

SUNANDAN DIVATIA SCHOOL OF SCIENCE

International Conference On:

ADVANCES IN MATERIALS SCIENCE

& APPLIED BIOLOGY (AMSAB)

 8^{th} to 10^{th} January 2019

DAY 2



Key Note Speaker: Dr. K V Venkatesh

- Title From: Systems Engineering Perspective of Human Metabolism through a Multiscale Model for Disease Analysis : A Cell to Human Framework
- Dr. K. V. Venkatesh is a pioneer in the areas of Systems Biology, Network analysis and modeling, Synthetic Biology and Metabolic and regulatory networks research in India with more than a decade of experience.
- He has more than a hundred peer reviewed publications, won several awards and has guided several doctoral, masters and bachelor's theses.
- He has a vast experience in the field of systems biology particularly in the area of network quantification of signaling pathways, gene regulatory and metabolic networks. His contributions towards quantifying metabolic states to define a phenotype has been well received by biologists.



Key Note Speaker: Dr.K V Venkatesh

(Indian Institute of Technology Bombay, Mumbai, India)





Key Note Speaker: Dr. Tanemura Masaki

(Nagoya Institute of Technology, Japan)

- Title From: Title: Catalytic Activity on Low Temperature Graphene Growth based on Dynamic TEM Observations
- Dr.Tanemura Masaki is currently a Professor at Nagoya Institute of Technology (NITech), Nagoya, Japan and Special Adviser to the NITech President as well as a Director of Multi-Energy Innovation Center at NITech.
- His recent research activities include the synthesis, characterization using in situ TEM (transmission electron microscopy) and application of 1- and 2-dimensional nanomaterials, such as carbon nanofibers (CNFs), graphene, boron nitride and transition metal dichalcogenide materials.



Key Note Speaker: Dr. Tanemura Masaki

(Nagoya Institute of Technology, Japan)





Key Note Speaker: Dr. Kaushik Chatterjee

(Indian Institute of Science Bengaluru, India)
Title From: Biomaterials for Engineering Organotypic Culture Models for Breast Cancer and Cardiac Diseases

- Dr.Kaushik Chatterjee research is focussed on the use of biomaterials for tissue engineering applications. He typically fabricate 3D tissue scaffolds and culture human cells in 3D scaffolds to generate a tissue.
- Towards bone tissue engineering, He is studying mesenchymal stem cells in 3D biomimetic scaffolds prepared from biodegradable polymers and calcium phosphate nanoparticles.
- Another area of interest of Dr.Kaushik Chatterjee is to study cancer cells in the scaffolds to enable study of cancer mechanisms in tumor-like 3D culture formats.



Invited Speaker: Dr. Kaushik Chatterjee

(Indian Institute of Science Bengaluru, India)





Key Note Speaker: Dr. Shailendra Giri

(Hendry ford Health System, USA)

- Title From: Title: Blood-based untargeted metabolomics in Relapsing-Remitting Multiple Sclerosis revealed testable therapeutic target.
- Dr. Shailendra Giri is Doctor in the Department of Neurology Research Division, Henry Ford Health System, USA.
- His focus is to understand the role of this metabolic gene (AMPK) as an immunomodulator in vitro and in vivo using diverse immunological, molecular and biochemical approaches.



Invited Speaker: Dr. Shailendra Giri

(Hendry ford Health system, USA)





Key Note Speaker: Dr. Prakriti Tayalia

(Indian Institute of Technology Bombay, Mumbai, India)

- Title From: Porous synthetic matrices as platforms for immunotherapy and cancer studies
- Dr.Prakriti Tayalia is Principal Investigator at the Department of Biosciences and Bioengineering, Indian Institute of technology (IITB) Bombay.
- Dr Tayalia's work is focussed on utilizing engineering tools, state of the art characterization techniques and biological assays to develop physiologically relevant material systems that would support multicellular culture in a more controlled fashion.
- Her group is also involved in developing material platforms to program the cells for applications involving activation of immune system, prevention of tumor growth and recruitment & differentiation of stem and progenitor cells.



Invited Speaker: Dr. Prakriti Tayalia

(Indian Institute of Technology Bombay, Mumbai, India)





Key Note Speaker: Dr. Abhijit De

(Advanced Centre for treatment, Research and Education in Cancer, Mumbai, India)

- Title: Avenues of in vivo Multimodality Imaging during Development of Cancer Nanotherapeutics
- Dr. Abhijit De worked as a research associate in Molecular Imaging Program and Department of Radiology, Stanford University, USA.
- Since 2009, Dr. De is affiliated with ACTREC, Tata Memorial Centre as a Scientific Officer.
- His group is primarily involved in in vivo molecular imaging research for functional evaluation of multi-dimentional anti-cancer therapy including cancer nanomedicine for clinical translation.



Invited Speaker: Dr. Abhijit De

(Advanced center for treatment , research and Education in Cancer, Mumbai, India)





Key Note Speaker: Dr. Shilpa Sawant

(Bhabha Atomic Research Centre, Mumbai, India)

- Title: Electrochemical Biosensors for Metabolite Detection
- Dr. Shilpa Sawant is currently working as a Scientist at BARC.
- She has worked on organic conductor's charge transfer salts and conducting polymers.
- Her current research is on Development of Biosensors From Biopolymer Composites Study on post-deposition annealing influenced contribution of hole and electron trapping to threshold voltage stability in organic field effect transistors.



Invited Speaker: Dr. Shilpa Sawant

(Bhabha Atomic Research Center, Mumbai, India)







Title: DNA based emerging Technologies on Biological Applications







Title: Development of electrochemical nano-immunosensor for early detection of hepatocellular carcinoma.







Title: Preparation and evaluation of bioactive glass scaffolds containing levonorgestrel by 3D printing approach for bone tissue regeneration.





Oral talk: Maneka Hoojan

(Sunandan Divatia School of Science NMIMS, Mumbai India)



Title: Folic acid conjugated arsenic trioxide nanoparticles for improved drug delivery



Oral talk: Taru Dube

(Institute of Nano Science and Technology, Mohali, India)



Title: Self-assembled levodopa tubes mediated synthesis of Au microroses as SERS probes in C6 Glioma cells





Interview Sessions

