

# Scientific Program

## 3<sup>rd</sup> International Conference on Biomaterials & Biodevices

Thursday  
November 10, 2022

Day 1 November 10, 2022

Meeting Hall: Lilliental

09:00-09:40 Registrations

09:40-10:00 Introduction

Keynote Presentations

10:00-10:45 Photonics (Er,Cr: YSGG and Photobiomodulation) in Surgery for Impacted Third Molar Tooth Extraction

**Saleh Aria**, The Harrow Dental Practice, UK

10:45-11:30 Personalized and Precision Medicine (PPM) as a Unique Healthcare Model to Be Set Up via Biodesign and Translational Applications and Upgraded Business Modeling to Secure the Human Healthcare, Wellness and Biosafety

**Sergey Suchkov**, Institute for Biotechnology and Global Health of MGUPP and A.I. Evdokimov MGMSU, Russia

Group Photo (11:30-11:50)

Networking & Refreshments @ Foyer (11:50-12:20)

Oral Presentations

**Session Chair:** **Saleh Aria**, The Harrow Dental Practice, UK

Sessions:

Biomaterials | Biopolymers and Polymers | Biomaterials & Nanotechnology | 3D Bio Printing Technology | Bioceramics and Composite materials|Biodegradable Biomaterials | Biosensors & Biorobotics | Cell & Tissue Science Engineering | Advanced Biomaterials | Bioinformatics & Biophotonics | Applications of Biomaterials | Biomimetic Materials |

12:20-13:00 Dynamic Force Spectroscopy *In silico*: Exploring Strength, Deformability and Toughness of Biological Particles

**Valeri Barsegov**, University of Massachusetts, USA

13:00-13:40 Synthesis, Characterization and Anti-Cancer Application of Nat-ZnFe<sub>2</sub>O<sub>4</sub> NPs on 2D Tumor Model

**Siva Chander Chabattula**, Indian Institute of Technology Madras, India

Lunch @ Restaurant (13:40-14:40)

14:40-15:20 Results of Local Treatment of Diabetic Foot Syndrome Using Sorption -Bactericidal Dressing "Aibolit"

**Dilara Nuraly**, LLP "SPTC Zhalyn", Kazakhstan

15:20-16:00 Precise Low-Temperature Ultrasonic Assisted Brazing Method for Medical Applications

**Abdulsalam Muhrat**, University of Minho, Portugal

16:00-16:40 Toward Electrophoretic Separation of Membrane Proteins in Supported n-Bilayers

**Frederic Harb**, University of Balamand, Lebanon

# Scientific Program

## 3<sup>rd</sup> International Conference on **Biomaterials & Biodevices**

**Thursday**  
**November 10, 2022**

Networks & Refreshments @ Foyer (16:40-17:10)

17:10-17:50

Advanced Manufacturing for Vascular Graft Sealant Technology

**Kirsty Goudie**, University of Strathclyde, UK

17:50-18:30

Fluorescence-Guided Surgery in the Combined Treatment of Peritoneal Carcinomatosis from Colorectal Cancer: Preliminary Results and Considerations

**Francesca Cardella**, University of Campania 'Luigi Vanvitelli', Italy

Day 1 Concludes

# Scientific Program

## 3<sup>rd</sup> International Conference on Biomaterials & Biodevices

Friday  
November 11, 2022

Day 2 November 11, 2022

Meeting Hall: Lilliental

Keynote Presentations

10:00-10:45 Antibodies (Abs) with Functionality (Ab-Proteases) as Translational Tools of The Next-Step Generation designed to be applied for Clinical Applications in Personalized and Precision Medical Practice

**Sergey Suchkov**, Institute for Biotechnology and Global Health of MGUPP and A.I. Evdokimov MGMSU, Russia

10:45-11:30 Optimal Design of Bio-Composite Material: State of Art and Challenges

**David Bassir**, Université de Bourgogne Franche-Comté, France

Networks & Refreshments @ Foyer (11:30-11:50)

Oral Presentations

**Session Chair** **Sergey Suchkov**, Institute for Biotechnology and Global Health of MGUPP and A.I. Evdokimov MGMSU, Russia

Sessions:  
Biomaterials in Drug Delivery Systems | Biodevices and Biomedical Optics | Sustainable Materials | Hydrogels | Wearables and Mobile Devices | Biofabrication | Computation Biology | Nanomedicine & Nanobiotechnology | Health Monitoring devices | Medical Imaging and Processing

11:50-12:30 Development of an Affordable, Biomimetic Surgical Mesh for Abdominal Wall Repair

**Alvena Kureshi**, University College London, UK

12:30-13:10 Design Analysis of Highly Sensitive and Fast Response Integrated Passive Device Based Microwave Resonator for Glucose Sensing Application

**Alok Kumar**, Ericsson, Estonia

Lunch @ Restaurant (13:10-14:10)

14:10-14:50 Synthesis and Cytotoxicity of Selenium Nanoparticles Incorporated Nano-Chitosan for Overcoming Drug resistant Cancer Cells

**Eman Helmy Ahmed Abdelmonaim**, ICFO 3 (Institute of Photonic Sciences, Barcelona), National Research Centre, Egypt

14:50-15:30 Transdermal Patch for Use in the Treatment of Pain

**Paula Ossowicz Rupniewska**, West Pomeranian University of Technology, Poland

15:30-16:10 Thermo-Elastic Vibration Analysis of Gradient Sandwich Nanobeams and Its Possible Application for Biomass-Sensor

**Mohammad Talha**, IIT Mandi, India

Day 2 Concludes

Panel Discussion-Awards & Closing Ceremony followed by Vote of Thanks

# Scientific Program

## 3<sup>rd</sup> International Conference on Biomaterials & Biodevices

Friday  
November 11, 2022

Virtual Presentations  
November 10, 2022 GMT

10:00 - 10:10 Introduction

### Oral Presentations

- |               |  |
|---------------|--|
| 10:10 - 10:35 | Antibacterial Activity on PLA Films Doped with Mg Particles and CTAB<br><b>Hierro-Oliva M</b> , University of Extremadura, CIBER-BBN and INUBE Spain, Spain  |
| 10:35 - 11:00 | Functionalized Double-Decker Silsesquioxanes as Promising Building Blocks in Biomaterials Chemistry<br><b>Łukasz John</b> , University of Wrocław, Poland  |
| 11:00 - 11:25 | Gemini Curcumin improves Cisplatin Induced Apoptosis on MDA MB 231 Cell Line<br><b>Parastoo Karami</b> , University of Tabriz, Iran  |
| 11:25 - 11:50 | Comparative Study of Development of Latent Fingerprint by Using Waste Materials<br><b>Viany Aseri</b> , Vivekananda Global University, India   |
| 11:50 - 12:15 | A Cost-Effective Way to Obtain Micro-Structured Surfaces on PLA Films<br><b>Hierro-Oliva M</b> , University of Extremadura, CIBER-BBN, and INUBE Spain, Spain  |
| 12:15 - 12:40 | Biopolymer-Choline Derivatives-Based Materials Can Affect Hydroperoxide Under Oxidative Stress Conditions<br><b>Kasaikina Olga</b> , Semenov Federal Research Center for Chemical Physics of the Russian, Russia |
| 12:40 - 13:05 | Recent Advances of Magnetic Gold Hybrids and Nanocomposites and Their Potential Biological Applications<br><b>Kalsoom mohammed</b> , Riphah International University, Pakistan                                   |
| 13:05 - 13:30 | Scope of Entrepreneurship in Sustainable Natural Fibers<br><b>Seiko Jose</b> , Central Sheep and Wool Research Institute, India  |
| 13:30 - 13:55 | <i>In vitro</i> and <i>In vivo</i> Fluorescence Imaging Of Microwave Synthesized Graphene Oxide Quantum Dots<br><b>Ganesh Gollavelli</b> , Jawaharlal Nehru Technological University Kakinada, India             |
| 13:55 - 14:20 | Immobilization of Enological Pectinase in Magnetic-Responsive Polyamide Particles for Wine Clarification<br><b>Sandra Oliveira</b> , University of Minho, Portugal   |

Day 1 Concludes

# Scientific Program

## 3<sup>rd</sup> International Conference on Biomaterials & Biodevices

**Friday**  
**November 11, 2022**

November 11, 2022 GMT

### Oral Presentations

10:00 - 10:25	Novel Polymer-Assisted Organic-Inorganic Hybrid Nanoflowers for Cascade Biocatalysis <b>Joana B. Braz</b> , University of Minho, Portugal
10:25 - 10:50	Drug delivery by anodic alumina nanostructures: a mini-review <b>Mohammad Amin Makarem</b> , Shahid Chamran University of Ahvaz, Iran
10:50 - 11:15	Laboratory Screening of a Variety of Polymeric and Biomass Wastes for Chemical Transformation into Valuable Products <b>Osman Y. Yansaneh</b> , University of Hull, United Kingdom
11:15 - 11:40	Exploration of Treatments for Subarachnoid Hemorrhage <b>Brandon Lucke-Wold</b> , University of Florida, USA
11:40 - 12:05	Influence of Increased Mechanical Loading by Lab-In-A-Tube on the Calcium Ions Upregulation in Human Mesenchymal Stem Cell <b>Yuanyuan Wei</b> , The Chinese University of Hong Kong, China
12:05 - 12:30	Polyacrylic Acid Functionalized Graphene for Phototherapy of Cancer and Bacteria in First and Second Biological Window <b>Ganesh Gollavelli</b> , Jawaharlal Nehru Technological University Kakinada, India

### Poster Presentation

12.30 - 12.45	Effect of Electron Beam Processing on the Tribological Properties of PEEK Polymer <b>Nurlan</b> , Astana IT University, Kazakhstan
---------------	---

Day 2 Concludes followed by Vote of Thanks