2D MatTech Global: Fundamentals to Applications

Unpublished work will be given priority for oral/poster presentation at the conference.

Selected high-quality submissions will be considered for publication in WILEY journals

2DMTG

2D materials are far more than a scientific curiosity; they represent a transformative frontier in materials science, poised to redefine performance boundaries across diverse technological domains. With their atomically thin, layered structures, these materials exhibit unprecedented quantum, optical, and electrochemical behaviors that are unattainable in bulk or other morphological forms. From the groundbreaking discovery of graphene to the emergence of advanced materials such as transition metal dichalcogenides, phosphorene, and MXenes, the 2D materials landscape is reshaping the future of energy, healthcare, defense, electronics, photonics, flexible devices, aerospace, and quantum technologies.

To capture the recent advancements in the field and dwell upon its future prospects, we are pleased to inform you that an International Conference on “2D MatTech Global: Fundamentals to Applications” is being organized by Indian Institute of Technology Indore (IIT Indore) in association with UGC-DAE Consortium for Scientific Research (UGC-DAE CSR), Indore and Raja Ramanna Centre for Advanced Technology (RRCAT), Indore.

This conference aims to serve as a dynamic, interdisciplinary platform uniting scientists, engineers, industry leaders, and policymakers around the world. It offers a vital space for sharing pioneering research, fostering interdisciplinary collaboration, and catalyzing the next wave of innovation. By bringing together prominent figures and emerging experts in the field, the event seeks to accelerate the real-world integration of 2D materials and unlock their vast potential for global impact.

Venue
IIT Indore, India

24th – 26th June, 2026

Website
https://tdmtg.iiti.ac.in/

IIT Indore

Indian Institute of Technology Indore (IIT Indore) is an Institute of National Importance established in 2009 by the Ministry of Education, Govt. of India. Over the years, IIT Indore has emerged as a leading center for teaching, research, and innovation. It has consistently ranked among the top engineering institutions in India and has earned recognition for its global impact in higher education. In recent years, it has been listed among the top young universities globally and continues to feature prominently in national rankings like NIRF. The institute boasts cutting-edge research infrastructure, modern laboratories, and smart classrooms, fostering a vibrant environment for academic excellence and interdisciplinary collaboration.

MEMS @IIT Indore

Department of Metallurgical Engineering and Materials Science (MEMS) at IIT Indore is a dynamic hub of innovation at the interface of science and engineering. It focuses on multidisciplinary research to understand and engineer process–structure–property relationships across diverse materials, addressing key challenges in energy, sustainability, advanced manufacturing, and next-generation materials. MEMS offers UG, PG, and PhD programs, supported by advanced laboratories.

CEVITS @IIT Indore

Center for Electric Vehicle and Intelligent Transport Systems (CEVITS) at IIT Indore is an interdisciplinary hub for research and innovation in electric mobility and intelligent transportation. It develops sustainable, next-generation transport solutions by integrating diverse expertise. CEVITS provides a comprehensive platform for electric vehicle technologies, connecting academia, industry, and research to train skilled professionals and innovators in e-mobility and to shape the future of sustainable transportation.

UGC-DAE CSR Indore

UGC-DAE CSR, Indore is an Inter-University Research Centre of the University Grants Commission (UGC), New Delhi. The broad objective of the Consortium is developing competence and promoting research in front line areas of science and technology in Indian Universities and colleges by providing institutional framework for optimum utilization of major research facilities established by the Department of Atomic Energy as well as in-house facilities. Through active collaborations with universities and national laboratories, UGC-DAE CSR Indore plays a vital role in strengthening university-based research, promoting high-quality publications, training young researchers, and fostering interdisciplinary scientific advancement across India.

RRCAT Indore

Raja Ramanna Centre for Advanced Technology (RRCAT), a premier unit of the Department of Atomic Energy, Govt. of India, is engaged in advanced non-nuclear R&D in lasers, particle accelerators, and related frontier technologies. Centre houses two national synchrotron radiation facilities: **Indus-1** and **Indus-2**. Indus-1 is a 450 MeV, 100 mA electron storage ring that delivers radiation from mid-infrared to soft X-ray region, with a critical wavelength of ~61 Å. Indus-2 is a 2.5 GeV 3rd generation synchrotron radiation source, indigenously designed and developed at RRCAT, producing high-brilliance photon beams from infrared to hard X-rays. With low-emittance operation, state-of-the-art accelerator systems, precision beam diagnostics, ultra-high vacuum infrastructure, and sophisticated beamline instrumentation, Indus-2 enables high-resolution structural, spectroscopic, and imaging studies across materials science, condensed matter physics, chemistry, biology, nanoscience, environmental science, and industrial R&D, serving as a key national platform for multidisciplinary research and strategic technological advancement.

Conference Themes

A] Science & Engineering of 2D materials

- Physics, Chemistry, and simulations
- Synthesis, exfoliation, and functionalization
- 2D Material-based composites, coatings, foams, and membranes
- 3D Printing of 2D materials
- 2D network of Polymer
- MAX and MXene Families
- Epitaxial and layered heterostructures
- 2D ferroelectrics, piezoelectric, and topological insulators,
- 2D perovskites and hybrid halides

B] Advanced Characterization Techniques for 2D Materials

- Advances in surface technology
- Spectroscopy and microscopy
- Synchrotron-based characterization
- Electronics, optoelectronics, plasmonics
- Sensing and Shielding

C] Energy Applications of 2D materials

- Energy storage applications
- Energy conversion applications
- Sustainable and green environment
- Green hydrogen generation
- Hydrogen storage

D] 2D Materials in Emerging Technologies

- Sensors, EMI Shielding, Flexible electronics
- Memory devices and memristor
- Biomedical and healthcare applications
- Anti-corrosion coatings and strength
- Quantum computing, magnetism, and spintronics
- Photonics

Other related topics

Important Dates

Abstract Submission	30th April 2026
Acceptance of Abstract	15th May 2026
Early Bird Registration	20th May 2026
Final Registration	05th June 2026

Advisory Committee

- Prof. Kourosh Kalantar-Zadeh, University of Sydney, Australia
- Prof. Robert Weatherup, University of Oxford, UK
- Prof. Umesh V Waghmare, President, JNCASR Bangalore, India
- Prof. T. Venky Venkatesan, Univ. of Oklahoma, USA
- Prof. Anirudha V. Sumant, Argonne National Laboratory, USA
- Prof. Sebastien Royer, Univ. du Littoral Côte d'Opale, France
- Prof. Kaustubh R. S. Priolkar, Director, UGC-DAE CSR, India
- Prof. Amlan J. Pal, Ex. Director UGC-DAE-CSR, India
- Prof. S. B. Ogale, Director TCG-CREST, & IISER Pune, India
- Prof. Yogendra Mishra, Univ. of Southern Denmark, Denmark
- Prof. Sanjay Mathur, Director, IIMC, Univ. of Cologne, Germany
- Mr. Unmesh D. Malshe, Ex. Director, RRCAT, India
- Prof. Kalobaran Maiti, Director, IACS Kolkata, India
- Prof. Yuan-Ron Ma, Vice-President, Fo Guang Univ., Taiwan
- Prof. Jin-Hyeok Kim, Chonnam National Univ., South Korea
- Prof. Bharat Jalan, University of Minnesota, USA
- Prof. Motohiko Ezawa, Univ. of Tokyo, Japan
- Dr. R. Balamuralikrishnan, Director, DMRL, India
- Prof. Bikramjit Basu, Director, CSIR-CGCRI, India
- Prof. Babak Anasori, Purdue University, USA

Sponsorship and Exhibition Opportunities

Sponsorship provides an excellent opportunity to "get your company's name out" to a scientific network of representatives and a prime opportunity to make impressions on decision-makers.

Title Sponsorship

- 35-min. presentation to entire audience.
- 2 full page advertisement in Souvenir.
- Promotion of the company name with title of conference.
- Prominent advertisement on the web page, dais, & electronic display.
- 2 booths in the exhibition.
- Free entry for 6 delegates

Diamond Sponsorship

- 25-min. presentation to entire audience.
- 2 full page advertisement in Souvenir.
- Prominent advertisement on the web page, dais, & electronic display.
- 2 booths in the exhibition
- Free entry for 5 delegates

Platinum Sponsorship

- 20-min. presentation to entire audience.
- 2 booths in the exhibition.
- 1 full-page advertisement in Souvenir.
- Prominent advert. on web page & dais.
- Free entry for 4 delegates.

Gold Sponsorship

- 15-min. presentation to entire audience.
- 1 booth in the exhibition.
- 1 full-page advertisement in Souvenir.
- Prominent advt. on the web page & dais.
- Free entry for 3 delegates.

Silver Sponsorship

- 1 booth in the exhibition.
- ½ page advertisement in Souvenir.
- Company logo displayed on web page & dais.
- Free entry for 4 delegates.

Bronze Sponsorship

- 1 booth in the exhibition.
- ½ page advertisement in Souvenir.
- Company logo displayed on web page & dais.
- Free entry for 2 delegates.

Category	Amount (INR)
Package Sponsorship	
Title	1200000
Diamond	1000000
Platinum	700000
Gold	500000
Silver	300000
Bronze	250000
Other Sponsorship	
Banquet	350000
Conference Kit	200000
Stalls	50000

Banquet Sponsorship

- 1 booth in the exhibition.
- Presentation by company at Banquet

Conference Kit Sponsorship

- Prominent display of Logo on conference kit provided by the sponsor.

Payment Details

https://payu.in/web/EB3AF4CBC22FB4C90B5ABC9A52E5CAC3

Details of Account Holder

1	Account Name	Indian Institute of Technology Indore
2	PFMS Unique Code	IITIND
3	Contact Address	IIT, Khandwa Road, Simrol, 453552, Indore
4	Registering Authority	Parliament of India
5	Agency Type	Statutory Body
6	Telephone No.	0731-6603586
7	Alt. Mob. No.	8308208880 / 9109504867
8	Official E-mail ID	arrnd@iiti.ac.in
9	TAN No.	BPLI01163B
10	PAN No.	AAAAI7115H
11	GST No.	23AAAAI7115H122

Details of Bank

1	Account Number	1476101027440
2	IFSC Code	CNRB0006223
3	MICR Code	452015003
4	SWIFT Code	CNRBINBBISG
5	Bank Name	Canara Bank
6	Branch Name	Simrol IIT Branch
7	Account Type	Savings A/c

Registration Fee

Delegate type	Indian (INR)		Foreign (USD)			
			Early Bird		Final	
	Early Bird	Final	SAARC	Non-SAARC	SAARC	Non-SAARC
UG/PG students	4000	4500	75	125	100	150
Research scholar	6000	7000	200	250	250	300
Faculty	10000	12000	300	400	400	500
Industry	15000	17000	500	700	650	850

Patron

Prof. Suhas S. Joshi, Director, IIT Indore,

Organizer

Dr. Rupesh S Devan,
Professor,
rupesh@iiti.ac.in
+91-731-660-5126/3244

Co-organizers

Dr. Ravindra Jangir,
Scientist G
ravindrajangir@rrcat.gov.in

Dr. Ram J. Choudhary,
Scientist H,
ram@csr.res.in

Department of Metallurgical Engineering and Materials Science,
Indian Institute of Technology Indore,
Khandwa Road, Simrol, Indore, 453552, India.