International Conference On:

ADVANCES IN MATERIALS SCIENCE
& APPLIED BIOLOGY (AMSAB)

8th to 10th January 2019

DAY 3
Key Note Speaker:
Dr. Tapas Sen

• Title From: Functional Nanomaterials in CleanTech and Medicine: An overview of our past and on-going UKIERI projects

• Dr. Tapas Sen is a reader in Chemistry at the University of Central Lancashire, UK. Currently he is leading the Nano-biomaterials Research group dedicated on researching in the area of nanomaterials and their applications in separation science, drug delivery, industrial catalysis and biosensors. Currently the group is running three multinational projects in collaboration with world leaders from academia and industries.

• Tapas Sen is leading the Nano-biomaterials Research Group within the area of Materials Science and is member of the Functional Materials Research Group. He is a Fellow of the Royal Society of Chemistry (FRSC) and Higher Education Academy (FHEA) of UK
Key Note Speaker: Dr. Tapas Sen
(University of Central Lancashire, UK)
Key Note Speaker:
Dr. Holger Gohlke
(Heinrich Heine University Dusseldorf, Germany)

- Title: Functional selectivity and basal activity of G-protein coupled receptors deduced from network rigidity
- Dr. Holger Gohlke is currently working as professor of pharmaceutical and medicinal chemistry at Heinrich-Heine-University Düsseldorf.
- He was awarded the “Promotionspreis“ from Philipps-University Marburg (2003), the “Innovationspreis in Medizinischer und Pharmazeutischer Chemie” from the Gesellschaft Deutscher Chemiker and the Deutsche Pharmazeutische Gesellschaft (2005).
- His current research focuses on the understanding, prediction, and modulation of interactions involving biological macromolecules from a theoretical perspective. His group applies and develops techniques grounded in bioinformatics, computational biology, and computational biophysics.
Key Note Speaker: Dr. Holger Gohlke
(Heinrich Heine University Dusseldorf, Germany)
Invited Speaker:
Dr. Vivek Tanavde
(Ahmedabad University, India)

- Title: miRNA regulation of stem cell differentiation: Do miRNA networks regulate signalling networks in differentiating Mesenchymal Stromal Cells

- Dr. Vivek Tanavde joined Ahmedabad University in 2017. Prior to this, he was a Principal Investigator at the Bioinformatics Institute, Singapore for more than 10 years.

- Dr. Vivek Tanavde focuses to achieve targeted differentiation of Mesenchymal stromal cells (MSC) by regulating signaling pathways. MSC have the potential of differentiating into a variety of different cell types & therefore offer therapeutic potential to treat a variety of disorders.

- Dr. Vivek Tanavde research is connecting the transcriptome data to cellular phenotype. This is difficult but becoming increasingly important with the advent of Next Generation Sequencing (NGS) technologies.
Invited Speaker: Dr. Vivek Tanavde
(Ahmedabad University, India)
Invited Speaker:

Dr. Musthafa Muhammed

(Indian Institute of Science Education and Research, Pune, India)

• Title: Realization of Hydrogen Economy with Electrochemical Energy Device

• Dr. Mustafa Muhammed is Assistant Professor at Department of Chemistry, Indian Institute of Science Education and Research (IISER), Pune.

• He is passionately involved in integrating the fundamental understanding at the molecular level to design cost effective, economical and environmentally friendly energy storage and conversion devices.

• Dr Muhammed will be foraying in electrochemistry for developing novel interfaces for applications ranging from selective sensors to electro-organic synthesis.
Invited Speaker: **Dr. Musthafa Muhammed**

(Indian Institute of Science Education and Research, Pune, India)
Invited Speaker:
Dr. Shailza Singh
(National Centre for Cell Science, Pune India)

• Title From: Systems driven Synthetic bio therapeutics device in Leishmaniasis

• Dr. Shailza Singh is currently a professor and researcher at National Centre for cell science Pune.

• Her lab focuses on molecular dynamics simulation of proteins and their interacting molecules.

• we have started working on systems biology where we aim to integrate the action of regulatory circuits, cross-talk between pathways and the non-linear kinetics of biochemical processes through mathematical models.

• Her Current Research is on System and Synthetic Approaches for therapeutic intervention against Leishmania.
Invited Speaker: **Shailza Singh**
(National Centre for Cell Science, Pune India)
Key Note Speaker:

Dr. Praveen Kumar Vemula

(Instem, Bengaluru, India)

- Title: Disease-responsive biomaterials: A novel concept for the treatment of autoimmune and inflammatory diseases

- Dr. Praveen Kumar Vemula is a Principal Investigator at the Institute for Stem Cell Biology and Regenerative Medicine (inStem), National Centre for Biological Sciences (NCBS), Bangalore.

- Currently his lab utilizes nanotechnology as a basic tool, and by combining with clinical research he aims to achieve an improved delivery of drugs, genes or cells as next-generation therapeutic strategies.

- Dr Vemula’s research is directed to harness the potential of self-assembled or polymeric nanomaterials as ‘next-generation biomaterials’ in the field of translational research to solve unmet biomedical needs.
Invited Speaker: Dr. Praveen Kumar Vemula
(Instem, Bengaluru, India)
Title: Highly Monodispense dendritic fibrous Nanosilica: scalable synthesis Quantified by E-factor and application in lasing ny self-Assembled Photonic Crystals.
Title: Real-time Metabolic interaction between tow bacterial species using a carbon-based pH and peroxide microsensors as a scanning electrochemical microscopy probes.
Title: A rechargeable Hydrogen Battery
Prize Distribution
AMSAB Core Team

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