

## 2<sup>nd</sup> Online International Conference on

# Functional Materials and Chemical Engineering

Day 1 - April 04, 2022

10:00 - 10:15

Introduction

Keynote Presentations

10:15 - 10:40

Thermoelectric Properties of PEDOT: PSS with Ionic Liquids as Additives  
**Ichiro Imae**, Hiroshima University, Japan

Oral Presentation

10:40 - 11:00

Synergistic degradation mechanism of chlorobenzene and NO<sub>x</sub> over the multi-active center catalyst: The role of NO<sub>2</sub>, Brønsted acidic site, oxygen vacancy  
**Guobo Li**, Southeast University, China

Poster Presentations

11:00 - 11:15

Shape Control of a Composite Laminate Plate Using Piezoelectric Actuators  
**Shiuh-Chuan Her**, Yuan Ze University, Taiwan

11:15 - 11:30

Development of Affinity Polymers for Biopurification using Supercritical CO<sub>2</sub> Technology  
**Diogo B. Lobato**, NOVA University of Lisbon, Portugal

11:30 - 11:45

Cytotoxic Effect of A New Photosensitizer With Europium For Photodynamic Therapy  
**Olga Shevchenko**, Pacific State Medical University, Russia

11:45 - 12:00

Efficient Metal Removal from Contaminated Waters Using Carbon Nanotubes and Graphene Oxide and Technology Prospection  
**Daniel Andres Grajales Ruiz**, Federal University of Minas Gerais, Brazil

Oral Presentations

12:00 - 12:20

Local structure and dynamics of tungsten oxide-based glasses: Insights from concurrent neutron diffraction and Compton scattering  
**Matthew Krzystyniak**, Rutherford Appleton Laboratory, United Kingdom

12:20 - 12:40

Functional polymeric materials for pharmaceutical purification  
**Raquel Viveiros**, NOVA University of Lisbon, Portugal

12:40 - 13:00

Tailoring the polytartaric acid structure for enhanced thermal conductivity  
**Alexandrina Nan**, National Institute for Research and Development of Isotopic and Molecular Technologies, Romania

Lunch (13:00-13:30)

13:40 - 13:50

Improving the Reliability Design of Mechanical Systems such as Refrigerator  
**Seongwoo Woo**, Ethiopian Technical University, Ethiopia

13:50 - 14:10

Metal Coordination Affinity Polymer for biopurification using green technologies  
**Ana I. Furtado**, NOVA University of Lisbon, Portugal

14:10 - 14:30

Zinc oxide Nanoparticles: Synthesis, physicochemical Characterization and Use to Remove Fe (III), Al (III) and Pb (II) from Contaminated Water  
**Manuel Ricardo Ramirez**, Federal University of Minas Gerais, Brazil

Day 1 Concludes

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## DAY 2 - April 05, 2022

### Keynote Presentations

10:00 - 10:25 Drug Screening Model Utilizing 3D Cell Culture And Drug Delivery System  
**Teruki Nii**, Kyushu University, Japan

10:25 - 10:50 4<sup>th</sup> Generation Glucose Sensors Composed Of Trimetallic Nanoporous Composite Materials For Diabetes Management  
**Gowhar A. Naikoo**, Dhofar University, Oman

### Poster Presentation

10:50 - 11:05 Silver Black Coatings For Broadband Absorbers And The Aging Behaviors  
**Yan Hao**, Beijing Institute of Technology, China

### Oral Presentations

11:05 - 11:25 Hydration Effects And Emerging Materials For Multivalent Batteries  
**Kwan Woo Nam**, Ewha Womans University, Republic of Korea

11:25 - 11:45 Reforming Full Range Commercial Naphtha Over Modified Hierarchical Zeolites  
**Aniz C Ummer**, KFUPM, Saudi Arabia

11:45 - 12:05 Revival Of Smooth Mgo Surface For Fabrication And Characterization Of Ybco Step-Edge-Based Josephson Junctions  
**Satyendra Prakash Pal**, Banaras Hindu University, India

12:05 - 12:25 MWCNTs/Epoxy y Nanocomposite With Magnetic Properties  
**Nahida Musayeva**, Institute of Physics, ANAS, Azerbaijan

12:25 - 12:45 Synthesis And Structural Studies Of CNT/Cu Composites: Future Lightweight Wires  
**Shivani Dhall**, DAV College, India

12:45 - 13:05 Structural And In Situ X-Ray Diffraction Study Of Hydrogenation Of  $\text{Ca}_x\text{Mg}_{1-x}\text{Ni}_2$  ( $0 \leq x \leq 1$ )  
**Zia Ur Rehman**, Hazara University, Pakistan

13:05 - 13:25 Novel Bacteria-Immobilized Cellulose Acetate/Poly(Ethylene Oxide) Nanofibrous Membrane For Wastewater Treatment  
**Doaa Zamel**, Helwan University, Egypt

### Lunch (13:25 - 13:55)

13:55 - 14:15 Controlled Release Of Paroxetine From Chitosan/Montmorillonite Composite Films  
**Funda Altunkaynak**, Gazi University, Turkey

14:15 - 14:35 Investigation The Photocatalytic Effect Of Green Synthesized Magnetic Nanocomposite Based On  $\text{MnFe}_2\text{O}_4$  On Tetracycline Antibiotic Degradation From Aqueous Solutions  
**Ftemeh Sadat Arghavan**, Mashhad University of Medical Sciences, Iran

### Poster Presentations

14:35 - 14:50 The methodology of studying the gas-thermal method of coating from UHMWPE in the course of physics specialties of the University  
**M.M. Nurizinova**, East Kazakhstan State University named after S. Amanzholov, Kazakhstan

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## **Functional Materials and Chemical Engineering**

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14:50 - 15:05	Simulation of the operation of a propane–air gas-thermal burner for spraying protective coatings based on ultra-high molecular weight polyethylene <b>Bayandinova Moldir Boleukhanovna</b> , Sarsen Amanzholov East Kazakhstan University, Kazakhstan
15:05 - 15:20	Magnetic Nb-Nanoferrites for Recovery of Pb <sup>+2</sup> , Fe <sup>+3</sup> , Al <sup>+3</sup> and Mn <sup>+2</sup> from Superficial Waters: Preparation, Physicochemical Characterization, metal adsorption proof and Technological Prospection <b>Lida Liliana Arias Parra</b> , Federal University of Minas Gerais, Brazil

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Day 2 Concludes