

Sea Ice at the Interface

Call for Papers

The International Glaciological Society (IGS) will prepare a special issue of the *Annals of Glaciology* with the theme 'Sea Ice at the Interface' in 2020. The issue will be part of *Annals* Volume 61 and will be issue number 82.

The Co-Chief Editors for this issue are David Barber and Feiyue Wang (University of Manitoba). Scientific editors are Marcel Babin, Jorgen Berge, Alice Bradley, Luke Copland, Dorte Dahl-Jensen, Jody Deming, Brent Else, Torsten Geldsetzer, Sebastian Gerland, Mats Granskog, Lawrence Hislop, Alexander Komarov, Kenneth Lee, Ann Lennert, Tao Li, Robie Macdonald, Rob Massom, Marcel Nicolaus, Søren Rysgaard, Randy Scharien, Gunner Spreen, Julienne Stroeve, Rocky Taylor, Letizia Tedesco, Martin Vancoppenolle, Muyin Wang, Zhouqing Xie

Further editors will be appointed as needed.

Schedule for publication:

- Submissions is now open
- 1 October, 2019 – deadline for submitting a manuscript to this *Annals*
- 1 January, 2020 – deadline for supplying final accepted paper
- Accepted papers will be published online as soon as authors have returned their proofs and all corrections have been made.
- The hard copy is scheduled for publication in 2020.

THEME

Sea ice plays a critically important yet highly dynamic role in global climate, polar marine ecosystems, globalization and indigenous cultures. Ongoing dramatic changes to the sea-icescape and freshwater–marine coupling, particularly involving ice sheets, glaciers, ice shelves, sea-ice loss and continental runoff, have major implications for climate within and beyond the polar regions, environmental and ecological integrity, and regional and global socioeconomic development. This symposium presents a timely opportunity to show recent advances in our knowledge and technological capabilities in sea-ice related research. In addition, the symposium will encourage holistic discussions amongst scientists, stakeholders and policy makers regarding the most recent changes, long-term trends and variability in the sea-ice environment in both hemispheres, and how best to engage and communicate with the general public.

Topics of interest:

1. **The role of atmospheric dynamics** in a changing sea ice cover
2. **Sea ice dynamics (I):** Processes
3. **Sea ice dynamics (II):** Observations
4. **Sea ice thickness and roughness** variability and change
5. **Snow on sea ice (1):** Observations and modelling

6. **Snow on sea ice (2)**: Processes and effects on sea-ice thickness retrievals
7. **Current and near future changes in seasonal/marginal ice zones**
8. **Optical properties and light propagation** in Arctic and Antarctic marine systems
9. **Satellite remote sensing for sea ice research**
10. **Novel technologies for observations** of the sea-ice system
11. **Challenges in high-resolution sea ice modeling**
12. **Sea Ice in CMIP6 models**
13. **Sea ice, ocean and climate connections** in the Northern and Southern Oceans:
Developments from observations and modelling
14. **Model-observation integration** for enhanced understanding of Arctic and Antarctic sea ice
15. **Glacier–sea-ice coupling** in the Arctic and Antarctic
16. **Paleo-reconstruction of glacier and/or glacier-sea ice coupling**
17. **Iceberg production**, drift, deterioration and freshwater impacts on the marine system
18. **Interactions between runoff and sea ice**
19. **Biogeochemical processes** within the ocean-sea ice-atmosphere interface
20. **Biogeochemical exchange processes** at sea-ice interfaces (BEPSII)
21. **Biodiversity and biogeochemical cycling** associated to sea ice on different spatial scales:
From local to pan-Arctic
22. **Sea ice habitats and ecological processes** across multiple scales
23. **Sea-ice ecosystems**: Genomes and phenomes of sea ice microbes
24. **Cryosphere storage, transport, and transformation** of legacy and emerging contaminants and oil spills
25. **Sea ice change impacts on Arctic** marine operations and shipping
26. **Freshwater-marine coupling in the Greater Hudson Bay Marine region**
27. **Community based-science integration**

Other sea ice related topics are also welcome.

If you have questions about the suitability of your paper for this Annals issue, please contact the Co-Chief Editor: Feiyue Wang <Feiyue.Wang@umanitoba.ca>

The Annals of Glaciology is listed on the 'Web of Science'. Current impact factor is 2.761.

Please note the usual high standards of IGS publications apply, and authors are expected to contribute toward publication of the issue through article processing charges. For further details on article processing charges, please see <https://www.cambridge.org/core/journals/annals-of-glaciology/information/open-access-information-for-journal-of-glaciology-and-annals-of-glaciology>.

For information on the preparation of manuscripts for submission, please see <https://www.cambridge.org/core/journals/annals-of-glaciology/information/instructions-contributors>.