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International Conference on Life Sciences


Wednesday


NOV 02, 2022

Virtual Presentations

11:40 - 12:05  Title: Plastic Trash to Monomers and Intermediates – PTMI
Anne M. Gaffney, University of South Carolina, USA

12:05 - 12:25  Title: Enzyme-Sulphide Coupling for Light-Induced Water Splitting and CO₂ Reduction
Jose C. Conesa, Institute of Catalysis and Petroleum Chemistry, CSIC, Spain

12:25 - 12:45  Title: Engineering of Semiconductor for Improved Photocatalysis
Mouni Roy, Banasthali Vidyapith, India

12:45 - 13:05  Title: Recent Advances in Self - Organized TiO₂ Nano Tube Synthesis and Applications
Anca Mazare, Friedrich - Alexander University, Germany

13:05 - 13:25 Title: Synthesis, Structure and Biological Activity of Various Derivatives of Benzofuroxans and Benzofurazans
Irina Galkina, Kazan Federal University, Russia

Lunch Break: 13:30 - 14:30 @ DXB Grill

Sessions: Nanotech for Energy and Environment | NanoFluidics |
Nanomaterials and Nano Particles | Pharmaceutical Nanotechnology |
Drug Delivery | Environmental Risk Factors

Session Chair

Balagopalan Unni, GEMS Arts & Science College, India

14:30 - 14:50 Title: Modified ZnO Eco - Friendly Nan Materials for Multiple Applications
M. Swaminathan, Kalasalingam Academy of Research and Education, India

14:50 - 15:10 Title: Enhancing the Durability of Calcareous Stone Monuments of Ancient Egypt using CaCO₃ Nanoparticles
Mohammad Ateeq Aldosari, King Abdulaziz City for Science and Technology, Saudi Arabia

15:10 - 15:30 Title: Ion Transport in Micro - to - Millimeter Pores through 2D Membrane
Pramoda K. Nayak, Indian Institute of Technology Madras, India

Role of Gene Polymorphism and Environmental Risk Factors in Chronic Obstructive Pulmonary Disease

Balagopalan Unni

Assam downtown University, India

Chronic respiratory diseases have a pre-eminent role in the health conditions of coal miners and exacerbations of COPD are known to result from increased levels of particulate air pollution. One of the risk factors for developing COPD is on account of the environmental triggers in genetically susceptible individuals. Atmospheric pollution from anthropogenic sources such as coal mining, industrial sources is a serious worldwide concern as it is associated with adverse health effects. This research work has been carried out to study the relative prevalence of the disease amongst the people residing in the vicinity of open- cast coal mine areas in Assam, India and also to trace out the genetic susceptibility to the disease in the population. Extensive survey was carried out in the Open- cast coal mine areas in Assam and data were recorded in Questionnaire formats by close interaction with the local people with their consent. Blood samples were collected (random sampling) from a large number of villagers residing very near to the coal mine through health camps conducted in the area; and spirometry was carried out. There was significant air pollution in the study site and pulmonary function decline was observed amongst most of the villagers exposed to the study site. GSTM1 null type was significantly associated with lung function decline and the presence of at least one active allele (either GSTM1 /GSTT1) seemed to have a protective role in the development of COPD. The impact of potentially injurious environmental and other factors such as smoking status, respirable mixed coal dust will be presented and discussed.

Biography

Former Chief Scientist and DADD and Fulbright Fellow retired from CSIR after 38 years of research career at CSIR North East Institute of Science & Technology, Assam. Currently appointed as Adviser Research at Assam downtown University. Back in Kerala, Dr. Unni is appointed as Director Academic & Research at GEMS College of Arts & Science affiliated to University of Calicut. He did his B.sc Biology, M.sc in Biochemistry (Second Rank) and Ph.D in Biochemistry from Allahabad University and PDF in Molecular Biology from Texas A&M University, USA. Dr. Unni is specialized in Biochemistry Molecular Biology, and Biotechnology. Dr. Unni got more than 125 research papers 180 abstracts, 35 papers in proceedings, 4 patents, 1 technology. 18 chapters in books, edited 3 books and 30 students received PhD degree under his guidance and supervision. Dr. Unni visited USA, Germany, Israel, Jordan, France, Morocco, UK, Thailand, Jordan, Singapore and China under various exchange programs.