

In-Person Conference

Program-At-A-Glance

Peers Alley Media

1126 59 Ave East, V5X 1Y9 Vancouver BC, Canada



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Vancouver BC, Canada
Ph: +1-778-766-2134
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5th Edition of
ADVANCED
MATERIALS SCIENCE
WORLD CONGRESS

MARCH 27-28
2023
Barcelona
Spain

Scientific Program





08:00-08:20	Registrations		
08:20-08:30	Opening Ceremony		
	Keynote Forum		
08:30-08:55	Title: Polyethylenimine-based materials: Novel heterogeneous catalysts for sustainable organic transformations Alessandro Sacchetti, Politecnico di Milano, Italy		
08:55-09:20	Title: Sample preparation for microstructural analysis using 3D printed tools Lawrence Whitmore, Paris Lodron University of Salzburg, Austria		
09:20-09:45	Title: Large electrocaloric effect in Pb(Sc _{0.25} In _{0.25} Nb _{0.25} Ta _{0.25})O ₃ medium-entropy ceramics Qi Zhang, Basque Center for Materials, Applications and Nanostructures, Spain		
	Distinguished Speaker Talks		
Chair	Alexander S. Mukasyan, University of Notre Dame, USA		
Chair	María Yesenia Díaz Cárdenas, Technologic of Higher Studies of Coacalco, Mexico		
09:45-10:05	Title: Materials science wish list for renewable energy John J. Kilbane II, Ilinois Institute of Technology, USA		
10:05-10:25	Title: Technology to product design process for design education Byungsoo Kim, Kansas State University, USA		
	Refreshment Break 10:25-10:40		
10:40-11:00	Title: Biopolymer-based active surfaces for novel tribo-electric nano generators (TENGs) Fernando G. Torres, Pontificia Universidad Catolica del Peru, Peru		
11:00-11:20	Title: Engineering of wood-based membranes with excellent permeability/selectivity properties for forward osmosis process		

Masoud Rastgar, China University of Mining and Technology, China

11:20-11:40	Title: Fracture simulation of brittle materials in tension and compression using cohesive elements Raul Dario Durand Farfan, University of Brasilia, Brazil
11:40-12:00	Title: CuCrFeVTi high-entropy alloy studied by positron annihilation spectroscopy Ricardo Domínguez-Reyes, Universidad Carlos III de Madrid, Spain
12:00-12:20	Title: Reactive spark plasma sintering of advanced materials Alexander S. Mukasyan, University of Notre Dame, USA
12:20-12:40	Title: Materials for energy storage device - Na-based batteries Claudia D'Urso, CNR-ITAE, Italy
	Group Photo
	Lunch Break 12:40-13:10
13:10-13:30	Title: Oxidative and antimicrobic effects of iron, titanium oxide nanoparticles and thalicarpine Elitsa L. Pavlova, Sofia University St. Kliment Ohridski, Bulgaria
13:30-13:45	Title: Light-controlled disorder-engineering for functional optical metasurfaces Maximilian Buchmüller, University of Wuppertal, Germany
13:45-14:05	Title: Synthesis of chiral-at-metal rhodium complexes from achiral tripodal tetradentate ligands Ricardo Rodríguez, Universidad de Zaragoza, Spain
14:05-14:25	Title: Real-time monitoring of Staphylococcus aureus biofilm sensitivity towards antibiotics with isothermal microcalorimetry Willem J. B. van Wamel, Erasmus University Medical Center, Netherlands
14:25-14:45	Title: New space tourism industry and sustainable development Annette Toivonen, Haaga-Helia University of Applied Sciences, Finland
14:45-15:05	Title: A derivative of chalcone as green corrosion inhibitor for copper María Yesenia Díaz Cárdenas, Technologic of Higher Studies of Coacalco, Mexico
15:05-15:25	Title: Bionate biocompatibility: <i>In vivo</i> study in rabbits Maria D (Amparo) Vanaclocha-Saiz, Universitat Politecnica de Valencia, Spain

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15:40-16:00	Title: A review of recent developments in biomaterials used in total hip implants Mohammed Zwawi, King Abdulaziz University, Saudi Arabia
16:00-16:20	Title: Oxide TFTs: Towards transparent & flexible pixel circuits for AMOLED displays Kavindra Kandpal, Indian Institute of Information Technology, Allahabad, India
16:20-16:40	Title: Ferromagnetic materials for energy efficient computing Prasanna Kumar Misra, Indian Institute of Information Technology, Allahabad, India
16:40-17:00	Title: Design of biocompatible energy harvesting device for low frequency operation Surya Prakash, Indian Institute of Information Technology, Allahabad, India
17:00-17:20	Title: Simulation based reinforcement learning algorithms for material design and optimal chemical reactions Rahul Meshram, Indian Institute of Information Technology, Allahabad, India
17:20-17:40	Title: A single electron transistor nanopore as toxic gas sensor: First principles investigation Boddepalli SanthiBhushan, Indian Institute of Information Technology, Allahabad, India
17:40-18:00	Title: Climate system : A global sensitivity approach Liban Ismail, Université Clermont Auvergne, France
Poster	Title: Microstructure, mechanical and biophysical properties of pure ultra-fine grain Titanium Krzysztof Wierzbanowski, AGH University of Science and Technology, Poland
Panel Discussions	
End of Day 1	

Scientific Program

Adv. Materials Science 2023





08:00-08:20	Registrations
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08:20-08:30 Opening Ceremony

Keynote Forum

Title: Multicoloured Jacquard artworks reproduction with CMYK channels to improve colour accuracy

Ken Ri Kim, Loughborough University, United Kingdom

Title: Optical sensors based on symmetric waveguide gratings Patrick Görrn, *University of Wuppertal*, *Germany*

Title: Magnesium screws for fracture treatment in Trauma surgery: 3.5-Year clinical results after medial malleolus fracture fixation and Computed Tomography (CT)

Patrick Holweg, Medical University of Graz, Austria

Distinguished Speaker Talks

Chair Yamin Leprince-Wang, Université Gustave Eiffel, France

Chair Taisei Kaizoji, International Christian University, Japan

09:45-10:05 Title: On adaptive multi-objective optimization for greener wired networks Hatem Yazbek, Nova Southeastern University, USA

10:05-10:25 Title: Green algae-based biopolymers for green energy storage devices Fernando G. Torres, Pontificia Universidad Catolica del Peru, Peru

Refreshment Break 10:25-10:40

10:40-11:00 Title: A theory of speculative bubbles and crashes
Taisei Kaizoji, International Christian University, Japan

Adv. Materials Science 2023

11:00-11:20	Title: Clinical significance of 'Hepcidin inducer Laennec and Porcine' in the treatment of Hereditary Hemochromatosis, NASH, and other iron loading chronic liver diseases complicating with Type2 DM Yuki HAMADA, HAMADA Clinic for Gastroenterology and Hepatology, Japan
11:20-11:40	Title: Dual-segment continuum robot with rotational motion along the deformed backbone Qingxiang Zhao, Chinese Academy of Sciences, China
11:40-12:00	Title: Development and application of a hydraulic impact test machine for simulating rockburst conditions WANG Jie, Liaoning Technical University, China
12:00-12:20	Title: Photocatalytic activity of nanostructured ZnO for water and air purification: From microfluidics to smart city applications Yamin Leprince-Wang, Université Gustave Eiffel, France
12:20-12:40	Title: Integration of smart, ultrathin and flexible cellulose-based printed sensors for process control and health monitoring Mohammed Khalifa, Kompetenzzentrum Holz GmbH, Austria
	Lunch Break 12:40-13:10
13:10-13:30	Title: Unidirectional flow of composite bright-bright solitons through asymmetric double potential barriers and wells Amaria Javed, New York University Abu Dhabi, United Arab Emirates
13:10-13:30 13:30-13:50	through asymmetric double potential barriers and wells
	through asymmetric double potential barriers and wells Amaria Javed, New York University Abu Dhabi, United Arab Emirates Title: Development and comparison of airplane fuselage panel assembly system alternatives using axiomatic design principles and simulation methodology
13:30-13:50	through asymmetric double potential barriers and wells Amaria Javed, New York University Abu Dhabi, United Arab Emirates Title: Development and comparison of airplane fuselage panel assembly system alternatives using axiomatic design principles and simulation methodology Osman Emre CELEK, Turkish Aerospace Industries Inc., Turkey Title: Anti-icing and anti-fouling properties of pitcher plant inspired coatings

14:50-15:10	Title: Numerical analysis of topological metamaterials as one dimensional photonic crystals Akhilesh Tiwari, Indian Institute of Information Technology, Allahabad, India
15:10-15:30	Title: An IoT based intelligent driver assistance system (i-DAS) Ashok G. Verghese, Hindustan Institute of Technology and Science, India
	Refreshment Break 15:30-15:45
15:45-16:05	Title: Geostatistics for mineral deposit grade assessment Bhabesh C Sarkar, IIT(ISM) Dhanbad, India
16:05-16:20	Title: Tungsten oxide-reduced graphene oxide composites for photoelectrochemical water splitting Shahzad Munir Ansari, Federal Urdu University of Arts, Science and Technology, Pakistan
16:20-16:35	Title: On log dagum weibull distribution: Applications on lifetime data Aneeqa Khadim, Mirpur University of Science and Technology, Pakistan
16:35-16:55	Title: Experimental observation of temperature variations in the bone due to certain physical parameters during bone drilling process J.G. Tsiagadigui, University of Yaoundé 1, Cameroon
16:55-17:15	Title: An improved multigrid solver and a novel visualization strategy for the p-version finite element method Janitha Gunatilake, University of Peradeniya, Sri Lanka
17:15-17:35	Title: Development of B-cell reference materials for comparable and quantitative cytometric expression analysis Lili Wang, National Institute of Standards and Technology (NIST), USA
17:35-17:55	Title: Analysis of the solidus temperature of multicomponent steel Toshio Fujimura, JFE Techno Research Corp, Japan
17:55-18:15	Title: Diagnostic performance of acoustic radiation force impulse imaging in evaluating liver fibrosis in patients with chronic hepatitis B infection: A cross-sectional study Chuong Dinh Nguyen, University Medical Center of HCMC, Vietnam

18:15-18:35	Title: Surfaces of carbon nanotubes as revealed by thermogravimetric and solvent extraction techniques Mark A. Banash, Neotericon LLC, USA
18:35-18:55	Title: The zygoma anatomy-guided approach (ZAGA) for rehabilitation of the atrophic maxilla André Sakima Serrano, Private Practice at ZAGA Center São Paulo, Brazil
18:55-19:15	Title: A new type of silica-induced "moundless" pitting corrosion in copper observed in Japan Masahiro Sakai, Muroran Institute of Technology, Japan
19:15-19:35	Title: The advanced use of Calphad databases and methods in computational thermodynamics Bo Sundman, OpenCalphad
19:35-19:55	Title: Investigation on fracture behavior of cementitious composites reinforced with aligned hooked-end steel fibers Sujjaid Khan, Hebei University of Technology, China
19:55-20:15	Title: Chitosan nanoparticles and their application in agriculture Divya Koilparambil, Apple International School, UAE
20:15-20:35	Title: Classification of fungal diseases in plant based on deep learning techniques Mallikarjun Hangarge, Karnatak Arts, Science and Commerce College, India
E-Poster	Title: A bio-resourced and superhydrophobic dry water extinguishing agent for pool fire based on phytic acid and silicon Haoran Jiang, University of Science and Technology of China, China
Panel Discussions	
	End of Day 2 & Conference
Closing Remarks	



6TH EDITION OF ADVANCED MATERIALS SCIENCE WORLD CONGRESS

March 2024 | Amsterdam, Netherlands

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



Virtual Conference

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VIRTUAL EVENT

5TH ADVANCED MATERIALS SCIENCE WOORLD CONGRESS

MARCH 27-28 2023

Theme: Unveils the most important materials advancements happening now; breakthroughs in energy, future cities, transit, and medicine, cutting-edge technologies, and accelerating innovations in materials science and engineering

ADV. MATERIALS SCIENCE 2023

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





GMT-Greenwich Mean Time

08:30-09:00

Introduction

Distinguished Speaker Talks

Sessions: Materials Science and Engineering | Nanomaterials and Nanotechnology | Advanced Materials and Nanotechnology | Smart Materials and Applications | Energy Materials | Polymer Science and Technology | Composite Materials | Carbon and 2D Materials|Graphene Technology | Metamaterials | Perovskites | Metallurgical and Materials Engineering | Metals and Alloys | Optics | Biomaterials and Medical Devices | Surface Science and Engineering

09:00-09:25 Keynote Talk	Title: Physical development in the early years: The impact of a daily movement programme on young children's physical development Pat Preedy, LSC Education Ltd, United Kingdom
09:25-09:50 Keynote Talk	Title: Graphene coatings: A disruptive approach to durable mitigation of environment-assisted degradation Raman Singh, Monash University, Australia
09:50-10:10	Title: Pickering like emulsion stabilized via fine bubbles Tomohiro Onda, Kao Corporation, Japan
10:10-10:30	Title: Spin reorientation in layered perovskite oxyfluoride Pb ₃ Fe ₂ O ₅ F ₂ Kengo Oka, Kindai University, Japan
10:30-10:50	Title: Analysis of the solidus temperature of multicomponent steel Toshio Fujimura, JFE Techno Research Corp, Japan
10:50-11:10	Title: Integrated hydrobulging of prolate ellipsoids from preforms with multiple thicknesses Jian Zhang, Jiangsu University of Science and Technology, China
11:10-11:30	Title: A modularity design approach to behavioral research with immersive virtual reality: A SkyrimVR based behavioral experimental framework Yu-Hsin Chen, Wenzhou-Kean University, China

Refreshment Break 11:30-11:45

11:45-12:05	Title: Mineral and toxic metal content of tropical stingless bee honey (Apidae; Heterotrigona itama) from Sabah, Borneo Suzan Benedick, University Malaysia Sabah Sandakan Campus, Malaysia	
12:05-12:25	Title: Derivation of the high-Tc version of the BCS optical conductivity of conventional superconductors using the spin polaron theory and matsubara green's functions Unofre B. Pili, University of San Carlos, Philippines	
12:25-12:45	Title: Diagnostic performance of acoustic radiation force impulse imaging in evaluating liver fibrosis in patients with chronic hepatitis B infection: A cross-sectional study Chuong Dinh Nguyen, University Medical Center of HCMC, Vietnam	
12:45-13:05	Title: Mechanical behavior of graphene reinforced metal matrix composites G.G.SOZHAMANNAN, Sri Manakula Vinayagar Engineering College, India	
13:05-13:25	Title: Dielectric properties of alumina-CaTiO ₃ nanocomposite for biomedical application Prafulla Kumar Mallik, Indira Gandhi Institute of Technology, India	
Lunch Break 13:25-13:55		
	Lunch Break 13:25-13:55	
13:55-14:15	Title: Soft artificial optical skin for biomedical application Abhijit Chandra Roy, Indian Institute of Science, India	
13:55-14:15 14:15-14:35	Title: Soft artificial optical skin for biomedical application	
	Title: Soft artificial optical skin for biomedical application Abhijit Chandra Roy, Indian Institute of Science, India Title: THz graphene MIMO dielectric resonator antenna	
14:15-14:35	Title: Soft artificial optical skin for biomedical application Abhijit Chandra Roy, Indian Institute of Science, India Title: THz graphene MIMO dielectric resonator antenna Amarjit Kumar, National Institute of Technology, India Title: Automatic sleep stage classification with reduced epoch of EEG	

15:35-15:55	Title: FTIR spectrum of soil organic carbon changes (SOC) by the growth of rubber tree (Hevea brasiliensis) seedlings in soils with varied pH and base status Ambily. K.K, Rubber Research Institute of India, Kottayam, India
15:55-16:15	Title: Optimization study on sliding wear characteristics and heat treatment conditions of different grades of ferritic ductile cast iron Bramaramba.v, NIT Rourkela, India
16:15-16:35	Title: High Thermal Stability of the RF dielectric properties of the BiVO ₄ matrix added with ZnO Daniel Xavier Gouveia, Federal University of Ceará, Brazil
	Refreshment Break 16:35-16:50
16:50-17:10	Title: Effects of serum albumin on the photophysical characteristics of synthetic and endogenous protoporphyrin IX louri Borissevitch, Universidade de São Paulo, Brazil
17:10-17:30	Title: The zygoma anatomy-guided approach (ZAGA) for rehabilitation of the atrophic maxilla André Sakima Serrano, Private practice at ZAGA Center São Paulo, Brazil
17:30-17:50	Title: Nanocellulose biobased composite overlays Gregory T. Schueneman, Forest Products Laboratory, USA
17:50-18:15 Keynote Talk	Title: A single intraarticular injection of nanotechnology-based drug formulation as a safe osteoarthritis disease-modifying drug Hee-Jeong Im, University of Illinois at Chicago, USA & Jesse Brown Veterans Affairs Medical Center, USA

Panel Discussions





GMT-Greenwich Mean Time

08:30-09:00

Introduction

Distinguished Speaker Talks

Sessions: Materials Science and Engineering | Nanomaterials and Nanotechnology | Advanced Materials and Nanotechnology | Smart Materials and Applications | Energy Materials | Polymer Science and Technology | Composite Materials | Carbon and 2D Materials|Graphene Technology | Metamaterials | Perovskites | Metallurgical and Materials Engineering | Metals and Alloys | Optics | Biomaterials and Medical Devices | Surface Science and Engineering

09:00-09:20	Title: A new type of silica-induced "moundless" pitting corrosion in copper observed in Japan Masahiro Sakai, Muroran Institute of Technology, Japan
09:20-09:40	Title: Antibiotic-resistant superbugs on nanomaterials and nanoplastics Sunghee Joo, University of Seoul, South Korea
09:40-10:00	Title: Investigation on fracture behavior of cementitious composites reinforced with aligned hooked-end steel fibers Sujjaid Khan, Hebei University of Technology, China
10:00-10:20	Title: Classification of fungal diseases in plant based on deep learning techniques Mallikarjun Hangarge, Karnatak Arts, Science and Commerce College, India
10:20-10:35	Title: Tungsten oxide-reduced graphene oxide composites for photoelectrochemical water splitting Shahzad Munir Ansari, Federal Urdu University of Arts, Science and Technology, Pakistan
10:35-10:55	Title: Luminescence studies on Eu³+: B₂O₃-SrO-TiO₂-LiO- Al₂O₃ glasses M. Priya, Saveetha Engineering College, India
10:55-11:15	Title: Chitosan nanoparticles and their application in agriculture Divya Koilparambil, Apple International School, UAE

Refreshment Break 11:15-11:30

11:30-11:50	Title: Causal analysis of company performance and technology mediation in small and medium enterprises during COVID-19 Ashraf Mishrif, Sultan Qaboos University, Oman	
11:50-12:10	Title: Domination of pythagorean fuzzy gragh Sadegh Banitalebi, Imam Hossein University, Iran	
12:10-12:30	Title: Direct cost analysis for 32,783 samples with preanalytical phase errors Pinar Eker, Maltepe University Faculty of Medicine, Turkey	
12:30-12:50	Title: Modelling Strength Data Sets via Modified Weibull Distribution Huseyin Unozkan, Halic University, Turkey	
12:50-13:10	Title: Advances in illicit drugs detection at points of care Ghadeer M. M. Abdelaal, Zagazig University, Egypt	
13:10-13:30	Title: Analysis of straightness and flatness errors based on Python Ahmed M. S. El Melegy, National Institute of Standards, Egypt	
Lunch Break 13:30-14:00		
14:00-14:20	Title: Biological acidification of pig manure using banana peel waste to improve the dissolution of particulate phosphorus: A critical step for maximum phosphorus recovery as struvite Langa Bright Moyo, University of the Witwatersrand, South Africa	
14:20-14:40	Title: Robotic process automation in banking industry: A case study on Deutsche Bank Alice Saldanha Villar, University of Essex, United Kingdom	
14:40-15:00	Title: A culture model for the assessment of phenylalanine neurotoxicity in phenylketonuria Julian Kylies, University Medical Center Hamburg-Eppendorf, Germany	
15:00-15:20	Title: Ethics of human-machine interaction: A proposition Abeer Dyoub, University of L'Aquila, Italy	

15:20-15:40	Title: Evaluation of structural properties of biodegradable nanoPMOs by STORM imaging for efficient cancer therapy Pradip Das, University of Montpellier, France	
15:40-16:00	Title: The advanced use of Calphad databases and methods in computational thermodynamics Bo Sundman, OpenCalphad	
16:00-16:20	Title: Synthesis of chiral-at-metal rhodium complexes from achiral tripodal tetradentate ligands Ricardo Rodríguez, Universidad de Zaragoza, Spain	
Refreshment Break 16:20-16:35		
16:35-16:55	Title: Quality of life after extraction of mandibular wisdom teeth: A systematic review Bassima Chami, Mohammed V University, Morocco	
16:55-17:15	Title: Exploring chitosan as an ecofriendly agent to improve sustainable dyeing properties of cotton fabric dyed with (Opuntia Ficus-Indica L) fruit peel and its UV protection activity Rym Mansour, University of Monastir, Tunisia	
17:15-17:35	Title: Coping with complexity in scientific research by combining systems, qualitative and quantitative approaches Omar Sacilotto Donaires, School of Economics, Business Administration and Accounting at Ribeirão Preto, Brazil	
17:35-18:00 Keynote Talk	Title: Development of B-cell reference materials for comparable and quantitative cytometric expression analysis Lili Wang, National Institute of Standards and Technology, USA	
18:00-18:25 Keynote Talk	Title: Nanostructured materials templated on short DNA oligonucleotides, at different pH conditions Julio Cesar Gonzalez Olvera, Universidad Politécnica de Santa Rosa Jáuregui, Mexico	
18:25-18:45	Title: XRD-Results measured on fracture surfaces of austenitic tensile test specimen Karl Berreth, Materialprüfungsanstalt Universität Stuttgart, Germany	
Panel Discussions		
Closing Remarks		



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