>
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<tbody>
<tr>
<td>Thomas Wahl</td>
<td>Bigger ships or less flooding? How tidal changes affect flooding along the U.S. coast (<a href="https://www.youtube.com/watch?v=NOI6VGp93HY">https://www.youtube.com/watch?v=NOI6VGp93HY</a>)</td>
</tr>
<tr>
<td>Jessica Fitzsimmons</td>
<td>Micronutrient trace metal dynamics in the Arctic Ocean (<a href="https://www.youtube.com/watch?v=ytrP3JAIFT0">https://www.youtube.com/watch?v=ytrP3JAIFT0</a>)</td>
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During the same week, IAPSO awarded the Prince Albert I Medal for 2021 to Prof. Carl Wunsch, who presented the Prince Albert I Memorial Lecture entitled "Physical Oceanography 1970 and Onwards: Through Outstanding PhD Theses". The Award Ceremony is available here: http://iapso.iugg.org/images/stories/_imagesMedal/Albert_I_medal/IAPSO_Award_Ceremony_2021.mp4.

**2023 General Assembly**

The next General Assembly of IUGG, involving all of IUGG’s Associations, is scheduled for Berlin, 12-19 July 2023, and the organization of this meeting has begun.

**IAPSO Early Career Scientist Working Group**

The IAPSO Early Career Scientist (ECS) Working Group was established in 2018, chaired by Alejandra Sanchez-Franks (United Kingdom) and co-chaired by Malin Ödalen (Sweden). The first IAPSO ECS networking event was organized on 9 July, 2019, during the IUGG 2019 General Assembly, with about 30 early career scientists participating. This IAPSO ECS group has now produced a website https://www.iapsoecs.org and a twitter account https://twitter.com/iapso_ecs?s=20 for this working group, where the newsletters, job and research cruise opportunities and ECS-related events get routinely updated. The IAPSO ECS Working Group organized and submitted a review of the Second Order Draft of the Working Group I (WG1) contribution to the sixth IPCC Assessment Report.
IAPSO Best Practice Study Groups

IAPSO has begun to fund IAPSO Best Practice Study Groups, expecting to fund two of these every two years. An IAPSO Best Practice Study Group will address an issue whose resolution will assist in the conduct of oceanographic research. In carrying out oceanographic research, a choice must frequently be made between a few options for measuring data, analysing data, processing software, or modelling a system. The reasons for choosing between competing methods are often not well documented and the relative strengths and weaknesses of these routes are usually not published or well known. Each Best Practice Study Group will receive up to US$12,000 towards the costs of a meeting. In January 2020 we chose the first two such IAPSO Best Practise Study Groups (out of nine quality applications), one concerned with the use of data from moored CTD instruments, and the other with the measurement accuracy and interpretation of pH measurements. The next round was advertised in September with closing date 15 November 2021 for submitting new proposals (http://iapso.iugg.org/index.php?option=com_acymailing&ctrl=archive&task=view&mailid=110).

IUGG/IAPSO support to scientific meetings

IAPSO endorsed the following two scientific meetings that were supported by IUGG:

- Workshop on Sea Level Data Archaeology, which took place in Paris, France, 10-12 March 2020.
- Tsunamis in Latin America and the Caribbean: Recent Developments and Plans for the Future, Quito, Ecuador, was planned for 3-5 August 2020 and is yet to be re-scheduled.

Announcements of future meetings

The Second World Conference on Meteotsunamis will be held in Menorca, Spain, on 18-20 May 2022. All information, including submission of abstracts and registration, may be found at the conference web pages at http://2cm-menorca.ime.cat/. Three years after the beacon event of the First World Conference on Meteotsunamis (www.izor.hr/mts2019), this conference will collect the best of the meteotsunami science, so we would like to invite you to be a part of this successful story.

- An Ocean of Values, The 5th Community Workshop of the IOC-UNESCO Ocean Best Practices System, is being held online from 20 to 24 September 2021. To understand, share, and co-develop ocean practices across communities and value systems, contributions are encouraged from the whole ocean community, including artists, teachers, students, researchers, policy makers, fishers, sportspeople, and anyone else that would like to share and improve practices around the things they value. Pre-registration is open: https://workshop5.oceanbestpractices.org/.

New IAPSO/IACS joint Commission on Ice-Ocean Interactions

A new joint commission between IAPSO and IACS is being established on the interactions between ice (both sea ice and ice shelves) and the ocean. We have identified two co-chairs and are now populating the joint commission with members.

Submitted by Trevor McDougall, IAPSO President, and Stefania Sparnocchia, General Secretary (September 2021)