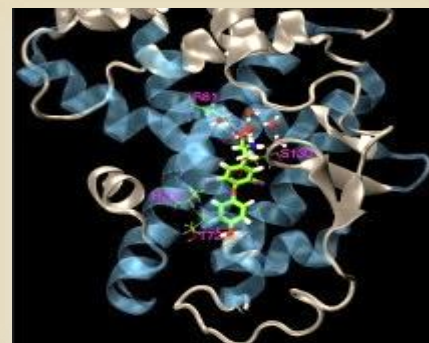
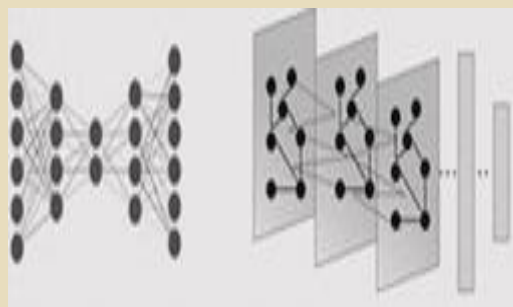


International Workshop
on
**Smart Materials for
Cancer Therapy in
the Era of AI**
SMCT-AI-2025



January 21, 2025



Scheme for Promotion of Academic and Research Collaboration



Program Schedule of one day international workshop

Smart Materials For Cancer Therapy In The Era of AI

SMCT-AI - 2025

Under the Aegis of the
Scheme for Promotion of Academic & Research Collaboration (SPARC) Program

January 21, 2025

8:30 A.M – 9:30 A.M	Registration
Inaugural Session	
9:30 A.M – 9:35 A.M	Introduction of the workshop By, Prof. Mahitosh Mandal (Convenor)
9:35 A.M – 9:40 A.M	Welcome address by Prof. Soumen Das (Chairperson SMST)
9:40 A.M – 9:45 A.M	Welcome address by Prof. Kinsuk Naskar (Chairperson RTC)
9:45 A.M – 9:50 A.M	Welcome address by Prof. Arobinda Gupta (Chairperson CSE)
9:50 A.M – 10:00 A.M	Speech by Prof. Stephen Rimmer , University of Bradford, UK
10:00 A.M – 10:10 A.M	Welcome address by Prof. P.K. Dutta (Dean BTBS)
10:10 A.M – 10:20 A.M	Speech by Prof. Rabibrata Mukherjee Joint National Coordinator SPARC, Dean, International Relations
10:20 A.M – 10:25 A.M	Vote of Thanks by Prof. Nikhil K. Singha
TEA BREAK	
Technical Session 1: 10:40 A.M – 01:00 P.M	
Session Chair: Prof. Mahitosh Mandal/ Prof. Nikhil K. Singha	
10:40 A.M – 11:20 A.M	<i>"Health, Happiness & Heartfulness - Integrated Wellness Based on Yogic Science"</i> Mr. Krishnamohon Govindayapalli Director, Devices Data Science, Microsoft India R&D
11:20 A.M – 12:00 P.M	<i>"The integrated use of an optical-thermal torch and a custom-designed smartphone application enables early screening of oral diseases"</i> Prof. Suman Chakraborty Department of Mechanical Engineering, IIT Kharagpur
12:00 A.M – 12:30 P.M	<i>"Smart polymers inspired by India; polymers for improved recognition of cells"</i> Prof. Stephen Rimmer University of Bradford, UK
12:30 P.M – 01:00 P.M	<i>"Transitions of gene regulatory networks during lung adenocarcinoma progression"</i> Dr. Riddhiman Dhar Department of Bioscience and Biotechnology, IIT Kharagpur

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LUNCH BREAK

Technical Session 2: 2:10 P.M – 5:00 PM

Session Chair : Prof. Sudip Ghosh /Prof. Soumen Das

2:10 P.M – 2:50 P.M	<p><i>“Development of broad-specificity vaccines against enteric infections - a necessity denied”</i> Dr. Santasabuj Das Director, NICED Kolkata</p>
2:50 P.M – 3:25 P.M	<p><i>“An overview of the prospects of nanomaterials and nanocomposites in biomedical applications”</i> Prof. Dipankar Chattopadhyay Department of Polymer Science & Technology, University of Calcutta</p>
3:25 P.M – 3:55 P.M	<p><i>“Artificial Intelligence in Protein Interaction and Interaction Design”</i> Prof. Pralay Mitra Department of Computer Science and Engineering, IIT Kharagpur</p>
4:00 P.M – 4:30 P.M	<p><i>“Genome Stability Meets AI: Pioneering Precision Medicine to Make Ideas Happen”</i> Prof. Sherif El-Khamisy Pro Vice-Chancellor (R&I), University of Bradford, UK</p>
4:30 P.M – 4:45 P.M	<p>Speech by Prof. Muhammad Wahajuddin, University of Bradford, UK</p>

TEA BREAK AND VALEDICTORY FUNCTION (4:45 P.M -5:00 P.M)

SMCT-AI 2025

The Smart Materials For Cancer Therapy In The Era of AI (SMCT-AI 2025) workshop provides a platform for researchers to discuss advancements in artificial intelligence (AI) and its applications in cancer therapy. It emphasizes AI's role in designing smart materials and targeted drug delivery systems to improve therapeutic outcomes and minimize side effects. Key topics include AI-based pharmacophore modeling, chemoinformatics, and advanced techniques like Graph Neural Networks and autoencoders for optimizing drug discovery and nanogel-drug interactions. The workshop also highlights the development of glycopolymer-based nanogels for precision medicine. Featuring plenary and invited lectures by leading experts, the event fosters collaboration and innovation in bridging AI, nanotechnology, and healthcare to address critical challenges in cancer treatment.

About Indian Institute of Technology Kharagpur:

Indian Institute of Technology Kharagpur (IIT Kharagpur), established in 1951, is India's first IIT and a globally recognized center of excellence in education, research, and innovation. Renowned for its multidisciplinary approach, the institute offers world-class programs in engineering, science, management, law, medical science, and technology, fostering a culture of academic rigor and innovation. IIT Kharagpur is committed to addressing global challenges through advanced research in fields such as artificial intelligence, renewable energy, materials science, healthcare, and sustainable development. Its cutting-edge facilities and collaborations with leading global institutions and industries enable transformative solutions with real-world impact. With a sprawling campus, a vibrant academic community, and an illustrious alumni network making significant contributions worldwide, IIT Kharagpur continues to lead as a beacon of excellence, driving innovation, and fostering societal progress.

About University of Bradford:

The University of Bradford, located in West Yorkshire, UK, is a prestigious institution with a rich history of academic excellence and innovation. Established in 1966, it is globally recognized for its cutting-edge research and high-quality teaching in diverse disciplines, including health, engineering, business, social sciences, and technology. The university is renowned for its Institute of Cancer Therapeutics (ICT), which has been at the forefront of cancer research since the 1950s. The ICT specializes in developing targeted cancer therapeutics through expertise in drug discovery, medicinal chemistry, pharmacology, and molecular biology. With a strong commitment to sustainability, community engagement, and global collaboration, the University of Bradford fosters an inclusive learning environment that equips students and researchers with the skills to address real-world challenges and make a meaningful impact on society.



IIT Kharagpur Main building



University of Bradford, UK