



In-Person Conference

Program-At-A-Glance

Peers Alley Media

1126 59 Ave East, V5X 1Y9

Vancouver BC, Canada



WhatsApp No: +1 873-889-8976



Peers Alley Media

1126 59 Ave East, V5X 1Y9

Vancouver BC, Canada

Ph : +1-778-766-2134

www.peersalleyconferences.com

MARCH 21-22
2022
London, UK

JOINT EVENT

**ADVANCED MATERIALS
SCIENCE WORLD
CONGRESS
&
ADVANCED CHEMISTRY
WORLD CONGRESS**

Scientific Program

DAY 1

MARCH 21, 2022

Scientific Program

08:30-09:00 Opening Ceremony

Keynote Session

09:00-09:25

Title: Multivariate optimization approach applied to natural polymers from *Ceratonia siliqua* L. and *Moringa oleifera* Lam as coagulating/flocculating agents
Flavia Vieira da Silva-Medeiros, *Federal University of Technology, Brazil*

09:25-09:50

Title: Primary immune thrombocytopenia and essential thrombocythemia: Cases series
Maria Podolak-Dawidziak, *Wroclaw Medical University, Poland*

09:50-10:15

Title: Present state of the Density Functional Theory studies, the spin problem, and following from quantum mechanics limits on its application
Ilya G. Kaplan, *National Autonomous University of Mexico, Mexico*

Refreshment Break 10:15-10:30

Distinguished Speaker Talks

10:30-10:50

Title: Creating complex 3D and 5D anisotropy in phase field modeling interface energies
Jacob L. Bair, *Oklahoma State University, USA*

10:50-11:10

Title: Electromotive force generated in all materials under temperature difference
Dong-Il Song, *Korea Meteorological Administration, South Korea*

11:10-11:30

Title: Multi-class modeling of grain growth and delta phase dissolution kinetics of alloy 718 with in-situ HT-EBSD measurements
Christian Gruber, *Materials Center Leoben Forschung GmbH, Austria*

11:30-11:50

Title: Use of metallized raw materials in electric furnace steelmaking
Karimov Ramin Ismatbey oglu, *Baku Steel Company LLC, Azerbaijan*

11:50-12:10

Title: Highly efficient photoswitch in diarylethene-based single- and bi-layer molecular junctions

Jean Christophe Lacroix, *Université Sorbonne Paris Cité, France*

12:10-12:30

Title: Characterization and anticancer potential of Withania somnifera fruit bioactives (a native species to Pakistan) using GC-MS, NMR and LC-MS-ESI

Qudsia Tabassam, *University of Sargodha, Pakistan*

12:30-12:50

Title: Electromagnetic methods for improved production of additive manufacturing materials

Imants Kaldre, *University of Latvia, Latvia*

12:50-13:10

Title: Causes of celestial motion

Dong-II Song, *Korea Meteorological Administration, South Korea*

Group Photo

Lunch Break 13:10-13:40

13:40-14:00

Title: A novel technique for mapping material and information flow in food traceability systems

Samantha Islam, *University of Cambridge, UK*

14:00-14:20

Title: Chemicals and Multiple Chemical Sensitivity (MCS)

Andrea Cormano, *ISDE Benevento, Italy*

14:20-14:40

Title: Systematic review and meta-analysis on the effects of astaxanthin on human skin ageing

Xiangyu Zhou, *University College London, UK*

14:40-15:00

Title: Bactericidal surfaces by biomimetics of the nanopillars on insect wings

Richard W. van Nieuwenhoven, *Vienna University of Technology, Austria*

15:00-15:20

Title: Front-end investigations of the coated particles of nuclear fuel samples – Ion polishing method

Zuzanna M. Krajewska, *National Centre for Nuclear Research, Poland*

15:20-15:40

Title: Novel image analysis technique for UHP hybrid nano-based fiber-reinforced concrete

Mohammad Iqbal Khan, *King Saud University, Saudi Arabia*

Refreshment Break 15:40-15:55

15:55-16:15

Title: Fabrication of pore-selectively silver-functionalized honeycomb-attened film and its application for antibacterial activity

Do Sung Huh, *Inje University, South Korea*

16:15-16:35

Title: Compact dual-band 4-MIMO Antenna elements for 5G mobile applications

Fayad Ghawbar, *Universiti Tun Hussein Onn Malaysia, Malaysia*

16:35-16:55

Title: Energy and CO₂ emission assessments of alkali- activated concrete and ordinary portland cement concrete: A comparative analysis of different grades of concrete

Ali Alsalman, *Almaaqal University, Iraq*

16:55-17:15

Title: The effect of cholesterol removal from milk and cream on the textural and organoleptic properties of final products

Lukáš Kolarič, *Institute of Food Nutrition, Slovak University of Technology, Slovakia*

17:15-17:35

Title: Application of lipases immobilized on Octyl-Sepharose CL-4B carrier as potential biocatalysts in obtaining pure enantiomers of NSAIDs

Natalia Kocot, *Nicolaus Copernicus University in Torun, Poland*

Poster

Title: Development of environmentally friendly HPLC methods for the simultaneous detection of several benzodiazepines and their applications to pharmaceuticals and human biological fluid

Hassan M Albishri, *King Abdulaziz University, Saudi Arabia*

Poster

Title: Determination of endocrine disruptor Bisphenol-A leakage from different matrices of dental resin-based composite materials

Naser Faissal Al-Tannak, *Kuwait University, Kuwait*

E-Poster

Title: Separation of radioactive Ni from activation products

Fabiola Monroy-Guzmán, *Instituto Nacional de Investigaciones Nucleares, Mexico*

E-Poster

Title: Mesoporous tungsten oxide films for electrochromic windows
Chi-Ping Li, *National United University, Taiwan*

E-Poster

Title: Pesticides: Agricultural food products, problems, chemistry
Lydia Bondareva, *Federal Scientific Center of Hygiene Maned After F.F. Erisman, Russia*

E-Poster

Title: Influence of ammonia modification on ultra-pure activated carbons derived from furfuryl alcohol
Agnieszka Kałamaga, *West Pomeranian University of Technology, Poland*

E-Poster

Title: Bandgap-coupled template auto-catalysis towards the growth of high-purity sp² nanocarbons
Jun Gao, *Tsinghua University, China*

Panel Discussion

End of Day 1



DAY 2

MARCH 22, 2022

Scientific Program

08:30-09:00 Opening Ceremony

Keynote Session

09:00-09:25

Title: Smart coatings: Degradation of priority pollutants on TiO₂ based photocatalytic materials in indoor and outdoor environments-Principles and mechanisms

Dimitrios Kotzias, *Institute for Health and Consumer Protection, Italy*

09:25-09:50

Title: High sodium content P2-type cathode for high-performance sodium-ion batteries

Ting Jin, *Northwestern Polytechnical University, China*

Distinguished Speaker Talks

09:50-10:10

Title: Circular polarizing filters based on chiral metasurface

Xin He, *Zhejiang University, China*

10:10-10:30

Title: Hot ECAP implementation in zirconia reinforced aluminium chip matrix (Al6061) composite production

Sami Abdo Mohammed Al-Alimi, *Universiti Tun Hussein Onn Malaysia (UTHM), Malaysia*

10:30-10:50

Title: Nanoparticles as cell tracking agents in human ocular cell transplantation therapy

David C. Mundy, *Stanford University School of Medicine, USA*

Panel Discussion

End of Day 2





Virtual Conference

Program-At-A-Glance

Peers Alley Media

1126 59 Ave East, V5X 1Y9

Vancouver BC, Canada



WhatsApp No: +1 873-889-8976



Peers Alley Media

1126 59 Ave East, V5X 1Y9

Vancouver BC, Canada

Ph : +1-778-766-2134

www.peersalleyconferences.com

VIRTUAL EVENT

3RD ADVANCED MATERIALS SCIENCE WORLD CONGRESS

MARCH 21-23
2022

Theme: Anticipating Future Trends, New Insights and Cutting-Edge Technologies in Materials Science and Engineering

Scientific Program

ADV. MATERIALS SCIENCE 2022

<https://advanced-materialsscience.peersalleyconferences.com/>

DAY 1

MARCH 21, 2022

Scientific Program

GMT-Greenwich Mean Time

Keynote Session

07:30-08:00

Introduction

08:00-08:25

Title: Fibre flow in 3D printing of discontinuous fibre reinforced thermoplastic composites

Dongmin Yang, *University of Edinburgh, United Kingdom*

08:25-08:50

Title: A current investigation into zircon uses in geosciences: Case studies from Southern Italy mountain ranges

Francesca Micheletti, *University of Bari Aldo Moro, Italy*

08:50-09:15

Title: Impact diamonds of Popigai Crater, Siberia: A new advanced natural nanopolycrystalline material

Nikolay Pokhilenko, *Russian Academy of Sciences, Russia*

Distinguished Speaker Talks

09:15-09:35

Title: Supercoiling artificial muscles

Geoff Spinks, *University of Wollongong, Australia*

09:35-09:50

Title: Graphene derivative and metal nanoparticles coated silk fabrics with durable, multifunctional properties for numerous potential applications

Shovon Bhattacharjee, *UNSW Sydney, Australia*

09:50-10:10

Title: Defect induction in crystals by glass crystallization method and its application for photonics

Kenji Shinozaki, *National Institute of Advanced Industrial Science and Technology, Japan*

10:10-10:30

Title: High curie temperature ferroelectrics

Seiji Kojima, *University of Tsukuba, Japan*

10:30-10:50

Title: Compact measurement of the optical power in high-power LED using a light-absorbent thermal sensor

Jae-Young Joo, *Korea Photonics Technology Institute, South Korea*

Refreshment Break 10:50-11:05

11:05-11:25

Title: Advanced graphene aerogel embedded phase change materials (PCMs) for energy harvesting

Chengbin Yu, *Seoul National University, South Korea*

11:25-11:45

Title: Design and preparation of full-spectrum solar light responsive photocatalysts for hydrogen generation

Junying Zhang, *Beihang University, China*

11:45-12:05

Title: Immunomodulating biomaterials

Weiwei Wang, *Peking Union Medical College, China*

12:05-12:25

Title: High-scattering porous polymer structures and their applications

Shudong Yu, *South China University of Technology, China*

12:25-12:45

Title: Oxidizable electrode induced bipolar resistive switching behavior in TE/CdZnTe/Pt structure

Aoqiu Wang, *Northwestern Polytechnical University, China*

12:45-13:05

Title: Advances in gallium nitride metalenses

Vin-Cent Su, *National United University, Taiwan*

13:05-13:20

Title: Failure analysis of DSS 2205 GTA welds and evaluation of the cooling rate effects on localized corrosion with mini-electrochemical cell

Li Yuan Hu, *Chang Gung University, Taiwan*

Lunch Break 13:20-13:50

13:50-14:10

Title: Metalla-ynes and poly(metallayne)s: Synthesis, characterization and optoelectronic applications

Rayya A. Al-Balushi, *A'Sharqiyah University, Oman*

14:10-14:30

Title: Carbon-based materials for energy storage applications
Meltem Yanilmaz, *Istanbul Technical University, Turkey*

14:30-14:50

Title: Recent advances resistive metallic hydrogen sensors
Necmettin Kilinc, *Inonu University, Turkey*

14:50-15:10

Title: Shape memory phenomena and thermomechanical reactions in reversibility of shape memory alloys
Osman Adiguzel, *Firat University, Turkey*

15:10-15:25

Title: Composite portable shelter system produced by vacuum bagging using recycled reinforcement and matrix materials
Ayşe Genc, *Calik Denim, Turkey*

15:25-15:45

Title: Study of radiation shielding materials on microstrip patch antenna for sustainability
John Nepomuceno Colaco, *Goa College of Engineering, India*

15:45-16:00

Title: Analysis of instantaneous Poynting vector and application
Himanshu Kushwah, *University of Delhi, India*

Refreshment Break 16:00-16:15

16:15-16:35

Title: A comparison of smear layer removal effects between conventional chemical surface treatment and double-wavelength (Er,Cr: YSGG 2780 nm and diode 940 nm) laser methods on push-out bond strength of three calcium silicate-based materials
Ezatollah Kazeminejad, *Golestan University of medical sciences, Iran*

16:35-16:50

Title: Optimization of deep drawing products by adding effect of texture pattern in draw bead design
Mohammad Soroush Merkani, *University of Tehran, Iran*

16:50-17:10

Title: Technique to avoid membrane punching during triaxial test of crushed aggregate
Wael Mahmood Albadri, *Al-Amarah University College, Iraq*

17:10-17:30

Title: Development and performance evaluation of a pedal operated seed cleaner (POS cleaner)

Wilber Akatuhurira, *Makerere University, Uganda*

17:30-17:50

Title: Sb₂S₃ thin films by ultrasonic spray: Formation and application in solar cells

Malle Krunk, *Tallinn University of Technology, Estonia*

17:50-18:10

Title: Microscale control of ferrofluid toward enabling novel micro-electromechanical systems

Kenichi Takahata, *University of British Columbia, Canada*

Panel Discussion

End of Day 1



DAY 2

MARCH 22, 2022

Scientific Program

GMT-Greenwich Mean Time

Keynote Session

07:30-08:00

Introduction

08:00-08:25

Title: Smart coatings: Degradation of priority pollutants on TiO₂ based photocatalytic materials in indoor and outdoor environments-Principles and mechanisms

Dimitrios Kotzias, *Institute for Health and Consumer Protection, Italy*

08:25-08:50

Title: Dental zirconia waste for a sustainable manufacturing of oil-water separation membranes

Francesca Deganello, *Italian National Research Council, Italy*

08:50-09:15

Title: Synthesis, modeling and applications of III-V nanowires and nanowire heterostructures: Opportunities and challenges

V. G. Dubrovskii, *St. Petersburg State University, Russia*

Distinguished Speaker Talks

09:15-09:35

Title: Energy transformation and accumulation in solids, irradiated by charged particles

Alexander Valyaev, *Nuclear Safety Institute of the Russian Academy of Sciences, Russia*

09:35-09:55

Title: Upconversion nanoplateforms as potent agents for cancer theranostics

Irina V. Balalaeva, *Lobachevsky University, Russia*

09:55-10:15

Title: Regularities of acoustic emission under shock loading of glass with a crack

Sergey Bekher, *Siberian Transport University, Russia*

10:15-10:35

Title: Study of corrosion-resistant deposited metal of NPP equipment performed with a strip electrode by arc welding and electroslag welding methods

Mikhail Timofeev, *Prometey Central Scientific Research Institute of Structural Materials, Russia*

10:35-10:55

Title: Role of production procedure on microstructure and chemical composition of $\text{Na}_{0.5}\text{Bi}_{0.5}\text{TiO}_3$ ceramics

Marija Duncce, *University of Latvia, Latvia*

10:55-11:15

Title: Organizing metal atoms and nanoclusters in LC media for novel applications

Satya Pal Singh, *Madan Mohan Malaviya University of Technology, India*

Refreshment Break 11:15-11:30

11:30-11:50

Title: Improving yield and nitrogen use efficiency using polymer coated urea in rice (*Oryza sativa* L.) under vertisol of Deccan Plateau (Typic Pellustert)

Gobinath Rajendran, *ICAR-Indian Institute of Rice Research, India*

11:50-12:10

Title: Pattern recognition techniques for sand particles

Jianfeng Wang, *City University of Hong Kong, China*

12:10-12:30

Title: Fluorescent single-walled carbon nanotubes for imaging and sensing in the near-infrared

Gili Bisker, *Tel-Aviv University, Israel*

12:30-12:50

Title: A LIME-based explainable machine learning model for predicting the severity level of COVID-19 diagnosed patients

Freddy Gabbay, *Ruppin Academic Center, Israel*

12:50-13:10

Title: Temperature dependent calibration of shape-memory alloy strain sensors

Thomas Mäder, *Fraunhofer Institute for Machine Tools and Forming Technology IWU, Germany*

13:10-13:25

Title: Examining the contribution of factors affecting the electrical behavior of poly(methyl methacrylate)/graphene nanoplatelets composites

Xiaoling Luo, *University of Erlangen-Nuremberg, Germany*

Lunch Break 13:25-13:55

13:55-14:15

Title: Manganese Hexacyanoferrate cathode material for aqueous Zn-ion battery

Marco Giorgetti, *University of Bologna, Italy*

14:15-14:30

Title: Multidisciplinary and statistical approach for the investigation and characterization of archaeological artifacts

Francesca Falcone, *D'Annunzio University, Italy*

14:30-14:45

Title: Employing dicarboxylic acids in the KF-YF_3 system to modulate the crystal phase and optical response of Eu^{3+} -doped materials

Pablo Serna-Gallen, *Jaume I University, Spain*

14:45-15:00

Title: A safe, flexible, and high-performing gel-polymer electrolyte for rechargeable lithium metal batteries

Julen Castillo, *Basque Research and Technology Alliance, Spain*

15:00-15:20

Title: Plasmoelectronic properties of self-organised nanoparticles

Jeremie Grisolia, *University of Toulouse, France*

15:20-15:40

Title: Effect of the chemical composition and dimensionality of halide perovskites for photovoltaic applications on their basic properties: Insights from theory

Philippe Baranek, *Edf Lab Paris-Saclay, France*

15:40-16:00

Title: Effect of adamantane substitutions to improve properties of organic optoelectronic materials

Jozef Krajcovic, *Brno University of Technology, Czech Republic*

Refreshment Break 16:00-16:15

16:15-16:35

Title: Changing the paradigm of pressure injury (PI) prevention: Translating sub epidermal moisture (SEM) assessment technology from bench to bedside

Ruth Bryant, *Abbott Northwestern Hospital, USA*

16:35-16:50

Title: Nanoparticles as cell tracking agents in human ocular cell transplantation therapy

David C. Mundy, *Stanford University School of Medicine, USA*

16:50-17:10

Title: Developing a needle-knife surgical device

Fabio Ferraz do Amaral Ravaglia, *University of Campinas, Brazil*

17:10-17:30

Title: Gas permeameter for polymers and nanocomposites: Improvements and advances

Gilberto Joao Pavani, *Federal Institute of Rio Grande do Sul, Brazil*

17:30-17:50

Title: Development of advanced composite materials by additive manufacturing

Haniyeh Fayazfar, *University of Ontario Tech, Canada*

17:50-18:10

Title: Deposition of biopolymers by cold gas spray

John Henao, *National Research Council of Science and Technology (CONACYT), México*

Panel Discussion

End of Day 2



DAY 3

MARCH 23, 2022

Scientific Program

GMT-Greenwich Mean Time

Keynote Session

07:30-08:00

Introduction

08:00-08:25

Title: Foaming epoxy-amine-carbamate: The effect of different neat amines on rheological and cellular morphology

Du Ngoc Uy Lan, *Universität Bayreuth, Germany*

08:25-08:50

Title: Valorization of waste for the materials and energy

Lucia D'Accolti, *University of Bari, Italy*

08:50-09:15

Title: Mechanical properties and thermal stability of fiber reinforced geopolymer composites

Huirong Le, *Tsinghua University, China*

Distinguished Speaker Talks

09:15-09:35

Title: High sodium content P2-type cathode for high-performance sodium-ion batteries

Ting Jin, *Northwestern Polytechnical University, China*

09:35-09:55

Title: Circular polarizing filters based on chiral metasurface

Xin He, *Zhejiang University, China*

09:55-10:15

Title: Fabrication of pore-selectively silver-functionalized honeycomb-patterned film and its application for antibacterial activity

Do Sung Huh, *Inje University, South Korea*

10:15-10:30

Title: Compact dual-band 4-MIMO Antenna elements for 5G mobile applications

Fayad Ghawbar, *Universiti Tun Hussein Onn Malaysia, Malaysia*

10:30-10:45

Title: Hot ECAP implementation in zirconia reinforced aluminium chip matrix (Al6061) composite production

Sami Abdo Mohammed Al-Alimi, *Universiti Tun Hussein Onn Malaysia, Malaysia*

10:45-11:05

Title: Correlation between charge transport- recombination loss kinetics and perovskite solar cell performance investigated by TPV and IMVS measurements

Rahmat Hidayat, *Bandung Institute of Technology, Indonesia*

Refreshment Break 11:05-11:20

11:20-11:40

Title: Structural, optical and electrical characterizations of Cr-doped CuO thin films

Ilhan CANDAN, *Dicle University, Turkey*

11:40-11:55

Title: Pollen morphology and its taxonomic significance of the genus Crucianella L. (Rubiaceae) in Iran

Soheyla Parsapanah, *University of Guilan, Iran*

11:55-12:10

Title: Graphene spin-coated electrode for polyacrylonitrile acoustic nanogenerators

Sedigheh Aghahyari, *Sharif University of Technology, Iran*

12:10-12:30

Title: Energy and CO₂ emission assessments of alkali- activated concrete and ordinary portland cement concrete: A comparative analysis of different grades of concrete

Ali Alsalman, *Almaaqal University, Iraq*

12:30-12:50

Title: Description of the heat capacity of solid phases by a multiparameter family of functions (MPFF)

Valery P. Vassiliev, *Lomonosov Moscow State University, Russia*

12:50-13:10

Title: The evolution of the Zener factor and the isotropy of triple periodic minimal surface structures

Ramon Miralbes Buil, *University of Zaragoza, Spain*

13:10-13:25

Title: Development of GTE turbine air-cooling system to increase its operating parameters

Ivan Malinovskiy, *Moscow Aviation Institute, Russia*

Lunch Break 13:25-13:55

Keynote Talk
13:55-14:20

Title: Advanced biocarbons and their lightweight sustainable green composite materials: A path forward to circular bioeconomy
Manju Misra, *University of Guelph, Canada*

14:20-14:40

Title: Refractory carbides at the temperatures up to 5000K
Alexander Ivanovich Savvatimskiy, *Russian Academy of Sciences, Russia*

14:40-15:00

Title: Virus resonance inactivation using non-ionizing radiation in the microwave regime
Refael Minnes, *Ariel University, Israel*

15:00-15:20

Title: Electromagnetic methods for improved production of additive manufacturing materials
Imants Kaldre, *University of Latvia, Latvia*

15:20-15:40

Title: SERS combined with chemometric analysis for detection and identification of microorganisms: Viruses and bacteria
Agnieszka Michota-Kamińska, *Polish Academy of Sciences, Poland*

15:40-16:00

Title: Optimisation for ultralight and high-stiffness hierarchical structures with tailored lattice metamaterials
Nan Li, *Imperial College London, United Kingdom*

16:00-16:20

Title: *In-situ* formation of Al-Cu based alloy foams
Ignacio A. Figueroa, *National Autonomous University of Mexico, Mexico*

16:20-16:40

Title: Impact of urbanization and development activities on carbon sink and CO₂ mitigating capacity of rubber plantation in Kerala, India
K. K Ambily, *Rubber Research Institute of India, India*

16:40-17:00

Title: Optimum stimulation period for pulse thermography
Antonio Ramos Silva, *Porto University, Portugal*

Panel Discussion

End of Day 3





**BOOKMARK
YOUR DATES**

**4th Advanced
Materials Science
World Congress**

March 2023

<https://advanced-materialscience.peersalleyconferences.com/>