

Joint Event

Advanced Nanotechnology and Nanomaterials

&

Advanced Physics; Applications and Scientific Innovations

September 19-20, 2024
Barcelona, Spain

SCIENTIFIC PROGRAM

NANO INTELLECTS 2024 & ADV. PHYSICS 2024

DAY 1

SEPTEMBER 19, 2024

Scientific Program

08:30-09:00 Registrations

09:00-09:10 Opening Ceremony

Moderator Francois HENN, Université de Montpellier, France

Chair Ricardo Vera-Graziano, Instituto de Investigaciones en Materiales, UNAM, México

Topics: Nanoscience and Technology | Nano Medicine | Nano Polymers | Nano Physics | Nano Chemistry | Robotics | Artificial Intelligence | Graphene | Materials Science and Engineering | Physics | Materials Physics | Optics and Photonics | Quantum Materials and Quantum Computing

Distinguished Speaker Talks

09:10-09:35 Title: 2D magnetic memory based on graphene nanoribbons spin-valves
Wen-Jeng Hsueh, National Taiwan University, Taiwan

09:35-10:00 Title: Confinement of a biologic ionic channel in a SWCNT
Francois HENN, Université de Montpellier, France

10:00-10:25 Title: Antiviral property of nanoclusters-grafted photocatalysts under indoor light illumination
Masahiro Miyauchi, Tokyo Institute of Technology, Japan

10:25-10:50 Title: Modulation of spontaneous activity in Embryonic Cardiomyocytes cultured on Poly (Vinyl-Alcohol)/Bioglass Type 58S Electrospun Scaffolds
Ricardo Vera-Graziano, Instituto de Investigaciones en Materiales, UNAM, México

10:50-11:15 Title: Restructuring consciousness through the Symintentry Hypothesis
David Rail, Consultant Neurologist, Australia

Group Photo 11:15-11:20

Refreshment Break 11:20-11:35

11:35-12:00 Title: Surprises in the return-rates of photons from a mirror on the Moon
Hans Deyssenroth, Germany

12:00-12:25	Title: Classical galvanomagnetic effects as a means of studying solids <i>Yurii Uhryn, Ivan Franko Drohobych State Pedagogical University, Ukraine</i>
12:25-12:50	Title: Porous hexagonal RuSe₂ thin films are obtained at low temperature using the simple spray pyrolysis <i>Beya OUERTANI, University of Carthage, Tunisia</i>
12:50-13:15	Title: Investigating power loss in a wind turbine using real-time vibration signature <i>Kingshuk Banerjee & Vishwaas Narasinh, Hitachi India Pvt. Ltd, India</i>
Group Photo 13:15-13:20	
Lunch Break 13:20-14:05	
14:05-14:30	Title: Zinc oxide nanoparticles exacerbate skin epithelial cell damage by upregulating pro-inflammatory cytokines and exosome secretion in M1 macrophages following UVB irradiation-induced skin injury <i>Ying-Jan Wang, National Cheng Kung University, Taiwan</i>
14:30-14:55	Title: Development of small and large compressive pulses in two phase flow <i>Meera Chadha, DST Centre of Excellence in Climate Modelling, IIT Delhi, India</i>
14:55-15:20	Title: Numerical evidence of hidden chaotic attractors in integer-order and fractional-order systems <i>Marius-F. Danca, Babes-Bolyai University, Romania</i>
15:20-15:45	Title: Use of nanotechnology and liability in the Italian law system <i>Giovanna Capilli, San Raffaele University, Italy</i>
15:45-16:10	Title: SEE failure analysis of Hi-rel ASIC for spacecraft applications <i>K. Padmapriya, U R Rao Satellite Centre, ISRO, India</i>
Refreshment Break 16:10-16:25	
16:25-16:50	Title: Development of a technology for applying high-temperature coatings to metal particles for subsequent 3D printing <i>Manisha Chauhan, Ariel University, Israel</i>
16:50-17:15	Title: Preparation and investigation of Montmorillonite-K10 polyaniline nanocomposites for optoelectronic applications <i>Ramsha Idrees, Pakistan Institute of Engineering and Applied Sciences, Pakistan</i>

17:15-17:40

Title: Photovoltaic performance investigation of solar cells based on different compositions of perovskite absorber layer

Samaneh Soleimani-Amiri, *Babol Noshirvani University of Technology, Iran*

17:40-18:05

Title: Investigation of Rietveld refinement and corrosion behaviour of Al-TiO₂ nanocomposite produced using air plasma spray and accumulative roll bonding method

Hamed Aminian, *Semnan University, Iran*

18:05-18:30

Title: Hybrid classical-quantum transfer learning for text classification

Mohammad Mahdi Nasiri Fatmehsari, *Pasargad Institute for Advanced Innovative Solutions, Iran*

18:30-18:55

Title: Temporal dynamics of Lung-Deposited Surface Area (LDSA) in Central Los Angeles: Diurnal and seasonal patterns

Constantinos Sioutas, *University of Southern California, USA*

Panel Discussion

DAY 2

SEPTEMBER 20, 2024

Scientific Program

09:55-10:00 Introduction

Topics: Nanoscience and Technology | Nano Medicine | Nano Polymers | Nano Physics | Nano Chemistry | Robotics | Artificial Intelligence | Graphene | Materials Science and Engineering | Physics | Materials Physics | Optics and Photonics | Quantum Materials and Quantum Computing

Distinguished Speaker Talks

10:00-10:25

Title: Investigation of nano- and micro-sized amorphous materials under the influence of high-energy radiation

Mohammed Faeq Mohammed Sabri, *Koya University, Iraq*

10:25-10:50

Title: No infections, no failure: 30,000 human implanted nanotextured orthopedic implants and counting

Thomas J. Webster, *12 Start-up Companies, Mansfield Bioincubator, USA*

10:50-11:15

Title: Approaches in line with human physiology to prevent skin aging

Nazli Karimi, *Hacettepe University, Turkey*

11:15-11:40

Title: Introducing the Vitrification potential as a poly-categorical glass-forming ability criterion for metallic glasses

Abdelmalek ROULA, *Mohamed Seddik Ben Yahia University of Jijel, Algeria*

Panel Discussion

End of Day 2

DAY 2

SEPTEMBER 20, 2024

Scientific
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5th Global Conference on

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2nd Global Conclave on

**Advanced Physics;
Applications and
Scientific Innovations**

October 2025