## The Colloquia on Science Diplomacy

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After the Covid-19 pandemic, the world has been shaken by the crisis created by the Russia-Ukraine war, and at this difficult time, which continues to change the societies in which we live, we are called to care for one another and to avoid closing in on ourselves.

Diplomacy and Science have a common modus operandi and modus vivendi: dialogue. Galileo Galilei – Lynceus – the father of modern Science and the author of the Dialogue Concerning the Two Chief World Systems, highlighted that dialogue always requires new "knowledge", new "interpretations" and new "visions" beyond the contemporary horizon. The tragic geopolitical events of recent months remind us that, despite any conflict, the quest for dialogue must be relentless. Dialogue encourages critical, rational and objective thinking: through dialogue we can challenge disbelief and prejudice. It is a process that empowers us to strengthen the fundamentals of human coexistence, to identify the common good, on the basis of knowledge and respect for differences. In this context the Colloquia fully represented this perspective promoting the values of Diplomacy and Science in international relations as fundamental principles.

At the *Colloquia*, the most important personalities of world institutions and the presidents of the most prestigious world academies discussed topics and future developments of interest for the international community.

The topic on "The Arab World in a Changing International Order" was discussed with H.E. Ahmed Aboul Gheit, Secretary-General of the League of Arab States. The subject was the great power competition impacting dynamics in different regions around the globe, including the Arab region, which is in turn going through a difficult moment marked by transformations and disruptions. It was thus important to analyze how great power competition is seen from the Arab perspective and assess its implication on the regional order. Major Arab States have been facing new challenges as prolonged crises engulfed countries like Syria, Libya and Yemen, with catastrophic human and strategic consequences. The vacuum that ensued from the unraveling of political orders in those countries was soon to be filled by international and regional players as well as by terrorist groups, which

prolonged and complicated those conflicts. In the face of such tremendous challenges, the Arab system, embodied by the Arab League, is fighting an uphill battle to defend the entities of nation states against the many threats they face, in particular militias and proxies as well as regional expansionist ambitions. In the aftermath of a turbulent decade, a number of Arab players look for pathways to de-escalation and peaceful settlements of conflicts, as it became clear that only political solutions could end crises and bring regional stability.

One of the greatest tasks of the 21st century, i.e. confronting global warming, was discussed with H.E. Petteri Taalas, Secretary-General of the World Meteorological Organization of the United Nations (WMO) in his Lectio Magistralis on "Climate Change: Impacts and Mitigation/Adaptation Perspectives". Global warming has led to a growing amount of disasters: flooding, drought, heat waves, tropical storms, forest fires and coastal flooding. They last longer and are more powerful than before. The economic losses have more than tripled during the last three decades. Melting of all mountain glaciers and Arctic Ocean ice is speeding up year by year, which is threatening the availability of freshwater to main rivers in all continents and is contributing to sea-level rise: it is expected to continue for the coming centuries due to an already high concentration of carbon dioxide. Oceans have absorbed more than 90% of the excess heat and have warmed. as well as becoming more acid due to carbon dioxide intake. Emissions have been growing, especially in big Asian countries and non-OECD countries. There is a need to dramatically reduce the consumption of coal, oil and natural gas, as well as to stop deforestation, especially in Latin America, Africa and Southern Asia. Energy should be produced by using nuclear, hydro, wind and solar energy, and transportation should be based on electric cars, biofuels and hydrogen. So far, not enough emission reductions have been made to stay on the 1.5-2.0 °C warming track of the Paris Agreement.

The topic on "Global Security and Disarmament Agenda at Crossroads: A Fragmented World or a Cohesive Future?" was discussed by H.E. Izumi Nakamitsu, Under-Secretary-General of the United Nations and High Representative for Disarmament Affairs. Increased polarization among the community of nations, rising inequalities exacerbated by climate change, the impacts of the global pandemic and the global supply chain crisis, heightened intolerance and hate speech, and eroding trust in the capacity of multilateral instruments to find effective solutions to current problems are threatening international peace and security in

ways we haven't experienced in decades. The nature, intensity, and global consequences of the Ukraine crisis are further creating fundamental challenges to the international order. The world needs an urgent course correction that brings Member States and all major stakeholders onto the same page and triggers urgent action to prevent and mitigate conflicts. Disarmament and arms control are fundamental elements of any new thinking on the international security architecture, one that recognizes that disarmament is not a utopian or abstract concept, but a practical component of human, national and collective security. Therefore, an updated vision for disarmament is necessary in order to move away from the reliance on weapons and towards an investment in people-centered approaches, diplomacy and dialogue – a colossal task in today's rapidly evolving international climate.

The main impacts and concerns generated by the Covid-19 pandemic from a migration perspective, and to which the United Nations International Organization for Migration (IOM) continues to respond, were introduced by H.E. António Vitorino, IOM Director General in his Lectio Magistralis on "Migration in the Post-Pandemic World". The pandemic led to an unprecedented halt to cross-border mobility: it left families separated, migrant workers stranded, and airports silent throughout much of 2020 and 2021. While travel restrictions have now reduced across much - but not all - of the world, the impacts for people on the move - migrants, refugees, and displaced persons - persist. The uneven treatment of many migrants during the pandemic – excluded from access to services, including vaccination, despite continued contributions in essential sectors supporting communities, such as agriculture, health, and food delivery - has deepened inequalities, from which it may take years to recover. Furthermore, other factors may affect future mobility, from economic fragility and the cost of living, and multiple, overlapping humanitarian crises, to the longer-term impacts of shifting demographics, climate change, and changing labour market demands.

The topic on "The Global Outlook: Short Term Pressures vs Structural Transformations and Reform" was discussed with H.E. Mathias Cormann, Secretary-General of the Organisation for Economic Co-operation and Development (OECD). In this context the priorities are: optimizing the strength and the quality of the post Covid-19 recovery while responding to the economic and social impacts of the war in Ukraine; leadership on climate action to help secure global net-zero by 2050 in a way that is effective and fair; seizing the opportunities of the digital transformation while better managing some of the associated risks, challenges

and disruptions; helping to ensure well-functioning global markets and a global level playing field with a rules-based trading system in good working order; and advancing OECD standards, through membership and partnerships and a sound approach to development.

We, the Editors, are pleased to present in this volume the remarks from each Special Event of the *Colloquia*. We thank the Vice President of The World Academy of Sciences, Professor Sabah Al Momin, the President of the Australian Academy of Sciences, Professor John Shine, the President of the Royal Danish Academy of Sciences and Letters, Professor Marie-Louise Nosch, the President of the Portuguese Academy of Sciences, Professor José Luís Cardoso, and the Executive Director of the Royal Society, Professor Julie Maxton, for their fundamental support.

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