भारत सरकार के प्रधान वैज्ञानिक सलाहकार का कार्यालय
Office of the Principal Scientific Adviser to the Government of India

भारतीय विज्ञान संस्थान

Policy Planning & Research Division
Ministry of External Affairs
Government of India

ORF OBSERVER RESEARCH FOUNDATION

TECHNOLOGY DIALOGUE

2026 Charting Technological Convergence

30 Nov 2026 – 2 Dec 2026

Indian Institute of Science, Bengaluru, India

Background

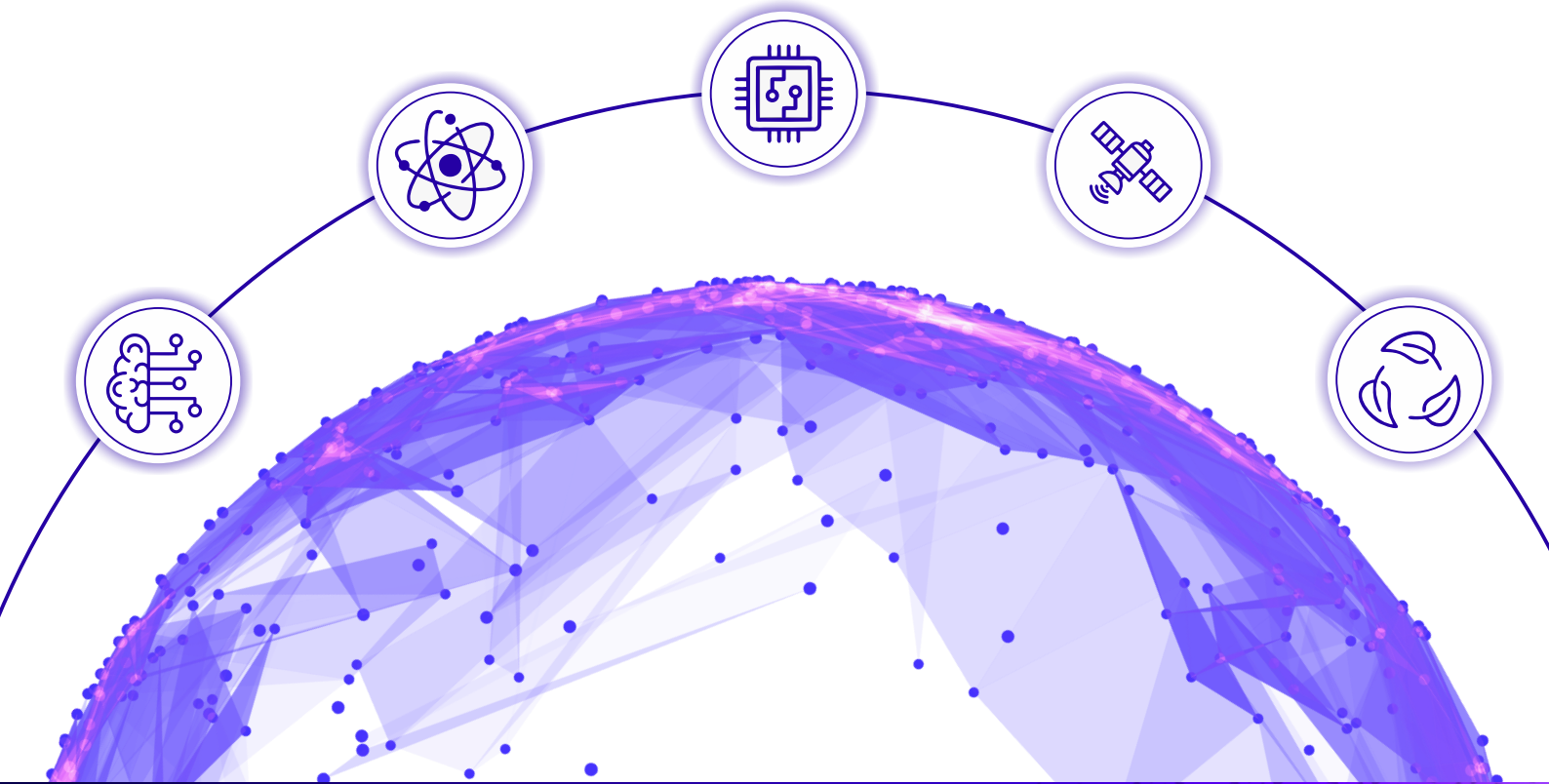
The Technology Dialogue is a Track 1.5 platform designed as an ecosystem conversation for government and non-government stakeholders to discuss technology partnerships, governance challenges and opportunities for international cooperation.

The first edition, held in 2023, was focused on ethical challenges related to disruptive technologies, the role of international collaborations and the need to recognise diverse knowledge systems. Building on this, Technology Dialogue 2025 focused on India's international technology engagement framework and strategic partnerships in artificial intelligence (AI), quantum technologies, semiconductors and other areas. The previous editions focused on specific issues of technology policy and technological missions through which India engages with its global partners. They brought together scientists and policymakers to deliberate on a range of issues that informed policies, missions and broader discussions from both Indian and international perspectives.



Technology Dialogue 2026

The 2026 edition of the Technology Dialogue will focus on the growing convergence of frontier technologies across sectors and technology domains. Advancements in the convergence of frontier technologies are expected to create significant disruptions in how economies function, industries are organised, and new sectors emerge. At the same time, certain existing industries and business models may become obsolete. These changes will also have wider implications for the organisation of societies, employability and the future of knowledge-based economies.The Dialogue will be an invite-only platform involving key government agencies from India and strategic partner countries, as well as industry stakeholders with a strong interest and role in shaping the convergence of frontier technologies. In addition to identifying new avenues for cooperation, the 2026 edition will examine policy challenges arising from technology convergence that are not specific to India or any individual country, but require coordinated responses across governments, institutions and sectors.

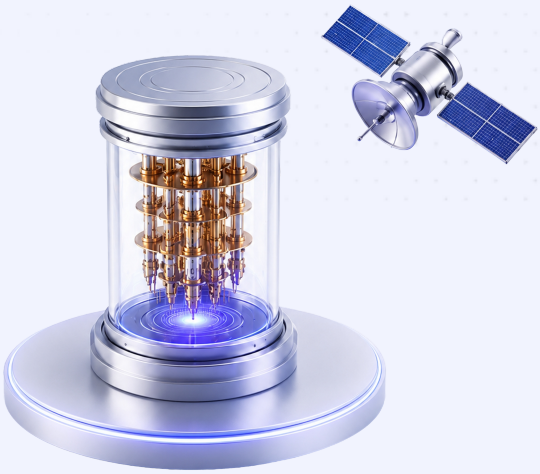


Themes

01 Panel

AI × Quantum: Shaping the Future of Computational Intelligence

The session will examine how AI and quantum technologies are reshaping computational capabilities and what it will take to translate these advances into scientific, economic and strategic leadership. It will explore opportunities and challenges in building globally competitive compute ecosystems, fostering interdisciplinary research and preparing industries and institutions for a future where computational intelligence becomes the foundational infrastructure for frontier technologies. The discussion will also consider how India can integrate its national investments to emerge as a leader in next-generation computing.





02 Fireside chat

Beyond Cybersecurity: What does it take to secure the critical systems?

The session will examine how the convergence of frontier technologies is reshaping cybersecurity and critical infrastructure resilience, highlighting the need for secure-by-design systems, post-quantum readiness, trusted hardware and stronger public-private collaboration. The discussion will explore how nations can move beyond traditional cybersecurity towards building resilient, trustworthy and future-ready digital ecosystems. Ultimately, it asks a defining question for the coming decade: Can security evolve as rapidly as the technologies it seeks to protect?

03 Panel

Frontier Technologies Unlocking the Bioeconomy Century

The panel will explore how the convergence of AI, biotechnology, engineering, data science, advanced manufacturing and digital technologies is redefining the global bioeconomy, creating new opportunities across healthcare, agriculture and sustainable manufacturing. It will also examine how India can leverage the BioE3 Policy and its growing biotechnology ecosystem to become a global leader in bio-based innovation.

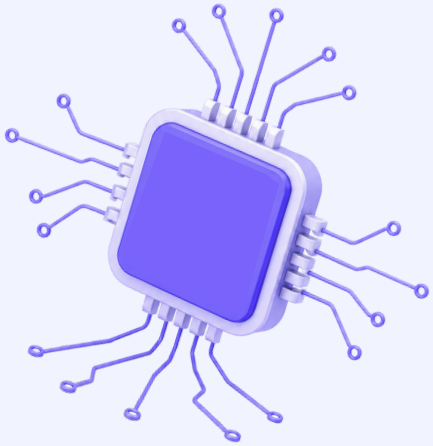


04 TED-style talk

The Brain, the Next Frontier: Neurotechnology Augmenting Human Potential?



The talk will explore how the convergence of neurotechnology, artificial intelligence, brain-computer interfaces, precision medicine, advanced imaging, biotechnology, and digital health is opening unprecedented possibilities, not only for understanding the brain, but also for restoring, enhancing, and augmenting human capabilities. It will also examine the ethical, societal, and governance challenges of ensuring these advances are developed responsibly, equitably, and in ways that enhance human potential. The session will invite the audience to reflect on a defining question: Can neurotechnology enable humanity not only to treat disease but also to responsibly expand the limits of human potential?



05 Panel

What and Who Will Determine Semiconductor Competitiveness in the Coming Decades?

The panel will explore the technological, industrial, and geopolitical forces that will define semiconductor competitiveness in the coming decades.It will examine how advances in AI, quantum technologies, photonics, advanced packaging, and specialised computing architectures are reshaping the semiconductor landscape, while addressing the strategic imperatives of supply chain resilience, technology sovereignty, trusted manufacturing, and international cooperation.It will also discuss how India can build a resilient end-to-end semiconductor ecosystem to strengthen its role in the global technology landscape.The panel may conclude with a defining question: What and who will shape the future of the world's most strategic technology?

06 Closing Keynote

Space 2050: Advancing Tech Frontiers for the Great Convergence



The closing keynote will explore how technological convergence, coupled with unprecedented collaboration across sectors and borders, is shaping the future of the global space ecosystem.It will reflect on opportunities presented by the New Space economy, including in-space manufacturing, lunar and deep-space exploration, satellite constellations, and space-enabled digital infrastructure.It will also examine how India can help shape the future of the New Space economy through innovation and trusted international partnerships.

TENTATIVE SCHEDULE

Day	Time	Proposed Programme
30th Nov 2026	Late Afternoon / Evening (Inaugural Session)	**Charting Technological Convergence:** (including a leadership keynote)
1st Dec 2026	Forenoon	**Panel: AI × Quantum:** Shaping the Future of Computational Intelligence **Fireside chat:** Beyond Cybersecurity: What it takes to secure the critical systems?
	Afternoon	**Panel:** Frontier Technologies Unlocking the Bioeconomy Century **TED-style talk:** The Brain, the Next Frontier: Neurotechnology Augmenting Human Potential?
2nd Dec 2026	Forenoon	**Panel:** What and Who will Determine Semiconductor Competitiveness in the Coming Decades? **Closing keynote:** Space 2050: Advancing Tech Frontiers for the Great Convergence

Additional Sessions

The previous editions also provided space for focused bilateral engagements. In the previous edition, for example, the India–France AI Policy Roundtable was hosted on the sidelines of Technology Dialogue 2025 as part of the lead-up to the AI summits in India and France. The 2026 edition will similarly facilitate such engagements with strategic partner countries to advance ongoing cooperation on priority technology and policy issues.

Flagship Associated Initiatives

1. Tech Diplomacy Global Fellows Programme

The 2026 edition of the Technology Dialogue would also launch a flagship Tech Diplomacy Global Fellows Programme. This is a structured initiative designed to identify and invest in the next generation of science and technology diplomats from India's strategic partner countries. These fellows will be identified based on the themes of this year's edition and will contribute to the deliberations during and beyond Technology Dialogue 2026. The fellows will be selected through a nomination process involving the OPSA and its counterparts in strategic partner countries. This fellowship will be jointly curated by the OPSA, IISc, and ORF.

2. Bengaluru Innovation Huddle

This edition will also feature a special ecosystem connect. Bengaluru is recognised as one of the world's leading technology and startup ecosystems, with a strong presence across a wide range of emerging and advanced technologies. The Dialogue will allow participants to connect closely with the ecosystem. It will be a standalone session, and participants will be curated based on the edition's priorities. The participants will primarily have an opportunity to connect with and gain a closer look at the innovation ecosystem available here through high-level engagements.



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