# "The 2<sup>nd</sup> International Conference for Science and Pharmacy" (MSPC2)

Mutah University Al-Karak, Jordan October 25 – 27, 2023

# Under the patronage of HE Prof. Dr. Salameh S. Naimat

President of Mutah University

#### **Conference Chairman**

Prof. Dr. Marwan S. Mousa

Surface Physics and Materials Technology Lab.

#### **ORGANIZING COMMITTEEE**

Prof. Dr. Marwan S. Mousa
Prof. Dr. Amin Aqel
Prof. Dr. Mohammed A. Al-Anber
Dr. Walid Rwadieh (University Public Relations Director)

#### **SPONSORS**

Deanship of Scientific Research at Mutah University
Arab Potash Company
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Dar Al Dawa Development & Inv. Pharmaceutical Company

#### SCOPE OF THE CONFERENCE

# The International Conference of the Faculty of Sciences & Faculty of Pharmacy at Mutah University

# "The $2^{nd}$ International Conference for Science and Pharmacy" ( MSPC2 )

#### 25-27 October 2023

#### **Aims and Themes of the Conference:**

- Bringing together the scientists from Mutah University and colleagues from around the world to Exchange and share their research.
- Establishing a network among those researchers
- Presenting advancement in research at Mutah in two main tracks:
- a- Science (i) Physics and Chemistry Materials
- b- Pharmaceutical research & industry
- Generating long-term collaborations.
- Publish fully refereed Proceedings in Scopus Jordanian Journals

-- Deadline for full paper submission for refereeing: 30.11.2023

Mutah University, Al-Karak, Jordan

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Website: www.mutah.edu.jo

Username: mspc2@mutah.edu.jo

#### **CONFERENCE PROGRAMME**

## **Pharmacy Auditorium**

(Faculty of Pharmacy / Mutah University)

## Under the Patronage of HE Prof. Dr. Salameh S. Naimat

#### 25 October, 2023

#### First Session

Chairlady: Dr Lidia K. Al-Halaseh

10:00 Opening Session

Prof. Dr. Marwan S. Mousa (Conference Chairman)

Prof. Dr. Salameh Naimat (President of Mutah University)

#### **10:15** International-Collaboration Session

Chairman: Prof. Dr. Marwan S. Mousa

Prof. Dr. Nizar Mheidat

(General Director of the Jordanian Drug and Food Administration)

Prof. Dr. Heinrich Lang

(Research Centre for Materials, Architectures and Integration of Nanomembranes (MAIN), Research Group Organometallics, Chemnitz, Germany)

Prof. Dr. Suresh Sagadevan

(Nanotechnology & Catalysis Research Centre, University of Malaya, Kuala Lumpur, Malaysia)

Prof. Dr. Mohamed Ellouze

(Sfax University, Faculty of Sciences of Sfax, LAMMA, Sfax, Tunisia)

Prof. Dr. Salima Labidi

(LNCTS Laboratory, Department of Physics, Faculty of Sciences, Badji Mokhtar University, Annaba, Algeria)

Prof. Dr. Hassan Elsayed

(Department of Microbial Biotechnology, Biotechnology Research Institute, National Research Centre, Egypt)

## **Group Photo**

**10:45** Coffee Break and Poster Session

#### **Second Session**

Chairmen: Prof. Dr. Mohammed A. Al-Anber and Prof. Dr. Mohamed Ellouze

#### 11:55 Prof. Dr. Heinrich Lang

Research Centre for Materials, Architectures and Integration of Nanomembranes (MAIN), Research Group Organometallics, Rosenbergstrasse 6, Chemnitz Germany

#### 12:20 Prof. Dr. Yaseen A. Al-Soud

Department of Chemistry, College of Science, University of Al al-Bayt, Al-Mafraq, Jordan

Novel Hybrid Motifs of 4-Nitroimidazoles-Piperazines: Synthetic Approaches and Pharmacological Importance

#### 12:45 Prof. Dr. Suresh Sagadevan

Nanotechnology & Catalysis Research Centre, University of Malaya, Kuala Lumpur 50603, Malaysia

Nanostructured photocatalysts for degradation of organic pollutants in wastewater and environmental remediation

#### 13:10 Prof. Dr. Rula M. Darwish

Dean /Professor of School of Pharmacy /The University of Jordan *Antibiotic Resistance: The Chase and the Race* 

13:35 <u>Hassan Elsayed<sup>1</sup>\*</u>, Rehab Moustafa <sup>1</sup>, Reem M. El Shenawy<sup>1</sup>, Sherine N. Khattab <sup>2</sup>, Mona M. Agwa<sup>3</sup> Eman Mahmoud <sup>1</sup>, Mohammed A. Sarhan <sup>4,5</sup>, Mohamed Mostafa Abdel Ghafar <sup>6</sup>, Mohamed El-Shiekh <sup>7</sup>, Ahmed A. Yousif <sup>6</sup>, Mohamed Shaban <sup>6</sup>, Maysa Hanfi Shaker <sup>8</sup>, Mohamed El-kassas <sup>9</sup>, Weaam Gouda <sup>10</sup>, Sherif M. shawky <sup>11</sup>, Ahmed H.I. Faraag <sup>12,13</sup>, Ali M. Zaki <sup>14</sup>

1 Department of Microbial Biotechnology, Biotechnology Research Institute, National Research Centre, Egypt; 2 Department of Chemistry, Faculty of Science, Alexandria University, Alexandria, Egypt; 3 Department of Chemistry of Natural and Microbial Products, Pharmaceutical and Drug Industries Research Division, National Research Centre, Egypt; 4 Department of Medical Microbiology and Immunology, National Liver Institute, Menoufia University, Menoufia, Egypt; 5 Department of Medical Microbiology, University of Toronto, Ontario, Canada; 6 Ahmed Maher Teaching Hospital, General Organization for Teaching hospitals and Institutes, Ministry of Health and Population, Egypt; 7 El-Matarea Teaching Hospital, General Organization for Teaching hospitals and Institutes, Ministry of Health and Population, Egypt; 8 Department of Pathology, Animal Health Research Institute, Egypt; 9 Endemic Medicine Department, Faculty of Medicine, Helwan University, Egypt; 10 Department of Biochemistry, Genetic Engineering and Biotechnology Institute, National Research Centre, Egypt; 11 Biochemistry Department, Faculty of Pharmacy, Misr University for Science and Technology, Egypt; 12 Botany and Microbiology Department, Faculty of Science, Helwan University, Egypt; 13School of Biotechnology, Badr University in Cairo, Egypt 14 Microbiology Department, Faculty of Medicine, Ain-Shams University, Egypt.

Modulation of SARS-CoV-2 spike antibody responses by Multiple Antigenic Peptide vaccination

### 14:00 S. Labidi<sup>1</sup>, M. Ellouze<sup>2</sup>, M. Labidi<sup>1,3</sup>, R. Masrour<sup>4</sup>, O. Ramdane<sup>1</sup>

1 LNCTS Laboratory, Department of Physics, Faculty of Sciences, BadjiMokhtar University, Annaba, Algeria.

2Sfax University, Faculty of Sciences of Sfax, LAMMA, B.P. 1171, 3000, Sfax, Tunisia

3 Higher School of Industrial Technologies of Annaba, Algeria 4Laboratory of Solid Physics, Faculty of Sciences, Sidi Mohamed Ben Abdellah University, BP 1796, Fes, Morocco

DFT and Monte Carlo calculations of cubic and tetragonal Ba2FeMoO6 for spintronic applications

#### 14:25 Coffee Break

#### **Third Session**

Chairmen: Prof. Dr. Wael Abu Dayyih and Prof. Dr. Hassan Elsayed

#### 14:50 Eng. Ahmad Al-Bes<sup>1</sup> & Eng. Fadel Labadi<sup>2</sup>

<sup>1</sup>Board Member of Jordan Chamber of Industry/ Representative of Chemical Industries Sector

<sup>2</sup>Manager of Industrial Development Department/ Amman Chamber of Industry

Success Stories and Challenges of Applied Scientific Research in Chemical Fertilizers Industries

#### 15:25 M. Ellouze<sup>1</sup>, S. Labidi<sup>2</sup>

1 Sfax University, Faculty of Sciences of Sfax, LAMMA, B.P. 1171, 3000, Sfax, Tunisia

2 LNCTS Laboratory, Department of Physics, Faculty of Sciences, Badji Mokhtar University, Annaba, Algeria.

Study of the structural, magnetic, and magnetocaloric effects of perovskites based on transition elements

# 15:40 Mayssa Abdel Hady<sup>1\*</sup>, Rehab I Moustafa<sup>2</sup>, Hassan Elsayed <sup>2</sup>

- 1 Department of Pharmaceutical Technology, National Research Centre, Egypt.
- 2 Department of Microbial Biotechnology, Biotechnology Research Institute, National Research Centre, Egypt

Achieving Lower Intraocular Pressure Using Biodegradable Drug Loaded Hydrogel

16:05 Lunch at Al Karak by the Castle with possibility for visiting the castle

**18:00** Return to Amman

End of Day 1

## Day 2 26 October, 2023

#### **Fourth Session**

Chair-man/woman: Prof. Dr. Amin Aqel & Prof. Dr. Salima

Labidi

#### 10:00 Dr. Kyle Cordova

Executive Director of Research for Development Sector, Senior Assistant to the President for Scientific Affairs, Royal Scientific Society, Amman 11941, Jordan

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On-Command Drug Release from a Hydrogen-Bonded Organic Framework Equipped with a Molecular Nano-Valve

# 10:25 Alaa M. Abd-Elnaiem1, A. Sedky1, Ali S. Alshomrany2, <u>A.</u> Hakamy2\*

<sup>1</sup>Physics Department, Faculty of Science, Assiut University, Assiut 71516, Egypt.

<sup>2</sup>Department of Physics, Umm Al-Qura University, Makkah, Saudi Arabia. Influence of annealing temperature on the structure and dielectric characterization of Indium-doped Tin Oxide (ITO) thin films on a boro-float substrate prepared by radio frequency sputtering

#### 10:40 Enas Almanasreh\*, Rebekah Moles, Timothy F Chen

Research in Social and Administrative Pharmacy, Faculty of Pharmacy, Mutah University, Al-Karak, Jordan.

The medication discrepancy taxonomy (MedTax): The development and validation of a classification system for medication discrepancies identified through medication reconciliation

#### 11:05 Coffee Break

#### **Fifth Session**

Chair-women: Dr Lidia K. Al-Halaseh & Prof. Dr. Mayssa Abdel Hady

#### 12:05 Dr. Yasser Gaber

Professor of Microbiology and Immunulogy, Faculty of Pharmacy, Mutah University, AL-Karak, Jordan.

Optimizing Hepatitis A and Cholera Vaccines: Exploring Innovative Adjuvants

#### 12:30 Yusuf M. Al-Hiari\*, Moneera Alzghoul, Violet Najeeb Kasabri,

\*Professor of School of Pharmacy /The University of Jordan Chelator Fluoroquinolones with Potential Anticancer Properties

## 13:00 <u>Lunc</u>h

#### **Sixth Session**

Chairmen: Prof. Dr. Mohamed Al share & Prof. Dr. Mohammad El-Khateeb

#### 14:05 Nisreen Taiseer Al-Qaisi, Wael Abu Dayyih

Faculty of Pharmacy, Mutah University, Al-Karak, Jordan Investigation Study of Artemisia and Dapagliflozin on HbA1c in Healthy and Induced DM Type 2 in Rats

#### 14:30 Dr. Deeb Taher

 $[Ti\{\eta 5\text{-}1\text{-}(SiMe3)\text{-}3\text{-}(R)\text{-}C9H5\}Cl2(OEt)]\ Half-Sandwich\ Complexes:\ Synthesis,\ Solid-State\ Structure,\ Synthesis,\ Solid-State\ Synthesis,\ Solid-State\ Structure,\ Synthesis,\ Solid-State\ Synthesis,\ Syn$ 

Hirshfeld surface analysis and Theoretical studies

#### 14:55 Mohammad Alwahsh<sup>1</sup>, Amani AlDoridee<sup>1</sup>

<sup>1</sup>Department of Pharmacy, Faculty of Pharmacy, Al-Zaytoonah University of Jordan, Amman, Jordan.

Cytotoxic Differences of Anticancer Drugs on 2D and 3D Cancer Cell Lines

# 15:20 Mohammad M. Allaham<sup>a, b\*</sup>, Alexandr Knápek<sup>b</sup>, Dinara Sobola<sup>c</sup> and Marwan S. Mousa<sup>d</sup>

- <sup>a</sup> Central European Institute of Technology, Brno University of Technology,
   Purkyňova 123, 612 00 Brno, Czech Republic
- b Institute of Scientific Instruments of Czech Academy of Sciences, Královopolská 147, 612 64 Brno, Czech Republic
- <sup>c</sup> Department of Physics, Faculty of Electrical Engineering and Communication, Brno University of Technology, Technická 2848/8, 616 00 Brno, Czech Republic
- <sup>d</sup> Department of Physics, Mu'tah University, Al-Karak 6170, Jordan Applications of glass-graphite micro-composites in cold field emission and scanning tunneling microscopy

# 15:55 <u>Ammar Al Soud<sup>1</sup>\*</u>, Samer Daradkeh<sup>1</sup>, Alexandr Knápek<sup>2</sup>, Marwan S. Mousa<sup>3</sup>, Dinara Sobola<sup>1,4</sup>

- <sup>1</sup> Central European Institute of Technology Brno University of Technology Purkynova 656/123, 61200 Brno, Czech Republic.
- <sup>2</sup> Institute of Scientific Instruments of the Czech Academy of Sciences Královoplská 147,612 64, 62100 Brno, Czech Republic.
- <sup>3</sup> Department of Physics, Mutah University, 61710 Al-Karak, Jordan.
- <sup>4</sup> Department of Physics Brno University of Technology Technická 24848/8,61600 Brno, Czech Republic.

Influence of Carbon Flakes Dopant Epoxy Electrical Properties

16:20 Coffee Break

**18:30 Dinner** 

END of DAY 2

# Day 3 27October, 2023 Marriott Hotel

10:00 Closing Session
Recommendations
Future Collaborations

11:00 Meeting with German partners:

Friedrich Naumann Foundation: Open Discussion and Cooperation Venues