



# WEBINAR Program

# V-Materials2021

2nd Edition of Materials Science  
&  
Nanoscience Webinar

April 16 | 07:00 – 15:15 GMT

April 17 | 12:30 – 18:50 GMT



**April 16, 2021**

**GMT 07:00 – 15:15**

07:00 – 07:10

Introduction



## Keynote Sessions - 1

Webinar

Speakers

Time Zone

Time Zone

07:10 – 07:45

15:10 – 15:45

Title: Spider Silks and their Artificial Counterparts

**Jinlian Hu**, City University of Hong Kong, Hong Kong.

07:45 – 08:20

15:45 – 16:20

Title: Antimonide-based materials and heterostructures for high performance photodetection

**Dao Hua ZHANG**, Nanyang technological University, Singapore.

08:20 – 08:55

16:20 – 16:55

Title: Thermal and Lithographic Performance of Silsesquioxane with Cycloaliphatic Epoxy-Siloxane Hybrid Spacer for Soft Lithography

**Zulkifli Ahmad**, Universiti Sains Malaysia, Malaysia.

08:55 – 09:30

10:55 – 11:30

Title: Interfacial properties in composite nano-systems for energy harvesting

**Alberto Vomiero**, Luleå University of Technology, Sweden.

**09:30 – 09:40**

**Networking and Refreshments Break**



## Invited Sessions

09:40 – 10:00

19:40 – 20:00

Title: Two-Dimensional Materials Based Photocatalysts for Light-Induced H<sub>2</sub> Production

**Jingrun Ran**, University of Adelaide, Australia.

10:00 – 10:20      13:00 – 13:20

Title: Metamaterials with programmed properties for waveguiding inspired by quantum mechanics

**Lea Sirota**, Tel Aviv University, Israel.

10:20 – 10:40      18:20 – 18:40

Title: Developing nanomaterials to harness molecular dynamics for biomedical engineering

**Wong, Siu Hong Dexter**, The Hong Kong Polytechnic University, Hong Kong, China.

10:40 – 11:00      12:40 – 13:00

Title: Organic Mixed Valence Compounds for Electrochromic and Electrofluorochromic Applications

**Corrente Giuseppina Anna**, University of Calabria, Italy.

11:00 – 11:10

**Networking and Refreshments Break**



## Keynote Sessions - 2

11:10 – 11:45      20:10 – 20:45

Title: Nanoparticles Joining in Stereolithographic Additive Manufacturing for Practical Components Fabrications

**Soshu Kiriwara**, Osaka University, Japan.

11:45 – 12:20      13:45 – 14:20

Title: Metal oxide nanostructures for chemical sensing application

**Elisabetta Comini**, University of Brescia, Italy.

12:20 – 12:55      14:20 – 14:55

Title: Innovative nanocomposites made of polymers and semiconductors for applications in photocatalysis

**Giuliana Impellizzeri**, Institute for Microelectronics and Microsystems (IMM) of the Italian National Research Council (CNR), Italy.

12:55 – 13:30      14:55 – 15:30

Title: Freestanding oxide heterostructure membranes hosting a 2-dimensional electron gas

**Fabio Miletto Granozio**, CNR-SPIN, Italy.

13:30 – 14:05      19:00 – 19:35

Title: Smart Nanostructures for Multifunctional Properties and Applications

**Tokeer Ahmad**, Jamia Millia Islamia, India.

14:05 – 14:40      16:05 – 16:40

Title: Theoretical prospects towards enhanced optical properties in silicon nanoparticles

**Katerina Dohnalova**, Institute of Physics, University of Amsterdam, The Netherlands.

14:40 – 15:15      16:40 – 17:15

Title: Substrate Dissipation Energy Regulates Cell Adhesion and Spreading

**Pasquale Sacco**, AREA Science Park & University of Trieste, Italy.

**End of Day One**



**April 17, 2021 GMT 12:30 – 18:50**

12:30 – 12:40

Introduction

Webinar  
Time Zone

Speakers  
Time Zone



## Keynote Sessions

12:40 – 13:15

14:40 – 15:15

Title: Design and applications of multifunctional low-dimension nanomaterials

**Alberto Bianco**, CNRS, France.

13:15 – 13:50

15:15 – 15:50

Title: Light emission from hexagonal SiGe:

**Jos Haverkort**, Eindhoven University of Technology, Netherlands.

13:50 – 14:25

09:50 – 10:25

Title: Why Bother With Nano In Biomaterials?

**Steven J. Eppell**, Case Western Reserve University, USA.

14:25 – 15:00

10:25 – 11:00

Title: The rise of Silicon Phthalocyanines as n-type organic semiconductors for thin film transistors and organic photovoltaics

**Benoît Lessard**, University of Ottawa, Canada.

15:00 – 15:10

**Networking and Refreshments Break**

15:10 – 15:45      10:10 – 10:45

Title: Study of Thermal and Magnetic Transport in Functional Materials Enabled by Ultrafast Optical Metrology

**Xiaojia Wang**, University of Minnesota, Twin Cities, USA.

15:45 – 16:20      11:45 – 12:20

Title: Non-destructive Quantification of Skin-Fabric Contact Area Using the X-ray Micro-Computed Tomography System

**Kavita Mathur**, North Carolina State University, USA.

16:20 – 16:55      11:20 – 11:55

Title: Rapid Photonic Annealing for High-Performance Perovskite Solar Cells

**Dawen Li**, The University of Alabama, USA.

16:55 – 17:30      09:55 – 10:30

Title: Dendrites and Pits vs Needles and Canyons: The Quest to Create Uniform Lithium Electro-Deposition and Dissolution

**Kevin Wood**, San Diego State University, United States.

17:30 – 18:05      12:30 – 13:05

Title: Characterization and Modeling of Thermal Protective and Thermo-physiological Comfort Performance of Polymeric Textile Materials

**Sumit Mandal**, Oklahoma State University, USA.



## Invited Sessions

17:30 – 17:50      20:30 – 20:50

Title: Graphene Derivatives in Biomaterials

**Ferda Mindivan**, Bilecik Seyh Edebali University, Turkey.

17:50 – 18:10      11:50 – 12:10

Title: Hybrid Polaritonic Metasurfaces: From Nonlinear Optics to Optoelectronics

**Raktim Sarma**, Sandia National Laboratories, USA.

18:10 – 18:30      21:10 – 21:30

Title: Potentiality of new dark clay-rich materials for porous ceramic applications in Ouled Sidi Ali Ben Youssef Area (Coastal Meseta, Morocco)

**Achraf HARRATI**, Hassan II University of Casablanca, Morocco.

18:30 – 18:50      21:30 – 21:50

Title: Surface-Enhanced Raman Scattering for conducting polymers in situ investigation: Application to poly (5-amino-1,4-naphtoquinone)

**Aouzal Zaynab**, Mohammed First University Faculty of Sciences, Morocco.

**Closing Ceremony**