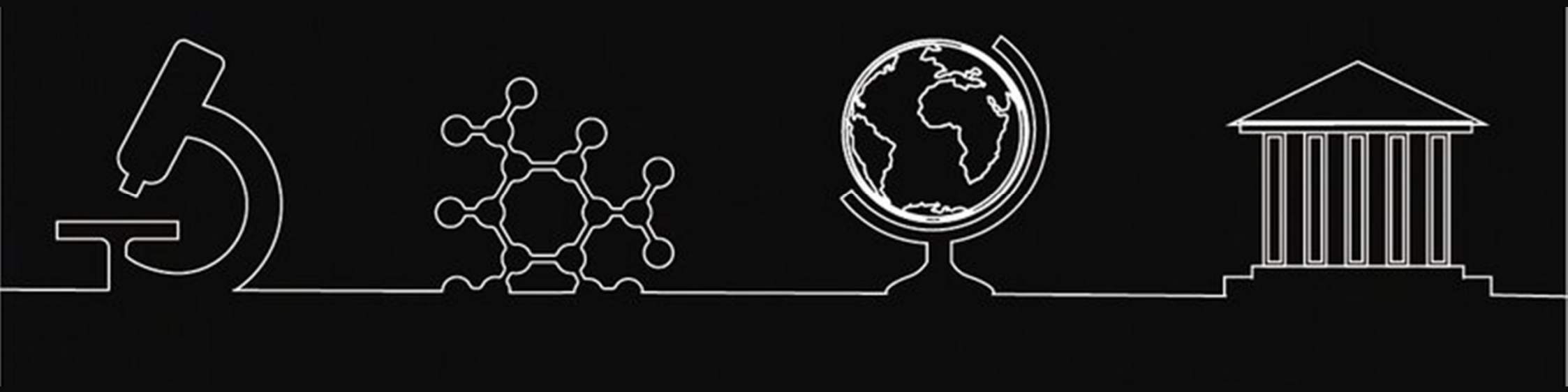
SCIENCE DIPLOMACY



MCAA General Conference 2019 – Vienna

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What is Science Diplomacy?

Science

Pursuing and applying knowledge/understanding about the natural & social world, following a systematic methodology based on evidence.

- Neutral
- Universal
- Rational
- Collaboration (Mobility, Open Science, Citizen Science, research infrastructures)
- transparent
- An engine of trust

Diplomacy

Process of advancing a country's national interests on the international stage.

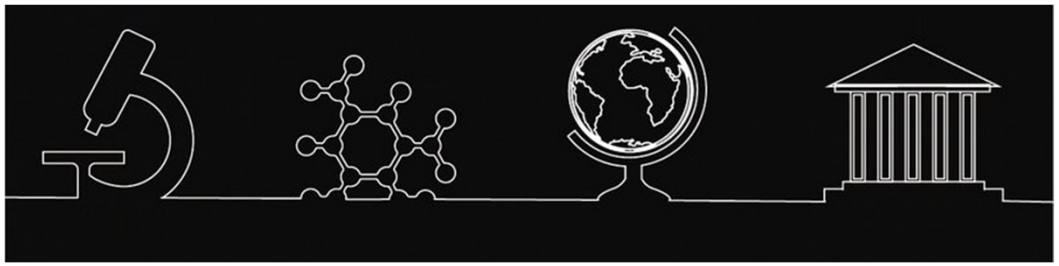
- Knowledge of your country's interests, priorities and policies
- Knowledge of your partner's interests, priorities and policies
- Empathy
- Negotiation

What is Science Diplomacy?

SCIENCE DIPLOMACY

…is the use of international scientific collaborations to address common problems and to build constructive international partnerships

… is understood as a series of practices at the intersection of science, technology and foreign policy.



History of Science Diplomacy

- International Council of Scientific Unions (ICSU) 1931
- Pugwash Conference 1955 (Russell–Einstein Manifesto: Call for a conference for scientists to assess dangers of weapons of mass destruction)
- Antarctic Treaty of 1959 (Antarctic governed by a series of scientific committees working closely with diplomatic partners)
- US science attachés and technical advisors in key embassies (1950s)
- First EU Research Framework Programme in 1983 → since then numerous other countries associated to it
- Intergovernmental Panel on Climate Change (1988)
- Comprehensive Nuclear-Test-Ban Treaty Organization (1997)
- 2030 Agenda for Sustainable Development (2015)
- Etc.

Pugwash Conference

Scientists atAntarctic

Categorisation of Science Diplomacy

2009: Royal Society/AAAS

- Science informs/in Diplomacy
- Diplomacy advances/for Science
- Science advances/for Diplomacy

2018: Group of Science Advisors (New Zealand, USA, UK, Japan)

- Actions that are designed to directly advance a country's national needs
- Actions that are designed to address cross-border interests
- Actions that are primarily designed to meet global needs and challenges

Science informs Diplomacy

- Diplomatic agenda is full of topics, where scientific evidence is needed:
  - Climate Change,
  - Food Security,
  - Epidemiology
  - biosecurity, disease
  - Food security
  - Environmental management,
  - AI,
  - Big data
  - micro-plastic contamination of the oceans

- Need Scientific Advice and respective structures!
- Iran Nuclear Deal: Nuclear physicist became part of negotiators.
- The 2030 agenda require sciences to support policy development and actions by civil society.

U.S. Secretary of Energy Moniz and Salehi, head of Iran's Atomic Energy Organization

Diplomacy advances Science

- **Flagship international projects** in which nations come together to collaborate on high-cost, high-risk scientific projects that otherwise could not be conducted.
  - E.g. CERN (1950s)
- Policies governing international **travel, visas,** and permit acquisition
- Research which can only be done at **specific parts of the world**: → e.g. ALMA telescope in Chile (international partnership among EU, USA, CA, JP, KOR, CHL, TWN)
- **EU Research framework programme** (more than 40 bilateral Science, Technology and Innovation (STI) agreements with third countries (agreements not only for scientific, but also for non-scientific reasons, especially with neighbourhood and developing countries.)

Science advances Diplomacy

Carlos Moedas, EU Commissioner for Research, Science and Innovation (2015):
"science diplomacy to play a leading role in our global outreach for its uniting power […] science diplomacy can light the way where other kinds of politics and diplomacy have failed".

- E.g. Appolo-Sojuz, International Space Station etc.
- Jordan and Israel peace treaty strongly focusses on water
- SESAME
- CERN (IL and D scientists meet for first time after WWI)
- Meteorological agents exchange data for hurricanes, shared between Cuba and US
- Biodiversity in Korea's Demilitarized Zone

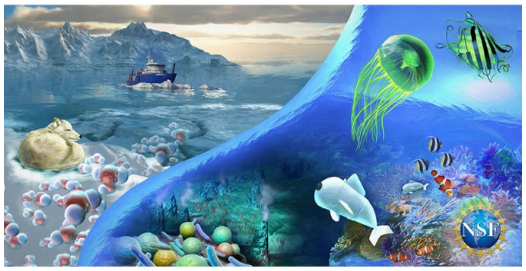
Regional Aspects/Interests of Science Diplomacy

Actions that are designed to address cross-border interests

- Transboundary Water Issues
- Protecting Wildlife (e.g. .mountain gorilla between Rwanda, Uganda, Congo)
- Fish Stocks
- Natural Gas

Actions that are primarily designed to meet global needs and challenges

- About 70% of the planet's surface is not jurisdictionally controlled:
  - Oceans
  - Polar Regions
  - Space
  - Cyberspace
- Globally relevant scientific challenges: SDG



Tools for Science Diplomacy

Science Diplomacy is a **Soft Power**: Persuasion through culture, values and ideas (interest-driven governmental practice with value-driven practice by non-state actors)

- National **strategy documents** for Science Diplomacy (F, UK, ES, USA, CH, JP, B…)
- **Bilateral Agreements** (Cooperation, Exchange of experience, access to research infrastructures, human capital etc.)
- **Science Advisory Boards**
- **Science Advisors** attached to Embassies or Foreign Affairs Departments
- **Pairing** Schemes
- **Science Diplomacy Organisations/Initiatives**: Science Diplomat Circles, Civil-Society Groups, Science Diplomacy Centers (e.g. AAAS, Fletcher School, Geneva Science and Diplomacy Anticipator etc.)
- Large International Science Organisations

Swissnex Network

European Science Diplomacy

EL-CSID

EL-CSID – European Leadership in Cultural, Science and Innovation Diplomacy. The EL-CSID project aims at analysing the relevance of cultural, science and innovation diplomacy for EU external relations. Cultural and science diplomacy have played an increasing role in the European

InsSciDE

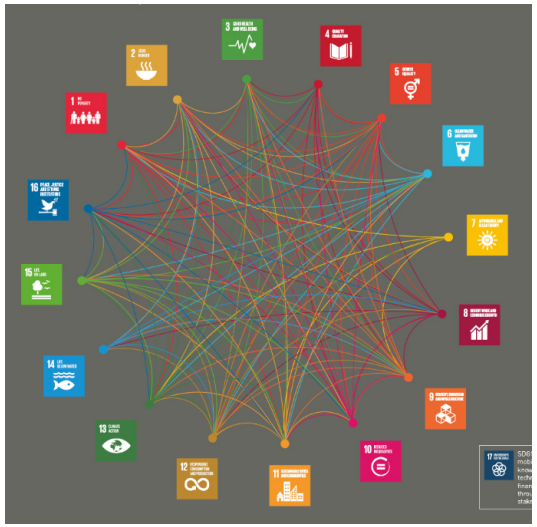
InsSciDE – Inventing a shared Science Diplomacy for Europe. The InsSciDE project aims to create new knowledge on past and present science diplomacy in Europe, engage stakeholders in drawing lessons learned, and deliver shared policy and training tools. InsSciDE aims

S4D4C

S4D4C – Using science for/in diplomacy for addressing global challenges The overall aim of S4D4C is to support current and future European science diplomacy for the benefit of European capacities, EU foreign policy goals and especially the development of solutions

Rise of Science Diplomacy

- **Increased role of non-state actors** (→ also scientistis):
  - Democratisation→ all want to have a voice and many get easier a voice through
  - Digitalisation and globalisaiton
  - Higher mobility, every citizen can be cultural ambassador and form relations. Individuals and companies do things before only governments could do (e.g. Bitcoin)
- **Interdependency** (SDG network)
- **Research gets more expensive** and including more and more actors and needs material on other parts of planet
- **Rise of global issues** in actuality and in awareness



Outlook

- Empowering of science diplomacy in other regions of the world, especially developing countries,
- Support tools for Science Diplomacy has to be strengthened (Fellowships, internships and paring schemes)
- Structures for a successful connection between scientists and politicians/diplomats:
  - Boundary spanning organizations
  - strengthening domestic advisory ecosystems and linking them to global policy making
  - academic rewards /incentives
  - funding
  - strong communities
  - Sustainable programs are needed