Speakers

Prof. Jamie Lead is endowed professor and Director of the SmartState Center for Environmental Nanoscience and Risk at the University of South Carolina. His research aims at understanding nanoscale phenomena in the environment and in investigating natural nanomaterials, manufactured nanomaterials and their interactions, behaviours and risks. Professor Lead is also Honorary Professor and Former Founding Director of the Facility for Environmental Nanoscience Analysis and Characterization, University of Birmingham, UK and Editor in Chief of the journal NanoImpact. He has published approximately 170 papers, edited 5 books and holds 3 patents.

Dr. Superb Misra is an Assistant Professor in Materials Science and Engineering at IITGN. He works on developing novel materials for biological and environmental applications. He has worked extensively on designing smart scaffolds for tissue regeneration and also works on evaluating the toxicological potential of nanomaterials and harnessing the “safety by design” feature to make nanomaterials safe.

Registration and Contact Details

Course Fee

Academic institutions:

Student**:** INR 2,000/- Faculty**:** INR 2,500/-

Industry/ Government lab: INR 5,000/-

Participants from outside India**:** USD 500/-

Registration Fees includes course notes, refreshments. Accommodation is not included, but can be made available upon request and on payment-basis, subject to availability

Account Details:

Account Name: IIT Gandhinagar Project & Consultancy

Acc No: 1414132000011 MICR No.: 380015052

Bank: Canara Bank, IIT Gandhinagar, Palaj

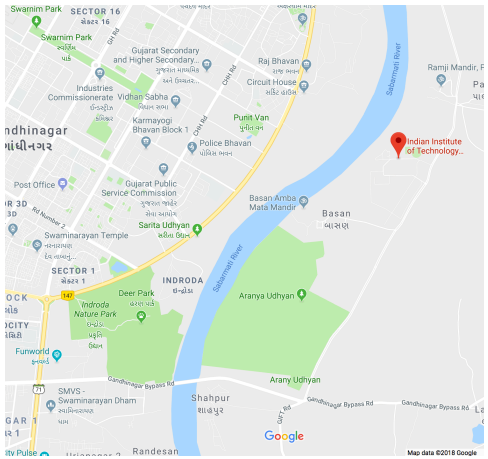
IFSc Code: CNRB0005159

Interested participants should send their CVs to **smisra@iitgn.ac.in** before September 1, 2018 and shortlisted candidates will be intimated by email, latest by September 30, 2018.

Dr. Superb Misra

Block 5-208, IIT Gandhinagar

Bio-Nano-materials Group



4 Days workshop on

Biological & Environmental interaction of nanoparticles

Contents of the workshop

Session 1A-B
- Concept of nano safety and regulatory aspects of nonmaterial

Session 2 A-B
- Synthesis and Metrology of nanomaterials

Session 3 A-B
- Effect of environmental factors on reactivity of nanomaterials
- Ecotoxicity of nanomaterials

Session 4 A-B
- Effect of Biological media on reactivity of nanomaterials

Lab Sessions - I-III
- Synthesis and testing of nanomaterials

For Registration

1. Send your cv to **smisra@iitgn.ac.in** for invitation
2. Register at GIAN website and obtain GIAN registration ID (**http://www.gian.iitkgp.ac.in/GREGN/index**)
3. Pay the course fees and send the confirmation to **smisra@iitgn.ac.in**

Overview and Objectives

Infiltration of nanomaterials in consumer goods has forced regulatory bodies to examine the impact of nanomaterials on humans and the environment. Unique physicochemical properties of nanomaterials also render unique challenges to our body's defence mechanism in dealing with these materials. Starting from Trojan horse mechanism to asbestos-like response, nanomaterials can trigger a wide range of environmental and biological response.

This workshop is aimed to provide an insight into the world of Nanosafety and Nanotoxicology. This course will specifically feature topics on how certain aspects of nanoparticles can have a toxicological potential and how the nanomaterials reactivity changes when in contact with cellular and environmental surrounding? The workshop is intended to provide researchers with :

- *Information on fundamentals of nanosafety and how nanoparticles interact with the environment.*
- *Appropriate tools and imparting an outward look for mitigating the toxic affects of nanopartices in their system design*
- *A network of researchers to interact and collaborate for addressing major concerns in the field of Nanosafy.*

Schedule

Day 1		Day 2		Day 3		Day 4	
08:30	Registration & Coffee	10:00	Session 2A	10:00	Session 3A	10:00	Session 4A
09:00	Opening Remarks	11:00	Coffee Break	11:00	Coffee Break	11:00	Coffee Break
09:30	Session 1A	11:30	Session 2B	11:30	Session 3B	11:30	Session 4B
10:30	Coffee Break	13:00	Lunch Break	13:00	Lunch Break	13:00	Lunch Break
11:00	Session 1B	14:00	Lab session -II	14:00	Lab session - III	14:00	Assignment
12:30	Photo Session & Lunch	16:30	IITGN Lab visit	19:00	Evening Dinner		
14:00-16:00	Lab session - I						

Workshop intended for

- Faculty from engineering colleges/institution willing to venture into a new field of research.
- Students at all levels (BTech/MSc/MTech/PhD) from reputed academic/technical Institutions across all disciplines.
- Scientists from government organisations and R&D Labs.

NO PRIOR KNOWLEDGE TO NANOMATERIALS/BIOLOGY IS REQUIRED