### Summary of Academy of Science Presidents' Meeting (APM)

<u>Date</u>: 18:30 - 20:00, 4<sup>th</sup> October, 2021 <u>Venue</u>: Online (Microsoft Teams) <u>Organizer</u>: Science Council of Japan (SCJ)

# Participants:

In total 26 academies/organizations attended. (Please see the bottom for the list of participants)

# Co-chairs:

Prof. Dr. Gerald H. Haug, President of the German Academy of Sciences Leopoldina Prof. KAJITA Takaaki, President of Science Council of Japan

## Theme:

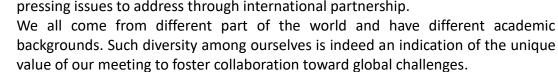
"The Effects of Climate Change on the Ocean and the Polar Regions"

Climate change severely affects the oceans and the cryosphere. For example, the polar regions are warming more rapidly than any other area in the world. But shrinking sea ice, melting permafrost, increased ocean warming, acidification and sea level rise are major threats not only for the Northern and Southern reaches of the world. They are a threat for the whole planet because the oceans and the cryosphere are key factors in the global climate system. Science can provide crucial knowledge to better understand the importance of the oceans and the cryosphere for global climate and ecosystem health. This will help us devise more effective climate change mitigation and adaptation measures. Because climate change is a global challenge faced by all of us, and it can only be tackled if we work together for a more sustainable future for all.

### Discussion Summary:

Prof. KAJITA Takaaki, President of Science Council of Japan, made the following welcome remarks:

The COVID-19 continues to be rampant in the world while bringing many challenges to us to face. At the same time, many countries and regions have been hit by natural disasters the likes of which we have never seen before. Climate change is also one of the most pressing issues to address through international partnership.



Prof. Dr. Gerald H. Haug, President of the German Academy of Sciences Leopoldina gave the following opening remarks:







The German Academy of Science Leopoldina will host the 2022 G7 Science Academy. The topic is not yet determined, but in close collaboration with the German Chancellor, this important topic of the STS/APM "The Effects of Climate Change on the Ocean and the Polar Regions" could be for

consideration. It is a valuable topic for G7 context and in line with the global effort, including IPCC.

Research and data are well developed, thanks to the dedicated works by academia.
However, it is the implementation issue we need to tackle.

Speeches were made from ten representative academies/organizations in the Academies' Report session and Prof. TAKAMURA Yukari summarized the session as follows:

Academies have the shared recognition of the topic, magnitude and urgency on the issue of climate change, Biodiversity and Planetary eco-system. Biodiversity and Planetary eco-system are the twin crisis which needs an urgent reactions.



- Academies should work together to deal with the following challenges:
  - How to improve general understanding of our climate system, actions and the impacts of climate change on the ocean and the polar regions,
  - How to provide scientific evidence of the climate change and actions to our society,
  - How to implement initiatives based on the understanding and urgency, collaborating together both nationally and internationally.

There were lively exchanges of views in the discussion session. The discussion began with various opinions delivered from some academies and then one question was asked by Prof. Dr. Gerald H. Haug to the floor: "It is a chance to treat Carbon Dioxide as 'garbage'. How can we think of its price?" Academy representatives responded that there is no shortage of political rhetoric; it is the action that is falling short.

Prof. Dr. Gerald H. Haug summarized it as follows:

It is necessary to pay our attention to the lack of communication between academia and the public. We must consider what scientific research-driven message to society could lead to change people's action. Collaboration and inclusivity are essential. The presence and participation of the under-represented regions in the international organizations should be improved. The pandemic, aside from the difficulties, not only sharpened the sense of urgency but also showed that 'mankind can act.' We must realize and accept the reality of failure of the Paris Agreement. We must think strategically about how to act; i.e., convince policymakers, especially on the sharpened and simplest topics such as global Carbon Dioxide price.

Prof. KAJITA Takaaki, President of Science Council of Japan, made the following closing remarks:

- Science is the key for global resilience and sustainability. Recognizing the significance of SDGs, we, the academies continue to strengthen the role of science through our activities, including combatting dis/mis-information, securing access to science for all human kind, capacity building for the future of science and the world, building trust for better policymaking, enhancing science diplomacy and partnership with various stakeholders.
- International cooperation among national academies and international scientific organizations has become increasingly important when we tackle global challenges as collective force to maximize our effort and voice.

The discussions at the APM were extremely informative. Participants addressed their academies' tasks and exchanged views, which provided an opportunity to pave the way for the future possibilities of multilateral collaborations.



#### <List of Participants>

-Academia Sinica

-Academy of Physical, Academy of Sciences Malaysia

-The Academy of Sciences of IR Iran

-American Academy of Arts and Sciences

-Australian Academy of Science

-Bulgarian Academy of Sciences

-Caribbean Academy of Sciences

-French Academy of Sciences

-Indonesian Academy of Sciences

-The German Academy of Sciences Leopoldina

-Institutes of Science and Development, Chinese Academy of Sciences

-The InterAcademy Partnership

-International Science Council

-International Sociological Association

-Mexican Academy of Sciences

-National Academy of Sciences

-The National Academy of Sciences, Republic of Korea

-Nepal Academy of Science and Technology

-The Royal Academy of Cambodia

-Royal Netherlands Academy of Arts and Sciences

-The Royal Society

-The Royal Society of Canada

-Science Council of Japan

-Slovak Academy of Sciences

-Swiss Academies of Arts and Sciences

-Turkish Academy of Sciences