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International virtual conference on **High-Performance Materials for Energy, Environment & Healthcare in the Digital Era**

30th June & 1st July 2020

Topics:

- Energy conversion/harvesting devices
- Flexible photovoltaics & electronics
- Piezoelectric/piezoresistive sensors
- Thermoelectric power generators
- Environmental and health monitoring devices

Online platforms:



Organized by

**Centre for Materials Technology, School of Advanced Sciences
Vellore Institute of Technology (VIT), Vellore - 632 014, India**

***Zoom ID & password/ YouTube live stream link to join the conference will be emailed to all registered participants one day before the conference**

#Registered participants who attend minimum of 5 sessions will get E-certificates for participation

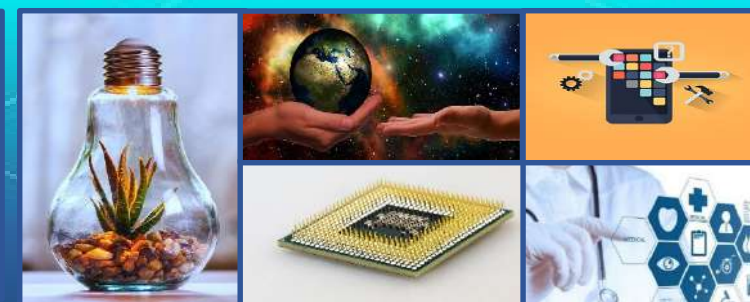
For Contact: Email: cmtconf2020@gmail.com, Phone: +91-9944826771



VIT[®]

Vellore Institute of Technology
(Deemed to be University under section 3 of UGC Act, 1956)

International virtual conference on High-Performance Materials for Energy, Environment & Healthcare in the Digital Era



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About VIT

VIT was established by Dr. G. Viswanathan, Chancellor in 1984 with the aim of providing quality higher education on par with international standards. VIT persistently seeks and adopts innovative methods to improve the quality of higher education on a consistent basis. The global standards set at VIT in the field of teaching and research spur us on in our relentless pursuit of excellence. Our Memoranda of Understanding with various international universities are our major strength. They provide for an exchange of students and faculty and encourage joint research projects for the mutual benefit. Many of our students, who pursue their research projects in foreign universities, bring high quality to their work and esteem to India and have done us proud. Recently VIT has been recognized as Institution of Eminence (IoE) by Government of India.

About the Centre

Centre for Materials Technology is the newly established research centre under School of Advanced Sciences (SAS), which was established in the year 1984, comprises Mathematics, Physics and Chemistry departments with the faculty strength of 226 who are experts in their research fields. The departments are recognized by DST-FIST to establish sophisticated instrumental facilities. The School offers Masters Programs in Data Science, Computational Statistics and Data Analytics, Physics, Chemistry and Ph.D. programs in frontier research areas in all these disciplines.

About the Conference

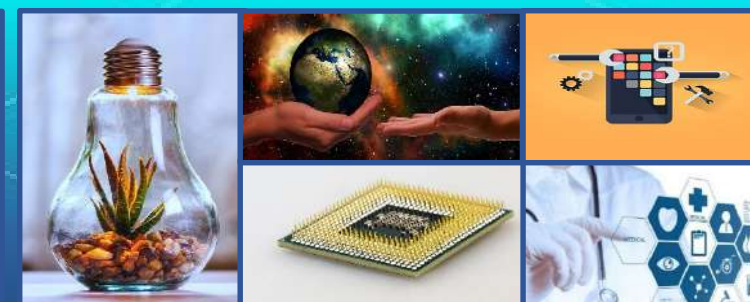
The International virtual conference on High-Performance Materials for Energy, Environment & Healthcare in the Digital Era is aimed at bringing academicians, scientists, engineers and students from India and abroad together to discuss the exciting new advancements taking place on the topics mentioned. Amidst the pandemic situation, this event will bridge the experts throughout the world and provide opportunities for fruitful deliberations.



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Technical Session Schedule – Day 1 (30th June 2020)



09:45 - 10:30 AM (IST)

Dr. Arumugam Manthiram

University of Texas at Austin, USA

Title: Battery Technologies for a Cleaner Environment



02:00 - 02:45 PM (IST)

Dr. Sudhagar Pitchaimuthu

Swansea University, UK

Title: Solar-Catalyst-Water Nexus for Sustainable Energy and Environment



10:30 - 11:15 AM (IST)

Dr. Srikanth Hariharan

University of South Florida, USA

Title: Functional Magnetic Nanoparticles for Cancer Theranostics



02:45 - 03:30 PM (IST)

Dr. Mohammad Luqman

Taibah University, Saudi Arabia

Title: Introduction to, and Applications of Ionomers as Biomimetic Smart Materials



11:30 AM - 12:15 PM (IST)

Dr. Hongdoo Kim

Kyung Hee University, Republic of Korea

Title: Optimization of Hybrid Piezocapacitive/ Piezoelectric Pressure Sensor for 2-D Applications



03:45 - 04:30 PM (IST)

Dr. Sreenath Subrahmanyam

Institute of BioEcoScience, Maryland, USA

Title: Molecularly imprinted polymers as advanced materials - Perspectives on computational design, applications in the environment & health, and future possibilities



12:15 - 01:00 PM (IST)

Dr. Palani Balaya

National University of Singapore, Singapore

Title: Designing of Safe Sodium-ion Batteries for Large Scale Stationary Storage Systems



04:30 - 05:15 PM (IST)

Dr. Mohamed I. Fadlalla

University of Cape Town, South Africa

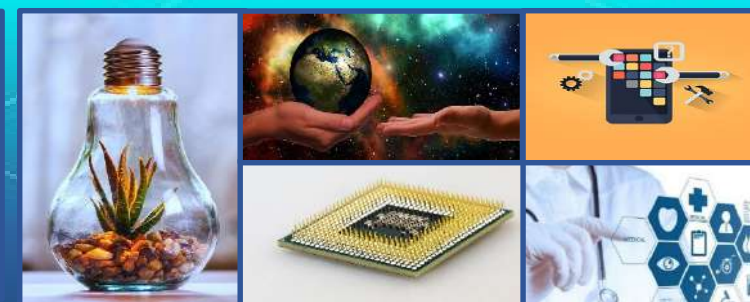
Title: Influence of substituent, Co and/or Ni, in ferrite structure for oxygenates formation in Fischer-Tropsch; 1D and 2D GC study



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Technical Session Schedule – Day 2 (1st July 2020)



10:15 -11:00 AM (IST)

Dr. Nihar Pradhan

Jackson State University, Jackson, MS, USA
Title: Heterostructure of Van der Waals layered
Materials for Photovoltaic Applications



12:00 - 12:45 PM (IST)

Dr. Joost N. H. Reek

University of Amsterdam, Netherlands
Title: Supramolecular approaches in Catalyst
development in the context of solar fuel



11:00 -11:45 AM (IST)

Dr. Seungbum Hong

Korea Advanced Institute of Science & Technology
(KAIST), Republic of Korea
Title: Materials Imaging based Design of
Piezoelectric Sensors and Energy Harvesters



02:00 – 02:45 PM (IST)

Dr. Mario Caironi

Istituto Italiano di Tecnologia, Milano, Italy
Title: Printed Polymer Field-Effect Transistors
Operating at Radio-Frequencies