IGSTC
INDO-GERMAN SCIENCE AND TECHNOLOGY CENTRE

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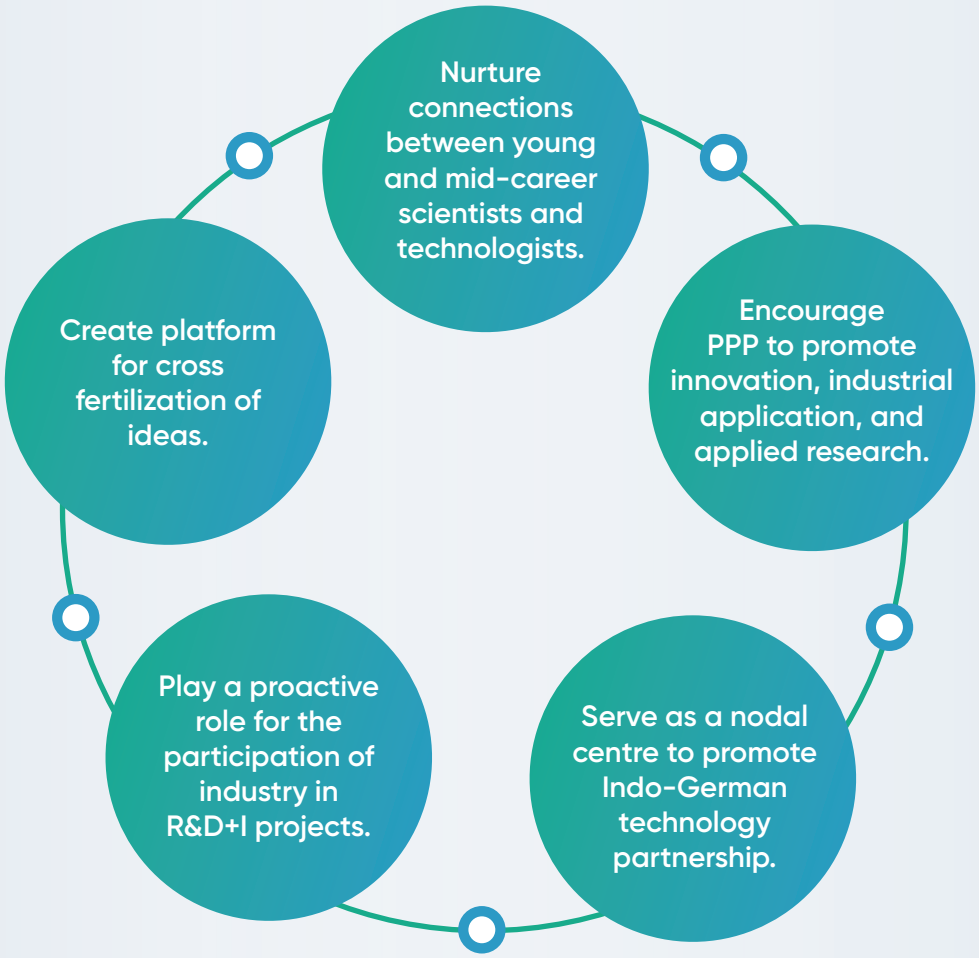
TO CATALYSE INDO-GERMAN
STRATEGIC R&D PARTNERSHIPS

About IGSTC

The Indo-German Science & Technology Centre (IGSTC), a joint initiative by the Department of Science & Technology (DST), Government of India and the Federal Ministry of Education and Research (BMBF), Government of Germany was established to facilitate Indo-German R&D networking through substantive interactions among government, academia/research system and industries, thus fostering innovation for overall economic and societal developments in both the countries. Through its various funding programme, IGSTC intends to catalyse innovation centric R&D projects by synergising the strength of research/academic institutions and public/private industries from India and Germany.



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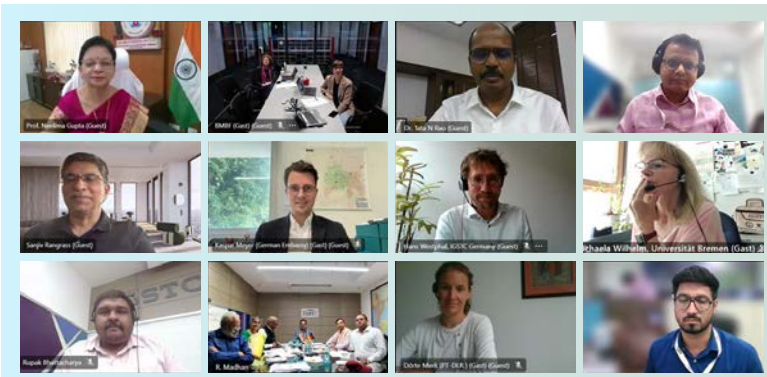
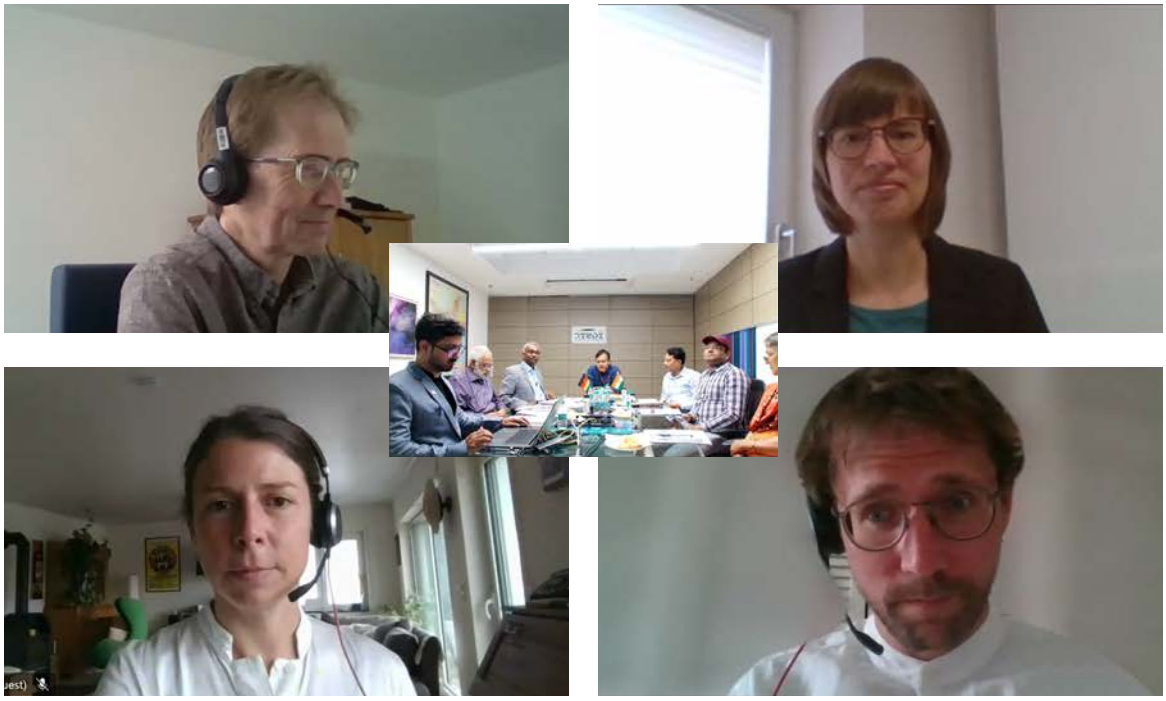


The 15th IGSTC Governing Body (GB) meeting was held virtually on 7th June 2023. The GB comprises of Dr. S K Varshney (DST & Indian Co-Chair), Ms Kathrin Meyer (BMBF & German Co-Chair), Prof Neelima Gupta (Sagar University), Dr Martin Goller (BMBF), Dr Tata Narasinga Rao (ARCI), Mr Clas Neumann (SAP), Mr Kaspar Meyer (German Embassy, New Delhi), Mr Sanjeev Rangrass (Zetwerk Manufacturing Businesses P. Ltd). Dr Ulrike Wolters (BMBF), and Dr Sibashisa Dash (DST), were present as member secretaries. Mr R Madhan (Director), Dr P V Lalitha, Mr R Varadarajan, Mr Hans Westphal and Ms Doerte Merk, Dr Rupak Bhattacharya and Mr Saquib Shaikh represented IGSTC in the meeting. Mr Rohit Kumar, DST nominated by Vishvajit Sahay (AS&FA, DST) attended the meeting. Dr Michaela Wilhelm, University of Bremen was also present as a guest invitee. The GB focused holistically on IGSTC's activities, status and updates on different programmes of IGSTC including 2 + 2 projects, Workshops and various networking fellowships.

8th Finance Committee Meeting



The 8th Finance Committee (FC) meeting took place virtually on 24th May 2023. The FC comprises of Mr Vishvajit Sahay (Financial Advisor, DST and Indian Co-Chair of FC), Dr Ulrike Wolters (BMBF and German Co-Chair of FC), Dr Martin Goller (BMBF) and Dr Sibashisa Dash (DST). Mr R Madhan (Director), Mr R Varadarajan, Dr P V Lalitha, Mr Pankaj Kothari (all from GSTC), Ms Alexandra Stinner (DLR-PT/IGSTC) and Mr Hans Westphal (DLR-PT/IGSTC) attended the meeting. Discussions were held and decisions were taken on financials, audit report and budget estimates pertaining to IGSTC.

13th Foundation Day

IGSTC celebrated its 13th Foundation Day on 14th June 2023 and highlighted its achievements and role in promoting the Indo-German Science and Technology partnerships since it's inception in the year 2010.

Mr R Madhan, Director summarized the Centre's journey over the past 13 years, emphasizing the significant milestones achieved in science, technology, innovation and achievements that have fostered a strong partnership between India and Germany.

Dr Annapurni Subramaniam, Director, Indian Institute of Astrophysics (IIA), Bangalore and Chief Guest of the event emphasized on the significance of increasing representation of women scientists and ensuring a proportionate number of women-led projects for fostering inclusivity and diversity within the scientific fraternity.

As the Guest of Honour, Mr Rajesh Nath, Managing Director of Association of Germany's Engineering Industry (VDMA) India, brought his extensive industry knowledge to the stage. Mr Nath's address emphasized the pivotal role of innovation and technology transfer in both countries' industrial landscapes.

"Research efforts should be directed towards contributing to society and making a positive impact on people's lives," said Dr. S K Varshney Head of International Cooperation Division (ICD) at the Department of Science and Technology (DST) and Co-Chair of IGSTC at his inaugural speech.

Mr Stephan Grabherr, Charge d'Affaires of the German Embassy in Delhi highlighted the significance of collaborations between industries and universities and stressed upon the need for nurturing strong partnerships and knowledge-sharing between these two spheres.

2+2 Projects

IGSTC launched the 2+2 Call 2023 on the thematic areas of Waste to Wealth and Sustainable Packaging with subtopics

- Electronic, industrial, domestic and construction waste recycling
- Secondary raw materials from waste
- Urban mining/Landfill mining
- Eco-friendly/green packaging materials, Design for recycle, Circular economy around the packaging for extending its lifecycle and usability.

Deadline for submitting First Stage Proposals for joint R&D&I projects of industrial relevance in 2+2 Mode of partnership was 17 August 2023.

CleanWater

Inauguration of Sewage Treatment Plant (STP) unit at IIT Madras

The inauguration of the Sewage Treatment Plant (STP) pilot plant at IIT Madras by Mr R Madhan, Director IGSTC on 30th May 2023 marked a significant milestone within the ongoing "Modular lightweight wastewater treatment units made with TRC for rural and periurban dwellings (CleanWater)" project funded by IGSTC under the 2+2 programme. The project aims at the realization of an innovative lightweight, modular Wastewater Treatment Plant (WTP) made with Textile-Reinforced Concrete (TRC).

Pyrasol

Inauguration of pilot plant at CSIR-Central Leather Research Institute (CLRI), Chennai

IGSTC ongoing project "Smart cities integrated energy supply, carbon sequestration and urban organic waste treatment through combined solar sludge drying and pyrolysis (Pyrasol)", aiming an innovative approach to transforming urban organic waste into biochar and energy in urban areas, has established an Integrated Solar Dryer and Pyrolysis Pilot Plant at CSIR-CLRI, Chennai. The plant was inaugurated in the auspicious presence of Dr Jayanthi M, Chairperson, Tamil Nadu Pollution Control Board and Mr R Madhan, Director IGSTC on 29th May 2023.

CO_2BioFeed

Project site visit at Reliance Corporate Park, Mumbai

CO_2 and biomass as feedstock for the production of fuels and chemical intermediates (CO_2BioFeed), an ongoing project supported by IGSTC aims to scale-up the process to industrial scopes, confirm the performance of the newly developed catalysts under industrial conditions and assess the cost benefits and environmental impact of the processes. The project is awarded to a consortium of Indian Association for the Cultivation of Science, Kolkata, IIT (ISM) Dhanbad, Reliance Industries Limited, Jamnagar, Ruhr-Universität Bochum, RWE Power Aktiengesellschaft, Essen and Parr Instrument GmbH, Frankfurt. Dr Rupak Bhattacharya, Scientific Officer, IGSTC visited the pilot plant at Reliance Corporate park, Mumbai and participated in the internal project review along with other Indian side project partners on 9th June 2023.

CirCulTeX

Consortium Meeting in Germany

The project "CirCulTeX: Circular urban cultivation systems with re-useable textile growing substrates (CirCulTex)" deals with the development, characterization and adaptation of spacer-fabric based textiles as an alternative growing medium in lieu of existing growing components for sustainable, re-useable, cost effective product compatible for commercial as well as Domestic customers for vertical farming setups. This consortium is comprised of Amity University Kolkata, Bidhan Chandra Krishi Viswavidyalaya, Harimitti Agro. P. Ltd., University of Hohenheim, German Institute of Textile and Fiber Research (DITF) and Eschler Textile GmbH. The consortium organized a joint meeting during 8th - 18th July 2023 to discuss recent developments cleaning strategy of used substrates and business models to cater the technological implementation in variable vertical farming systems at commercial scale in both India & Germany. In the present era of urbanization, CirCulTex project supports the fruitful outcome by nurturing and strengthening the alternative soilless vertical cultivation system for future food security and sustainability.

RAMFLICS

Consortium Meeting in Germany

The project RAMFLICS (Robust additive manufacturing of functional lightweight integrated customisable metallic structures) aims to print defect-free, structurally sound and dimensionally consistent customised functional features on extruded components using a novel wire arc additive manufacturing technique. The project is partnered by IIT Bombay, IIT Madras, Hindalco Industries Ltd, Technische Hochschule Brandenburg, Fraunhofer-IPK and Gefertec GmbH. The RAMFLICS team organised a consortium meeting in Germany during 18th -23rd June 2023 to discuss optimum strategy and printing of selected features based on modelling, experiments and in-situ process monitoring. The team jointly assessed the structural integrity and dimensional consistency of the printed features which will be used in designing prototypes followed by further commercialization and mass production by the Hindalco Industries Ltd.

Bilateral Workshops

Platform for substantive interactions between researchers, academicians and industry

- Create platform for cross fertilization of ideas
- Develop knowledge networks for industrial sectors to enhance competitiveness
- Establish joint knowledge pools to address global challenges
- Advance industrial research partnership with mutuality of interest and respect

The Indo-German Science & Technology Centre (IGSTC), a joint initiative by the Department of Science and Technology (DST), Government of India and the Federal Ministry of Education and Research (BMBF), Government of Germany invites proposals for organising Indo-German workshops on areas designed around a specific research topic out of thematic areas relevant to both DST and BMBF.

The workshop to be organised in India or Germany.

Salient Features

Who can apply?

- The proposal should have one coordinator each from India and Germany
- Coordinator should hold a regular position in public or private non-profit research organisation, institution of higher education or university
- The application can be submitted by any one of the coordinators
- Training workshops do not fall under the scope of this call

Funding

Approximately € 30000/ ₹ 25 lakh

Support

- Event cost for up to 30 participants
- International and domestic airfare for participants
- Accommodation costs
- Organisational and logistics expenses

Applications are accepted throughout the year

Cut-off dates: 31st January & 31st July

Women Involvement in Science & Engineering Research (WISER)

WISER 2022 Awardees

Dr Shrutidhara Sarma is an Assistant Professor at the Department of Mechanical Engineering, Indian Institute of Technology Jodhpur (IITJ), India. Dr Sarma spearheads the Flexible Sensors from Nanocomposites Laboratory at IITJ, that focuses on developing advanced sensors for wearable devices and aerospace related technologies. She was awarded the prestigious WISER research grant from Indo-German Science & Technology Centre (IGSTC) in 2022 for her innovative project entitled "Towards development of ultrasensitive strain measurement system using laminated nanocomposites (TESSLA)". As a part of this grant, she completed her scientific visit to the Institut für Mikrotechnik (IMT) at Technische Universität Braunschweig, Germany and was hosted by Prof. Andreas Dietzel, Director, IMT.

Dr P Rajamalli, Assistant Professor at the Materials Research Centre, Indian Institute of Science, Bangalore focusing on development of emitting materials for organic electronics including organic light emitting diodes (OLEDs) has been awarded WISER-2022 grant. She recently visited the lab of Dr Caroline Murawski, Kurt-Schwabe-Institut (KSI) Meinsberg (her host) and discussed about the requirement of emitting materials for optogenetics and fluorescence imaging. They had intense knowledge exchange on OLED fabrication and measurement, and learnt how to use fruit flies and study their behaviour under light stimuli. Through IGSTC funding support, she will be developing the ideal materials and optimised device structure for flexible OLED devices for optogenetic and imaging applications.

Dr Poulomi Ganguli, Assistant Professor, Agricultural and Food Engineering, Indian Institute of Technology Kharagpur collaborated with Prof Bruno Merz, Head Section Hydrology, GFZ German Research Centre for Geosciences under WISER programme. As part of the WISER project, the primary aim of the project is to understand sequential and compound climate hazards owing to heatwaves and extreme precipitation (both 'low' and 'high' ends) across climate regions. She has recently visited and carried out the project activity in collaboration with scientists at GFZ.

WISER 2023 Award Ceremony

IGSTC has organised the WISER Award Ceremony on 14th June 2023 to felicitate all the WISER-2023 Awardees. The event was graced by Dr Annapurni Subramaniam, Director, Indian Institute of Astrophysics (IIA) as Chief Guest and Mr Rajesh Nath, Managing Director, Association of Germany's Engineering Industry (VDMA) India, Mr Stephan Grabherr, Charge d'affaires of the German Embassy in Delhi and Mr S. K. Varshney, Adviser & Head, International Division, DST & Indian Co-Chair, IGSTC GB. Dr Mehrnaz Anvari, German Awardee was handed over the certificate at Fraunhofer SCAI, Germany by Ms Dörte Merk, Senior Scientific Officer, DLR-PT.

Indian Awardees

Dr Monika Gupta

IIT Ropar

Host
Prof Frank Würthner
University of Wurzburg, Wurzburg

Title of the project Development of solid-state solar thermal fuels derived from liquid crystalline norbornadiene derivatives

Dr Medhavi Vishwakarma

IISc Bangalore

Host
Prof Jacopo Di Russo
RWTH Aachen, Aachen

Title of the project Understanding the role of idiopathic pulmonary fibrosis in cancer initiation

Dr Kriti Tyagi

CSIR-NPL New Delhi

Host
Dr Müller Wolf Eckhard
German Aerospace Centre (DLR) Cologne

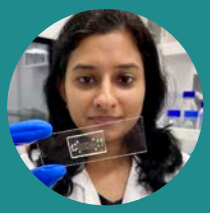
Title of the project
High power factor materials for efficient thermoelectric heat pumping applications

Dr Kala Sasikumaran

IIIT Kottayam

Host
Prof Akash Kumar
TU Dresden, Dresden

Title of the project
Sparse matrix multiplication co-processor for deep learning applications on RISC-V platform



Dr Greeshma Thrivikraman Nair

IIT Madras

Host
Prof Michael Gelinsky
TU Dresden, Dresden

Title of the project Circumferential cell migration towards a neuropeptide gradient for healing critical-sized cranial defects

Dr Puja Yadav

Central University of Haryana

Host
Prof Barbara Maria Spellerberg
University Hospital Ulm, Ulm

Title of the project Antibacterial and anti-biofilm activity of the human peptide library against group B streptococcus

Dr Ramya Devi Durai

SAASTRA University, Thanjavur

Host
Dr Petra Kluger
Reutlingen University, Reutlingen

Title of the project
Exploration of 3D adipose tissue models to study long-acting Statin nanoparticles to assess the efficacy and suitability as an alternative for animal models

Dr Rik Rani Konerghosh

IIT Mandi

Host
Dr Thomas Sheppard
Universitat Leipzig, Leipzig

Title of the project
Engineering hybrid MOF composite materials with rationally designed ligands for photocatalytic hydrogen evolution

Dr Lata Gawade

Goa University

Host
Prof Bela Hieronymus Buck
Alfred Wegener Institute Helmholtz Centre for Polar and Marine Research (AWI), Bremerhaven

Title of the project
Understanding and implementing IMTA: An efficient technology towards sustainable mariculture, carbon sequestration, and blue economy boost

Dr Rita Sharma

BITS Pilani

Host
Dr Duarte Dionísio Figueiredo
Max Planck Institute of Molecular Plant Physiology, Potsdam

Title of the project
Investigating the role of long non-coding RNAs in phytohormone-mediated autonomous seed development in Arabidopsis

German Awardees

Dr Mehrnaz Anvari

Fraunhofer-Institute for Algorithms and Scientific Computing (SCAI), Sankt Augustin

Host
Prof Sarika Jalan
IIT Indore

Title of the project
The role of the higher-order and symplectic communications in the power grid

Dr Özlem Günay Eşiyok

Humboldt University of Berlin

Host
Dr Nishith Gupta
BITS Pilani, Hyderabad

Title of the project
Optogenetic modulation of cAMP and cGMP signaling in Toxoplasma gondii

Industrial Fellowships

Industrial Fellowship 2021 - Awardee

Dr M. Keerthana is a Principal Scientist at Wind Engineering Laboratory, CSIR-Structural Engineering Research Centre (CSIR-SERC). She gained valuable experience as a Post-Doctoral Industrial Fellow (PDIF) at Fraunhofer Institute for Wind Energy Systems (IWES) in Oldenburg, Germany, where she collaborated closely with Dr Bernhard Stoevesandt and his team. In light of the shared commitment between India and Germany towards achieving a net-zero emissions trajectory, her aspiration is to make a significant contribution to the realm of renewable energy structures.

Industrial Fellowship 2022 - Awardee

Ms Reshma, a PhD student of IIT Bombay is carrying out research activity at International Advanced Research Centre for Powder Metallurgy and New Materials (ARCI), Hyderabad on perovskite solar cells. She has been awarded the IGSTC-PIEF to work at HySPRINT innovation laboratory, Berlin, Germany. The Helmholtz Innovation Lab HySPRINT is a cooperation platform for industry at Helmholtz-Zentrum Berlin with a focus on (opto)electronic materials and devices at an early technological stage of development. Through the IGSTC Industrial Fellowship, she aims to get exposure in the photovoltaic industry, which will help her to learn and understand the standards and requirements at an industry level and achieve a similar quality in the academic level research carried out by applying this knowledge.

Industrial Fellowship 2023 Award Ceremony

IGSTC has organised the award ceremony to felicitate IGSTC Industrial Fellows of Call 2023 on 14th June 2023. The event was graced by Dr Annapurni Subramaniam, Director, Indian Institute of Astrophysics (IIA) as Chief Guest and as the Guest of Honour, Mr Rajesh Nath, Managing Director, Association of Germany's Engineering Industry (VDMA) India, Mr Stephan Grabherr, Charge d'affaires of the German Embassy in Delhi and Mr S. K. Varshney, Adviser & Head, International Division, DST. The young industrial fellows embarking on their research journey to Germany were fervently encouraged to acquire both cross-cultural insights and practical experience within the industrial setup.

Post Doctoral Industrial Fellowship (PDIF)

Yamini Mittal

CSIR-Institute of Minerals & Materials Technology (IMMT)

Host
Ingenieurgesellschaft Janisch & Schulz mbH

Ashish Sengar

IIT Delhi

Host
Fraunhofer Institute for Interfacial Engineering and Biotechnology IGB

Bhabagrahi Natha Sharma

IIT Delhi

Host
TESTIA GmbH

Mohammed Shariq

Vellore Institute of Technology

Host
Fraunhofer Institute for Manufacturing Engineering and Automation IPA

Amit Kumar Vats

NIT Kurukshetra

Host
Fraunhofer Institute for Manufacturing Engineering and Automation IPA

Jaladhi Trivedi

CSIR-Central Salt and Marine Chemicals Research Institute (CSMCRI)

Host
Fraunhofer Institute for Ceramic Technologies and System IKTS

Ramarajan J

IIITDM Kancheepuram

Host
Fraunhofer Institute for Wind Energy Systems IWES

Harshal Agarwal

CSIR-Central Electrochemical Research Institute (CECRI)

Host
Fraunhofer Institute for Chemical Technology ICT

Abhay Mishra

IIT Bombay

Host
QuantumDiamonds GmbH

Jyotsnamayee Nayak

Sardar Vallabhbhai National Institute of Technology Surat

Host
DendroPharm GmbH

PhD Industrial Exposure Fellowship (PIEF)

Nabab Khan

CSIR - Institute of Himalayan Bioresource Technology (IHBT)

Host
LIONEX GmbH

Aparna Ramachandran

CSIR - National Chemical Laboratory (NCL)

Host
UCB Biosciences

Kumar Vaibhav Tejan

IIT Mandi

Host
OLI Systems GmbH

Paladugu Sri Harsha

IISc Bangalore

Host
Fraunhofer Institute for Microengineering and Microsystems IMM

Angel Joseph

IIT Delhi

Host
Fraunhofer Institute for Interfacial Engineering and Biotechnology IGB

Ajin Rajan

IIT Madras

Host
BASF SE

Nipun Sharma

IIT Jodhpur

Host
Fraunhofer Institute for Reliability and Microintegration IZM

Apurva Sharma

CSIR – Central Scientific Instruments Organisation (CSIO)

Host
K|Lens GmbH

Arunava Kr Kalita

IIIT Guwahati

Host
Fraunhofer Institute for Integrated Circuits IIS

Faridul Hassan

NIT Silchar

Host
Fraunhofer Institute for Solar Energy System ISE

Paired Early Career Fellowship in Applied Research (PECFAR)

PECFAR 2022 – Awardees

Dr Pankaj Khanna is currently working as an Assistant Professor at the Department of Earth Sciences, Indian Institute of Technology Gandhinagar (IITGN), where he heads the REEFS Lab (REthinking Energy For Sustainability) and focusing on the Climate Change and Energy E&P uncertainties. The German member of the partner, Dr Sam Thiele is a senior Post-Doctoral Fellow at the Helmholtz Institute Freiberg (HIF), and specialises in 3-D outcrop analogue modelling, data processing, and interpretation. His research applies innovative imaging and mapping techniques to better predict the subsurface and potential raw materials and energy resources therein.

Under the PECFAR Award, Dr Thiele visited India for three weeks, including 5 days visiting IIT Gandhinagar and 12 days in Ladakh collecting various geological datasets (rocks, structural measurements, water samples), and drone mapping of cliffs surrounding the Chumathang and Puga hot springs. Following Dr Thiele's visit, Dr Khanna visited HIF (Germany) to further investigate the datasets collected and build the first 3D outcrop models of these areas. The PECFAR support helps him to undertake productive research collaboration, yielding promising outcomes currently in a process of being prepared for publications in peer reviewed journals.

IGSTC awarded Paired Early Career Fellowship in Applied Research (PECFAR) 2022 to Mr Christian Lahoda, TU Berlin and Dr Prateek Saxena, IIT Mandi to explore the integration of recycled plastics, specifically PET, into additive manufacturing processes, addressing the challenge of economic and ecological sustainability. The study involved meticulous preparation of PET feedstock through sorting, cleaning, and granulation of recycled plastic bottles. The recycled PET feedstock was then used to fabricate continuous filaments through extrusion. These filaments were successfully employed in additive manufacturing using the Anisoprint Composite FDM printer, resulting in the production of test components with diverse geometries. Comprehensive evaluations, including dimensional accuracy, surface quality, and mechanical properties were performed on these components. Tensile testing provided insights into the strength, elasticity, and durability of recycled PET materials in additive manufacturing. The research demonstrated progress in qualifying recycled granulate for additive manufacturing, showcasing the potential of incorporating recycled plastics into the process.

IGSTC awarded PECFAR-2022 to Dr Ankit Jain, IIT Bombay and Dr Abhishek Khetan, RWTH University, Aachen. During the visit of Dr Jain at RWTH Aachen, the major research objective was to learn about the development and training of machine learning force fields for subsequent use in phonon calculations to study the thermal transport physics. Dr Jain initiated research project phonon thermal transport calculations using conventional empirical force fields for hard-carbon allotropes that finds application in solid-state batteries. The performance obtained using these conventional empirical force field will be compared against machine learning force fields which are developed by Dr Khetan's group and benchmarked with ab-initio density functional theory calculations. During this award period both the awardees had several extended discussions on understanding different experimentally reported results on electrochemical ammonia production. They have come up with a list of control experiments which could help in testing hypothesis of possible catalytic route along with its optimization.

IGSTC awarded PECFAR 2022 to the pair of Dr Surabhi Jain, IIT (ISM) Dhanbad & Ms Ana Paula Ribera, TU Munich to undertake the research on "Investigating the mechanical behavior of tailings before and after biochemical modification, and the impact of the modification on mitigating the failure mechanism". The research involves two basic part of experimental work on assessing the geotechnical properties of raw and biomodified tailings and selection and further development of existing constitutive relationships for modelling, based on advanced laboratory investigation. During the visit to the host institute, TU Munich, Dr Jain used different constitutive models, beginning from simple Mohr-Coulomb model, or even more sophisticated models such as Hypoplasticity, Norsand to describe and predict the mechanical behavior of the tailing materials used for the experimental investigation. The material parameters of the constitutive law were derived from the testing results from the Testing program carried out in the IIT (ISM) Dhanbad. The results concluded that the constitutive models have the ability of simulating the behavior of tailings materials including the decay of shear resistance due to liquefaction. But it is not more useful for biomodified tailings and there is a need of development of new constitutive modelling or using other models which can describe the particle-to-particle contacts after modification. However, learning the modelling, understanding the concept provide different design methods to mitigate the failure of TSF and safe designing of it.

Small Immediate Need Grants (SING)

SING - Awardee

Ms Mayookha V P from CSIR-Central Food Technological Research Institute (CFTRI) has been awarded Small Immediate Need Grants (SING) to visit the laboratory of Prof Heike Lorenz, Max Planck Institute for Dynamics of Complex Technical Systems, Magdeburg. The objective of this award is to establish an innovative crystallization process designed for the separation of Trilaurin and various Long Chain Fatty Acid Triglyceride species from Virgin Coconut Oil.

During her stay at the host institute, Ms Mayookha conducted fundamental thermal and crystallization studies on Virgin Coconut Oil. Through her research, she identified the crystallization process as a promising method for enhancing the value of coconut products, which could directly benefit the relevant industries and farmers in India, one of the major coconut producers in the world. Apart from the academic and research experiences, Ms Mayookha was deeply impressed by the work culture and support provided by the research group, Physical and Chemical Foundations of Process Engineering, led by Prof Dr Andreas Seidel-Morgenstern. The SING award facilitated Ms Mayookha to have the opportunity to connect with scholars from various parts of the world, expanding her scientific and social network.

IGSTC-Connect PLUS

Dr Shree Prakash Tiwari

Indian Institute of Technology Jodhpur

Host
Prof Daniel Neumaier
University of Wuppertal, Wuppertal

Title of the project
Exploration of multifunctional flexible transistors for photo-sensing applications

Dr Sonu Gandhi

DBT- National Institute of Animal Biotechnology (NIAB), Hyderabad

Host
Prof Sofia Dembski
Fraunhofer-Institut für Silicatforschung, Würzburg

Title of the project
Exploration of multifunctional flexible transistors for photo-sensing applications

Prof Daniel Neumaier

University of Wuppertal, Wuppertal

Host
Prof Subho Dasgupta,
Indian Institute of Science Bangalore

Title of the project
Printed negative capacitance field-effect transistors (nc-FETs) based on 2D-TMD semiconductors

Prof Subho Dasgupta

Indian Institute of Science (IISc) Bangalore

Host
Prof Daniel Neumaier,
University of Wuppertal

Title of the project
Printed negative capacitance field-effect transistors (nc-FETs) based on 2D-TMD semiconductors

Dr Rachit Agarwal

Indian Institute of Science (IISc) Bangalore

Host
Dr Brigitta Loretz,
Helmholtz-Institute for Pharmaceutical Research, Saarland

Title of the project
Development of spray-dried inhalable bacteriophage microparticles

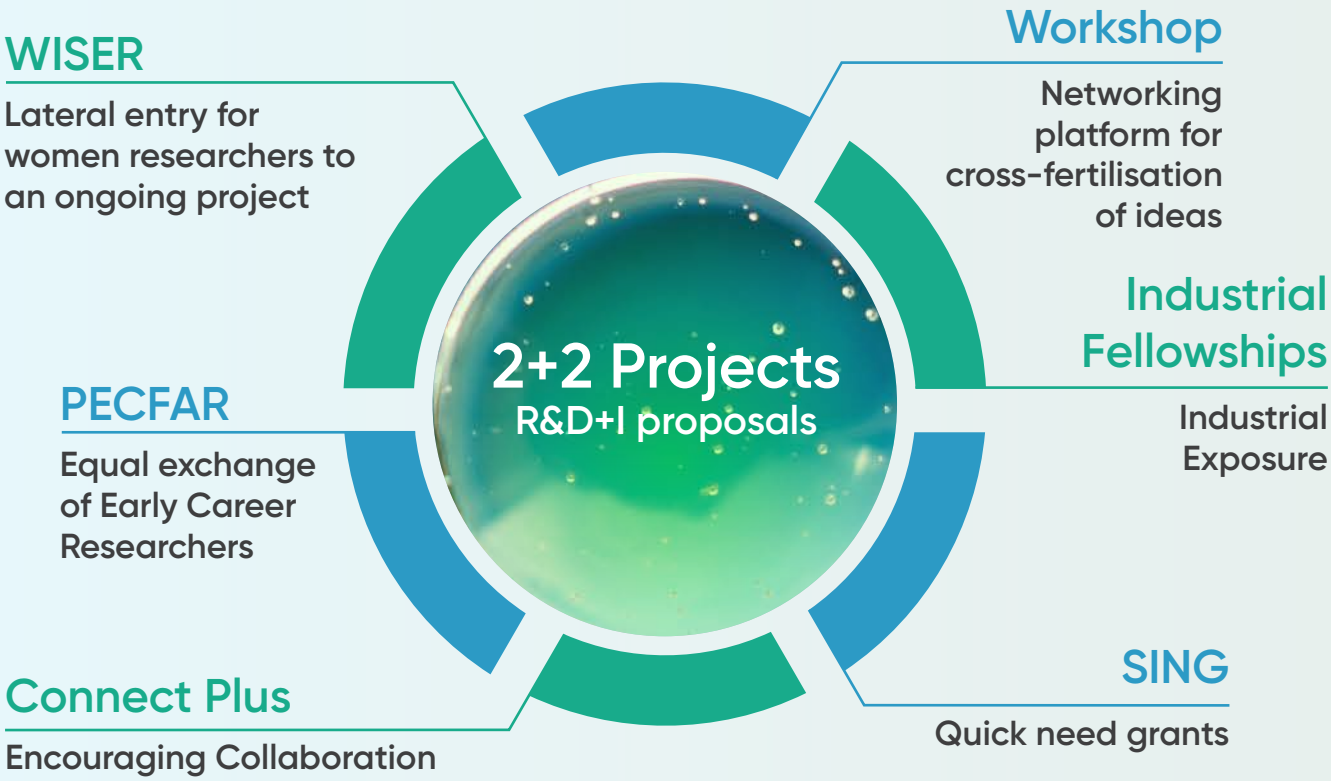
IGSTC-Networking

Mr R Madhan, Director, IGSTC and Ms. Doerte Merk, DLR-PT participated in 19th Rapid Tech 3D in Erfurt, Germany during 9th - 11th May 2023. H. E. Harish Parvathaneni, Ambassador of India to the Federal Republic of Germany visited IGSTC booth at the Fair.

Mr R Madhan, Director, IGSTC visited IIT Indore to interact with the faculties and researchers on IGSTC programmes and also met three SING Awardees from IIT Indore.

Mr R. Madhan, Director, IGSTC, recently visited the CSIR - Central Leather Research Institute to inspect the progress of the IGSTC funded 2+2 project " Pyrasol: Smart Cities integrated energy supply, carbon sequestration and urban organic waste treatment through combined solar sludge drying and pyrolysis".

Dr L. Singh, Director, Manipur Science & Technology Council had a meeting with the Director, IGSTC at IGSTC Secretariat to explore possible Indo-German S&T partnerships in India's North-East region.


WISER
Lateral entry for women researchers to an ongoing project
Workshop
Networking platform for cross-fertilisation of ideas
2+2 Projects
R&D+I proposals
Industrial Fellowships
Industrial Exposure
PECFAR
Equal exchange of Early Career Researchers
Connect Plus
Encouraging Collaboration
SING
Quick need grants

Indo-German Science & Technology Centre

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