

F.No.13-52/2018-ICC
Government of India
Department of Higher Education
International Cooperation Cell

Shastri Bhawan, New Delhi
Dated the 13th November, 2025

OFFICE MEMORANDUM

Subject: Minutes of the Apex Committee Meeting of SPARC.

The undersigned is directed to forward herewith a copy of the Record of Discussion of the Apex Committee Meeting of SPARC held on 4th November, 2025 at 3:00 P.M in Hybrid mode under the Chairmanship of Secretary, Higher Education (HE) for information and necessary action.

2. This issues with the approval of Secretary, HE.



(Rajeev Kumar Sinha)
Under Secretary (ICC)
Email: rajeevk.sinha@nic.in

To:

1. Shri Vikram Misri, Foreign Secretary (psfs@mea.gov.in)
2. Prof. Abhay Karandikar, Secretary, DST (dstsec@nic.in)
3. Dr Rajesh S Gokhale, Secretary, DBT (secy@dbt.nic.in)
4. Shri Vivek Aggarwal, Secretary, Ministry of Culture (secy-culture@nic.in)
5. Office of Chairman UGC (cm.ugc@nic.in)
6. Prof T G Sitharam, Chairman AICTE (chairman@aicte-india.org)
7. Ms. Saumya Gupta, Joint Secretary (TE), MoE
8. Shri Sanjog Kapoor, Joint Secretary & Financial Advisor, MoE (jsfa-moe@gov.in)
9. Prof. Suman Chakraborty, Director, IIT Kharagpur (director@iitkgp.ac.in)
10. Prof. Rabibrata Mukherjee, National Coordinator (SPARC), IIT Kharagpur (rabibrata@che.iitkgp.ac.in)
11. Prof. Indranil Manna, Professor, IIT Kharagpur (on lien as VC, BIT, Mesra) (vc@bitmesra.ac.in)
12. Prof. Virander S. Chauhan (viranderschauhan@gmail.com)
13. Dr. S. Vaidhyasubramaniam, Dean, Planning & Development, SASTRA University (vaidhya@sastra.edu)

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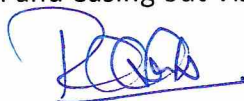
- i. PPS to Secretary (Higher Education), MoE
- ii. PPS to JS (ICC), MoE

Minutes of the Apex Committee Meeting of SPARC

The Apex Committee meeting for the Scheme for Promotion of Academic and Research Collaboration (SPARC) was held on 4th November, 2025 at 3:00 PM. in Hybrid mode under the chairmanship of Secretary (HE). The list of participants is at **Annexure-I**.

2. The Apex Committee discussed the recommendations contained in the 'Third Party Review of SPARC scheme' submitted by DRDO. APEX committee agreed on the continuation of the SPARC scheme beyond the period of 31st March 2026. Comments/inputs of APEX Committee Members to be furnished urgently for the preparation of the Expenditure Finance Committee note for the continuation of the scheme. After due deliberations on the other agenda items, the following decisions were approved during the meeting:

- i. **SPARC Phase IVA (2025-26):** A Total of **66 SPARC projects** (totaling 68.52 Crores) have been approved for funding. [List attached] * *[Note: Budget Outlay for SPARC as per SFC for FY 2021-26 is Rs 425.2 Crores. Funds currently available for sanctioning as per SFC is Rs 144.16 Crores.*
- ii. Approval for eligible Indian Institutions to participate SPARC projects with the Universities within QS 800 World from 28 selected nations and also those which are beyond these countries but falling under QS 800.
- iii. To revise the duration of visits by Foreign Faculty to Indian Institutes from the earlier window of '15 days to 4 months' during the project to '7 days to 2 months' in one academic year (retaining the overall provision of **'15 days to 4 months' during the complete project cycle of two years**). Multiple visits to also be allowed. This will apply prospectively to all future projects on the date of approval.
- iv. Extension of the ongoing projects (based on multiple requests from the PIs) by six months (i.e. Phase II, IIB, III including SPARC-UKIERI) from the date of issue of this approval- for now it stands at 31st March, 2026.
- v. To permit Indian Institutions to participate for Joint research projects with the following
 - a) Top 100 International Laboratories/Research Organizations under 'Nature Index' world ranking or with eminent scientist/experts including Nobel Laureates.
 - b) Research organizations, such as Conseil Européen pour la Recherche Nucléaire (CERN), Switzerland; Los Alamos National Lab (LANL), USA; Deutsches Elektronen-Synchrotron (DESY), Germany; Science and Technology Facilities Council (STFC), UK; High Energy Accelerator Research Organization (KEK), Japan (that may not be covered under QS or similar rankings).
- vi. To organize sensitizing/outreach session with Indian diplomatic Missions of 28 selected countries under SPARC through virtual mode in coordination with MEA for wider knowledge dissemination and easing out Visa related concerns.



- vii. To host a National Level SPARC Conclave in Delhi/Other cities inviting globally reputed award Winner/Scientist/Experts/Nobel laureate/prominent faculties in the field of SPARC identified 12 themes.

3. **Suggestions:** Tangible Outcomes/Success Stories including its impact on industry and economy resulting from SPARC Projects needs to be captured, every PI shall mandatorily provide all the requisite information sought by IIT Kharagpur (CNA). which will capture the expected outcome of the project. Each PI may explore the possibilities of handholding the Project esp. those where Patents are produced so that industry linkages can be established.

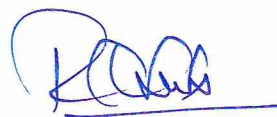
4. **Further the apex committee recommended the following changes which may be taken up in the next SFC/EFC :**

i. To allow two visits of Indian faculty (PIs/ Co-PIs) abroad by economy class airfare (subject to airfare ceiling of US\$2,500 – in line with the recently revised rate for the visit of Indian students abroad under the SPARC scheme) to and from the host country in connection with a research project and also payment of the living expenses @ \$1800 per month which is equivalent to the amount entitled for the student. The minimum duration of the visit of an Indian faculty shall be kept at 15 days and the maximum duration may be up to 2 months over the duration of the project.

ii) To revise the current eligibility criteria for Indian Institutes from top 100 NIRF (overall) to the top 100 NIRF ranked Institutions in Overall/subject wise/universities/colleges. This will enhanced the overall application domain.

5. Suggested to form a committee to re-work on the new structures of the Scheme. The proposed list of Members be given by IIT Kharagpur.

The meeting ended with thanks to the chair and participants.



Annexure-I**List of Participants**

S.No.	Participants
1.	Shri Vineet Joshi, Secretary (HE), Ministry of Education, Chairman
2.	Shri Armstrong Pame, Joint Secretary (ICC), Ministry of Education, Member Secretary
3.	Shri Sanjog Kapoor, JS & FA, Ministry of Education, Member
4.	Shri Dhavala Vijaya Raghava, OSD [ED], Nominee of Secretary MEA, Member
5.	Dr. Garima Gupta, Scientist-'F', Nominee of Secretary DBT, Member
6.	Shri G Ravinder, Director (ICC), Ministry of Education
7.	Shri Mukesh Kumar, Director (IFD), Ministry of Education
8.	Shri N.S Bisht, DS (IFD), Ministry of Education
9.	Prof. Manish R. Joshi, Secretary, Nominee of Chairman UGC, Member
10.	Dr Archana Thakur, Joint Secretary (IC), Nominee of Chairman UGC, Member
11.	Prof. Indranil Manna, Vice-chancellor of the Birla Institute of Technology, Mesra, Nominated Member (Reputed Academician from Public Sector)
12.	Prof. Virander S. Chauhan, Arturo Falaschi Emeritus Scientist, ICGEB. Distinguished Visiting Professor, University of Delhi, Nominated Member (Reputed Academician from Public Sector)
13.	Dr. S. Vaidhyasubramaniam, Dean - Planning and Development, SASTRA University, Thanjavur, Nominated Member (Reputed Academician from Private Sector)
14.	Prof. Rabibrata Mukherjee, National Coordinator (SPARC), IIT Kharagpur (Special Invitee)
15.	Shri Rajeev Kumar Sinha, Under Secretary (ICC), Department of Higher Education, Ministry of Education.
16.	Shri Ashish Kumar Mishra, Section Officer (IFD), Ministry of Education
17.	Shri Atul Juyal, Liaison Officer (SPARC), Department of Higher Education, Ministry of Education.
18.	Ms. Arati Verma, Assistant Section Officer, Department of Higher Education, Ministry of Education.



Approved List of Projects during Apex Committee of SPMC
On 04.11.2025

Sl. No.	PROPO SAL ID	THEME	Title	Indian PI Name	INDIAN PI Institute	INTERNATIONAL PI Country	Final amount
1	P4044	Advanced Computing (Supercomputing, AI, Quantum Computing)	Applying LLMs to Secure Software Development	B. Janet	National Institute of Technology, Tiruchirappalli	United States	7573200
2	P4051	Advanced Computing (Supercomputing, AI, Quantum Computing)	Handling Problem of Data Quality in Artificial Intelligence and its Application to Software Quality, Fairness and explainable AI (DAQUA)	Sandeep Kumar	Indian Institute of Technology Roorkhee	Spain	10832000
3	P4077	Advanced Computing (Supercomputing, AI, Quantum Computing)	Graph Neural Networks for Quantum Entanglement Optimisation in Large-Scale Quantum system	Chandrashekar Jatoth	National Institute of Technology Raipur	Australia	10072000
4	P4086	Advanced Computing (Supercomputing, AI, Quantum Computing)	Machine Learning for Quantum Matter (ML4QM)	Sourin Das	Indian Institute of Science Education and Research (IISER), Kolkata	United States	10154000
5	P4100	Advanced Computing (Supercomputing, AI, Quantum Computing)	From Data to Evidence: A Digital Forensic Readiness Framework for Deep Artefact Discovery	Parag Rughani	National Forensic Sciences University	Australia	9170000
6	P4139	Advanced Materials, Rare-earth & Critical Minerals	Advanced Superconducting Materials for Fusion Reactor: A High-Entropy Approach	Sourav Mark	Thapar Institute of Engineering and Technology	France	11144000
7	P4016	Agri & Food Technologies	Unstructured but Essential: Understanding and Exploiting IDPs (intrinsically disordered proteins) for Climate-Resilient Maize	Rifat John	University of Kashmir	United States	11728000
8	P4045	Agri & Food Technologies	Pulse Laser-Induced Reactive Oxygen Species (ROS) in Spermatozoa and Their Implications for Microfluidic-Assisted Sex and Motility Sorting	Tuhin Subhra Santra	Indian Institute of Technology Madras	Taiwan	9483000
9	P4074	Agri & Food Technologies	Novel Disruptive Technology: Design and development of smart and sustainable technology for agri-food systems	Madhuresh Dwivedi	National Institute of Technology Rourkela	Canada	8724000
10	P4101	Agri & Food Technologies	Next-Generation spectral Imaging and AI for Sustainable Agri-Food Quality Management	Shrinubudheen KV	National Institute of Technology Calicut	Norway	10506000
11	P4137	Agri & Food Technologies	Innovative Polymer-Encapsulated Phase Change Materials for Enhanced Thermal Management in Smart Food Packaging	Krunal M. Gangawane	Indian Institute of Technology Jodhpur	United States	8110800

		Photocatalytic Nanomaterials Coupled with Marine-Derived Antimicrobial Peptides for Advanced Water Treatment and Aquaculture Disease Management	SWAPNA P. ANTONY	Cochin University of Science and Technology	South Korea	11882000
12	P4070	Blue Economy				
13	P4028	Disaster Management & Resilient Infrastructure	SK Pramada	National Institute of Technology Calicut	United States	10854000
14	P4083	Disaster Management & Resilient Infrastructure	William Kumar Mohanly	Indian Institute of Technology Kharagpur	United States	8460000
		Graphene-impregnated Coatings of Fibres for Enabling Use of Fibre Reinforced Plastic (FRP) Reinforcement and Tubular Structures of Seawater Sea Sand Concrete	Kinsuk Naskar Damodhara Rao Mailapalli	Indian Institute of Technology Kharagpur	Australia	10022000
15	P4006	Energy, Sustainability and Climate				
16	P4099	Energy, Sustainability and Climate		IIT Kharagpur	United States	12738000
17	P4013	Energy, Sustainability and Climate Change	SHANTHA KUMAR S	Vellore Institute of Technology Vellore	Australia	7257600
18	P4014	Energy, Sustainability and Climate Change	SOUROVEE DUTTA	National Institute of Technology Hamirpur	United Kingdom	15070000
19	P4017	Energy, Sustainability and Climate Change	Mohammad Adil Dar	Birla Institute of Technology and Science Pilani	Australia	5810400
20	P4033	Energy, Sustainability and Climate Change	Usha K. Aravind	Cochin University of Science and Technology, Kochi	Russian	11076000
21	P4034	Energy, Sustainability and Climate Change	Pravesh Chandra Shukla	IIT Bhilai	Finland	11142000
22	P4036	Energy, Sustainability and Climate Change	G. Arthanareeswaran	National Institute of Technology Tiruchirappalli	Sweden	12520000
23	P4037	Energy, Sustainability and Climate Change	Pradeep Thalappil	Indian Institute of Technology Madras	Israel	12642000

24	P4041	Energy, Sustainability and Climate Change	Thermal-Hydraulics, Core Design, and Model Validation for a micro-HTGR Using He, CO ₂ , and N ₂ Coolants	Goutam Dutta	IIT Jammu	United States	10868000
25	P4048	Energy, Sustainability and Climate Change	Development of Next-generation Energy Materials for Efficient and Stable Perovskite Solar Cells	Anandan Sambandan, PhD	National Institute of Technology Tiruchirappalli	Australia	13619000
26	P4053	Energy, Sustainability and Climate Change	Low temperature thermocatalysis for valorisation of agricultural waste	virendra kumar vijay	Indian Institute of Technology Delhi	United Kingdom	10968000
27	P4060	Energy, Sustainability and Climate Change	Sustainable Green ICT Infrastructure: Advancing Energy-Efficient Data Center Design and Empowering Next-Generation				
28	P4069	Energy, Sustainability and Climate Change	Researchers through Green ICT Initiatives	Dr. E.Suresh Babu	National Institute of Technology Warangal	Germany	6338400
29	P4075	Energy, Sustainability and Climate Change	Exploring the potential of Floating and Agri PV based hydrogen for UK and India	K. Ravi Kumar	Indian Institute of Technology Delhi	United Kingdom	8066400
30	P4090	Energy, Sustainability and Climate Change	Development of High-Performance Natural Rubber/Graphene Nanocomposites: The Role of Graphene on Strain-Induced Crystallisation of Natural Rubber	Manoj B	Christ University	United States	9759000
31	P4093	Energy, Sustainability and Climate Change	Exergy Optimization Framework for Waste Heat Recovery in Next-Generation Polygeneration Systems	Tangellapalli Srinivas	Dr B R Ambedkar National Institute of Technology Jalandhar	United Kingdom	10279000
32	P4106	Energy, Sustainability and Climate Change	Digital Twin Integration With Data Fusion for Enhanced Management of Grid Integrated solar PV system for EV charging	Amit Ojha	Maulana Azad National Institute of Technology, Bhopal, India	Singapore	10066000
33	P4112	Energy, Sustainability and Climate Change	Emotional Drivers for Biodiversity Conservation Action: A psycho-ecological assessment	Sabha Alam Choudhury	National Institute of Technology Karnataka, Surathkal	Australia	9478000
34	P4113	Energy, Sustainability and Climate Change	Modelling, Control, and Stability Analysis of Type 4 Grid Forming Offshore Wind Turbine in Weak Grid.	Animesh Kumar Sahoo	Indian Institute of Technology Dharwad	Norway	12436000
35	P4118	Energy, Sustainability and Climate Change	Next-Generation Power Electronics for Multisource Hydrogen-Battery Hybrid Electric Drives in Sustainable Mobility Systems	Vijayakumar	SRM Institute of Science and Technology	United Kingdom	10826000
36	P4136	Energy, Sustainability and Climate Change	Regional to global transport of the surface pollutants and chemically active trace gases: Eddy shedding of the Asian summer monsoon anticyclone	Sanjay Kumar Mehta	SRM Institute of Science and Technology	Japan	12816000
			From Carbon Waste to Energy: Prototype Development for CO ₂ to Fuel Conversion	Leela Manohar Aashala	National Institute of Technology Warangal	Taiwan	9082000

37	P4026	Healthcare & MedTech	Secure AI Framework for Deepfake Detection and Adversarially Robust MedTech System.	Preeti Chandrakar	National Institute of Technology, Raipur, Chhattisgarh	United States	9155000
38	P4029	Healthcare & MedTech	Federated Multimodal Deep learning Framework for Privacy-Preserving and Context Awareness in Early Cardiovascular Disease Prediction	Vasundhara	National Institute of Technology Warangal, India	United States	9344000
39	P4032	Healthcare & MedTech	Laser-Ablative Synthesis of Next-Generation Bismuth-Based Nanoformulations for AI-enhanced Multimodal Theranostic Applications for Head and Neck Squamous Cell Carcinoma	Parikshit Moitra	IISER Berhampur	United States	10816000
40	P4042	Healthcare & MedTech	Steroid Hormones and Their Metabolites: A One Health Approach on Risks to Aquatic Ecosystems, Fauna, and Humans	C. T. Aravindakumar	Mahatma Gandhi University, Kottayam	Norway	10936000
41	P4049	Healthcare & MedTech	Hybrid metamaterials-based miniaturized spin-orbit photonic weak measurement device for bio-sensing	Nirmalya Ghosh	IISER Kolkata	United States	11638000
42	P4052	Healthcare & MedTech	Smart Exoskeletons in Healthcare: Principle and Practices for Developing Scalable Exosuits for Rural Applications	Anup Nandy	National Institute of Technology, Rourkela	United States	9516000
43	P4055	Healthcare & MedTech	Explainable AI Clinical Decision Support Service for Hospitals and Telemedicine platforms	M. B. Mukesh Krishnan	SRM Institute of Science and Technology, Kattankulathur	Singapore	8841600
44	P4072	Healthcare & MedTech	Development of Smart Co-Delivery Systems for Breast Cancer Using AI-Engineered Milk-Derived nanocarriers	Kaiser Raza	Central University of Rajasthan	United Kingdom	13301000
45	P4082	Healthcare & MedTech	Sustainable Sequential Green Extraction of Bioactive Marine Polysaccharides and Their Application in Diabetic Wound Healing Hydrogels	Sabu Thomas	Mahatma Gandhi University	United States	7896000
46	P4087	Healthcare & MedTech	Seeing Smarter - Artificial Intelligence (AI) and Eye - Tracking to Transform Dental Radiograph Education.	M S Muthu	Sri Ramachandra Institute of Higher Education and Research	Australia	11691000
47	P4098	Healthcare & MedTech	Synthesis of QDs-Porphyrin conjugates as theranostic agents via synergistic therapeutic effect	Sreekala M S	Mahatma Gandhi University	South Africa	8212800
48	P4114	Healthcare & MedTech	Advanced Fluorescent Probes and Super-Resolution Spectral and Imaging Methods for Early Detection of Alzheimer's Disease	Sarthak Mandal	National Institute of Technology Tiruchirappalli	Canada	6771600

49	P4125	Healthcare & MedTech	Dendrimer Grafted 2D-MXene Nanoarchitectonics based Electrochemical Aptasensors towards the Ultrasensitive Detection of Antineoplastic Drugs	SENTHILKUMAR SELLAPPAN	Vellore Institute of Technology (VIT) Vellore	South Korea	10696000
50	P4126	Healthcare & MedTech	Self Powered Electrical Bandages for Drug Delivery, Bioelectric Stimulation, and Real-Time Biosensing in Diabetic Wound Healing	NAVED ANJUM I MALEK	SARDAR VALLABHBHAI NATIONAL INSTITUTE OF TECHNOLOGY	United Kingdom	13254000
51	P4005	Healthcare and MedTech	Novel mitochondria-targeted compounds for the treatment of cardiomyopathies produced by anti-cancer drug (ACD)	Shailendra Pratap Singh	Central University of Rajasthan	Germany	10268000
52	P4008	Healthcare and MedTech	Deploying a Machine learning (ML) based drug repurposing strategy to identify new small molecules targeting the interaction between Matrix Metalloproteinase and Heat Shock Family Proteins in Glioma progression	Mahitosh Mandal	Indian Institute of Technology Kharagpur	United Kingdom	7586400
53	P4023	Next-Gen Communications	AI-Powered Zero-Knowledge Proof-based Security Framework Integrating PQC and QKD for Next-Generation 5G/6G Networks	Awaneesh Kumar Yadav	Indian Institute of Technology Mandi, Mandi, H.P., India	Taiwan	10224000
54	P4056	Next-Gen Communications	Design and Development of Fluid-based Reconfigurable Surfaces for Adaptive Electromagnetic Wave Control and Beam-Steering Applications	Karthikeyan S S	NIT Tiruchirappalli	Italy	9738000
55	P4071	Next-Gen Communications	In band Full Duplex based Integrated Tracking and Communications in Giga MIMO Systems for FR3 Band (F1T-CoMS)	Navneet Garg	National Institute of Technology Delhi	United States	8900400
56	P4081	Next-Gen Communications	Secure and scalable quantum communication via nanoscale photonic devices	Sivarama Krishnan	Indian Institute of Technology Madras	Germany	12542000
57	P4107	Next-Gen Communications	Rapid prototyping of next generation communication Ics	Sankaran Aniruddhan	Indian Institute of Technology Madras	Canada	13696000
58	P4024	Smart Cities & Mobility	AI-Powered Real-Time Object Motion Detection and Tracking for Intelligent Surveillance and Monitoring	Mohammad Faruk Hashmi	National Institute of Technology Warangal	Israel	10166000
59	P4035	Smart Cities & Mobility	Design and Development of AI-Driven Robust Control Strategies for Wastewater Treatment Plants in Urban and Rural India.	Dr. Soumya Ranjan Mahapatro	Vellore Institute of Technology Chennai Campus	South Africa	10019000
60	P4058	Smart Cities & Mobility	SmartX: Predictive Edge Intelligence for Urban Traffic Flow	Sourav Kanti Addya	National Institute of Technology Karnataka, Surathkal	Australia	11925000
61	P4040	Space and Defense	Design and Development of Fuel Cell-based Unmanned Aerial Vehicles	SATYA SEKHAR BHOJILLA	Indian Institute of Technology Jammu	Taiwan	10714000
62	P4131	Space and Defense	Self-healing epoxy polymeric materials for advanced structural applications	Narayan Chandra Das	Indian Institute of Technology Kharagpur	Australia	9314400

			Developing an in-situ Microscope and Optoelectronic tools for Two-dimensional Quantum Heterostructure	Prof. Prasana Kumar Sahoo	Indian Institute of Technology Kharagpur	Prof. Ritesh Agrawal	University of Pennsylvania	United States	11415400	Recommended
63	P4119	Semiconductor								
64	P4050	Semiconductor	Tapping GaN potential: Heterogeneously integrated packaging of GaN devices for low voltage high current electric vehicle drives.	Dr. Prasant Surana	Indian Institute of Technology Roorkee	Prof. Wei-Hua Cheng	National Yang Ming Chiao Tung University (NYCU)	Taiwan	10648000	Recommended
65	P4002	Semiconductor	Doping in monolayer 2D semiconductors for applications in multi-logic devices	Dr. Debjit Ghoshal	Indian Institute of Technology Guwahati	Dr. Saptarshi Das	Pennsylvania State University	United States	13098000	Recommended
66	P4015	Semiconductor	Hybrid Nano-Pillar Dielectric Stacks for III-V & III-N MOS Platforms: A Pathway to Next-Generation High-Speed Multifunctional Devices	Dr. Anirudha Mondal	National Institute of Technology Durgapur	Dr. Kao-Shuo Chang	National Cheng Kung University	Taiwan	11312000	Recommended
Total									685218400	

