

International Arctic Science Committee (IASC)

Activities' Report - Year 2023

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1. Introduction

In 2023 we noted the profound impact and loss of potential for Arctic research, that the current challenges have caused. The principles of scientific freedom of research, independence and peaceful international cooperation remain vital. From the past year's activities, I want to highlight the publication of the State of the Arctic Science report, the IASC Fellows, and the two new additional fellowships funded by the Prince Albert II of Monaco Foundation. Furthermore, it is worth noting ICARP IV process and the joint statement of IASC, SCAR and other partners regarding the 5th International Polar Year, and the importance of ambiguous Arctic cooperation and partnerships.

The IASC Report 2023 presents a cohesive synthesis of Arctic research activities and priorities with a large range of input and contributions touching upon all aspects of Arctic research. It is aimed at Arctic science agencies, managers, and users, including a wide range of decision-makers and policy-makers, to help all Arctic science stakeholders and rights-holders stay up to date on Arctic research. Several information can be found in the 2023 **IASC State of Arctic Science Report**, which aims to be a cohesive synthesis of international Arctic research activities and priorities, as gathered from the Arctic research community itself.

While the challenges for Arctic research due to the Covid-19 pandemic in the last three years have now largely eased, the geopolitical situation that has arisen as a result of Russia's actions in Ukraine continues to create further short-term and also long-lasting uncertainties for research in the Arctic. The situation is seriously affecting international scientific collaborations and the ability of the international scientific community to carry out research and observations across vitally areas of the Arctic. The impacts on scientific collaboration, data exchange and publications, conferences and events, travel and fieldwork, maintenance of experiments and long-term monitoring stations, exchange programs and secondments, funding decisions and international research expeditions are profound. The consequences are felt by national and international researchers of all career stages, however some of the greatest impacts are experienced by the Indigenous Peoples of the Arctic, many of whose lands, waterways, relations, hunting and gathering grounds, and communities.

2. Main activities carried on by IASC during 2023 relevant for Italy and for CNR

Most important activities carried out in 2023 relies on: the planning of the Fourth International Conference on Arctic Research Planning (ICARP IV)

The ICARP IV process during 2022 to 2025 must be well planned and coordinated with other ongoing international activities. To ensure this, IASC is engaging our partners in Arctic research to enable a community-wide undertaking, with about 25 international organizations contributing to the process so far. ICARP IV will identify important research questions and priorities that cut across disciplines and knowledge systems, and that require new and innovative thinking and collaboration. ICARP IV will develop a vision for implementation alongside science plans for addressing these priorities. An integral aspect of the ICARP IV will be the inclusion of early career researchers, Indigenous Peoples, and local residents in the co-creation of priorities and science plans to address the key questions. ICARP I, II, and III focused the attention of the world's researchers toward the value of strategic international coordination in accelerating progress in addressing critical challenges. ICARP IV will build upon this concept by striving to achieve consensus and build collaborations among the leading scientific, academic, environmental, Indigenous and political organizations currently concerned with Arctic issues.

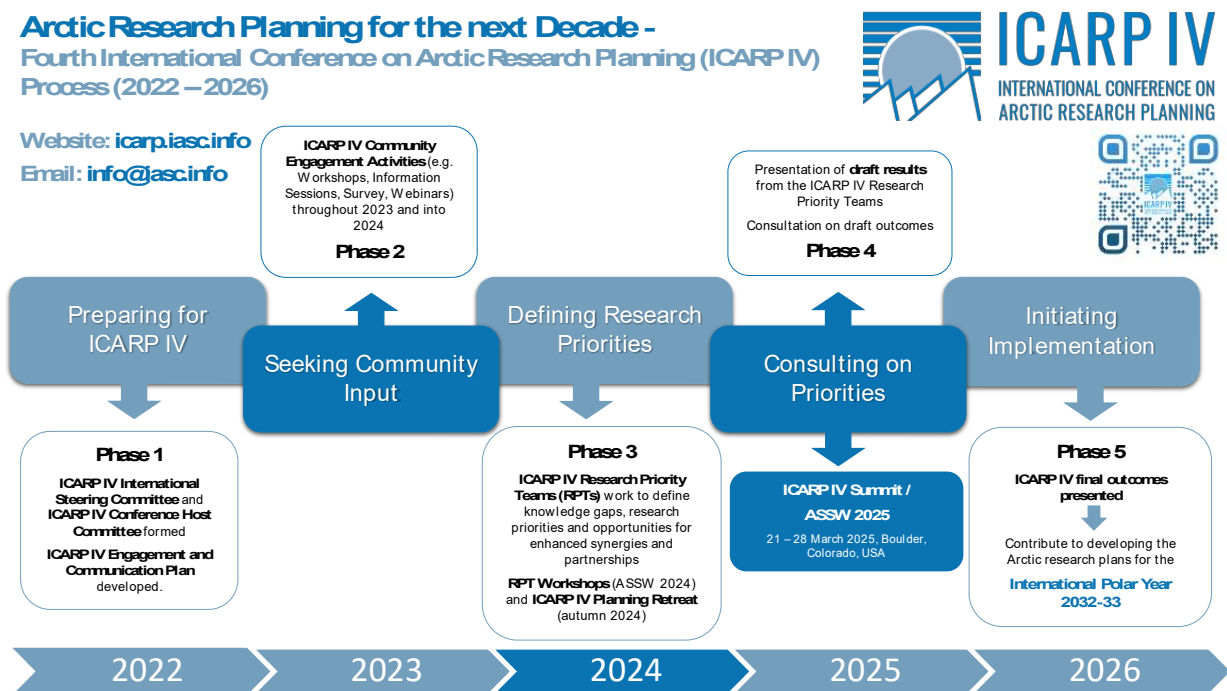
The focus of ICARP IV will be on important research questions that cut across many disciplines and knowledge systems. IASC is committed to recognizing that Traditional Knowledge, Indigenous Knowledge and academic scientific knowledge are coequal and complementary knowledge systems that all can and should inform the

work of IASC and ICARP IV. Research efforts should provide improved understanding and predictive capabilities for the evolution of Arctic systems. Consideration will be given to providing relevant and useful information that people in the Arctic and those in more temperate and tropical regions need to have in order to adapt and prepare for the changing Arctic and its impact on global systems.

For ICARP IV, a planning and consultation process was initiated in 2022 that will culminate at the ICARP IV conference to be convened in Boulder Colorado, USA in 2025, hosted by a consortium of US institutions, including the University of Colorado Boulder, University of Northern Iowa, University of Alaska Fairbanks, and Alaska Pacific University.

More information on ICARP IV is available here: <https://icarp.iasc.info/>.

ICARP IV has been the subject of a specific call of the *Programma di Ricerche in Artico*.



3. Activities carried on by Carlo Barbante within IASC during 2023 and impact on the Italian scientific community

We had continuous exchange of ideas with the Italian representatives in the IASC Working Groups and with IASC the Ex Comm in order to improve Italian presence in the Arctic research. The Italian national participation to the WGs was low in the past years, because of the difficulties of supporting the participation of Italian researchers. Since when the Ministry of University and Research established the *Programma di Ricerche in Artico*, it was possible through the Arctic Scientific Commission to support to the participation to the WGs of some Italian Researchers. This year we had a turnover of the Italian representative in the Terrestrial Working Group, where Maria Silvia Giamberiny has replaced Antonello Provenzale. Laura Ghigliotti also become vice-chair of the Terrestrial Working Group

I actively participated to the IASC Council meeting and I've been in contact with all our representatives in the WGs.

4. Evaluation of the participation in terms of benefits and membership cost

The establishment of an active participation to the Working and Action Groups made a considerable impact in the Italian Arctic research system and CNR in particular. We could indeed establish an important networking with the international research community, which lead to the participation to common research initiative and sharing of facilities. This year represented a new record of participation in the Arctic Science Summit Week for the Italian reseachers.

5. Evaluation of Italians' attendance and how to improve interest and involvement

The participation of the Italian researchers to the IASC activities is remarkable, as testified by the presence of the Italian researchers at the ASSW 2023 in Vienna, where a scientific session was organized by Italian researcher.

I think that we have to further improve the gender balance in the Italian representation in the WG, including our excellent female colleagues in the relevant roles. We are going toward this direction, but we plan to do more in the coming year.

Like in the past year, the Italian National Community has to be more present within the Social and Human WG. These themes are more and more important in the Arctic research especially considering the role of our Country as an Observer member in the Arctic Council. One of the greatest benefits in participating to the IASC activities is that of encouraging and facilitating cooperation between Italian and international researchers in all aspects of Arctic research and in all areas of the Arctic region

6. Italian experts with important roles within the Union or within related Commissions and Programs (if known)

Italian researchers are now sitting in almost all the WGs. This has been a great achievement, since the WG is the place where most of networking s carried out.

- Atmosphere WG – Stefano Decesari (ISAC-CNR)
- Cryosphere WG – Andrea Spolaor (ISP-CNR)
- Marine WG – Laura Ghigliotti (IAS-CNR), Tommaso Tesi (ISP-CNR)
- Terrestrial WG – Maria Silvia Giamberini (IGG-CNR)

Composition and activities of the WG are reported in the <https://iasc.info/working-groups/>

7. If Union with CNR Commission, short summary about the 2023 CNR Commission activities

8. Notes (if any)

All the documents stored in the IASC web site are available upon request.

9. Conclusions

It is extremely important to encourage the participation of Italian Scientists to the governing bodies of IASC and of the Working Groups and in particular in key positions such as those of vice-Chair and Chair. I think that in a few years we will be in a position to propose someone.

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Carlo Barbante