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Registration is available for the 2023 Gordon Research Conference and Seminar on Polar Marine Science

Meeting Start Date: Sun, 03/05/2023

Meeting End Date: Fri, 03/10/2023

Location: Ventura, CA, USA

Website: <https://www.grc.org/polar-marine-science-conference/2023/>

Also Gordon Research Seminar [for Early career scientists] Dates:03/03-04/2023

Website: <https://www.grc.org/polar-marine-science-grs-conference/2023/>

Abstract Submission Deadline: Sun, 02/05/2023

Registration Deadline GRC: Sun, 02/05/2023

Registration Deadline GRS: Sat, 02/04/2023

Other Deadline (See below): Mon, 09/05/2022

"Integrating Ocean Physics and Biogeochemistry to Assess Polar Ecosystem Sensitivity to Rapid Change". The Polar Marine Science GRC is a premier, international scientific conference focused on advancing the frontiers of science through the presentation of cutting-edge and unpublished research, prioritizing time for discussion after each talk and fostering informal interactions among scientists of all career stages. The conference program includes a diverse range of speakers and discussion leaders from institutions and organizations worldwide, concentrating on the latest developments in the field. The conference is five days long and held in a remote location to increase the sense of camaraderie and create scientific communities, with lasting collaborations and friendships. In addition to premier talks, the conference has designated time for poster sessions from individuals of all career stages, and afternoon free time and communal meals allow for informal networking opportunities with leaders in the field.

Polar oceans face rapid change, but major knowledge gaps remain in quantifying and predicting physical and chemical change, and in assessing their impacts on polar marine ecosystem structure and function. The prognosis for future polar oceans that will be warmer, fresher and more acidic and will have less sea ice are not understood, yet these regions are globally significant for water mass formation and oceanic circulation, sea level rise, oceanic CO₂ uptake, carbon sequestration, fisheries and biodiversity conservation. The 13th GRC on Polar Marine Science will highlight recent advances in the understanding of physical-chemical-biological linkages and feedback processes across coupled ocean-cryosphere-atmosphere-ecosystems of the Arctic and Southern oceans. Special emphasis will be given to understand impacts on polar marine species, food webs and habitats. Sessions will highlight recent advance in polar climate change detection and attribution, impacts of multiple stressors on biota, changes in habitat distribution, integrated approaches to collect multi-disciplinary observations, and novel methods to analyze and link long-term time-series data with conceptual and numerical models. Continuing a tradition of highlighting cross-cutting research, the 13th GRC on Polar Marine Science will bring leading scientists together to present and discuss frontier research in Arctic and Antarctic marine research. One-minute oral summaries of posters will allow presenters to

address the entire group, promoting enhanced interactions, in-depth discussions and brainstorming. A GRC "Power Hour" will be held to help address the challenges women face in polar science and support the professional growth of women in our communities by providing an open forum for discussion and mentoring.

A Gordon Research Seminar (GRS) will be held on the weekend prior to the GRC. The GRS will provide a forum for graduate students and postdoctoral scientists to present their work, discuss new methods, cutting edge ideas, and pre-published data, as well as to build collaborative relationships with their peers. The participants will discuss cutting-edge aspects of their research, and have the opportunity to build collaborative relationships with other early career researchers as well as with established scientists and mentors.

The seminar will focus on the spatial and temporal variability of processes (and specific methodology applied) occurring in the polar oceans, with a particular emphasis on interfaces. The seminar will consist of approximately 10 talks and 2 poster sessions selected from submitted abstracts. As an introductory route to the GRC, the seminar will especially encourage early-career researchers to overcome any difficulty in speaking to a wider audience. In addition, the seminar will seek to unite science with technology, as these two disciplines are the cornerstones for the advancement of polar marine science. All attendees are expected to actively participate in the GRS, either by giving an oral presentation or presenting a poster. Therefore, all applications must include an abstract. The seminar chair will select speakers from abstracts submitted by September 5, 2022. Any applicants who wish to be considered for an oral presentation should submit their application by September 5, 2022. Those applicants who are not chosen for talks and those who apply after the deadline to be considered for an oral presentation will be expected to present a poster.

Some financial support is available and will be offered in priority to graduate students and postdoctoral fellows attending both the GRC and the preceding GRS. Those interested in attending both meetings must submit an application for the GRS in addition to an application for the GRC.