

# **Humboldt Kolleg**

## **"How to Change the World via Science"**

**German-Jordanian University**

**Madaba, Jordan**

**June 09 – 11, 2022**

**Under the Patronage of HRH Princess Sumaya bint El Hassan**

Tentative Program

**Day 1: Wednesday 08/06/2022**

**20:00** : Registration (Marriot Hotel )

**21:00** : Welcome Reception (Marriot Hotel)

## Day 2: Thursday 09/06/2022

09:00 Registration (Auditorium H, German Jordanian University)

### OPENING SESSION

10:00 Chairman: **Prof. Dr. Yaseen Al-Soud**

- **Prof. Dr. Marwan Mousa**, President, Jordanian Club of Humboldt Fellows
- **Prof. Dr. Wajeeh Eweis**, Minister of Higher Education and Scientific Research
- **HE Bernhard Kampmann**, Ambassador of Germany to Jordan
- **Prof. Dr. Ala'aldeen Al-Halhouli**, President of the German Jordanian University
- **HRH Princess Sumaya bint El Hassan**, President of the Royal Scientific Society of Jordan

Chairman: **Prof. Dr. Mohammed El-Khateeb**

Key Note Speaker:

**11:00: Prof. Dr. Holger Stark**

Heinrich-Heine-Universitaet Duesseldorf, Germany

*Pitolisant in Orphan Diseases – From Narcolepsy to Prader-Willi Syndrome*

**11:30** Group Photo

**11:40** Coffee Break

Chairman: **Prof. Dr. Sultan Abu Orabi**

Key Note Speaker:

**12:10 Prof. Dr. Boguslaw Buszewski**

Nicolaus Copernicus University, Poland

*New concept for the diagnostics of cancer and civilisation illness*

Key Note Speaker:

**12:40 Prof. Dr. Guido Schmitz**

University of Stuttgart, Germany

*Atom Probe Tomography: Interfaces and reactions in nanostructured matter*

Key Note Speaker:

**13:10 Prof. Dr. Najim A.L. Al-Masoudi**

Konstanz, Germany and Chemistry Dept., University of Basrah, Iraq

*Synthesis, Aromatase, Inhibitory, Antiproliferative and molecular modeling studies of functionally diverse D-ring pregnenolone pyrazoles*

## **13:40 Lunch**

Chairmen: **Prof. Dr. Khalid A. Begain** and **Prof. Dr. Hassan Tashtoush**

Key Note Speaker:

**14:50 Prof. Dr. Ashraf Abadi**

German University in Cairo, Egypt

*From Celecoxib to a Novel Class of Phosphodiesterase 5 Inhibitors for the Improvement of Erectile and Cognitive Functions Celecoxib derivatives: New perspective*

Key Note Speaker:

**15:10 Prof. Dr. Srinivasan Natarajan**

Framework Solids Laboratory, Indian Institute of Science, India

*Inorganic Chemistry and Color: The Importance of Mineral Structures*

**15:40 Dr. Alaadin Alkilany**

Qatar University, Qatar; & The University of Jordan, Amman, Jordan

*Pharmaceutical Nanotechnology in Jordan: Status & Future Directions*

**16:00 Coffee Break**

Chairmen: **Prof. Dr. Mahmoud Al-Talib** and **Prof. Dr. Mohammed A. Al-Anber**

**16:20 Prof. Dr. Michał Szumski**

Nicolaus Copernicus University, Toruń, Poland,

*Biosilica as a new generation of stationary phases for separation techniques; synthesis, characterization and applications*

**16:40 Prof. Dr. Michał Korolko**

Torun Regional Development Agency, Poland

*European Digital Innovation Hubs – a new model for digital transformation and technology transfer for business and public administration in the European Union*

**17:00 Eng. Tawfeeq Abu Rshaid**

Association of Jordanian graduates from German Universities

*Role in serving Jordan and building cooperation with Germany  
Field Emission Emitters nano-structures*

*Parallel Sesion (1)*

*Auditorium L*

Chairmen: **Prof. Dr. Luay Rashan** & **Dr. Mohammad Khanfar**

**14:50 Prof. Dr. Hans-Heinrich Limbach**

Freie Universitaet Berlin, Germany

*Hydrogen Transfer and Bonding studied by NMR*

**15:10 Dr. Ahmad Telfah**

Leibniz-Institut fuer Analytische Wissenschaften, ISAS, Dortmund, Germany

*XPS and UV-Vis studies of nanoparticle positioning effect on optical and structural properties of Nickel and Nickel Oxide nanocomposites*

**15:30 Prof. Dr. Hamada E. Ali**

Department of Biology, Sultan Qaboos University, Muscat, Oman

*Do climate, land use, and nutrient availability promote plant invasion in arid environments?*

**15:50 Dr. Hassan Elsayed**

Department of Microbial Biotechnology, National Research Centre, Egypt

*Harnessing Peptide and Nanoparticle Technology for developing innovative vaccination strategy against COVID-19*

**16:10 Coffee Break**

Chairmen: **Prof. Dr. Hans-Heinrich Limbach** & **Prof. Dr. Sami Mahmoud**

**16:30 Daniel Burda**

Institute of Scientific Instruments of the Czech Academy of Sciences, Brno, Czech Republic

*Polymer Graphite as the ultimate electrode material: basic properties and selected applications*

**16:40 Marius Berca**

Renewable Energy Dept., Technical Univ. of Cluj-Napoca, Romania; Clausthal Univ., of Technology, Clausthal-Zellerfeld, Germany

*Shaping sustainable strategies of energy resources applying odds*

**16:50 Martina Ondriskova**

Institute of Scientific Instruments of the Czech Academy of Sciences, Brno, Czech Republic

*Spirally ordered field emission arrays*

**17:00 Hanan Al-Soud**

Applied of Earth and Environmental Sciences Department, Al al-Bayt University,  
Mafraq, Jordan

*Microfacies analysis, Micropaleontology and Paleoenvironment of Oil Shale Deposits  
in Wadi Al-Shallala – Jordan*

**17:10 Sondos Alsawakhnah**

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

*Synthesis and Characterization of 5-Piperazinyl-4-Nitroimidazole Tagged Hetaryl  
Fragments*

**17:20 Habiba Aboelfotouh**

Faculty of Pharmacy, German University, Cairo, Egypt

*Pyridones as Phosphodiesterase 3 Inhibitors*

**17:30 Mirna Victor**

Faculty of Pharmacy, German University, Cairo, Egypt

*Non estrogenic mechanisms of selective Estrogen receptor modulators*

**17:40 Amel Gouasmia**

University of Sfax, Faculty of Sciences of Sfax, Tunisia

*Effect of Bi<sub>2</sub>O<sub>3</sub> in the electrical and dielectric properties in ZnO Nano powders*

**17:50 Ammar Al Soud**

Brno University of Technology, Czech Republic.

*Dielectric Properties of Epoxy resin in relation with field electron emission*

**18:00 Mohammad M. Allaham**

Brno University of Technology, Czech Republic.

*Analysis methods in field emission theory: A comprehensive comparison with  
practical applications*

**18:10 Aseel Aljabarat**

Department of Physics, Mutah University, Jordan.

*Field Electron Emission from Copper Broad Area Electrodes and their  
Characteristics*

**18:20 Adel M. Abu Amr**

Department of Physics, Mutah University, Jordan.

*Characterization of Field Electron Emission of Copper Electron Emitters*

**18:30-19:30**

Chairlady: **Prof. Dr. Ritab Salem Al-Khour**

**Poster Session (1)**

**20:45 Dinner** (Tawaheen el Hawa: Typical Jordanian Restaurant)

**Day 3: Friday 10/06/2022**

**8:00** Registration (Auditorium H, German Jordanian University)

Chairmen: **Prof. Dr. Ahmad Ajlouni** & **Prof. Dr. Abdulrahim Hunaiti**

Key Note Speaker:

**9:00 Prof. Dr. Heinrich Lang**

Main research center, TU Chemnitz, Germany

*From: Small Tailor-made Molecules To: Versatile Applications*

Key Note Speaker:

**9:30 Prof. Dr. Rupert Schreiner**

ANK OTH Regensburg, Germany

*Silicon Field Emission Source with individually controllable single emitters*

Key Note Speaker:

**10:00 Prof. Dr. Ilza Pajeva**

Institute of Biophysics & Eng., Bulgarian Academy of Sciences, Sofia, Bulgaria

*Improvement of Conventional Anti-Cancer Drugs as New Tools against Resistant Tumours*

**10:30** Coffee Break

Chairmen: **Prof. Dr. Ahmad Mousa** & **Prof. Dr. Ameen Aqel**

Key Note Speaker:

**10:50 Prof. Dr. Azhar Ariffin**

Department of Chemistry, Faculty of Science, University Malaya, Malaysia

Carbazole-Based Dendrimers in Organic Light Emitting Diodes (OLED) Applications

Key Note Speaker:

**11:20 Prof. Dr. Fernando J. Lahoz**

*University of Zaragoza , Spain*

The structure/properties paradigm as a basic research instrument. The use of structural knowledge for underpinning enantioselective catalysis

**11:50 Prof. Dr. Bassam Abu Thaher**

Department of Chemistry - Islamic University of Gaza (IUG), Palestine

*Design, Synthesis and Biological Evaluation of Novel Aminopyrazoles, Pyrazolo[1,2,4]Triazolopyrimidine Derivatives as Potential Anticancer*

**12:10 Prof. Dr. Ahmed I. Khodair**

Chemistry Department, Kafrelsheikh University, Kafrelsheikh, Egypt

*New N-ribosides and N-mannosides of rhodanine derivatives with anticancer activity on leukaemia cell line: Design, synthesis, DFT and molecular modelling studies*

**12:30 Prof. Dr. Milan Matějka**

Institute of Scientific Instruments of Czech Academy of Science, Czech Republic

*Bright future of 2D and 3D nanofabrication technology*

**12:50 Prof. Dr. Stanislaw Ledakowicz**

Department of Bioprocess Engineering, Lodz University of Technology, Poland

*Biochemical engineering in the development of 3-rd generation biorefinerie*

**13:10 Lunch**

Chairmen : **Prof. Dr. Raed Ghanem & Prof. Dr. Mohamed Ellouze**

Key Note Speaker:

**14:10 Prof. Dr. Alexandr Knápek**

Institute of Scientific Instruments of Czech Academy of Sciences, Czech Republic

*Polymer graphite: a promising material for modern nanoscience?*

**14:40 Dr. Nelia Wanderka**

Helmholtz Zentrum Berlin für Materialien und Energie GmbH, Germany

*Application of 3D imaging techniques in industrial research*

**15:00** Coffee Break

Chair: **Prof. Dr. Ashraf Abadi & Prof. Dr. Malika Abid**

**15:20 Prof. Dr. Yasser El-Nahhal**

Department of Chemistry - Islamic University of Gaza (IUG), Palestine  
*Biochemical Changes on Rabbits due to Low dose Exposure of Bromacil, and Vinclozolin*

**15:40 Prof. Dr. Fathy Abdelrazek**

Chemistry Department, Cairo University, Egypt  
*Recent Achievements in the Synthesis of Some Novel Heterocyclic Analogues of Tetra- and Pentacycline Compounds of Biological Interest*

**16:00 Prof. Dr. Azeez Barzinjy**

Department of Physics, Salahaddin University, Erbil, Iraq  
*Green Synthesis of Nanoparticles: Novel Applications in Harvesting Sunlight for Solar Thermal Generation*

**16:20 Dr. Yahya Al-Khatatbeh**

Department of Basic Sciences, Princess Sumaya University for Technology, Jordan  
*Testing the stability of  $AlB_2$  and  $I4/mmm$ -type phases with respect to  $Ni_2In$ -type structure of  $ZrO_2$  at extreme pressures*

**16:40 Dr. Dinara Sobola**

Institute of Physics of Materials of Czech Academy of Sciences, Czech Republic  
*Advanced ferroelectric materials and their applications*

**17:00 Benjamin Schmailing**

Director of the DAAD Information Centre in Jordan

**17:20 Dr. Ali Taani**

Department of Physics, Al Balqa Applied University, Jordan.  
*Studying the magnetized X-ray parameters as measured through cyclotron resonance scattering features*

**17:40-18:50**

Chairlady: **Prof. Dr. Bothina A. Hamad**

**Poster Session (2)**

**20:45 Dinner** (Typical Jordanian Restaurant)



*Parallel Sesion (2)*  
*Auditorium L*

**Chairmen: Dr. Yahya Al-Khatatbeh & Prof. Dr. Adel Abdel-Ghani**

Key Note Speaker:

**10:50 Dr. Mark Haggmann**

Dept. Electrical and Computer Engineering, University of Utah, USA.

*Generation of microwave and terahertz energy by laser-assisted quantum tunnelling*

Key Note Speaker:

**11:10 Prof. Dr. Giacomo de Angelis**

Laboratori Nazionali Legnaro, Legnaro, Italy

*Ordered nanostructures for optical biosensors*

**11:30 Prof. Dr. Beate Paulus**

Freie Universitaet Berlin, Germany

*Understanding of catalytic processes on the atomic scale*

**11:50 Prof. Dr. Ryszard Palka**

West Pomeranian University of Technology, Sikorskiego, Szczecin, Poland

High-performance hybrid excited electric machines

**Day 4: Saturday 11/06/202**

**8:00** Registration (Auditorium H, German Jordanian University)

**Chairmen: Prof. Dr. Waleed Mahameed & Dr. Ebaa M. El-Hossary**

Key Note Speaker:

**9:00 Prof. Dr. Michael Springborg**

Physical and Theoretical Chemistry, University of Saarland, Germany

*Shapes (of) Matter*

Key Note Speaker:

**9:30 Prof. Dr. Valentin Mirceski**

University of Lodz, Poland; and Macedonian Academy of Sciences and Arts,  
Macedoni

*Interfaces in nature, interfaces between people*

Key Note Speaker:

**10:00 Prof. Dr. Ildiko Tulbure**

University "1 Decembrie 1918" Alba Iulia, Romania

*Chances and challenges of engineering approaches for human sustainability*

**10:30** Coffee Break

Chairmen: **Prof. Dr. Majda Sekkal & Prof. Dr. Bassam Abu Thaher**

**10:50 Prof. Dr. Moemen S. Hanafy**

Plant Biotechnology Department, National Research Centre, Egypt

*Towards deciphering the biological function of pathogenesis-related protein by CRISPR/Cas9-mediated PR10a mutagenesis in potato plants*

**11:10 Prof. Dr. Mohamed Ellouze**

University of Sfax, Faculty of Sciences of Sfax, B.P. 1171-3072, Sfax, Tunisia

*Magnetism and Magnetocaloric effect in perovskites*

**11:30 Prof. Dr. Ebaa El-Hossary**

Egyptian Atomic Energy Authority, Egypt

*Natural Products Repertoire of the Red Sea*

**11:50 Prof. Dr. Sami Ben Salama**

King Abdelaziz University, KSA

*Hydrogen Energy and I-Energy Applications: Implementation of home energy management system using Vehicle-to-Home (H2V) approach*

**12:10 Prof. Dr. Jarosław Wenta**

Toruń, Poland

*From a hospital to an order of knights. About the Teutonic Order in Acre.*

**12:30 Prof. Dr. Eshraq A. Ababneh**

Department of Physics, Al-Balqa Applied University, Jordan

*BALQARAD: Towards improved sensitivity in  $\gamma$ -ray spectroscopy*

**12:50 Prof. Dr. Halina Gabrys**

Department of Plant Biotechnology, Jagiellonian University, Poland

*What can we learn from research on light signalling in plants?*

**13:10 Lunch**

Chairmen: **Prof. Dr. Fathy Abdelrazek & Dr. Khaldoun Tarawneh**

Key Note Speaker:

**14:10 Prof. Dr. Hani Khoury**

Dept. of Geology, The University of Jordan, Amman, Jordan

*The wonderful world of Minerals in Jordan*

**14:40 Prof. Dr. Karel Liedermann**

Brno University of Technology, Czech Republic

*The Effect of the Temperature on the Dielectric Properties of Poly(Methyl Methacrylate)*

**15:00 Prof. Dr. Malika Abid**

University Mohammed First, Oujda, Morocco.

*Genetic Diversity and Population Structure of almond genotypes from eastern Morocco assessed by SSR markers*

**15:20** Coffee Break

Chairmen: **Dr. Inshad Jum'h & Dr. Ahmad Telfah**

**15:40 Dr. Aleksandra Cvetanović Kljakić**

Faculty of Technology, University of Novi Sad, Serbia

*Advantages of Using Natural Deep Eutectic Solvents (NADES) for Obtaining Functional Additives for Food Production*

**16:00 Prof. Dr. Samir Hamad**

Scientific Research Center- Soran University, Iraq

*Effect of Growth Time on Morphology and Structure of ZnO Nanomaterials Using Biosynthesis Method*

**16:20 Prof. Dr. Luay Rashan**

Dhofar University, Research Center, Sultanate of Oman.

*Combination Effect of Essential Oils and Acid Extract of Boswellia sacra on Basal Cell Carcinoma of the Skin: A case report*

**16:40 Prof. Dr. Tola Faraj**

Tishk International University - Erbil, Kurdistan Region, Iraq

*Nature as an authentic remedy*

**17:00 Prof. Dr. Semih Aydin**

Department of Physics Education, Tishk International University, Iraq

*Green synthesis of ZnO Nanoparticles using Aloe barbadensis miller (aloe vera) leaf extract and its Phytochemicals*

**17:20 Prof. Dr. Zbigniew Miszalski**

Institute of Botany Polish Academy of Sciences, Poland

Evolution of CO<sub>2</sub> fixation on Earth and plant resistance to different stresses

**17:40 Prof. Dr. Hani Hayajneh**

Program Ambassador of the German Alexander von Humboldt Foundation - Jordan

*Postdoctoral Research in Germany through the Alexander von Humboldt Foundation fellowships*

**Humboldt Network:** Marriott Hotel Meeting Hall

**19:30 Humboldt Network (Experiences of Humboldtians) & Closing Session**

Chair: **Prof. Dr. Moawiyah Ibrahim** & **Prof. Dr. Lamia El-khoury**

Prof. Dr. Ali Mahafzah (Senior Humboldtian of Jordan)

Prof. Dr. Holger Stark (Heinrich-Heine-Universitaet Duesseldorf, Germany)

Prof. Dr. Guido Schmitz (University of Stuttgart, Germany)

Prof. Dr. Marian Jaskula (Jagiellonian University, Cracow, Poland)

Prof. Dr. Alexandr Knápek (Czech Academy of Sciences, Czech Republic)

Prof. Dr. Alessandra Beccarisi (Secretary General of Humboldt Italy)

Prof. Dr. Eva Jakab (President of the Hungarian Humboldt Association)

Prof. Dr. Malika Abid, Humboldt Ambassador Scientist, Magreb

Prof. Dr. Lora Taseva, President of the Humboldt-Union, Bulgaria

Prof. Dr. Ilza Pajeva, f/Humboldt Ambassador Scientist, Bulgaria

Prof. Dr. Marian Jaskula, f/Humboldt Ambassador Scientist, Poland

Prof. Dr. Marwan Mousa, f/Humboldt Ambassador Scientist, Jordan

Prof. Dr. Hani Hayajneh, Humboldt Ambassador Scientist, Jordan

Prof. Dr. Mohamed Ellouze, f/Humboldt Association of Magreb, Tunis

Prof. Dr. Majda Seqal, Humboldt Ambassador, Algeria

Prof. Dr. Valentin Mirceski, president/Humboldt and DAAD Club, Macedonia

Prof. Dr. Stnislaw Ledakowicz, f/President of Humboldt Association, Poland

Dr. Ebaa M. El-Hossary, Humboldt Ambassador Scientist, Egypt

*Among the contributors to the discussion*

-Dr. Ulrich Wacker (Friedrich Naumann Foundation)

-Benjamin Schmailing, Director of the DAAD Information Centre in Jordan

-Eng. Tawfeeq Abu Rshaid (Association of Jordanian graduates from German Universities)

**20:45 Dinner** (Conference Banquet /Marriott Hotel Meeting Hall)

*Parallel Sesion (3)*

*Auditorium L*

Chairmen: **Prof. Dr. Adnan Al-Lahham** & **Prof. Dr. Mohammad Al-Share**

**10:50 Prof. Dr. Eva Jakab**

Karoli University Budapest, Hungary

*Science and Scientists in International Context*

**11:10 Prof. Dr. Lora Taseva**

Institute of Balkan Studies & Centre of Thracology Bulgarian Academy of Sciences,  
Bulgaria

*In the Language Laboratory of a Medieval Translator*

**11:30 Prof. Dr. Gordana Jovanovic**

Univerrrsity of Belgrade, Serbia

*The ethics of cultural psychology–how to unit university and plurality*

**11:50 Prof. Dr. Adam Lukaszewicz**

Faculty of Archaeology, University of Warsaw, Poland

*Travellers and archaeologists - builders of bridges between cultures*

**12:10 Prof. Dr. Josef Lazar**

Institute of Scientific Instruments of Czech Academy of Sciences, Czech Republic

*Societal and economic relevance of research and advanced technologies*

**12:30 Prof. Dr. Ashraf Mansour**

German University in Cairo, Egypt

*German University in Cairo A Model of Excellence in Higher Education and  
Industrial Cooperation*

**12:50 Prof. Dr. Alessandra Beccarisi**

University of Foggia, Italy

New perspectives on medieval philosophy

**13:10 Lunch**

## Posters

**Prof. Dr. Adel A.-H. Abdel-Rahman Nassar**

Chemistry Department, Menoufia University, Egypt

*Synthesis of Some Modified Fused Pyrimidine Derivatives as Anticancer Agents*

**Prof. Dr. Marian Jaskula**

Jagiellonian University, Cracow, Poland

*Template assisted fabrication of metallic nanowire arrays for applications in Li-ion batteries*

**Prof. Dr. Majda Sekkal**

Dept. of Chemistry, Sidi Belabas University, Algeria

*NLO properties of chromophores grafted on polymer materials as calculated by DFT methods*

**Melad Al-khazaleh**

Department of Biological Sciences, Al al-Bayt University, Mafraq, Jordan

*Evaluation of anti bacterial and antioxidant activity of Achillea fragrantissima Majorana syriaca extracts*

**Dr. Sadeekah Saber**

Jerash University, Amman-Irbid international highway, Jerash 26150, Jordan

*Synthesis, crystal structure, anticancer evaluations, and molecular docking study of novel 4-nitroimidazole-piperazine tagged 1,2,3-Triazole systems*

**Sondos O. Alsawakhnah**

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

*Synthesis and characterization of 5-piperazinyl-4-nitroimidazole tagged hetaryl fragments*

**Mirna V. A. Ayad**

Faculty of Pharmacy, German University in Cairo, Egypt

*Novel ridaiifen analogues with potential proteasomal inhibition and anti-cancer activity*

**Habiba G. Aboelfotouh,**

Faculty of Pharmacy, German University in Cairo, Egypt

*Pyridones as phosphodiesterase 3 inhibitors*

**Hanan AbdElmo'ti Al-Soud**

Applied of Earth and Environmental Sciences Department, Al al-Bayt University,  
Mafraq, Jordan

*Microfacies analysis, micropaleontology and paleoenvironment of oil shale deposits in  
Wadi Al-Shallala – Jordan*

**Amel Gouasmia**

University of Sfax, Faculty of Sciences of Sfax, Tunisia

*Effect of Bi<sub>2</sub>O<sub>3</sub> in the electrical and dielectric properties in ZnO Nano powders*

**Miron Gieniec**

Institute of Botany, Polish Academy of Sciences, Poland

*Is the ethylene biosynthesis pathway affected by osmotic stress in the C<sub>3</sub>/CAM  
intermediate plant Mesembryanthemum crystallinum L.?*

**Ammar Al Soud**

Brno University of Technology, Czech Republic

*Dielectric properties of epoxy resin in relation with field electron emission*

**Fatima-Zohra Benchehaima**

Djillali Liabes University of Sidi Bel Abbes, Algeria

*NLO responses of polymer materials as predicted using computational chemistry  
methods*

**Saleh S. ALbashaish**

Department of Physics, Mutah University, Jordan

*Energy and time characterization and modeling of the Clover composite HPGe  
detector*

**Aseel Aljabarat**

Department of Physics, Mutah University, Jordan

*Field electron emission from copper broad area electrodes and their characteristics*

**Adel M. Abu Amr**

Department of Physics, Mutah University, Jordan

*Characterization of field electron emission of copper electron emitters*

**Ali F. AlQaisi**

Department of Physics, Mutah University, Jordan

*Improve the performance of uncoated Carbon Fiber-tips by investigating the effects of  
epoxy resin 478 - coating of carbon fiber on their electronic emissivity*

**Alla Jaafreh**

Department of Physics, Mutah University, Jordan

*Field electron emission from molybdenum tips preparation and characterization*

**Zinab A. Abu-aloush**

Department of Physics, Jordan University of Science and Technology, Jordan

*The effect of magnetized water and Fe<sub>3</sub>O<sub>4</sub> nanoparticles on seed germination and seedling growth of wheat (*triticum durum* L.) and barley (*hordeum vulgare* L.)*

**Nisreen A. Al-Quraan**

Department of Physics, Jordan University of Science and Technology, Jordan

*Effect of ash carbon nanofibers on GABA shunt pathway in germinating seeds of tomato (*Lycopersicon esculentum* Mill., c.v. Rohaba.) under salt stress*

**Ala'a H. Al-Ahmad**

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

*Synthesis and reactions of (5-bromo-imidazole) derivatives with substituted piperazine*

**Basmah Odat**

Department of Physics, Jordan University of Science and Technology, Jordan

*Molecular simulation of 6-gingerol loading on grapheme and grapheme oxide for drug delivery applications*

**Dr. Hossam Al-Suod**

Faculty of Chemistry, Nicolaus Copernicus University, Poland

*Method development for concomitant identification and quantification of cyclitols and sugars isolated from different morphological parts of *Raphanus sativus* L*

**Inshad Jum'h**

School of Basic Science and Humanities, German-Jordanian University (GJU), Jordan

*XPS, UV-Vis, XRD, and PL spectroscopies for studying nickel nanoparticle positioning effect on nanocomposite film properties*

**Dr. Ahmad Telfah**

ISAS - Institute for Analytical Sciences, Dortmund, Germany

*Portable low-field nuclear magnetic resonance for targeted metabolomics and biochemical sensor*



**Hussam AL Saoud**

Bialystok University of Technology, Department of Materials Engineering and Production, Poland

*Diatom biosilica using as a drug carrier*

**Mohammad M. Allaham**

Institute of Scientific Instruments of Czech Academy of Sciences, Czech Republic  
*Field emission orthodoxy test and analysis results as obtained from metal-insulator composite electron sources*

**Dr. Natalia Kulikova**

Jagiellonian University, Cracow, linguistics

*Mineralogical terminology in Latin medical texts (on the example of Book V of A.C. Celsus' treatise De Medicina)*

**Dr. Khadidja Adjir**

Laboratory of Thermodynamics and Molecular Modeling, Algeria

*Gaussian Basis Sets Investigation of Electric Polarizability and Hyperpolarizability for Hydrogen and Chloroform Molecules*

**Ahmed Marhri**

University Mohammed First, Oujda, Morocco

*Chemical characteristics of cactus pear (Opuntia ficus india L.) seed oil grown wild in eastern Morocco*

**Nargis Sahib**

University Mohammed First, Oujda, Morocco

*Morphological differences amongst Juniperus turbinata populations following a continental gradient in North-Eastern Morocco*

**Benkirane Chaymae**

University Mohammed First, Oujda, Morocco

*Germination study of some hemp ecotypes from northern Morocco*

**Aziz Tikent**

University Mohammed First, Oujda, Morocco

*Quality assessment of five local fresh figs (Ficus carica L.) grown in Eastern Morocco*

**Y. Rbah**

University Mohammed First, Oujda, Morocco

*Effect of hemp seed incorporation in the diet of laying hens on laying performance and physical quality traits of eggs*

**Dr. Aleksandra Cvetanović Kljakić**

University of Novi Sad, Serbia

*A green strategy to improve the bioavailability of bioactive ingredients of Sambucus  
ebulus L.: Perspective of using NADES solvents from the environmental point of view*

**Prof. Dr. Husam El-Nasser**

Faculty of Science, Department of Physics, Al al-Bayt University, Mafraq, Jordan

*Spectroscopic ellipsometry analysis of polymethylmethacrylate/ perylene dye thin films*

**Wala Al-Qaisi**

Department of Chemistry, Mu'tah University, Jordan

*Impregnation of Benzyl-L-Cysteine into Silica Gel for The Removal of Cadmium(II)  
Ion from Water*

**Neda'a Al-Adaileh**

Department of Chemistry, Mu'tah University, Jordan

*Fabrication of Silica Gel Surface by Tris(2-aminoethyl)amine Moiety for Capturing  
Uranium (VI) Ion*