

# 4<sup>th</sup> Annual Conference of ISNM 21<sup>st</sup> – 23<sup>rd</sup> November 2019 Aerocity, New Delhi

### 21st NOVEMBER 2019

01:50 PM - 01:55 PM	WELCOME REMARKS	
	Prof. A. K. Dinda, General Secretary, ISNM	
01:55 PM – 02:00 PM	THEME OF NANOBIOTECK - 2019	
	Prof. K N Ganesh, President, ISNM	

02:00 PM – 05:00 PM	SESSION I – BIOLOGICAL & BIOINSPIRED NANOMATERIALS
	Chairperson: Prof. A. K. Dinda, AIIMS - Delhi Co-Chair: Dr. Reji Varghese, IISER - Trivandrum
02:00 PM – 02:45 PM	Redefining Identity of Disease, Tissues and Cells – a Biomaterials Paradigm  Prof. Abhay Pandit, National University of Ireland, Ireland
02:45 PM – 03:15 PM	Boosting Intracellular Delivery of mRNA therapeutics  Dr. Gaurav Sahay, OSHU, USA
03:15 PM – 03:45 PM	Nucleic Acid-derived Nanoparticles for Transdermal Drug delivery and Biosensing Dr. Xu Chenjie, The Nanyang Technological University, Singapore
03:45 PM – 04:00 PM	Harnessing inflammatory arthritis by pH-responsive glycol- chitosan nanoparticles: in vitro and in vivo activities Dr. Anita Kamra Verma, KMC, Delhi
04:00 PM – 04:15 PM	Helical Nano-swimmers for Biotechnology  Dr. Ambarish Ghosh, IISc – Bangalore
04:15 PM – 04:30 PM	Nanoparticle-mediated Targeting of Tumour Proliferation via Epigenetic Modifications
	Dr. Avinash Bajaj, RCB, Faridabad



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05:00 PM – 07:00 PM	Tea-Break + POSTER SESSION
	Judges:
	Dr. Neetu Singh, IIT – Delhi
	Dr. Indrajit Roy, University of Delhi, Delhi
06:00 PM – 07:00 PM	GBM OF ISNM



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### 22<sup>nd</sup> NOVEMBER 2019

09:00 AM – 11:00 AM	SESSION II – NANOBIOSENSOR & POINT-OF-CARE DEVICES
Cł	nairperson: Dipankar Bandyopadhyay, IIT - Guwahati
	Co-Chair: Dr. Ravikrishnan Elangovan, IIT – Delhi
09:00 AM – 09:45 AM	Goodbye Hospitals: Hello Nanosensors
	Prof. Thomas Webster, Northeastern University, USA
09:45 AM – 10:05 AM	Design and Development of Proof-of-Concept Biosensors Based on Engineered Surfaces and Nanomaterials
	Dr. Pranjal Chandra, IIT – Guwahati
10:05 AM – 10:25 AM	A Combined Impedance Spectroscopy and Dielectrophoresis (IS-DEP) Platform for Live Bacterial Cell Monitoring and Analysis  Dr. Shalini Gupta, IIT - Delhi
10: 25 AM – 10:45 AM	Recent Advancement of Biocompatible Diagnostic Surface Enhanced Raman Scattering (SERS)-Nanoprobe for Spectroscopic Detection and Bioimaging of Human Lung Cancer and Metastatic Melanoma  Prof. Kaustab Kumar Maiti. CSIR - NIIST
10:45 AM – 11:00 AM	Nanofibres based biosensing platform for Vitamin D detection  Dr. Pratima Solanki, JNU, Delhi

11:00 AM – 11:30 AM	Tea-Break
11:30 AM – 12:00 PM	Trigger Talk - DNA Nanobiotechnology
	Prof. K N Ganesh, IISER - Tirupati



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12:00 PM – 01:15 PM	SESSION IV - PANEL DISCUSSION ON SAFETY AND
	REGULATORY ISSUES IN NANOTECHNOLOGY

**Chairperson:** *Prof. Y. K. Gupta, AllMS - Bhopal* **Co-ordinator:** *Prof. A. K. Dinda, AllMS - Delhi* 

#### Panelist:

**Dr. Suchita Ninawe**, DBT; **Prof. K. N. Ganesh**, IISER – Tirupati; **Dr. Anil Mishra**, INMAS; **Dr. Swarup Kumar Sarkar**, ICMR**; Ishwara Reddy**, DCGI; **Dr. Alok Adholeya**, TERI; **Dr. Suman Chakravarti**, IIT – Kharagpur.

01:15 PM - 02:15 PM	Lunch
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02:15 PM - 02:30 PM	Indian Society of Nanomedicine - Bridging the gap
	between Academia - Industry
	Prof. A. K. Dinda, General Secretary, ISNM

02:30 PM – 03:55 PM	SESSION V - ORAL PRESENTATION
	Talks by Post-Docs/PhD Scholars (Competitive Session)
Chair	person: Dr. Aasheesh Srivastava, IISER - Bhopal
The session is a competitive session. The speakers will be selected from the abstracts received for oral presentation by the Scientific Committee of NANOBIOTECK – 2019  7 Minutes Presentation + 3 Minutes Discussion	
02:30 PM – 02:40 PM	Coupled Effects of Nanotopography and Titania Coating on Cobalt Chromium Coronary Stents in Improving in vivo Performance
	Aleena Mary Cherian, AIMS - Kochi
02:40 PM – 02:50 PM	Near-infrared and electric field multi-responsive silk nanocomposite hydrogel for localized and synergistic tumor therapy
	Ankit Gangrade, IIT – Guwahati
02:50 PM – 03:00 PM	Self-Propelling Magneto-Nanobots For Tumor Targeting And Modulate Intracellular Anticancer Drug Delivery
	Kshama D. Dhobale, MIMER, Pune



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03:00 PM – 03:10 PM	Minimalistic Peptide Bioglass Hydrogel as Bone Matrix Mimick
	Nidhi Gupta, INST - Mohali
03:10 PM – 03:20 PM	Rationally Designed Bioinspired δ- Amino Valeric Acid Based Hydrogel: One Shot Solution for Drug Delivery and Effluent Management  Priyanka Tiwari, RGTU, Bhopal
03:20 PM – 03:30 PM	
03.20 FIVI - 03.30 FIVI	Smartphone and Nanoparticle Assisted Heavy Metal ion Sensing from Aquatic Systems
	Reethu Haridas, CSIR – NIIST, Trivandrum
03:30 PM – 03:40 PM	SEMICONDUCTING BIOFILMS AND THEIR EMERGENT OPTO-ELECTRONIC PROPERTIES  Sanhita Ray, University of Calcutta, Kolkata
03:40 PM – 03:50 PM	Nanostructured Biomaterial For Enhancing The Differentiation of hMSCs into Dopaminergic Neurons  Sonali Rawat, AllMS, Delhi
00.50 DM 04.00 DM	
03:50 PM – 04:00 PM	Protein Templated Gold Nanoclusters as In-vivo and In-vitro Quantitative Estimator of Hg(II) Ion and Specific Bio-Imaging Probe
	Subhajit Chakraborty, IISER - Bhopal
04:00 PM – 04:10 PM	In-vitro and In-vivo evaluation of biocompatible and biodegradable carboxymethyl starch as a topical hemostat  Vineeta Panwar, INST, Mohali

04:10 PM – 04:30 PM	Talk by Anton Paar
04:30 PM – 06:30 PM	Tea-Break + POSTER SESSION
	Judges:
	Prof. Tinku Basu, Amity University, Noida
	Prof. Pratima Chaudhuri, Amity University, Noida



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### 23rd NOVEMBER 2019

09:00 AM – 11:00 AM	SESSION VI – NANOTECHNOLOGY APPLICATION IN TISSUE ENGINEERING
	Chairperson: Prof. Maneesh Singhal, AIIMS, Delhi Co-Chair: Dr. Biman Mandal, IIT - Guwahati
09:00 AM – 09:30 AM	Electroosmotic Flow Driven Microfluidic Device for Bacteria Isolation Using Magnetic Microbeads
	Prof. Rupak Banerjee, University of Cincinnati, USA
09:30 AM – 09:50 AM	Stem Cell derived Exosome: The new therapeutic modalities
	Dr. Sujata Mohanty, AIIMS, New Delhi
09:50 AM – 10:10 AM	Innovative nano-engineering of biomaterials for translational advancements in healthcare
	Prof. Deepthy Menon, AIMS – Kochi
10:10 AM – 10:30 AM	The Interaction of Carbon dots with Endothelial cells: an Important Aspect for Biomedical Applications  Prof. Deepa Ghosh, INST, Mohali
10:30 AM – 10:45 AM	Regenerative Medicine from Nanofibrous Extracellular Matrix
	Prof. Narayan Chandra Mishra, IIT - Roorkee

10:45 AM – 11:00 AM	Tea-Break
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11:00 AM - 12:00 PM	SESSION IN INDIA	III – EMERGING CONCEPTS AND INNOVATIONS
		Talks by Young Investigators (Early Career Faculties/Scientists)

Chairperson: Prof. Manzoor K, AIMS - Kochi

The session is a competitive session. The speakers will be selected from the abstracts received for oral presentation by the Scientific Committee of NANOBIOTECK – 2019



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## **Aerocity, New Delhi**

11:00 AM – 11:10 AM	Nano-Bio-Conjugates Trojan Horses or Wolf's in a Sheep's Clothes: Addressing the Challenge Using Non - Invasive Imaging	
	Dr Rashi Mathur, DCRS, INMAS - Delhi	
11:10 AM – 11:20 AM	Nanoparticles Aided Drug Delivery for Neuroinflammation Treatement	
	Dr. Abhijeet Singh, Manipal University – Jaipur	
11:20 AM – 11:30 AM	Customizing Raman Spectroscopy for Point of Care and Testing Applications	
	Dr. Karuvath Yoosaf, CSIR - NIIST, Trivandrum	
11:30 AM – 11:40 AM	DNA Enabled Design of Multimodal Nanoparticles for Cancer Theranostics	
	Dr. Suchetan Pa, IIT - Raipur	
11:40 AM – 11:50 AM	Quantification of Therapeutic Parameters for Plasmonic Photothermal Therapy of Cancer	
	Dr. Sanjeev Soni, CSIO, Chandigarh	
11:50 AM – 12:00 PM	Optical detection of Glutathione using random plasmonic metasurfaces based Nanobiosensors	
	Dr. V H S Moorthy, Manipal University	

12:00 PM – 12:30 PM	VALEDICTORY FUNCTION AND AWARD DISTRIBUTION	
12:30 PM – 01:15 PM	Lunch	