



सेन्टर फॉर मेटिरियल्स फॉर इलेक्ट्रॉनिक्स टेक्नोलॉजी (सी-मेट)

(वैज्ञानिक संस्था, इलेक्ट्रॉनिक्स और सूचना प्रौद्योगिकी मंत्रालय, भारत सरकार)

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List of Screened IN and Screened OUT Proposals for Grant Challenge - 2 Under IICG

Annexure – I

List of Screened IN Proposals for Presentation

Sr. No.	Proposal ID	Applicant/PI Name	Organization/Institute	Project Title
1	IICG-2026-002	Dr.R.Prasanna	Vel Tech Rangarajan Dr. Sagunthala R&D Institute of Science and Technology	Design for Graphene based Omnidirectional Radiation Arrays for Sub-6GHz Antenna Application
2	IICG-2026-009	Akhil Gupta Dr. Monika Verma	Mazout Electric Private Limited, Laxmi Nagar, Delhi	Design for Graphene based Omnidirectional Radiation Arrays for Sub-6GHz Antenna Application
3	IICG-2026-058	Dr. Deepti Das Krishna	Cochin University of Science & Technology, Cochin,	Design for Graphene-based Omnidirectional Radiation Arrays for Sub-6GHz Antenna Application
4	IICG-2026-013	Dr. Arpan Desai,	ICT Department, Pandit Deendayal Energy University, Gandhinagar, India	Development of Graphene-Based Wideband Dual-Polarized MIMO Dipole Array Antenna for 5 GHz Wireless Communication.
5	IICG-2026-040	Dr. Kamal Kishor Upadhyay	Manipal University Jaipur	Design for Graphene based Omnidirectional Radiation Arrays for Sub-6GHz Antenna Application.
6	IICG-2026-033	Mr. Mohammad Muzaffar Ahsan Mrs. S Maheshwari Dr. S Meenaketan	BPCL	Scalable Petcoke-Derived Graphene Heterostructures for High-Performance Room-Temperature Hydrogen Sulfide (H ₂ S) Gas Detector
7	IICG-2026-042	Dr Ashutosh Kumar Dubey	Indian Institute of Technology (BHU) Varanasi	Development of a Highly Selective, Stable, and Scalable 2D-FET Sensing Platform for NO ₂ Gas level

8	IICG-2026-048	Dr. Neetu Prasad	PhytoLens AI Private Limited	Laser-Fabricated Graphene Photonic Chip for AI-Enabled Smartphone-Based Spectral Sensing
9	IICG-2026-057	Dr. Kailash Chandra Jena	Indian Institute of Technology (IIT), Ropar	Self-Powered Stretchable Laser-Induced Graphene (LIG) Patch Integrated with Covalent Organic Frameworks (COFs) for Direct Conductive Sweat Monitoring of Organophosphate Pesticides.
10	IICG-2026-005	Dr. Anuj Kumar	GLA University, Mathura	Crown Ether Functionalized Borophene Quantum Dots for Ultrasensitive and Highly Selective Fluorescence Sensing of Sodium (Na ⁺) and Potassium (K ⁺) Ions
11	IICG-2026-055	Dr. Tulika Srivastava	SRM Institute of Science and Technology Ramapuram, Chennai	Development of Graphene-Based Heterojunction Photodetectors for Selective UVA, UVB, and Solar-Blind UVC Detection
12	IICG-2026-046	Dr. E. Durgadevi	SRM Institute of Science and Technology (SRMIST)	Design and Demonstration of a Universal 2D-FET Test-Chip Platform with Contact-Selective, Thermally Cross-Linked Amine-Polymer Engineering
13	IICG-2026-012	Dr. Sunil Mahajan	MAEER's MIT Arts, Commerce and Science College, Alandi (D.), Pune	Development of an Active Noise Cancellation (ANC) System with Graphene-based Flexible Piezo-Transducer Films
14	IICG-2026-051	Dr. M. Shunmugathammal	SRM Institute of Science and Technology Ramapuram, Chennai	GraFlex-ANC: Fabrication of Graphene-Based Flexible Piezoelectric Transducers for Active Noise-Cancelling Earbuds in MRI Patients
15	IICG-2026-053	K. Lalitha	SRM Institute of Science and Technology Ramapuram, Chennai	Development of Smart Helmet using Active Noise Cancellation (ANC) System with Graphene based Flexible Piezo-Transducer Films for Fighter Aircraft Pilot.

Annexure – II
List of **Screened OUT** Proposals

Sr. No.	Proposal ID	Applicant/PI Name	Organization/Institute	Project Title
1	IICG-2026-018	Dr. Amit Kumar Singh	Indian Institute of Technology Patna, India	Design for Graphene based Omnidirectional Radiation Arrays for Sub-6 GHz Antenna Application
2	IICG-2026-037	Dr. P. Sandeep Kumar	SRM Institute of Science and Technology (SRMIST)	On the Design and Analysis of Graphene based Monopole Antenna variants for Sub-6GHz MIMO Applications
3	IICG-2026-014	Saurav Soni	SYNTHEON TECH PRIVATE LIMITED, Jaipur, Rajasthan	VAJRA-RF: Graphene Omnidirectional Dual-Polarized MIMO Array
4	IICG-2026-022	Dr Nukala Srinivasa Rao	MVSR Engineering College, Telangana state	Graphene-Based Omnidirectional Radiation Arrays for Sub-6 GHz 5G/6G Communication Systems
5	IICG-2026-025	Dr. Brijesh Mishra	School of Engineering and Technology, CMR University, Bengaluru	Design and Development of Graphene-Based High-Gain Omnidirectional 2×2 MIMO Antenna Arrays for Sub-6 GHz Wireless Communication Applications
6	IICG-2026-030	Dr. V. Harini	MVSR Engineering College, Hyderabad	Performance Analysis of a CPW-Fed Graphene-Based Textile Wearable MIMO Antenna for Smart 5G Communications
7	IICG-2026-032	Dr. Rajat Joshi	Lovely Professional University, Punjab	Design and Development of Graphene-Based Omnidirectional Radiation Array for High-Efficiency Sub-6 GHz Wireless Communication Applications
8	IICG-2026-039	Dr.R.Ramyea	Kongu Engineering College	Design of Graphene based Omnidirectional Radiation Arrays for Sub-6GHz Antenna Application
9	IICG-2026-041	Dr. Gaurav Upadhyay	Maulana Azad National Institute of Technology Bhopal	Development Design and Experimental Validation of an AI-Assisted Graphene-Based Omnidirectional Antenna for Next-Generation Wireless Communication Applications
10	IICG-2026-050	Dr. Reshma Lakshmanan	Adi Shankara Institute of Engineering and	Design for Graphene based Omnidirectional Radiation

			Technology (ASIET), Kochi	Arrays for Sub-6GHz Antenna Application
11	IICG-2026-056	Dr. Chandni Bajaj	SRM Institute of Science and Technology Ramapuram, Chennai	Design of Graphene-based Conformal MetaSurface-backed MIMO antenna for sub-6 GHz wearable applications.
12	IICG-2026-060	Dr.Ajanthaa Lakkshmanan	SRM Institute of Science and Technology Ramapuram, Chennai	AI-Optimized Graphene-Enhanced Omnidirectional MIMO Antenna System ("GraphAnt-6G") for Resilient, Energy-Efficient Sub-6GHz Connectivity in Rural, Industrial-IoT and DisasterResponse Networks
13	IICG-2026-026	Dr. Hitesh Borkar (NIT-W) Dr. Vinay S. Palaparthi (DAU Gujrat)	National Institute of Technology, Warangal (NIT Warangal)	Detection of Highly Selective Multi Freon 11, 113, 12, 21, and 22 Using Graphene 2D Nanomaterials
14	IICG-2026-059	Dr. Srikant Kumar Mohanty	Amrita Vishwa Vidyapeetham, Chennai	A graphene-oxide diffusive memristor as a spiking tactile sensor for robotic and prosthetic skin
15	IICG-2026-029	Dr. S. Venkatesh	Department of Electronics and Communication Engineering, IIIT Kottayam	Preparation and fabrication of g-C3N4 and Bi based nanocomposites for the design and development of paper-based microfluidic triboelectric nanogenerators [TENG] fluoroquinolone sensors
16	IICG-2026-031	Dr. Dipak Kr Chanda	Matrexia Advanced Technologies Pvt. Ltd. West Bengal	Development of Printable Few Layer Graphene-Based Flexible Strain and Tactile Pressure Sensor Platform for Smart Electronics, Robotics and IoT Applications
17	IICG-2026-035	Dr. M. Jerold	National Institute of Technology Warangal	Development of Bioengineered Graphene Paste Electrode as an Effective Electrochemical Sensor for Heavy Metal Detection in Wastewater
18	IICG-2026-036	Dr. G. RAAM DHEEP	LOVELY PROFESSIONAL UNIVERSITY	Design, Fabrication, and Characterization of Graphene-Doped Lead Zirconium Titanate (GPZT)-Based Flexible Piezoelectric Thin-Film Electronic Skin for Robotic Tactile Sensing Applications.
19	IICG-2026-043	Satya Veer Singh	National Institute of Technology Warangal (NIT Warangal), TG	Development of In-Situ Grown Ag-TiO2 Quantum Interfaces for Graphene based Flexible, Self-Powered and Neuromorphic Photodetectors.

20	IICG-2026-049	Dr. Sudha Joseph	Cambridge Institute of Technology, KR Puram, Bengaluru	Multi-layer vertically stacked hybrid graphene gas sensor for non-invasive health monitoring
21	IICG-2026-054	Dr Kishor Kumar Sahu	Reseapro Labs Pvt Ltd.	Portable Graphene–MXene Electrochemical Smart Sensor for Real-Time Fluoride and Arsenic Detection in Drinking Water
22	IICG-2026-028	Dr. Saara K	INFAB Semiconductor Pvt Ltd InCeNSE - Incubator @ CeNSE	Development of a Graphene–PVDF Nanocomposite Piezoelectric Sensor Platform for Multi-Regime Dynamic Sensing
23	IICG-2026-027	Dr. Mariyappan Shanmugam	Hindustan Institute of Technology and Science, Chennai	2D Layered Semiconductors Based Heterostructured Photodetectors for Broadband Underwater Optical Communication
24	IICG-2026-001	Dr. Sridhar Pilli - PI Prof. P. Venkateswara Rao (Co-PI)	Department of Civil Engineering, National Institute of Technology (NIT) Warangal	Catalyst-Free, Dual-Waste-Derived Graphene-Hybrid Carbon: A Scalable 2D-Material Sensing Platform for Environmental, Health and Industrial Monitoring
25	IICG-2026-003	Dr. Lanke Pallavi	B. V. Raju Institute of Technology (BVRIT), Narsapur, Telengana	SomnoGraph: A Graphene-Based Dry-Electrode Wearable Platform for AI-Assisted Sleep Neurophysiology and Early-Risk Biomarker Screening
26	IICG-2026-007	Dr.R.Kalaivani Ms.R.Jamuna	Erode Sengunthar Engineering College Thudupathy, Perundurai, Erode-638057	Design and Development of a Graphene-Based Smart Water Quality Monitoring System with Indigenous DHRUV64 Edge Intelligence for Industrial Applications
27	IICG-2026-008	T. Bharanidharan	SRM Institute of Science and Technology (SRMIST), Ramapuram	Development of Reduced Graphene Oxide (rGO)-Based Chemiresistive Sensors for Humidity and Volatile Organic Compound (VOC) Monitoring in Industrial Safety and Environmental Applications
28	IICG-2026-010	Dr. Nitesh Kumar Chourasia Dr. Ankur Solanki	Department of Physics, School of Energy Technology, Pandit Deendayal Energy University (PDEU), Gandhinagar, Gujarat	Scalable MXene Field-Effect Transistor-Based Advanced Sensor Platform for Wearable and Intelligent Sensing Applications
29	IICG-2026-011	Dr. Murali Mohan Seepana	National Institute of Technology, Warangal (NIT Warangal)	Integrated MEMS Sensor Framework for Real-Time Humidity Monitoring and Model-Based Thermal-Hydral Control in Proton

				Exchange Membrane Fuel Cell
30	IICG-2026-015	Saurav Soni	SYNTHEON TECH PRIVATE LIMITED, Jaipur, Rajasthan	TRINETRA-H2: Self-Calibrating Graphene Hydrogen Safety Sensor
31	IICG-2026-019	V. Narendar	National Institute of Technology, Warangal (NIT Warangal)	Development of a Novel Multi-Micro-Sensors using Graphene Nanomaterials Embedded with IoT Platform for Precise Irrigation Management
32	IICG-2026-020	Dr. Kumar Prasannajit Pradhan	Indian Institute of Information Technology, Design and Manufacturing (IIITDM),Kancheepuram	Design and Development of Machine Learning-Aided Graphene Chemisors
33	IICG-2026-021	Dr. Arijit Bardhan Roy	SRM Institute of Science and Technology, Kattankulathur, Tamil Nadu, India	Development of Graphene/2D Material based Advanced Sensors (Graphene capped Silica Nanosphere as conducting scatterer: Application on crystalline Silicon based flexible optical sensor)
34	IICG-2026-023	Dr. Mohit Trivedi Prof. Shirish H. Sonawane Dr. Neelkanth Nirmalkar	National Institute of Technology, Warangal (NIT Warangal)	Development of a Tunable-Charge Graphene Nanoplatelet (GNP)–Carbon Nanotube (CNT) Functionalized Membrane for Controlled Oxygen Nanobubble Generation
35	IICG-2026-024	Abhiram B, Student	School of Engineering, CUSAT	AI-Enabled Graphene-Assisted Microwave Resonator Platform for Rapid, Non-Destructive Liquid Chemical Identification
36	IICG-2026-034	Prof. Dr Ushaa Eswaran	MAHALAKSHMI TECH CAMPUS, Chennai	High-Resolution Terrestrial Water Budget Quantification and Convective Extreme Early Warning System Using Satellite Radar Remote Sensing and Land Data Assimilation
37	IICG-2026-044	Dr. Sanjib Nayak	National Institute of Technology Warangal	Graphene-Integrated Magnetic Nanocomposite Sensors for Next-Generation Electronics and Intelligent Sensing Applications.
38	IICG-2026-045	Dr. Gurleen Kaur Walia	Lovely Professional University	SiliSense-X: A Stable, Scalable, and AI-Enabled Graphene–Silicene Sensor Platform for Real-Time Detection of Toxic Gases and Health-Relevant VOCs
39	IICG-2026-052	Dr. B. Padmavathi	SRM Institute of Science and Technology Ramapuram, Chennai	Design and Development of a Flexible Graphene-Based Wearable Biosensing Platform for Continuous

				Real-Time Physiological Monitoring
40	IICG-2026-016	Saurav Soni	SYNTHEON TECH PRIVATE LIMITED, Jaipur, Rajasthan	TATVA-2D: Universal Test Chip, Contact Library and Evidence Platform for 2D-Material FET Integration
41	IICG-2026-047	Dr. Priyanka	L.D.A.H Rajkiya Engineering College, Mainpuri	Design, Development and Demonstration of a CMOS-Compatible Test Platform for Integration and Electrical Characterization of 2D Material-Based Field Effect Transistors (FETs)
42	IICG-2026-006	Dr. Saara K	INFAB Semiconductor Pvt. Ltd.	Development of a Standard FET Test Chip for 2D Materials
43	IICG-2026-004	Dr.K.THANGAVEL	Hindusthan College of Arts & Science, Coimbatore	Development of Active Noise Cancellation (ANC) system with Graphene based flexible Piezo-Transducer films
44	IICG-2026-017	Saurav Soni	SYNTHEON TECH PRIVATE LIMITED, Jaipur, Rajasthan	KAVACH-SONIC: Frequency-Selective, Deformation-Aware Graphene Adaptive Acoustic Shield
45	IICG-2026-038	Dr. Shanky Saxena	Lovely Professional University	Design and development of a Shoe energy harvester for Rescuing soldiers trapped in avalanche Under Problem Statement 4