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## **List of Acronyms**

CFRS Committee for Freedom and Responsibility in Science

COP28 28th Conference of the Parties

**ECOSOC** The United Nations Economic and Social Council

**EMCR** Early- and Mid-Career Researchers

FAO The Food and Agriculture Organization of the United Nations

**GKD** Global Knowledge Dialogue

GoF Group of Friends on Science for Action

**HLPF** High-level Political Forum

**IDSSD** International Decade of Sciences for Sustainable Development

**INC** Intergovernmental Negotiating Committee

IPCC Intergovernmental Panel on Climate Change

IPY International Polar Year

ISC International Science Council

**RFP** Regional Focal Points

SCAR Scientific Committee on Antarctic Research

SDGs Sustainable Development Goals

**SDSN** Sustainable Development Solutions Network

**STI** Science, Technology and Innovation

STI4SDGs Science, Technology and Innovation for Sustainable Development Goals

**UN** United Nations

**UN DESA** United Nations Department of Economic and Social Affairs

**UNDP** United Nations Development Programme

**UNEP** United Nations Environment Programme

UNESCO United Nations Educational, Scientific and Cultural Organization

**UNU** United Nations University

WCRP World Climate Research Programme

WHO World Health Organization

WDS World Data System

### Foreword from the President and the CEO

The year 2023 has been transformative for the Council, marked by a notable increase in the ISC's profile, reflected in its enhanced global impact through collaborations with Members and partners.

In parallel, the Council has enhanced its governance through extensive consultations with Members, resulting in revised statutes and significant development and reorganization of the Secretariat. Led by the Working Group on Constitutional Revision, Members played a vital role in the constitutional reform process, demonstrating their vision and the ISC's ability to adapt to evolving scientific and societal landscapes. These shifting landscapes, coupled with the challenges to science as a trusted source of knowledge, mean that the role of the ISC and its engaged membership is more crucial now than ever. Our efforts in reforming the statutes and creating an agile Secretariat have aimed to better position the ISC to effectively respond to these challenges.

We have strengthened our role and reach by establishing liaison mechanisms within the United Nations system through our New York presence and the launch of the UN Group of Friends on Science for Action. We've expanded partnerships with UN agencies such as UNESCO, UNEP and UNDP, enabling the mobilization of experts from our membership to support specific science-driven UN processes, strengthening the voice of science on the international stage.

By broadening our membership to encompass early and mid-career scientists, we have cultivated a more inclusive and dynamic ISC community. Furthermore, by reinstating our regional presence and forging partnerships in Asia and the Pacific through the Australian Academy of Science, in Latin America and the Caribbean via the Colombian Academy of Exact Sciences, and with Future Africa exploring roles for the ISC in Africa, we are better equipped to address local and global challenges with specialized regional expertise.

Our science coordination capacities underwent a significant overhaul, exemplified by the launch of the Centre for Science Futures and the appointment of Dr. Vanessa McBride as our new Science Director. The launch of the Centre, along with the active engagement of our Committee for Science Policy (<u>CSP</u>) has been pivotal in ensuring that our science coordination remains both responsive and forward-looking. The session highlighting the science priorities of the ISC's Affiliated Bodies at the Mid-term Meeting of Members in Paris inspired a renewed effort for future collaboration from ISC Members.

Amid ongoing global conflicts and polarization, the ISC has remained steadfast in its principle of non-discrimination within the scientific community. Our Committee for Freedom and Responsibility in Science (CFRS) has been actively monitoring the impact of polarized views on science, ensuring that scientific endeavours remain free from instrumentalization by conducting seminal work on the positioning of science in times of conflict. The CFRS issued critical statements on freedom and responsibility in science, including an important joint statement with the InterAcademy Partnership on threats to the autonomy of academies of science as mechanisms for science advice.

The rise of artificial intelligence (AI) has been a focal point of our work. We undertook a systematic assessment of the impacts of AI and other emerging technologies on science and science systems, along with national measures related to AI. This included the launch of a series of regional workshops on science systems in the national context and the release of a framework for evaluating rapidly developing digital and related technologies. This framework addresses issues of AI governance, including large language models, filling a significant gap in the global discussion. This ongoing work aims to provide comprehensive insights and guidelines to navigate the complex landscape of technological advancements.

The ISC continued its convening role addressing core issues affecting the scientific publishing community, with the publication of papers on the "Key Principles for Scientific Publishing" and "The Case for Reform of Scientific Publishing." The Global Commission on Science Missions for Sustainability launched its paper, "Flipping the Science Model," at the High-level Political Forum, sparking widespread interest in joining the ISC's call for doing science differently to attain a sustainable future.

In sad news for the ISC and in particular, the Colombian Academy of Exact, Natural and Physical Sciences and the Regional Focal Point for Latin America and the Caribbean (RFP-LAC), we acknowledged the sudden passing in September 2023 of Dr. Enrique Forero González. Dr. Forero served on the ISC's inaugural Committee for Freedom and Responsibility in Science and was the Director of the RFP-LAC. He was known for his scientific integrity, constant intellectual curiosity and sense of humour, and his passing has left a major void in our scientific community.

Overall, 2023 has been a year of substantial progress and strategic enhancements for the ISC. Our expanded functions, revamped science coordination, constitutional reforms, proactive response to global challenges, and strengthened Secretariat position us well for the future as we enter the International Decade of Sciences for Sustainable Development. We look forward to continuing our mission with renewed vigour and commitment in 2024 and beyond, and we look forward to seeing Members in Oman in January 2025 for the General Assembly.

Peter Gluckman

ISC President

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Salvatore Aricò

ISC Chief Executive Officer

#### **GLOBAL VOICE FOR SCIENCE**

The ISC serves as a tool to ensure that the voice of science influences all those involved in science systems, including funders, research infrastructure, university consortia, science publishers, policy for science, public perceptions of science, hence also science journalists, and more. To achieve this objective, it is imperative that the active scientific community, alongside other essential stakeholders within the science ecosystem, coalesce to articulate and advocate with a unified and coherent voice.



Salvatore Aricò Chief Executive Officer of the International Science Council

## **Forging a Global Science Community**

In 2023, the ISC significantly strengthened its membership and regional

In the wake of the COVID-19 pandemic, the Secretariat actively fostered relationships with ISC Members globally and regionally, organizing major in-person events and multiplying engagement opportunities. These efforts yielded rich collaborations throughout the year, including the convening of all Members at the ISC Mid-term Meeting of Members, regional collaboration in the Global Knowledge Dialogue (GKD) for Asia and the Pacific held in Kuala Lumpur, in partnership with the Academy of Sciences Malaysia and the Australian Academy of Science.

A significant aspect of these efforts involved solidifying the Council's regional presence and promoting regional partnerships through its Regional Focal Points (RFPs). Building upon the establishment of its Liaison Committee in 2022, the Latin American and Caribbean RFP held its <u>inaugural meeting</u> in the Dominican Republic in March 2023. It also played a significant role at the SRI meeting in Panama. In July, the ISC signed a landmark agreement with the Australian Academy of Science for five years to host the <u>ISC RFP for Asia and the Pacific</u>, with the support of a generous grant from the Australian Government. Its Advisory Council was inaugurated later in the year.

In Africa, where RFP developments are underway, the ISC, alongside Future Africa, convened a <u>Science Forum in South Africa</u>, aiming to lay the groundwork for new pan-African science initiatives that would strengthen the voice of African scientists globally.

In a bid to actively engage scientists, as well as national and regional scientific institutions, ISC Members nominated focal points to collaborate with and strengthen the RFPs. This collaborative approach at the global and regional level aims to foster a dynamic ecosystem of scientific engagement across disciplinary and geographical borders, thereby ensuring Members' needs and priorities are effectively captured and reflected in the Council's strategic agenda.

In 2023, the Council also made a priority of enhancing the representation of Early and Mid-Career Researchers (EMCRs) in its membership and activities. Seventeen Young Academies and Associations became Members of the ISC. Together with ISC Member the Global Young



scientists to address their key challenges and propose recommendations and actions.

The need to increase EMCR representation in leadership positions within science organizations was also a key issue discussed at the Mid-term Meeting of Members. To promote their participation in significant global science events, the ISC supported several EMCRs, in particular from the Global South, to take part in the Future Earth SRI conference in Panama and in the World Climate Research Programme (WCRP) Open Science Conference in Rwanda.

Finally, in 2023, the ISC appointed 100 new ISC Fellows, in recognition of outstanding contributions to promoting science as a global public good. The Fellowship

is the highest honour that can be conferred on an individual by the ISC. Together with the 123 individuals that were appointed in 2022, the new ISC Fellows will support the Council at a critical moment for science and sustainability as we enter the UN's International Decade of Sciences for Sustainable Development (IDSSD) in 2024.

At the Mid-term Meeting of Members, sessions emphasized the role of science in addressing today's challenges and the importance of the ISC in fostering collaboration among scientists worldwide. © Jason Gardner for the ISC.

#### **Mid-term Meeting of Members**

Three hundred delegates from the ISC membership and Affiliated Bodies gathered in Paris for the ISC's 'Capitalizing on Synergies in Science' Mid-term Meeting of Members—the first all-member event since the ISC's creation in 2018. The three-day in-person dialogue focused on strengthening member relationships, addressing global science developments, and exploring the evolution of science systems to adapt to new challenges.

#### **Global Knowledge Dialogue**

The ISC continued its GKD series. which started with the African scientific community in 2022. In 2023, regional delegates from Asia and the Pacific gathered in Kuala Lumpur to foster scientific representation and collaboration. The Council continued its collaboration with its Member, the Organization for Women Scientists in the Developing World (OWSD), to ensure representation by women at the GKDs. In 2024, the initiative continued with a meeting in Chile to mobilize the Latin American and the Caribbean science communities.

#### **Pacific meeting**

The ISC partnered with the National University of Samoa, the Sasakawa Peace Foundation and the Richard Lounsbery Foundation to facilitate a regional discussion on "Science in the Pacific" in Apia, Samoa. More than 60 regional scholars gave strong support to an ambitious plan to co-design and establish a Pacific academy of sciences and humanities. Let's all remember Target 16.8 of SDG 16: "Broaden and strengthen the participation of developing countries in the institutions of global governance". This inclusive participation requires all countries to have access to the latest scientific evidence, but also ensuring that this science is diverse, open, and draws from local knowledge.



María Estelí Jarquín, member of the ISC Committee for Outreach and Engagement 2022-2025.

## Representing Science in The Multilateral System

In 2023, the ISC membership significantly increased its capacity to integrate science in multilateral policy processes, especially within the United Nations (UN) and other multilateral systems.

Operating at the nexus of science and policy, the ISC integrates scientific knowledge into international policy-making to ensure policies incorporate scientific insights and address the needs of the scientific community. As part of this commitment, the ISC vigorously champions the creation of a policy framework that nurtures scientific research and empowers scientists, thereby equipping them to tackle societal challenges effectively.

To enhance its capacity to provide scientific advice for global policy processes, the ISC established a dedicated <u>Global Science Policy Unit</u>. This unit oversees relations with UN agencies, manages ISC representation in UN processes and co-leads projects with UN entities. The appointment of a UN Liaison Officer in New York in September further facilitates ISC representation and fosters closer working relationships with UN partners and Member States.

As co-chair of the UN Scientific and Technological Community Major Group, the ISC fosters dialogue on science, technology and innovation cooperation to advance the Sustainable Development Goals (SDGs), providing inputs to the UN High-level Political Forum (<u>HLPF</u>). Through this position, the Council also pushes for increased diversity in science at the policy level by facilitating participation in UN events for its Members, Affiliated Bodies and partners.

In 2023, the ISC co-convened a plenary session within the official programme of the Science, Technology and Innovation (STI) Forum for the first time, supported by the UN Economic and Social Council (ECOSOC) President and the Permanent Missions of the United Kingdom and South Africa as co-chairs of the Forum. During this session, the ISC emphasized the importance of genuine engagement and the critical need for a higher level of ambition to accelerate SDG implementation, requiring a more scaled-up application of science, technology, innovation and engineering to accelerate progress towards these goals.

During the HLPF, the ISC collaborated in organizing the inaugural <u>UN Science Day</u> – in partnership with the Stockholm Environment Institute, the Sustainable Development Solutions Network (SDSN), the United Nations Development Programme (UNDP) and the United Nations Department of Economic and Social Affairs (UN DESA) – providing a

critical platform for decision-makers, scientists and stakeholders to discuss science-based solutions and strategies for addressing the slow progress on the SDGs. As a result, the ISC and its partners issued a <u>statement by ISC Fellows</u> to advocate for the urgent acceleration of SDG progress by harnessing scientific evidence and action. This initiative strengthened collaboration with UNDP and the office of the UN President of the General Assembly, positioning the ISC in taking a lead role encouraging transformative science action at the 2023 SDG Summit.



Salvatore Aricò,
ISC Chief Executive
Officer, discusses the
importance of fostering
collaboration between
science and policy and
the role played by the
ISC in strengthening the
science-policy interface
for global sustainability
at the Science 20 Summit
of the G20 in Coimbatore,
India.

© Ruth Cooper, Royal Society

# Group of Friends on Science for Action

In 2023, a significant development was the ISC's initiation and support of the launch of a UN Group of Friends (GoF) on Science for Action, jointly led by Belgium, India and South Africa. The ISC acts as a joint-Secretariat to the GoF, with the United Nations Educational, Scientific and Cultural Organization (UNESCO). The GoF serves as an informal coalition of countries advocating for the integration of science in UN General Assembly deliberations and across the UN system. This milestone enables the ISC to work directly with UN Member States, fostering relationships that support scientific evidence in national and global decision-making.

#### **UNEP-ISC Foresight Project**

The UN Environment Programme (UNEP) and the ISC partnered to develop a strategic foresight and horizon scanning approach aimed at promoting an anticipatory culture of policy-making. Throughout 2023, they established an independent Expert Panel and conducted a global survey to identify disruptions and emerging issues impacting planetary health. Regional workshops were held to capture context-specific signals, continuing into 2024. The **UNEP-ISC Global Foresight Report** is scheduled for release mid-2024 at the High-level Political Forum in New York.

#### **New and strengthened UN ties**

In 2023, the ISC signed a letter of intent to collaborate with the Food and Agriculture Organization (FAO) and a memorandum of understanding (MoU) with the United Nations University (UNU). Major efforts also went into operationalizing recent MoUs, notably with the World Health Organization (WHO), with a pilot project looking at the determinants of youth mental health. ISC Members were invited to nominate experts to join the project's Oversight Panel, with an emphasis on the participation of younger experts from diverse disciplines and contexts.

What's happening in the polar regions has a global impact. It is crucial that policy-makers understand and take the actions needed. Momentum is building to make those policy changes, amid a growing global sense of urgency, but more needs to happen, quickly.



**Jane Francis**, Director of the British Antarctic Survey, and Scientific Committee on Antarctic Research (SCAR) representative, at the One Planet Polar Summit.

## **Promoting the use of science in policy-making**

By integrating science in international policy, the ISC and its Members are capable of brokering knowledge between the multilateral system and the scientific community.

The ISC plays a unique and pivotal role in integrating scientific excellence and science-policy expertise across diverse fields and global regions through its broad membership networks. ISC Members have access to several opportunities, including nominating their experts to participate in key science–policy dialogues, showcasing their achievements on a global scale, and building connections within the ISC network and with other networks.

In 2023, the ISC significantly increased the engagement of its Members in global policy processes across regions and disciplines. As a result, ISC Members and Affiliated Bodies contributed valuable scientific insights to numerous high-level global policy consultations, including significant events such as the UN Water Conference, the Mid-Term Review of the Sendai Framework for Disaster Risk Reduction, the Intergovernmental Negotiating Committee (INC) on Plastic Pollution and the dialogues on Global Sea Level Rise in the UN General Assembly.

Additionally, scientists affiliated with ISC Members were able to attend and actively participate in such events, thanks to the ISC facilitating their accreditation and registration with the UN. This inclusive approach enabled ISC Members and Affiliated Bodies to promote their research agenda on a global scale and provide valuable policy recommendations within their areas of expertise.

At COP28, the ISC and its Affiliated Bodies bridged the science policy gap for urgent climate action. The WCRP and Future Earth played active roles in mobilizing the broader scientific community around initiatives such as the Kigali Declaration and the '10 New Insights in Climate Science.' The ISC also co-hosted an official side-event alongside its Member, the Royal Society, and the Intergovernmental Panel on Climate Change (IPCC), exploring ways of better understanding economic impacts of climate change and accelerating science-based climate action globally.

At COP28 the ISC additionally placed a high priority on amplifying the voices of young

researchers by supporting their engagement in UN events. Notably, the ISC <u>highlighted</u> <u>insights from early-career climate researchers</u> in underrepresented regions, thereby ensuring diverse scientific perspectives in the global discourse on climate sciences.

At the <u>Polar Summit</u> in Paris, France, renowned scientists, including from SCAR and the International Arctic Science Committee (IASC), alerted policy-makers to the unexpectedly rapid pace of change, with the dramatic consequences of extreme climate and weather events unfolding in the Arctic and the Antarctic regions. Scientists were looking for new ways to break through the political impasse and make the case for urgent change. The next International Polar Year (IPY) in 2032–33 (the design of which starts in 2025) will be a key opportunity to take stock of our changing poles and encourage vital research and action.

Anda Popovici, ISC Science Officer (right) and Adetoun Mustapha, Associate Professor at Lead City University (centre), meet with UNEP's Executive Director Inger Andersen (left) at INC-3, where the ISC Delegation shared insights on the need for a robust science-policy-society interface mechanism to guide the plastics treaty negotiations.



#### Mobilizing expertise on waterrelated issues

The 2023 UN Water Conference was the first of its kind in almost 50 years, aiming to mobilize global action for water resilience and security. With a delegation of over 40 representatives, the Council ensured a strong representation from the scientific community and showcased its capacity to quickly mobilize its networks to deliver on science for policy. Drawing from a policy brief compiled by ISC experts and issued ahead of the event, the ISC provided evidence-based and independent scientific guidance to decision-makers, drawing upon the diverse expertise of its membership in natural and social water-related challenges.

#### **Tackling global plastic pollution**

Due to a significant interest among ISC Members and Affiliated Bodies, the ISC is actively engaging in the ongoing negotiations to develop a legally binding instrument to end plastic pollution. This effort aims to ensure that independent, multidisciplinary science strengthens and guides the instrument's development. In 2023, prior to the third negotiation meeting (INC-3), the ISC developed a policy brief advancing a strong sciencepolicy-society interface to support implementation of the binding instrument, including a set of principles and functions to guide the scope, objectives and institutional arrangements of such a scientific mechanism.

# Reframing Trust in Science for Multilateral Policy

The ISC's Centre for Science Futures addressed the pressing issue of declining trust in science and rising misinformation in its working paper 'The Contextualization Deficit: Reframing Trust in Science for Multilateral Policy.' Drawing on empirical evidence spanning 15 years, the paper proposes updates to the science-policy interface model and offers a practical framework for stakeholders to identify systemic requirements at global, regional or local levels. Presented in collaboration with the UNESCO UniTwin Chair on Communication for Science as a Public Good, the paper debuted at the 2023 Science Journalism Forum, engaging science journalists and relevant stakeholders.

#### **GLOBAL SCIENCE AGENDA**

The world needs science – all science, packaged into actionable knowledge, ready to be acted upon to solve practical and pressing issues. Just as the global community has used "big science" approaches to build the CERN and the Square Kilometre Array, it is more than time to apply a similar mindset to properly address sustainability challenges.



Irina Bokova, ISC Patron & Co-chair of the Global Commission for Science Missions for Sustainability

# Promoting International Science Cooperation and Setting Global Science Priorities

The ISC advocates for an urgent shift towards a collaborative, mission-led and actionable science model in addressing pressing societal and existential challenges.

The ISC plays a pivotal role in fostering global scientific collaboration and shaping the international scientific agenda. Notably, its Affiliated Bodies serve as platforms for bringing together scientists from various disciplines, coordinating global and interdisciplinary scientific research programmes and providing policy guidance. These joint initiatives, supported by the ISC and other international organizations, including from the UN system, are critical for advancing scientific priorities and addressing the world's most pressing issues.

In 2023, several Affiliated Bodies released strategic plans to shape global research across various fields. The Scientific Committee on Solar-Terrestrial Physics (SCOSTEP) introduced long-term programmes in solar terrestrial physics, while the Global Climate Observing System (GCOS) and SCAR launched initiatives to enhance global climate observations and provide an open-access geological mapping database for Antarctica. The Committee on Space Research (COSPAR) started a small satellite programme to help low- and middle-income countries engage in space-based research with minimal investment. Additionally, Future Earth hosted the world's largest transdisciplinary sustainability event in Panama, attracting over 2,000 leaders and experts. The World Climate Research Programme (WCRP) convened more than 1,400 participants at an Open Science Conference in Rwanda, culminating in the Kigali Declaration which emphasized urgent climate action and the societal benefits of climate research.

In addition to advancing thematic research agendas, the ISC has advocated strongly at the Annual meeting of the Global Research Council, the UN STI Forum and the HLPF for a shift towards a collaborative, mission-driven and actionable science model to tackle urgent societal and existential challenges.

The traditional science model, marked by intense competition and fragmented funding, does not adequately address our most urgent societal and existential needs. To promote sustainability, science must become more collaborative, mission-oriented and actionable wherever it is applied. This necessitates a new global science model capable of supporting transdisciplinary and mission-driven research effectively and

ransdisciplinary and mission-driven research effectively al sustainably.

In its <u>'Flipping the Science Model' report</u>, released at the HLPF, the <u>ISC Global Commission</u> proposes establishing a network of Pilots for Science Missions for Sustainability. These pilots will focus on mobilizing coordinated, collective science-based

actions to address complex sustainability challenges at the global, regional and local levels. The Science Missions model represents the ISC's strategic response to the significant disparity between the scale of global challenges and the current frameworks and funding mechanisms for scientific research. This disconnect is particularly evident in the unequal capacity to generate critical scientific knowledge, especially in regions most in need, such as in the Global South.

Katsia Paulavets, ISC Senior Science Officer, and Ambassador Macharia Kamau, Member of the ISC Global Commission on Science Missions for Sustainability and Honorary Fellow, at the High-Level Political Forum 2023.

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#### Flipping the Science Model

The ISC's groundbreaking report, unveiled at the 2023 UN HLPF, 'Flipping the Science Model: A Roadmap to Science Missions for Sustainability,' outlines a visionary model for transdisciplinary and mission-led science. It seeks to elevate the collaboration between science, policy and society to new heights, tailored for our unprecedented era. The goal is to render knowledge fully actionable, integrated and engaged, aiming for solutions that match the scale of humanity's most critical challenges. The proposed mission-led science model was featured in 'Nature' as an approach for aligning science funding with the SDGs. To test the model, the ISC will launch a global call for Pilot Science Missions for Sustainability in 2024.

#### **STI4SDGs Roadmaps in Africa**

To present its science mission model for mobilizing science and research funding for sustainable development, the ISC was invited to the workshop on STI4SDGs Roadmaps in Africa. The ISC called for transformative action, mobilizing scientific experts and advocating for a re-evaluation of current scientific practices and funding approaches for sustainability.

#### International Year of Basic Sciences for Sustainable Development

The ISC is proud to have engaged its Members in supporting the International Year of Basic Sciences for Sustainable Development throughout the year. This support included the sharing of valuable analytical resources and, critically, a collaboration with ISC-GeoUnions. This partnership featured the regular 'ISC Distinguished Lecture Series,' which contributed to the Year by addressing issues such as 'Energy Sustainability for Net Zero' and 'From Fire to Space: How Basic Sciences Lead and Shape Our Paths Toward Sustainable Development.'

Freedom and responsibility in science are fundamental to scientific advancement and human and environmental wellbeing. However, these rights can be undermined when politically-motivated government interference in institutional autonomy occurs, leading to a chilling effect on the practice of science at a time when the world is racing to find solutions to global existential crises.



Anne Husebekk, ISC Vice-President for Freedom and Responsibility in Science

# Defending and promoting science freedom and responsibility

The ISC has worked with partners to safeguard scientific freedoms and responsibilities, responding to the concerning trends of declining academic freedom and diminishing trust in science.

The Council's Committee for Freedom and Responsibility in Science (CFRS) serves as the custodian of the <u>Principle of Freedom and Responsibility in Science</u>. Operating at the nexus of science and human rights, the Committee is dedicated to safeguarding the freedoms inherent to scientific pursuit and ensuring that scientists uphold their responsibilities.

The CFRS is mandated to consider and respond to threats to science systems and individual scientists whose freedoms and rights are restricted. In 2023, the Committee responded to cases in Afghanistan, Argentina, Australia, Fiji, Greece, India, Iran, Israel, Nicaragua, Palestine, Sudan, Ukraine, USA, as well as to cases with global scope. At the end of 2023, the Committee was actively monitoring a total of 35 cases.

Recent years have witnessed a concerning decline in scientific freedom – a trend confirmed in 2023, which can be partly attributed to a growing polarization at political and social levels in many countries. Responding to these challenges, CFRS embarked on a review of the ISC Principles of Freedom and Responsibility of Science and is in the process of formulating a definition of the 'Right to Science'.

In collaboration with UNESCO, the ISC organized a <u>conference</u> to explore the concepts of scientific freedom and responsibility, leveraging existing normative standards and analyses, including UNESCO's 2017 Recommendation on Science and Scientific Researchers and the <u>ISC CFRS's 2021 discussion paper</u>. The conference also addressed challenges posed by rapid scientific and technological advancements. These discussions aimed to identify strategies to strengthen governmental and institutional efforts, particularly in the context of declining trust in science.

Additionally, as part of a global drive to seek regional perspectives, the CFRS organized a <u>dedicated session</u> on the sidelines of the ISC GKD for Asia and the Pacific region in Kuala Lumpur. This workshop explored region-specific trends, challenges, successes and opportunities pertaining to the advancement of freedom and responsibility in science in the region.



© The Academy of Sciences Malaysia for the ISC

The CFRS workshop discussions for Asia and the Pacific, a region critical to global science with its large population and high scientific output, addressed the pressing issues of declining scientific and academic freedom.

The New Zealand government has actively supported the CFRS since 2016. This support continues with the Ministry of Business, Innovation and Employment supporting CFRS Special Advisor Gustav Kessel, based at the Royal Society of New Zealand Te Apārangi.

# 2<sup>nd</sup> Conference on the war in Ukraine

The ISC, ALLEA and the Ukraine scientific community organized a 2023 virtual conference on the war in Ukraine, bringing together over 530 participants. The threeday event mobilized the scientific community to evaluate the protection and support efforts implemented during the past year while assessing ways forward for enhanced support and post-conflict reconstruction. Following the discussions, the partners released the 2023 edition of the conference report, highlighting new considerations based on the worsening situation in Ukraine.

# Podcast series on freedom and responsibility in science in the 21st century

What do freedom and responsibility mean today, and why do they matter to the scientific community? This 2023 ISC podcast series explores the 21st-century issues tied to freedom and responsibility in science over six episodes. Expert guests, such as Soumya Swaminathan and Courtney C. Radsch, explored critical topics including building trust in science, using emerging technologies responsibly, combating mis- and dis-information and the intersections between science and politics.

#### **Joint IAP-ISC statement**

Throughout the year, the CFRS actively engaged in various initiatives aimed at raising awareness about the importance of scientific freedom and responsibility and promoting efforts to enhance their implementation. As part of these efforts, the ISC and the InterAcademy Partnership (IAP) issued a joint statement expressing profound concern over increasing state interference in the autonomy of national academies of science and urging governments worldwide to adopt legal frameworks protecting national academies from such interference.

# **Empowering the Science Community to Embrace Changing Practices**

Through advocating for reform in scientific publishing, promoting Open Science and transdisciplinarity, the ISC is fostering an enabling environment for science as a global public good.

A resilient and inclusive research system is essential for advancing scientific knowledge and effectively addressing global challenges. However, this system faces mounting pressure from various stakeholders, including funders, governments and the publishing industry, as well as intensifying competition.

The ISC envisions <u>science as a global public good</u>. Achieving this vision requires an enabling environment and a paradigm shift in the conduct, dissemination and evaluation of science. To this end, the ISC is actively tackling structural aspects by improving knowledge accessibility, fostering collaboration, upholding ethical standards and advocating for diversity and inclusion.

Building on the 2021 General Assembly where ISC Members endorsed <u>eight essential</u> <u>principles</u> for modern scientific publishing, the ISC released '<u>The Key Principles for Scientific Publishing</u>,' along with a companion paper, '<u>The Case for Reform of Scientific Publishing</u>'. This second paper evaluates the extent to which the outlined conditions for modern scientific publishing are being met, aiming to <u>initiate a discussion</u> on possible actions the ISC could take to realize its ambitious principles in building open knowledge systems. These papers underscore the shortcomings of scientific publishing, particularly within the commercial sector, and emphasize the urgent need to prioritize knowledge as a global public good over the 'publish or perish' culture.

In 2023, the ISC continued to emphasize the critical need for a substantial shift towards transdisciplinary research to effectively address complex global challenges, particularly those outlined in the UN 2030 Agenda. The ISC report 'A Model for Implementing Mission Science for Sustainability' by the Global Commission's Technical Advisory Group, underpinning the 'Flipping the Science Model' report, makes the case to adopt a transdisciplinary research approach, which integrates diverse knowledge systems. This requires science institutions to implement new models of funding and assessing research and researchers to reduce the structural barriers to transdisciplinarity.

Furthermore, the ISC and its Committee on Data (<u>CODATA</u>) have collaborated closely with UNESCO and the World Data System (<u>WDS</u>) on the promotion of Open Science and the accessibility of scientific data. Together, the partners organized a one-day symposium at <u>International Data Week</u> in Salzburg, Austria, aimed at exploring current and emerging cooperative frameworks in science, digitalization and ethics to advance the implementation of the UNESCO Recommendation on Open Science.



© ISC

Grantees from the ISC LIRA 2030 Africa projects, completed in 2023, have documented key achievements, insights, and lessons from conducting transdisciplinary research. Over six years, the extensive knowledge and data generated have proven crucial not only for academics but also for local communities and policymakers.

#### **Reviewing research evaluation**

The ISC's think tank, the Centre for Science Futures, in collaboration with the GYA and the IAP, conducted a review of current research evaluation systems. This review includes an examination of recent actions, responses and initiatives undertaken by various stakeholders, illustrated through several case examples from around the world, with the goal to contribute to ongoing debates and address open questions regarding the future of research evaluation.

#### Fostering transdisciplinary science

As science systems rapidly evolve, there is an increasing recognition of the need to bridge the gap between scientists in natural and social sciences and non-academic stakeholders who contribute valuable insights to complex challenges. This necessitates the adoption of a transdisciplinary research approach, which integrates diverse knowledge systems. The 'Looking at the Future of Transdisciplinary Research' paper by the ISC's Centre of Science Futures examines the evolution of science leading to the emergence of transdisciplinarity and identifies key considerations for its successful application in shaping the future of research.

#### **LIRA** research programme

The ISC-led research funding programme, 'Leading Integrated Research for Agenda 2030 in Africa' (LIRA 2030 Africa), adopted a unique approach to studying urban sustainability challenges through transdisciplinary research. The programme ended in 2023, and two reports highlighting key achievements and lessons learned from advancing and practicing transdisciplinary science in Africa were published. The insights gained were recognized and promoted across multiple platforms. These included a 'Nature' article, a chapter in 'The Handbook of Transdisciplinarity: Global Perspectives,' along with presentations at the 2023 Annual meeting of the Global Research Council and recognition in the Swiss Academy report as a flagship programme in sustainability research and innovation.

#### CENTRE FOR SCIENCE FUTURES

The story behind the Centre started with thinking about what science needs in order to thrive. We have created a team to operate as a think tank inside the ISC that will focus on emerging trends in science and policy for science issues, to gather evidence, develop resources, and conduct foresight exercises relevant to our Members, providing them with the insights they need for the future.



Mathieu Denis, Head of the Centre for Science Futures

# **Equipping The Scientific Community to Help Define and Navigate Science Futures**

In 2023, the ISC inaugurated its think tank, the Centre for Science Futures, to assess emerging trends in science and promoting new approaches to navigate the ever-evolving landscape of science.

In its ongoing commitment to support the advancement of science, the ISC established the Centre for Science Futures to effectively position itself amidst the transformation of science systems. Operating as a think tank within the ISC, the Centre aims to deepen our understanding of emerging trends in science and research systems, offering actionable options and tools. Serving ISC Members, the global scientific community and policy-makers, the Centre prioritizes interdisciplinary and global perspectives, providing science-based guidance on initiatives related to the future of science and the global scientific ecosystem.

To transcend the confines of the traditional academic sphere, the Centre for Science Futures actively pursued collaborations with the private and university sectors. These collaborations aimed to cultivate new networks embracing a broader spectrum of scientific expertise and harness resources, expertise and cutting-edge technology from industry leaders such as Nvidia and the Metaverse Institute. Following its inauguration, the Centre signed an official partnership agreement with Sciences Po Paris, cementing the university as a founding partner of the Centre.

During the Digital with Purpose conference – a platform focused on leveraging technology to address sustainability challenges – the Centre's head, Mathieu Denis, addressed issues on the <u>impacts of artificial intelligence</u> (AI) on science organizations and research systems, emphasizing that the question is no longer *if* AI is changing science, but rather *how* it is doing so.

To meet these evolutions, the ISC collaborated with its Members to enhance their digital capabilities. At the request of ISC Members stemming from the ISC Mid-term Meeting, the Secretariat organized a practical workshop to create a safe space for AI experimentation in everyday work. Owing to the high number of interested participants, a second session in partnership with the International Union for Physical and Engineering Sciences in Medicine (IUPESM) and the International Organization for Medical Physics (IOMP) was arranged, drawing a total of over 5,000 registrants.



© Zhenya Tsoy, ISC

"The question is no longer **if** Al is changing science, but **how**" Mathieu Denis, Head of the ISC's Centre for Science Futures, at the 2023 Digital with Purpose Global Summit in a panel session on the impacts of Al on science and science systems.

# **Evaluating rapidly developing digital and Al technologies**

Artificial Intelligence, synthetic biology and quantum technologies are prime examples of innovation, informed by science, emerging at an unprecedented pace. It can be challenging to systematically anticipate not only their applications, but also their implications. Ahead of the Al Safety Summit 2023, the ISC released a discussion paper on a framework for evaluating AI and rapidly developing digital technologies and informing the multiple global and national discussions taking place related to AI.

#### Al for science workshop

In collaboration with the Australian Academy of Science, the Centre for Science Futures convened thought leaders and experts with national mandates in AI for science on the sidelines of the GKD in Kuala Lumpur. Delegates from 12 countries across Asia and the Pacific gathered for a timely discussion and exchange of insights on formulating national approaches and priorities, identifying issues and strategies pertaining to Al in their respective countries. Building on the momentum generated by this workshop, the Centre is releasing a series of reports on Preparing Science Systems for AI.

#### Podcast on science fiction

In this six-part podcast series, produced in collaboration with the journal 'Nature', the Centre for Science Futures explores the intersection of science fiction and science, featuring perspectives from leading authors like Kim Stanley Robinson and Vandana Singh. The series, which is the most listenedto podcast series of the ISC, delves into the creative process behind crafting plausible future scenarios. It discusses inspirations and views on scientific and technological advancements, with topics ranging from climate change and food security to the impacts of Al.

### **Financial Report**

In 2023, the International Science Council (ISC) underwent significant strategic and operational changes. As detailed in this annual report, key developments included establishing a UN liaison in New York, launching the Centre for Science Futures, supporting early- and mid-career scientists, and strengthening the secretariat with a new Science Director.

While concluding two long-running, grant-funded programmes, namely Transformations to Sustainability (T2S) and Leading Integrated Research for Agenda 2030 in Africa (LIRA 2030), the ISC secured new funding aligned with its expanded ambitions. A major success was a 1.9 million USD grant from the NSF for sustainability activities and increased funding from the Frontiers Foundation for the ISC's promotion of participation in the Frontiers Planet Prize from the Global South. The new partnership on strategic foresight with UNEP brought in a notable project grant, and a generous grant from the Sasakawa Foundation complemented by a grant from the Richard Lounsbery Foundation enabled us to coordinate and finance the meeting on an academy of scholars in the Pacific region.

Regarding expenditure, an intense programme of work allowed the Secretariat to utilize a significant portion of the accumulated reserves, following the recommendation of the auditors to reduce reserves in line with the ISC's non-profit status. A Mid-term Meeting of Members was organized in May 2023, in response to strong demand from the Members. Several budget lines contributed to the cost of organizing this major event and in making sure that the ISC membership in all its diversity was well represented, with the ISC supporting nearly 60 bursaries for ISC Members, principally in low- and middle-income countries (amounting to about 20% of the total cost of the meeting).

Additionally, significant funds were invested in finalizing the work of the <a href="ISC Global">ISC Global</a>
Commission on Science Missions for Sustainability; producing seminal work in the area of science in times of crisis and conflict; establishing the liaison function with the UN and ISC engagement with global policy processes; supporting the coordination of the science agenda through the work of the ISC affiliated bodies; managing the nascent <a href="ISC Fellowship">ISC Fellowship</a>; and launching the Centre for Science Futures.

The accumulated deficit and the use of the reserves to the end of 2023, and the projections at the end of 2024, fully respect the 2022–2024 budget approved by the membership at the 2021 General Assembly. A modest gain in the ISC investment portfolio reduced the deficit, with a final result in 2023 of a loss of 1,178,559 EUR.

The general (i.e. available) reserves at the beginning of 2024 consequently stood at 772,388 EUR, with the intention to bring these down still further in 2024, while keeping the use of reserves over the three-year budget cycle within the boundaries agreed by the General Assembly in 2021.

The structural reserves of the ISC (1.5m EUR) remain untouched.

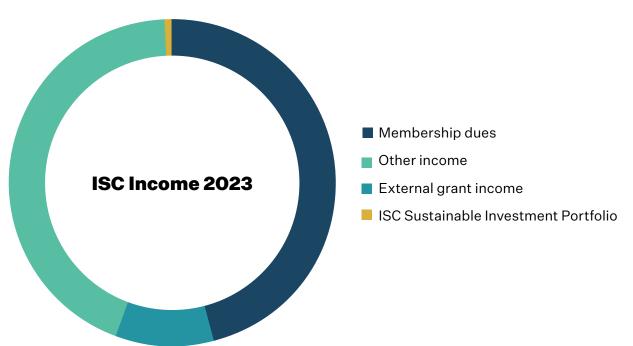
### **Balance Sheet 2023**

Assets	Euros
Bank and cash balances	1,933,543
Marketable securities	2,441,282
Grants to be received	271,390
Other assets	162,883
Fixed assets	68,399
Total assets	4,877,497
Liabilities	Euros
External funds allocated	1,442,323
Sundry creditors & accruals	919,769
Provision / Retirement	243,017
Total liabilities	2,605,109
Reserves	Euros
Mandatory reserve	1,500,000
General fund / Retained earnings	1,950,947
Total reserves	3,450,947
Net Result 2023	-1,178,559

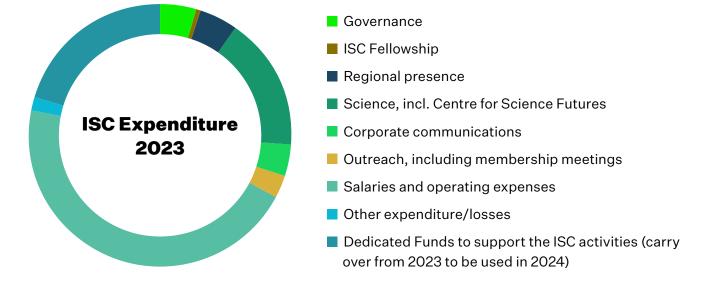
## Statement of income and expenditure

INCOME	Euros
Membership dues	2,903,752
Category 1 Members	2,834,237
Category 2 Members	237,756
Category 3 Members	18,935
Provision on arrears	-187,176
France (host country) subsidy	100,000
Other (core) income	554,363
Bank interest and gain on exchange	32,580
Cancellation provision on arrears and other provisions	318,122
Gain on previous year (incl. recovery of dues and returned funds)	160,777
ISC Sustainable Investment Portfolio gains	42,884
External grant income	2,755,796
Academy of Sciences Taipei grant for IRDR International Center of Excellence	
activities (incl. carried-over funds from 2022)	1,467,882
IDRC grant for INGSA activities (incl. carried-over funds from 2022)	67,176
Frontiers Research Foundation grant	345,457
Lounsbery Foundation grant for Pacific Islands academy initiative	13,465
New Zealand/MBIE grant for CFRS activities (incl. carried-over funds from 2022)	120,379
NORFACE grant for T2S Programme	24,202
NSF (USA) grant for ISC's sustainability activities	351,590
Sasakawa Foundation grant for Pacific Islands academy initiative	103,361
Sweden/SIDA grant for LIRA Programme, carried-over funds from 2022	123,738
UNEP grant for Foresight project	133,546
University of Bergen for Stein Rokkan Prize	5,000

Total income 6,313,911



EXPENDITURE	Euros
GOVERNANCE	729,298
Governance meetings, representation and administrative support	144,788
Advisory Committee meetings and support	154,682
Provision General Assembly	35,000
ISC Fellowship, administrative support and expenses	44,468
ISC Regional Structures, including Pacific Islands academy meeting	350,360
Science	1,247,491
Sida-supported funding programmes (return of unspent funds)	99,339
ISC science projects	193,667
Engagement in global policy processes	
(ISC presence in NY, UN-related meetings, publications)	224,323
ISC co-sponsored international research programmes and affiliated bodies	415,430
ISC-endorsed/sponsored events, initiatives and prizes	131,760
ISC representation, networking and partnership development	95,709
Centre for Science Futures projects	87,263
Communications and outreach	494,741
Corporate communications, branding, publications, travel	280,747
Membership outreach, including membership meetings	213,994
Support	3,387,883
Personnel	3,074,617
Operating expenses	196,155
IT infrastructure	117,111
Other	114,746
Loss on arrears	69,001
Loss on exchange	105
ISC Sustainable Investment Portfolio charges and losses	45,640
Earmarked funds carried over to 2024	1,518,310
Total expenditure	7,492,469
Excess of expenditure over income	-1,178,558



## ISC Secretariat (as of 31 December 2023)

#### **LEADERSHIP**



Salvatore Aricò



**Mathieu Denis**Senior Director, Head of the Centre for Science Futures



Vanessa McBride Director, Science



**Alison Meston** *Director, Communications* 



**Sarah Moore**Director, Operations

Science



Katsia Paulavets
Senior Science Officer



**Megha Sud** Senior Science Officer

The Centre for Science Futures



**Dureen Samandar Eweis**Science Officer

Freedom and Responsibility in Science



Vivi Stavrou

CFRS Executive Secretary / Senior
Science Officer



**Gustav Kessel**Special Advisor to the Committee for
Freedom and Responsibility in Science

#### **Global Science Policy Unit**



**Anne-Sophie Stevance** Senior Science Officer



Anda Popovici Science Officer



**James Waddell** Science Officer



**Morgan Seag**ISC Liaison to the UN system



**Hélène Jacot des Combes** *Project Manager* 

#### **OPERATIONS**



Natacha de Marchi Senior Financial Officer



**Mayette Geronimo** *Financial Officer* 



**Alexandra Guennec** Senior Human Resources Officer



Yun-Kang Ahn
IT Officer



**Eric Leparmentier**General Services



Miia Ylöstalo-Joubert Senior Administrative Officer and PA to the CEO



Jane Guillier

Administrative Officer



**Olivia Tighe**Administrative Officer



**Sarajuddin Barekzai** Administrative Officer

# COMMUNICATIONS AND MEMBERSHIP OUTREACH



**Zhenya Tsoy**Senior Communications Officer / Digital Lead



**Léa Nacache**Communications Officer



**Anne Thieme**Membership Liaison Officer



**Gabriela Ivan** *Membership Development Officer* 

#### **REGIONAL PRESENCE**



Carolina Santacruz-Perez
Science Officer, Latin American and
Caribbean



**Petra Lundgren** *Director, Asia and the Pacific* 



Aleta Johnston
Communications Manager, Asia and the
Pacific



**Salote Austin**Oceania Programme Manager, Asia and the Pacific

#### ISC GOVERNING BOARD OFFICERS



**Peter Gluckman** President



Salim Abdool Karim
Vice-President for Outreach and
Engagement
Chair of the Committee for Outreach and
Engagement



Anne Husebekk
Vice-President for Freedom and
Responsibility in Science
Chair of the Committee for Freedom and
Responsibility in Science



Motoko Kotani
Vice-President for Science and Society
Chair of the Committee for Science
Planning



Sawako Shirahase
Vice-President for Finance
Chair of the Committee for Finance,
Compliance and Risk

# ISC GOVERNING BOARD ORDINARY MEMBERS



**Karina Batthyány**Committee for Science Planning



Françoise Baylis
Committee for Freedom and
Responsibility in Science



**Geoffrey Boulton**Committee for Science Planning



Melody Burkins
Committee for Freedom and
Responsibility in Science



**Mei-Hung Chiu**Committee for Outreach and Engagement



**Pamela Matson**Committee for Science Planning



**Helena Nader**Committee for Science Planning



Walter Oyawa Committee for Outreach and Engagement



**Maria Paradiso**Committee for Outreach and Engagement



**Martin Visbeck**Committee for Science Planning

### **2023 List of ISC Members**

Africa, African Academy of Sciences (AAS)

Albania, Academy of Sciences (ASA)

Angola, Foundation of Science and Development

Arab Council for the Social Sciences (ACSS)

Argentina, National Scientific and Technological Research Council (CONICET)

Armenia, National Academy of Sciences of the Republic of Armenia (NAS RA)

Australia, Academy of the Social Sciences in Australia (ASSA)

Australia, Australian Academy of Science

Australia, Australian Early and MidCareer Researchers Forum (EMCR Forum)

Austria, Austrian Academy of Sciences (ÖAW)

Azerbaijan, Azerbaijan National Academy of Sciences (ANAS)

Bangladesh, Bangladesh Academy of Sciences (BAS)

Bangladesh, National Young Academy of Bangladesh (NYAB)

Belarus, National Academy of Sciences (NASB)

Belgium, Royal Academies for Science and the Arts of Belgium (RASAB)

Belgium, Young Academy of Belgium

Benin, National Academy of Sciences, Arts and Letters (ANSALB)

Bolivia, National Academy of Sciences of Bolivia (ANCB)

Bosnia & Herzegovina, Academy of Sciences and Arts of Bosnia and Herzegovina (ANUBiH)

Bosnia & Herzegovina, Academy of Sciences and Arts of the Republic of Srpska (ANURS)

Botswana, Botswana Academy of Science (BAS)

Botswana, Ministry of Tertiary Education, Research, Science and Technology

Brazil, Brazilian Academy of Sciences (ABC)

Brazil, National Association of Graduate Studies and Research in Social Sciences (ANPOCS)

Bulgaria, Bulgarian Academy of Sciences (BAS)

Burkina Faso, National Center for Scientific and Technological Research (CNRST)

Cameroon, Cameroon Academy of Sciences (CAS)

Canada, National Research Council of Canada (NRC)

Canada, Royal Society of Canada's College of News Scholars, Artists and Scientists (RSC College)

Caribbean, Caribbean Academy of Sciences (CAS)

Chile, Chilean Academy of Sciences

China, Academy of Sciences located in Taipei

China, Association for Science and Technology (CAST)

China, Chinese Academy of Social Sciences (CASS)

Colombia, Colombian Academy of Exact, Physical and Natural Sciences (ACCEFYN)

Colombia, Young Academy of Colombia

Costa Rica, National Academy of Sciences (ANC)

Côte d'Ivoire, Academy of Sciences, Arts, African Cultures and Diasporas (ASCAD)

Czech Republic, Czech Academy of Sciences

Democratic Republic of Congo, Congolese Academy of Sciences (ACCOS)

Denmark, Danish Young Academy	(ICSSR)
Denmark, Royal Danish Academy of Sciences and Letters Dominican Republic, Academy of Sciences of the Dominican Republic	India, Indian National Science Academy (INSA)
	India, Indian National Young Academy of Sciences (INYA)
	India, Young Academy of India
Egypt, Academy of Scientific Research and Technology (ASRT)	Indonesia, Indonesian Young Academy of Sciences (ALMI)
El Salvador, Viceministerio de Ciencia y Tecnología de El Salvador	Indonesia, National Research and Innovation Agency Badan Riset dan Inovasi Nasional (BRIN)
Estonia, Estonian Academy of Sciences	Institute for Global Environmental Strategies
Eswatini, National Research Council	(IGES)
Ethiopia, Ethiopian Academy of Sciences (EAS)	International Arctic Science Committee (IASC)
European Association of Development and Training Institutes (EADI)	International Arctic Social Sciences Association (IASSA)
European Consortium for Political Research (ECPR)	International Association of Applied Psychology (IAAP)
Facultad Latinoamericana de Ciencias Sociales	International Association of Legal Science (IALS)
(FLACSO)	International Astronomical Union (IAU)
Finland, Council of Finnish Academies	International Cartographic Association (ICA)
France, Académie des Sciences	International Commission for Acoustics (ICA)
Georgia, Georgian Academy of Science	International Commission for Optics (ICO)
Germany, Deutsche Forschungsgemeinschaft (DFG)	International Commission on Illumination (CIE)
Ghana, Ghana Academy of Arts & Sciences (GAAS)	International Consortium of Research Staff Associations (ICoRSA)
Ghana, Ghana Young Academy (GhYA)	International Council for Industrial and Applied Mathematics (ICIAM)
Global Young Academy (GYA)	International Council for Laboratory Animal
Greece, Academy of Athens	Science (ICLAS)
Guatemala, Academia de Ciencias Médicas, Fisicas y Naturales	International Council for Scientific and Technical Information (ICSTI)
Honduras, National Academy of Sciences of	International Economic Association (IEA)
Honduras	International Federation for Information
Hungary, Hungarian Academy of Sciences (MTA)	Processing (IFIP)
India, Indian Council of Social Science Research	International Federation of Data Organizations for

Social Science (IFDO)	International Union for Vacuum Science Technique and Applications (IUVSTA)	
International Federation of Library Associations and Institutions (IFLA)	International Union of Academies (UAI)	
International Federation of Societies for Microscopy (IFSM)	International Union of Basic and Clinical Pharmacology (IUPHAR)	
International Federation of Surveyors (FIG)	International Union of Biochemistry and	
International Foundation for Science (IFS)	Molecular Biology (IUBMB)	
International Geographical Union (IGU)	International Union of Biological Sciences (IUBS)	
International Institute for Applied System Analysis (IIASA)	International Union of Crystallography (IUCr) International Union of Food Science and	
International Mathematical Union (IMU)	Technology (IUFoST)	
International Network for Advancing Science and Policy (INASP)	International Union of Forest Research Organizations (IUFRO)	
International Peace Research Association (IPRA)	International Union of Geodesy and Geophysics (IUGG)	
International Political Science Association (IPSA)	International Union of Geological Sciences (IUGS)	
International Society for Digital Earth (ISDE)	International Union of Immunological Societies	
International Society for Ecological Economics	(IUIS)	
(ISEE)	International Union of Materials Research Societies (IUMRS)	
International Society for Photogrammetry and Remote Sensing (ISPRS)	International Union of Microbiological Societies	
International Society for Porous Media (InterPore)	(IUMS)	
International Sociological Association (ISA)	International Union of Nutritional Sciences (IUNS)	
International Statistical Institute (ISI)	International Union of Physiological Sciences (IUPS)	
International Studies Association (ISA)		
International Union for History and Philosophy of Science and Technology (IUHPST)	International Union of Psychological Science (IUPsyS)	
International Union for Physical and Engineering Sciences in Medicine (IUPESM)	International Union of Pure and Applied Chemistry (IUPAC)	
International Union for Pure and Applied Biophysics (IUPAB)	International Union of Pure and Applied Physics (IUPAP)	
International Union for Quaternary Research	International Union of Radio Science (URSI)	
(INQUA)	International Union of Soil Sciences (IUSS)	
International Union for the Scientific Study of	International Union of Speleology (UIS)	
Population (IUSSP)	International Union of Theoretical and Applied	

Mechanics (IUTAM) Luxembourg, Fonds National de la Recherche (FNR) International Union of Toxicology (IUTOX) Madagascar, Ministère de l'Enseignement International Water Association (IWA) Supérieur et de la Recherche Scientifique Iran, Islamic Rep. of, University of Tehran Malawi, National Commission for Science and Iraq, Ministry of Science and Technology Technology Malaysia, Academy of Sciences Malaysia Ireland, Royal Irish Academy Mauritius, Mauritius Academy of Science (MAST) Israel, Israel Academy of Sciences and Humanities Mexico, Academia Mexicana de Ciencias Italy, Consiglio Nazionale delle Ricerche (CNR) Mexico, Consejo Mexicano de Ciencias Sociales (COMECSO) Jamaica, Scientific Research Council (SRC) Moldova, Academy of Sciences of Moldova Japan, Science Council of Japan (SCJ) Monaco, Centre Scientifique de Monaco Jordan, Royal Scientific Society (RSS) Mongolia, Mongolian Academy of Sciences Kazakhstan, National Academy of Sciences of the Republic of Kazakhstan (NAS RK) Montenegro, Montenegrin Academy of Sciences and Arts Kenya, Kenya National Academy of Sciences (KNAS) Morocco, Hassan II Academy of Sciences and Technology Kenya, National Commission for Science, Technology and Innovation (NACOSTI) Mozambique, Scientific Research Association of Mozambique (AICIMO) Korea, Democratic People's Republic of, State Academy of Sciences Namibia, National Commission on Research, Science and Technology (NCRST) Korea, Republic of, Korean Academy of Science and Technology (KAST) Nepal, Nepal Academy of Science and Technology (NAST) Korea, Republic of, Korean Social Science Research Council (KOSSREC) Netherlands, Koninklijke Nederlandse Akademie van Wetenschappen (KNAW) Korea, Republic of, National Academy of Sciences of the Republic of Korea New Zealand, Royal Society Te Apārangi Lao PDR, Lao National Science Council Nigeria, Nigerian Academy of Science Latin American, Council of Social Sciences Nigeria, Nigerian Young Academy (NYA) (CLACSO) North Macedonia, Macedonian Academy of Latvia, Latvian Academy of Sciences Sciences and Arts Lebanon, National Council for Scientific Research Norway, Norwegian Academy of Sciences and (CNRSL) Letters Lesotho, Department of Science and Technology Norway, University of Bergen (UiB) Lithuania, Lithuanian Academy of Sciences

Arts (SASA) Oman, Ministry of Higher Education, Research and Innovation Social Science Research Council (SSRC) Organization for Social Science Research in Society for Social Studies of Science (4S) Eastern and Southern Africa (OSSREA) Society for the Advancement of Science in Africa Organization for Women in Science for the (SASA) **Developing World (OWSD)** South Africa, Human Sciences Research Council Pakistan, National Academy of Young Scientists of South Africa (HSRC) Pakistan (NAYS) South Africa, National Research Foundation Pakistan, Pakistan Association for the (NRF) Advancement of Science (PAAS) South Pacific, University of the South Pacific Panama, Universidad de Panama (UP) (USP) Peru, Academia Nacional de Ciencias (ANC) Spain, Ministry for Science and Innovation Philippines, National Research Council of the (MCIN) Philippines (NRCP) Spain, Young Academy of Spain Philippines, Philippine Social Science Council Sri Lanka, National Science Foundation (NSF) (PSSC) Sudan, National Centre for Research (NCR) Poland, Polish Academy of Sciences Sudan, Sudanese National Academy of Sciences Poland, Polish Young Academy (PYA) (SNAS) Portugal, Academia das Ciencias de Lisboa Sweden, Royal Swedish Academy of Sciences Romania, Academia Româna Switzerland, Swiss Academy of Humanities and Russian Federation, Russian Academy of Social Sciences Sciences (RAS) Switzerland, Swiss Academy of Sciences Saudi Arabia, King Abdulaziz City for Science and (SCNAT) Technology (KACST) Tajikistan, National Academy of Sciences of Scientific Committee of Problems of the Tajikistan (NAST) **Environment (SCOPE)** Tanzania, Tanzania Commission for Science and Senegal, Senegal Academy of Science and Technology Technology (ANSTS) Thailand, National Research Council of Thailand Serbia, Serbian Academy of Sciences and Arts The World Academy of Sciences (TWAS) Seychelles, Seychelles National Parks Authority The World Academy of Sciences Young Affiliates Singapore, Singapore National Academy of Network (TYAN) Science (SNAS) Togo, Chancellerie des Universités du Togo Slovak Republic, Slovak Academy of Sciences Transnational Institute (TNI) (SAS) Tunisia, Université de Tunis El Manar Slovenia, Slovenian Academy of Sciences and

Türkiye, Science Academy Bilim Akademisi

Türkiye, Turkish Academy of Sciences (TÜBA)

Uganda, Uganda National Council for Science and Technology (UNCST)

Ukraine, National Academy of Sciences (NAS)

United Kingdom, Academy of Medical Sciences

United Kingdom, The British Academy

United Kingdom, The Royal Society

United States, National Academy of Sciences (NAS)

Uruguay, Comisión Consejo Nacional de Innovacion Ciencia y Tecnologia (CONICYT)

Uzbekistan, Academy of Sciences of the Republic of Uzbekistan

Vatican City State, Pontifical Academy of Sciences

Venezuela, Fondo Nacional de Ciencia, Tecnología e Innovación (FONACIT)

Vietnam, Vietnam Union of Science and Technology Associations (VUSTA)

World Anthropological Union (WAU)

World Association for Public Opinion Research (WAPOR)

Zambia, Zambia Academy of Sciences (ZaAS)

Zimbabwe, Research Council of Zimbabwe (RCZ)

### **List of Affiliated Bodies**

Affiliated Bodies are joint science initiatives and programs co-sponsored by the ISC and other international organizations (e.g., those within the UN system), focusing on specific areas of international research that are of interest to many ISC Members. They play a crucial role in uniting a variety of partners to address particular issues or areas. One key feature of these collaborative programs is their ability to consider issues from the broadest possible perspective while minimizing overlap and duplication of effort.

#### THEMATIC ORGANIZATIONS

Committee on Space Research (COSPAR)

Global Research Programme on Inequality (GRIP)

**Future Earth** 

International Network for Government Science Advice (INGSA)

Integrated Research on Disaster Risk (IRDR)

Scientific Committee on Antarctic Research (SCAR)

Scientific Committee on Oceanic Research (SCOR)

Scientific Committee on Solar-Terrestrial Physics (SCOSTEP)

Urban Health & Well-being (UHWB)

World Climate Research Programme (WCRP)

#### **DATA AND INFORMATION**

Committee on Data (CODATA)

Frequencies for Radio Astronomy & Space Science (IUCAF)

World Data System (WDS)

#### MONITORING AND OBSERVATIONS

Global Climate Observing System (GCOS)

Global Ocean Observing System (GOOS)

Work with the ISC to advance science as a global public good.

#### **About the International Science Council**

The International Science Council (ISC) works at the global level to catalyse change by convening scientific expertise, advice and influence on issues of major importance to both science and society.

The ISC is a non-governmental organization with a unique global membership that brings together more than 250 international scientific unions and associations, national and regional scientific organizations including academies and research councils, international federations and societies, and young academies and associations.

#### Connect with us at:

secretariat@council.science

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75116 Paris, France

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