The Muscat Declaration on Global Science

on the occasion of the

Muscat Global Knowledge Dialogue and Third General Assembly of the International Science Council

26–30 January 2025 Muscat, Oman









Preamble

The Global Knowledge Dialogue is an initiative of the International Science Council (ISC) to periodically consider key issues at the science-society and science-policy interfaces. This edition was convened jointly by the ISC and the Ministry of Higher Education, Research and Innovation of the Sultanate of Oman.

The International Science Council's global membership brings together 250 international scientific unions and associations, national and regional scientific organizations, including academies, government agencies and ministries, research and science councils, international scientific federations and societies, young scientific organizations.

Recalling that the vision of the ISC is of science as a global public good, meaning that scientific knowledge and its practice should be universally considered as shared resources from which everyone should be able to benefit,

Recognizing the diversity of ambitions, challenges, opportunities and approaches in science globally, the growing disparities in research capacity and quality of education between countries and regions, and the need to address these gaps to foster global progress,

Recalling that to realize its vision, the mission of the ISC is to provide a robust, effective, and trustworthy global voice for science,

Considering that the global context in which science is done has changed significantly in the last decade, and that emerging technologies are further changing the paradigms of scientific research,

Noting that in this context, science has a key role to play in promoting social justice, peace, security, and sustainability,

Considering the role of the ISC in strengthening the voice of scientists and their diversity, advancing their freedom and safety, and promoting the right to participate in and benefit from science.

Actionable statements

Participants in the Muscat Global Knowledge Dialogue, therefore,

Defend and **promote** the free and responsible practice of science by:

- Advancing the right to participate in and benefit from science and, more broadly, upholding the role of science as a global public good
- Maintaining cross-border scientific collaboration in times of tensions and crisis
- Supporting the protection of science ecosystems and scientists in emergency and conflict settings, with particular attention to displaced scientists
- Supporting, the free, safe, ethical, inclusive, accountable and equitable conduct of science,

Stimulate and **support** international, inter- and transdisciplinary collaborations in scientific research and scholarship on issues of global concern, including by:

- Actively supporting the UN International Decade of Sciences for Sustainable
 Development as a tool to advance the sustainability agenda
- Mobilizing for the International Polar Year 2032–33 and the UN Decade for Cryospheric Sciences
- *Taking* a holistic approach that integrates all formal and applied sciences (natural, medical, social, humanities, engineering sciences) as necessary in addressing these complex challenges
- *Encouraging* the pursuit of research on inequality and social cohesion, including gaps where science can play an effective role
- Calling upon funding organizations, philanthropic entities, and leading scientific institutions worldwide to take proactive steps in supporting under-resourced regions by investing in capacity-building initiatives
- Working collectively to develop practical solutions to prevent or reduce pollution and achieve the vision of zero-emissions,

Contribute to the fair evolution of science systems, in the context of emerging technologies and global inequalities, including by:

- Engaging with science and research funders, policy-makers and other relevant stakeholders to provide expert guidance on the transformation and reform of science systems (in, for example, open science, research assessment, and science publishing) and the enhancement of their transparency, efficiency, inclusion and integrity,
- Promoting a transformation in the higher education institutional environment by equipping future scientists globally with the necessary transdisciplinary knowledge, tools, and skills to tackle urgent and complex societal and environmental issues,
- Critically evaluating the potential impacts of artificial intelligence and other emerging technologies on multiple facets of science and education systems,
- *Ensuring* that scientific data is generated, stored, managed and accessed in a way that facilitates the address of cross-domain grand challenges,
- Supporting academies and associations of young scientists,

Continue advocating for the value of science and promoting evidence-based understanding and decision-making at all levels,

Promote capacity-building initiatives, appropriate training, and adoption of principles and models to strengthen science's role in the multilateral system,

Promote and **assist** the use of science diplomacy to advance the common good and address global challenges,

Advocate for the growth and maintenance of investment in international science programmes and free and open knowledge sharing,

Encourage the contribution of scientific research and innovation to the goals of global peace, human well-being, planetary stewardship, and global sustainability,

Reiterate the importance of improving the representation of women scientists and underrepresented groups in the governance of scientific organizations and in science endeavours in general,

Conclude that science is a universal endeavour that can act as a positive force to bridge divides, foster trust, and catalyse collective action on shared global challenges at multiple levels.