



Workshop on Strengthening India's Semiconductor Ecosystem: Policies, Challenges, and Opportunities

CSIR-NIScPR, Dr. K.S. Krishnan Marg, Pusa Campus, New Delhi,
on
📅 27 February 2026

CONCEPT NOTE

The global semiconductor industry stands at the forefront of technological transformation, powering innovations in artificial intelligence, 5G and beyond, electric mobility, quantum technologies, and advanced manufacturing. Recognized globally as a strategic asset, semiconductors now underpin economic competitiveness, national security, and technological sovereignty. In response, leading nations are advancing policies to build resilient, self-reliant, and innovation-driven semiconductor ecosystems.

India has made significant efforts in positioning itself within this global value chain. Key initiatives such as the India Semiconductor Mission (ISM), Production-Linked Incentive (PLI) schemes for semiconductor and display manufacturing, and the Design-Linked Incentive (DLI) program reflect the country's strategic commitment to developing a vibrant domestic ecosystem encompassing design, manufacturing, and research.

CSIR-NIScPR, as a national institute dedicated to science policy research and science communication, plays a critical role in supporting India's vision through evidence-based policy research. The institute's expertise in S&T policy analysis, technology foresight, innovation studies, and stakeholder engagement makes it uniquely positioned to facilitate multi-sectoral dialogue.

Recently, CSIR-NIScPR has undertaken research to study the Global Semiconductor Policies and strategies to strengthen India's Semiconductor Ecosystem. In this context, CSIR-NIScPR is organizing a workshop with the objectives of assessing India's current landscape of semiconductor ecosystem, identifying challenges, exploring opportunities for collaboration, identify global best practices and policy insights, facilitate dialogue on policy interventions, and develop actionable recommendations for supporting strengthening India's semiconductor capabilities.

This interactive workshop aims to bring together R&D institutions, policymakers, academia, and industry leaders to deliberate on critical challenges and opportunities shaping India's semiconductor future. Discussions will focus on assessing India's current policy landscape, benchmarking it against global leaders, identifying systemic gaps, and formulating strategies to foster innovation, investment, and global competitiveness.

Expected Outcomes

- Actionable policy recommendations to strengthen India's semiconductor ecosystem
- Identification of priority areas for strategic interventions
- Insights from global best practices and their applicability to India
- A roadmap for fostering collaboration among government, industry, and academia toward technological self-reliance

Workshop on Strengthening India's Semiconductor Ecosystem: Policies, Challenges, and Opportunities

🕒 10:00 AM – 5:30 PM | 27 February 2026, CSIR-NIScPR Conference Hall, Pusa Campus

Time	Programme
Inaugural Session	
10: 00 AM-10:05 AM	Welcome address by Dr. Geetha Vani Rayasam , Director, CSIR-NIScPR, New Delhi
10:05 AM-10:10 AM	Setting the Context Dr. Vipin Kumar , CSIR-NIScPR
10:10 AM-10:40 AM	Address by the Chief Guest Prof. V. Ramgopal Rao , Group Vice-Chancellor, BITS Pilani & Ex-Officio Member, ES Manufacturing Committee
10:40 AM-10:45 AM	Vote of Thanks Dr. Naresh Kumar , CSIR-NIScPR
Session I: R&D and Innovation, Design, and Manufacturing Ecosystem Chair: Dr. Rajesh K Sharma , Former Director, SSPL, DRDO, Delhi & Chairman, Semiconductor Society (india) Co-Chair: Dr. Naresh Kumar , CSIR-NIScPR, New Delhi	
10:45 AM – 12:30 PM	Dr. Manish Mathew CSIR-CEERI, Pilani Ms. Dipakshi Mehandru Director - Government Affairs, Intel India Dr. Rahul Kumar Associate Head, Center for Research Excellence in Semiconductor Technologies (CREST), BITS Pilani Dr. Umesh Kumar Tiwari Head Optics & Photonics Instrumentation (OPI), CSIR- CSIO, Chandigarh Dr. Nirmalya Karar CSIR-NPL, New Delhi Prof. Shree Prakash Tiwari , Dept. of Electrical Engineering & Dean of Administration, IIT Jodhpur, Rajasthan
Session II: Ecosystem for Skill Workforce & Talent Development Chair: Dr. Manish K Hooda , Director (Technology), India Semiconductor Mission, New Delhi Co-Chair: Dr. Bornali Sarma , CSIR-NIScPR, New Delhi	
12:30 PM – 1:30 PM	Dr. Ripunjay Singh NIELIT, New Delhi Prof. Awanish Pandey Programme Coordinator - Semiconductor Manufacturing and Technology, IIT-Delhi Prof. Rishu Chaujar , Director-Vinod Dham Centre of Excellence for Semiconductors and Microelectronics, Department of Applied Physics, Delhi Technological University, New Delhi
01:30 PM – 02:30 PM	Lunch

Session III: Policy, Governance, and Institutional Framework

Chair: Dr. Arundhati Sanath, Director, Public, Policy & Govt. Affairs, Lam Research

Co-Chair: Dr. Vipin Kumar, Head Energy Environment & Sustainability Division, CSIR-NIScPR, New Delhi

02:30 PM – 04:00 PM	<p>Dr. C.M. Ananda Head, Aerospace Electronics Division, CSIR-NAL, Bengaluru</p> <p>Prof. Sujit Bhattacharya Adjunct Professor, Amrita University, Former Chief Scientist, CSIR-NIScPR & Professor (AcSIR)</p> <p>Dr. Shiv Narayan Nishad & Dr. Sandhya L. CSIR-NIScPR New Delhi</p> <p>Ms. Naba Suroor, Science & Technology / Atal Innovation Mission Division, NITI Aayog, Government of India, New Delhi</p> <p>Dr. Amit Kumar, Research and Information System for Developing Countries (RIS), New Delhi</p>
---------------------	--

Panel Discussion and Concluding Session: Strategic Pathways: A Roadmap for India's Semiconductor Future

Chair: Prof. Navakanta Bhat, Dean, Division of Interdisciplinary Sciences, Professor, Centre for Nanoscience and Engineering, Indian Institute of Science (IISc), Bengaluru

Co-Chair: Dr. Sujit Bhattacharya, Adjunct Professor, Amrita University, Former Chief Scientist, CSIR-NIScPR & Professor (AcSIR)

4:00 PM – 5:30 PM	<p>Dr. Roopa Hegde Lead Engineer, Semiverse Solutions, Lam Research</p> <p>Dr. Hemang Shah Senior Director, Government Affairs and Business Development, Applied Materials India, Bengaluru, Karnataka</p> <p>Dr. Manish Mathew Head, Semiconductor Diamond Research Group (DRG), CSIR-CEERI, Pilani</p> <p>Mr. George Paul Director, Govt Relations & Corporate Strategy Sahasra Semiconductors Private Limited, New Delhi</p> <p>Shri Rajendra Pratap, Vice President (Digital & Computing), VerveSemi Microelectronics (P) Ltd, Noida, UP</p> <p>Dr. Rahul Kumar Associate Head, Center for Research Excellence in Semiconductor Technologies (CREST), BITS Pilani</p>
-------------------	---

Concluding Remarks: Dr. Vipin Kumar, Dr. Charu Verma and Dr. Shiv Narayan Nishad

ORGANIZING TEAM



Patron

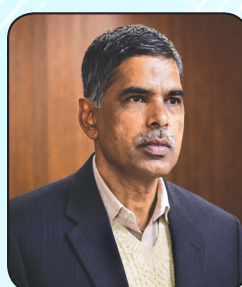
Dr. (Mrs.) Geetha Vani Rayasam

Director, CSIR-NIScPR, New Delhi

CORE ORGANIZING TEAM



Dr. Vipin Kumar, Chairman
Chief Scientist, CSIR-NIScPR



Dr. Naresh Kumar, Co-Chairman
Chief Scientist, CSIR-NIScPR



Dr. Shiv Narayan Nishad,
Member & Convener,
Principal Scientist, CSIR-NIScPR



Dr. Sandhiya Lakshmanan,
Member,
Senior Scientist, CSIR-NIScPR

ABOUT INSTITUTE

CSIR- National Institute of Science Communication and Policy Research (NIScPR), New Delhi

CSIR-National Institute of Science Communication and Policy Research (CSIR-NIScPR) is a constituent laboratory of Council of Scientific and Industrial Research carrying a broad mandate to promote STI policy studies and science communication among diverse stakeholders and act as a bridge at the interface of science, technology, industry, and society, which is essential to a robust S&T ecosystem in the country. The institute draws from the rich intellectual diversity of faculty in policy research and science communication. The core research activity of the institute is in different areas of the STI ecosystem, developmental challenges identified under sustainable development goals, and science-society studies with strong alignment to government policy and programs. Evidence-based policy research, socio-economic impact assessment, and outreach to society through diverse communication interactions are the focal approaches of the research. The institute also has 15 journals in different areas of science and technology, along with publishing a popular science magazine, Science Reporter, and R&D newsletters.

For Further Information, Please contact

Dr. Vipin Kumar

Chief Scientist, CSIR-NIScPR

Email: vipan.kumar.niscpr@csir.res.in

Dr. Naresh Kumar

Chief Scientist, CSIR-NIScPR

Email: nareshkr.niscpr@csir.res.in

Dr. Shiv Narayan Nishad

Principal Scientist, CSIR-NIScPR

Email: s.nishad.niscpr@csir.res.in

Contact: +91 7838297720