

# Science Diplomacy and Scientific Sanctions against Russia

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## Abstract

The West's scientific sanctions against Russia have suspended EU-Russian cooperation in research and technology. This situation necessitates a look at how they impact science diplomacy.

**Keywords:** science diplomacy, scientific sanctions, international scientific cooperation, EU-Russia relations.

Science diplomacy “is about the interactions between science and international relations and how these can combine to most effectively achieve shared objectives” (Royal Society and AAAS, 2025, p. 9). Along with the West and the Global South (Ruffini and Krasnyak, 2023, p. 771), Russia has implemented the concept in specific regions and spheres (Krasnyak, 2020; Devyatkin, 2023; Zaika and Lagutina, 2023), such as the Arctic (Everett and Halašková, 2022; Wood-Donnelly and Bartels, 2022; Argüello and Rafaly, 2023), outer space, the oceans, biodiversity, and nuclear non-proliferation. However, the ability of scientific exchange to ease international tensions is regarded skeptically by some (Rungius and Flink, 2020) and seen as varying from case to case by others (Mays, Laborie and Griset, 2022).

The concept of science diplomacy appeared at a time of unipolarity. In line with the Obama administration’s foreign policy interests, it was promoted as a tool that could heal some of the wounds inflicted by U.S. foreign policy and ensure a constructive approach to global issues. But today’s world is characterized by fragmentation, a decline of multilateralism, contestation of the Western liberal order, and the rise of new centers of power. Science diplomacy is “affected by current geoeconomic rivalries” (Fägersten, 2022, p. 5), and “may include both soft and hard power elements at the same time” (European Commission, 2025, p. 43). Scientific sanctions are a good illustration of the latter.

Since the beginning of the 21st century, Russian-EU scientific relations have gone through three distinctive periods. During the 2000-2014 “honeymoon,” marked by a scientific rapprochement between Russia and the EU, which was little affected by the 2008 Russo-Georgian War, Russia was considered a candidate for associated partner in the EU’s Framework Research Programs.

The period of 2014-2022 saw the introduction of economic sanctions by Western countries, which indirectly harmed Russian-EU scientific cooperation (Makkonen and Mitze, 2021).

The third, current period features an expansion of economic sanctions and their accompaniment by scientific sanctions.

The European Commission terminated the Horizon 2020 funding of Russian research and announced that there would be no further funding of contracts (Horizon Europe Funding, 2022). CERN, the European Organization for Nuclear Research, suspended Russia's observer status. The European X-Ray Free-Electron Laser suspended existing agreements with Russian research institutions. The governments of Germany, France, the UK, the U.S., Canada, and other Western countries instructed their universities and research institutions to freeze ties with their Russian partners, curtail research and innovation programs in all areas of science and education, suspend dual-degree students programs and other cooperative efforts (Matthews, Naujokaitytė, and Zubaşcu, 2022; Jonson, Adams, Grant, and Murphy, 2022). The Arctic 7 states refused to participate in the Arctic Council meetings during Russia's chairmanship in 2021-2023, subsequently resuming participation without Russia (Joint Statement, 2022; Chuffart et al., 2022, p. 205). There were also marginal discussions about suspending Russia from international research organizations and banning publications of Russian scientists in Western journals (Dezhina and Nefedova, 2023, p. 20). Academic mobility was largely curtailed. European universities stopped sending students on exchange to Russia but continued to accept students from Russia on an individual basis. However, the EU-Russian Science and Technology cooperation agreement signed in 2000 and renewed in 2019 was not denounced, and person-to-person academic interactions were not restricted. Publications continued to be co-authored with researchers from Russian institutions. Moreover, in such critical areas as nuclear security, space sciences, vaccine development, and climate monitoring at the poles, Russia's role remains essential (Devyatkin, 2023; Zaika and Lagutina, 2023).

Symbolically, the arc of EU-Russian scientific relations can be traced from 2006, when the European Council directed the start of (ultimately unsuccessful) negotiations on Russia's "associated country" status in EU research programs, to March 2022, when the

European Commission decided “not to engage in further cooperation projects with Russian entities” and “to suspend any payment to Russian entities under existing contracts” (Gabriel, 2022).

Scientific sanctions and their enforcement raise several questions. Firstly, they are scarcely engaged and poorly defined in the literature, likely due to their rarity in the past (Gordin, 2022). Secondly, there is no common understanding in the West regarding the extent of scientific sanctions or the conditions under which they could be lifted. Unlike economic sanctions, the implementation of scientific sanctions is not systematically controlled. While the motives behind economic sanctions have been openly stated (isolate and weaken Russia economically, deprive it of resources for the military, etc.), the objectives of scientific sanctions, and their expected effects in the short or longer term, have not been explained (although the British Minister for Science, Research & Innovation, did state that “Our aim is to introduce measures that will negatively impact the Russian state” by “diminishing and isolating its influence” (Research and Innovation Sanctions, 2022)). Public announcements of scientific cooperation’s freezing have not clearly explained its logic. Weakening Russia, by detaching its scientific community from Western partners or by stimulating an exodus of talented scholars, may be contemplated but as objectives have not been openly stated.

So, what was the real reason for sanctioning Russia?

It appears that scientific sanctions were perhaps enacted simply as a symbolic (Flink, Müller, and Dall, 2022) expression of moral indignation with Russia’s use of military force against Ukraine, in the face of which doing “business as usual” was deemed impossible (Science Business, 2022; Ruffini, 2023).

Since science diplomacy is seen in Europe as a natural extension of European values (Moedas, 2016), it should come as no surprise that the war in Ukraine was described by EU officials as “an attack on elementary values of freedom, democracy and self-determination, on which cultural expression, academic and scientific freedom and scientific cooperation are based” (Gabriel, 2022). In this context the use of scientific sanctions has made science diplomacy subordinated to

the current ideological confrontation between ‘liberal democracies’ and ‘authoritarian regimes’ like Russia (but also China) that are perceived by the EU as systemic rivals.

Notably, countries that have imposed scientific sanctions on Russia are generally those that have enforced economic sanctions, which is yet another proof of a political reading. The freezing of scientific cooperation by Western academic and scientific institutions with Russia is remarkably aligned with the West’s hostile foreign policy towards Russia. Thus, EU political priorities have taken precedence of the scientific agenda.

This raises the question of scientific sanctions’ impact on science diplomacy.

Since its inception, the dominant narrative of science diplomacy has been about “using scientific cooperation to improve international relations” (Royal Society and AAAS 2010, p. vi.). Disruption of international scientific exchange and cooperation is being used by the EU as a diplomatic coercive tool in “instances when science diplomacy needs to be used as a hard power, i.e., for shutting doors rather than keeping them open by applying restrictive measures, as happened in the wake of the Russian aggression against Ukraine” (European Commission, 2025, p. 43).

This transforms the essence of science diplomacy. Traditionally associated with soft power, today, amidst scientific sanctions driven by the logic of constraint, not persuasion, science diplomacy is becoming “a formidable political and strategic tool that serves as an element of coercive hard power. In the case of the current war in Ukraine, science diplomacy, exercised through scientific sanctions, has proved to be a punitive strategy” (Rentetzi, 2022). Indeed, *science for diplomacy* is being replaced by *science to condemn and punish*.

It is too early to speculate on the reversibility of scientific sanctions and a return to constructive and peaceful science diplomacy. There are no signs that broken international scientific cooperation will be restored any time soon. But science knows no borders, and scientists and academia have always been uniquely placed to contribute to dialogue and peaceful relations between nations.

## References

- Argüello, G. and Rafaly, V., 2023. Science Diplomacy and Asian States: Transforming the Governance Landscape in the Arctic. *Polar Record*, 59, p. e41.
- Chuffart, R., Raspotnik, A., Brodt, L., and Convey, P., 2022. Dealing with Insecurities and Geopolitics: Science Diplomacy at the Poles. *Antarctic Science*, 34(3), pp. 205-207.
- Devyatkin, P., 2023. Arctic Exceptionalism: A Narrative of Cooperation and Conflict from Gorbachev to Medvedev and Putin. *The Polar Journal*, 13(2), pp. 336-357.
- Dezhina, I. and Nefedova, A., 2023. Оценки влияния санкций на работу высокопродуктивных российских ученых [The Impact of Sanctions on Highly Productive Russian Scientists]. *Sotsiologicheskie issledovaniya*, 12, pp. 19-31.
- Horizon Europe Funding, 2022. EU Stops All Horizon Europe Funding Going to Russia. *Open Access Government*, 4 March.
- European Commission, 2025. A European Framework for Science Diplomacy. Recommendations of the EU Science Diplomacy Working Groups. Available at: [https://research-and-innovation.ec.europa.eu/news/all-research-and-innovation-news/european-framework-science-diplomacy-2025-02-13\\_en](https://research-and-innovation.ec.europa.eu/news/all-research-and-innovation-news/european-framework-science-diplomacy-2025-02-13_en) [Accessed 19 June 2025].
- Everett, K. and Halašková, B., 2022. Is It Real? Science Diplomacy in the Arctic States' Strategies. *Polar Record*, 58, p. e27. Available at: <https://www.cambridge.org/core/journals/polar-record/article/is-it-real-science-diplomacy-in-the-arctic-states-strategies/1BF7457A2D87D590A618D5DA4228CC4D> [Accessed 19 June 2025].
- Fägersten, B., 2022. Leveraging Science Diplomacy in an Era of Geo-Economic Rivalry – Towards a European Strategy. *The Swedish Institute of International Affairs*.
- Flink, T., Müller, J.M., and Dall, E., 2022. Science Diplomacy in Difficult Times: Learning the Language of Realpolitik. *31st MCAA Newsletter*, June.
- Gabriel, M., 2022. *Statement on Research by Commissioner Mariya Gabriel*. Brussels, 3 March. Available at: [https://ec.europa.eu/commission/presscorner/detail/en/STATEMENT\\_22\\_1528](https://ec.europa.eu/commission/presscorner/detail/en/STATEMENT_22_1528) [Accessed 11 August 2024].
- Gordin, M. A., 2022. Century of Science Boycotts. *Nature*, 606, pp. 27-29.
- Joint Statement, 2022. Joint Statement on Limited Resumption of Arctic Council Cooperation. *US Department of State*, 8 June. Available at: <https://www.state.gov/joint-statement-on-limited-resumption-of-arctic-council-cooperation/> [Accessed 11 August 2024].
- Jonson, J., Adam, J., Grant, J., and Murphy, D., 2022. Stumbling Bear, Soaring Dragon. Russia, China and Geopolitics of Global Science. Mossavar-Rahmani Center for Business and Government; Policy Institute at King's College London, July. *Mossavar-Rahmani Center for Business and Government; Policy Institute at King's College London*. Available

at: <https://www.kcl.ac.uk/policy-institute/assets/Stumbling-bear-soaring-dragon.pdf> [Accessed 11 August 2024].

Krasnyak, O., 2020. Russian Science Diplomacy. *Diplomatica*, 2(1), pp. 118-134.

Makkonen, T. and Mitze, T., 2021. *Geo-Political Conflicts, Economic Sanctions and International Knowledge Flows*. Cornell University, 21 December. Available at: <https://arxiv.org/abs/2112.00564> [Accessed 11 August 2024].

Matthews, D., Naujokaitytė, G., and Zubaşcu, F., 2022. German Universities Told to Freeze Ties with Russia in Retaliation for Invasion. *Science Business*, 24 February. Available at: <https://sciencebusiness.net/news/universities/german-universities-told-freeze-ties-russia-retaliation-invasion> [Accessed 20 May 2025].

Mays, C., Laborie, L., and Griset, P. (eds), 2022. *Inventing a Shared Science Diplomacy for Europe: Interdisciplinary Case Studies to Think with History*. DOI:10.5281/zenodo.7397453.

Moedas, C., 2016. Science Diplomacy in the European Union. *Science & Diplomacy*, 5(1). Available at: [https://www.sciencediplomacy.org/sites/default/files/science\\_diplomacy\\_in\\_the\\_european\\_union\\_science\\_\\_diplomacy.pdf](https://www.sciencediplomacy.org/sites/default/files/science_diplomacy_in_the_european_union_science__diplomacy.pdf) [Accessed 19 June 2025].

Science Business, 2022. Most European Researchers Support Science Sanctions on Russia. *Science Business*, 27 October. Available at: <https://sciencebusiness.net/news/sciencebusiness-survey-most-european-researchers-support-science-sanctions-russia> [Accessed 25 January 2025].

Rentetzi, M., 2022. Scientific Sanctions Do Not Work. *Diplomatic Courier*, 31 May. Available at: <https://www.diplomaticcourier.com/posts/scientific-sanctions-do-not-work> [Accessed 11 August 2024].

Research and Innovation Sanctions, 2022. *Research and Innovation Sanctions on Russia and Support for Ukraine*. UK Government. Department for Business, Energy & Industrial Strategy and George Freeman MP, 27 March. Available at: <https://www.gov.uk/government/news/research-and-innovation-sanctions-on-russia-and-support-for-ukraine> [Accessed 11 August 2024].

Royal Society and AAAS, 2010. *New Frontiers in Science Diplomacy. Navigating the Changing Balance of Power*. The Royal Society and the American Association for the Advancement of Science. London: The Royal Society. Available at: [https://www.aaas.org/sites/default/files/New\\_Frontiers.pdf](https://www.aaas.org/sites/default/files/New_Frontiers.pdf) [Accessed 20 May 2025].

Royal Society and AAAS, 2025. *Science Diplomacy in an Era of Disruption*. Available at: <https://royalsociety.org/-/media/about-us/international/science-diplomacy/science-diplomacy-in-an-era-of-disruption.pdf> [Accessed 18 June 2025].

Ruffini, P.-B., 2023. *Guerre en Ukraine, sanctions académiques et diplomatie scientifique*. Available at: <https://normandie-univ.hal.science/hal-04110773/> [Accessed 11 August 2024].

Ruffini, P.-Br. and Krasnyak, O., 2023. Science Diplomacy from a Nation-State's Perspective: A General Framing and Its Application to Global South Countries. *Science and Public Policy*, 50(4), pp. 771-781.

Rungius, Ch. and Flink, T., 2020. Romancing Science for Global Solutions: On Narratives and Interpretative Schemas of Science Diplomacy. *Humanities and Social Sciences Communications*, 7, p. 102.

Wood-Donnelly, C. and Bartels, M.P., 2022. Science Diplomacy in the Arctic: Contributions of the USGS to Policy Discourse and Impact on Governance. *Polar Record*, 58, p. e16.

Zaika, Yu. and Lagutina, M., 2023. Arctic Science Diplomacy in New Geopolitical Conditions: From "Soft" Power to "Hard" Dialogue? *Polar Record*, 59, p. e23.