

ACS Regional MEA Conference – UAE

"Chemistry for Future Sustainable Societies"

Agenda

February 4, 2024 (Sunday)

Time	Activity	Time slot
9.00 – 5.00	Pre-registration at the Jannah Burj Al-Sarab Jannah Burj Al-Sarab Hotel (conference materials can be collected from the reception desk)	
9.00 – 5.45	Student workshop and symposium (<i>agenda provided at the end</i>)	

February 5, 2024 (Monday)

Time	Activity	Time slot
7.00 – 8.00	Breakfast at the Hotel	
8.00	Bus leaves the Jannah Burj Al-Sarab Hotel to NYUAD	
8.00 – 8.45	Registration on-site	
8.45 – 9.00	Opening of the conference (Lecture Hall)	15 min
	Plenary and keynote lectures (Lecture Hall)	
9.00 – 10.00	Plenary lecture 1 (Chair: Panče Naumov) Omar Yaghi, University of California-Berkeley <i>"How will Chemistry Solve the Climate and Water Problems on Our Planet – Fast"</i>	60 min
10.00 – 10.45	Keynote lecture 1 (Chair: Khaled Mamhoud) Yury Gogotsi, Drexel University <i>"Chemistry of MXenes"</i>	45 min
10.45 – 11.00	Coffee break and group photo (Atrium)	15 min
Lecture Hall Session 1.1: Organic and polymer chemistry (Chairs: Maguy Abi Jaoude, Thies Thiemann)		Room 001A Session 2.1: Physical and computational chemistry (Chairs: Sharmarke Mohamed, Tynchtyk Amatov)
11.00 – 11.30	Invited talk Hugo Bronstein, University of Cambridge	Invited talk 30 min

	<i>"Suppression of Dexter Transfer by Covalent Encapsulation for Efficient Matrix-Free Narrowband Deep Blue Hyperfluorescent OLEDs"</i>	Ayan Datta, Indian Association for the Cultivation of Science (IACS) <i>"Buckling and Defects in Two-Dimensional Atomically Thin Monolayers"</i>	
11.30 – 11.50	Helanka Perrera, Higher Colleges of Technology <i>"Effect of Chemical Modification on Date Palm Fibers"</i>	James T. Titah, Tabor College <i>"Exploring the Role of Homopolar Dihydrogen Bonding in Stabilizing the Solid-State Structures of Hydrogen Storage Materials: A Computational Approach"</i>	20 min
11.50 – 12.10	Md Ataur Rahman, New York University Abu Dhabi <i>"A Catalytic Enantioselective Stereodivergent Aldol Reaction"</i>	Tamador Alkhidir, Khalifa University of Science and Technology <i>"Machine Learning Framework for Screening of High-Mobility Organic Materials"</i>	20 min
12.10 – 1.30	Lunch (Atrium)		
Lecture Hall Session 1.2: Organic and polymer chemistry (Chairs: Maguy Abi Jaoude, Thies Thiemann)		Room 001A Session 2.2: Physical and computational chemistry (Chairs: Sharmarke Mohamed, Tynchtyk Amatov)	
1.30 – 2.00	Invited talk Alan Healy, New York University Abu Dhabi <i>"Accelerating Natural Product Research: from Synthetic Planning to Stereodivergent Synthesis"</i>	Invited talk Tishana Singh, University of KwaZulu-Natal <i>"Computational Chemistry for Future Sustainable Societies: Understanding the Bioactivity of Natural Products"</i>	30 min
2.00 – 2.20	Na'il Saleh Ibrahim, United Arab Emirates University <i>"Molecular Engineering of Cucurbituril-Based Alginate Hydrogels"</i>	Mohamad Toutounji, United Arab Emirates University <i>"Mixed Quantum-Classical Liouville Equation Treatment of Electronic Spectroscopy of Condensed Systems: Harmonic and Anharmonic Electron-Phonon Coupling"</i>	20 min
2.20 – 2.40	Emmanuel E. Etim, Federal University Wukari <i>"Redefining Proton Affinity for Complex Heteronuclear Molecular Species: A Quantum Chemical Approach"</i>	Serdal Kirmizialtin, New York University Abu Dhabi <i>"The Mechanism of Like-Charge Attraction Between DNA Strands Revealed by Computer Simulations"</i>	20 min
2.40 – 3.50	POSTER SESSION A (Room 001C) (Posters "A")		
Lecture Hall Session 3.1: Biochemistry and medicinal chemistry (Chairs: Wael Rabeh, Saif AlQassim)		Room 001A Session 4.1: Inorganic and bioinorganic chemistry (Chairs: Nataša Tomić, Mansour Almatarneh)	

3.50 – 4.20	Invited talk Shehab Ismail, Katholieke Universiteit Leuven <i>"Stabilization of the RAS-PDE6D Complex as a Novel Strategy to Target RAS Signaling"</i>	Invited talk Francis Verpoort, Wuhan University of Technology <i>"Carbon Dioxide Utilization Based on Novel Designed Materials"</i>	30 min
4.20 – 4.40	David Sheehan, Khalifa University of Science and Technology <i>"Nanoparticles as Novel Nucleation Agents in Protein Crystallization: Success with a Panel of Unrelated Proteins"</i>	James Darkwa, University of Johannesburg <i>"Pyrazolyl-Nickel Ethylene Oligomerization Catalysts: Ligand Enabled Supported Catalysts for Lubricant Synthesis"</i>	20 min
4.40 – 5.00	Aleksander Rebane, New York University Abu Dhabi <i>"Surface Passivation Method for the Super-repellence of Aqueous Macromolecular Condensates"</i>	Bhajan Lal, Northwestern University <i>"Robust 3D Linker Based Metal-Organic Frameworks (MOFs) for Hexanes Separation"</i>	20 min
5.00 – 5.15	Coffee break		
Lecture Hall Session 3.2: Biochemistry and medicinal chemistry <i>(Chairs: Wael Rabeh, Saif AlQassim)</i>		Room 001A Session 4.2: Inorganic and bioinorganic chemistry <i>(Chairs: Nataša Tomić, Mansour Almatarneh)</i>	
5.15 – 5.45	Invited talk Hyeongseop Jeong, Korea Basic Science Institute <i>"Conformational Changes in the Human Cx43/GJA1 Gap Junction Channel Visualized using Cryo-EM"</i>	Invited talk Shabana Khan, Indian Institute of Science Education and Research Pune (IISER Pune) <i>"N-Heterocyclic Silylene-Copper(I) Aryl Complex: Access to Versatile Cu(I) Synthons"</i>	30 min
5.45 – 6.05	Mayssa Hachem, Khalifa University of Science and Technology <i>"Efficient Docosahexaenoic Acid Uptake by the Brain from a Structured Phospholipid"</i>	Safa Gaber, United Arab Emirates University <i>"Highly Stable 3D Conjugated Metal-Organic Framework for Energy Storage Applications"</i>	20 min
6.05 – 6.25	Elias AKoury, Lebanese American University <i>"Targeting Protein Misfolding in Drug Discovery for Neurodegenerative Disease"</i>	Ning Wang, University of Johannesburg <i>"Improving Harsh Environmental Stability of Few-Layer Black Phosphorus by Local Charge Transfer"</i>	20 min
6.25 – 6.45	Yamanappa Hunashal, New York University Abu Dhabi <i>"Unveiling the Dynamics of C. elegans Metabolism by NMR Spectroscopy"</i>	Emilia Oueis, Khalifa University of Science and Technology <i>"Inhibition of A. Baumannii ATP Phosphoribosyltransferase for the Treatment of Pneumonia Infections"</i>	20 min

February 6, 2024 (Tuesday)

Time	Activity		Time slot
7.30 – 8.30	Breakfast at the hotel		
8.30	Bus leaves the Jannah Burj Al-Sarab Hotel to NYUAD		
8.30 – 9.00	Registration on-site		
Plenary and keynote lectures (Lecture Hall)			
9.00 – 10.00	Plenary lecture 2 (Chair: Maryam Khaleel) Susumu Kitagawa, Kyoto University <i>“Chemistry and Application of Soft Porous Crystals”</i>		60 min
10.00 – 10.45	Keynote lecture 2 (Chair: Brijith Thomas) Panče Naumov, New York University Abu Dhabi <i>“Dynamic Organic Crystals: A New Class of Smart Engineering Materials”</i>		45 min
10.45 – 11.00	Coffee break		15 min
Lecture Hall Session 5.1: Materials chemistry and nanotechnology (Chairs: Na'il Saleh, Anis Allagui)		Room 001A Session 6.1: Environmental, green and food chemistry (Chairs: Jolly Jacob, Basheer Chanbasha)	
11.00 – 11.30	Invited talk Marieh B. Al-Handawi, New York University Abu Dhabi <i>“Harvesting of Aerial Humidity with Natural Hygroscopic Salt Excretions”</i>		Invited talk Afaf Kamal-Eldin, United Arab Emirates University <i>“Phenolic Compounds of Fruits: Lessons from Dates (Phoenix dactylifera)”</i>
11.30 – 11.50	Philipp Hans, SESAME <i>“Probing Ge-Rich Ge-Sb-Te Phase Change Material Thin Films in-situ by Synchrotron X-ray Radiation”</i>		Dinesh Shetty, Khalifa University of Science and Technology <i>“Focus on Energy & Environmental Applications: Can Framework Materials Listen to Your Tunes?”</i>
11.50 – 12.10	Dalaver H. Anjum, Khalifa University of Science and Technology <i>“Scanning Transmission Electron Microscopy for the Nanocharacterization of Mixed Metal Nanocatalysts”</i>		Xuan Li, Khalifa University of Science and Technology <i>“Enhanced Organic Pollutant Photodegradation over a 2D/2D MoS₂/Au/TiO₂ Z-Scheme Photocatalyst via Adsorption-Photocatalysis Synergy”</i>
12.10 – 1.30	Lunch (Atrium)		80 min
1.30 – 2.30	POSTER SESSION B (Room 001C) (Posters “B”)		60 min

Lecture Hall		Room 001A	
Session 5.2: Materials chemistry and nanotechnology (Chairs: Na'il Saleh, Anis Allagui)		Session 6.2: Environmental, green and food chemistry (Chairs: Jolly Jacob, Basheer Chanbasha)	
2.30 – 2.50	Saeed M. Alhassan, Khalifa University of Science and Technology <i>“Tapping into the Potential of Elemental Sulfur”</i>	Ranjith Bose, Khalifa University of Science and Technology <i>“Enhancing Water Oxidation Efficiency and Durability through Integration of Multiple Catalytic Active Sites”</i>	20 min
2.50 – 3.10	Tshepo Molefe, University of the Witwatersrand <i>“Fischer-Tropsch Synthesis: Osmium Promoted Co@HCS Catalysts”</i>	Mahira Bashri, Khalifa University of Science and Technology <i>“Sustainable Covalent Organic Framework Catalyst via Efficient Pd-Recovery from Wastewater”</i>	20 min
3.10 – 3.30	Brijith Thomas, New York University Abu Dhabi <i>“A Systematic Study on the Influence of Endogenous Organic Dopant BCF in Spiro-OMeTAD”</i>	Dina S. Ahmed <i>“Eco-Friendly Organic Polymers as Gas Storage Media”</i>	20 min
3.30 – 9.00	Desert safari and dinner off-site Pre-registration at the reception desk required on Feb 5 You have to register your name the day before the trip and pay the fee		

February 7, 2024 (Wednesday)

Time	Activity		Time slot
7.30 – 8.30	Breakfast at the hotel		
8.30	Bus leaves the Jannah Burj Al-Sarab Hotel to NYUAD		
	Plenary and keynote lectures (Lecture Hall)		
9.00 – 10.00	Plenary lecture 3 (Chair: Saeed Alhassan) Erick Carreira, ETH Zurich <i>"New Strategies and Tactics in Natural Products Synthesis"</i>		60 min
10.00 – 10.45	Keynote lecture 3 (Chair: Sheikha Alneyadi) Ying-Wei Yang, Jilin University <i>"Pillararene-Inspired Synthetic Macrocycles: From Extended Pillar[n]arenes to Geminiarenes"</i>		45 min
10.45 – 11.00	Coffee break		15 min
	PARALLEL SESSIONS (Lecture Hall and 001A)		
Lecture Hall Session 7.1: Analytical and bioanalytical chemistry <i>(Chairs: Imad Hamadneh, Sherine Khattab)</i>		Room 001A Session 8.1: Chemistry in education and practice <i>(Chairs: Sreekumar Pankajakshan, Mohammad Siddiqui)</i>	
11.00 – 11.30	Invited talk Andreas Hennig, Osnabrück University <i>"Supramolecular Host-Guest Chemistry with Biomembranes"</i>	Invited talk Roderick Bates, Nanyang Technological University <i>"Online Methods in Chemical Education: The Revolution is Here"</i>	30 min
11.30 – 11.50	Rino Eposito, New York University Abu Dhabi <i>"Spontaneous Transformation of Avocadene Acetate in Water"</i>	Mohammed Sohel, The City University of New York <i>"Integrating Nanotechnology in Freshman Year General Chemistry Courses"</i>	20 min
11.50 – 12.10	Soja Saghar Soman, New York University Abu Dhabi <i>"Chemical Sensing Using Micro-fluidic Paper Based Analytical Devices (μPADs)"</i>	Ran Liu, University of South Africa <i>"Catalytic Oxidation Desulfurization of Dibenzothiophene by Triethylamine-based Bronsted-Lewis Acid Ionic Liquids"</i>	20 min
12.10 – 1.30	Lunch (Atrium)		80 min
1.30 – 2.30	POSTER SESSION (Room 001C) (Posters "B")		60 min

Lecture Hall		Room 001A	
Session 7.2: Analytical and bioanalytical chemistry (Chairs: Imad Hamadneh, Sherine Khattab)		Session 8.2: Chemistry in education and practice (Chairs: Sreekumar Pankajakshan, Mohammad Siddiqui)	
2.30 – 3.00	<p>Invited talk Syed Tufail Hussain Sherazi, University of Sindh “Unsaponifiable Part of Vegetable Oil Deodorizer Distillate: An Innovative Capping Agent for Fabrication of the Silver Nanoparticles”</p>	<p>Invited talk Anja Henning-Knechtel, New York University Abu Dhabi “RNA Dynamics in PEG and Protein Crowding Environments”</p>	30 min
3.00 – 3.20	<p>Shekha Al Kiyumi, Sultan Qaboos University “Antibacterial Properties of <i>Blepharispermum hirtum</i> Extracts, Fractions, and Isolated Compounds against Bacterial Clinical Isolates”</p>	<p>Imane Belyamani, Zayed University “Advancing Brominated Post-Consumer WEEE Recycling and Assessing the Life Cycle of Debromination Treatments”</p>	20 min
3.20 – 3.40	<p>Mark Benson, Rigaku Corporation “Rigaku Advances in X-ray and Electron Crystallography”</p>	<p>Ettigounder (Samy) Ponnusamy, Merck KGaA “DOZN™2.1 - A Quantitative Green Chemistry Evaluator for a Sustainable Future”</p>	20 min
PARALLEL SESSIONS (Lecture Hall and 001A)			
Lecture Hall		Room 001A	
Session 9.1: Applied chemistry (Chair: Uzma Ashiq, Xu Lu)		Session 10.1: Chemistry and practice (Chair: Durga Prasad Karothu)	
3.40 – 4.00	<p>Emad Yousif, Al-Nahrain University “Synthesis and Application of Levofloxacin–Tin Complexes as New Photostabilizers for Polyvinyl Chloride”</p>	<p>Reza Zamani, Thermo Fisher Scientific “Electron Beam Damage Mitigation Strategies in TEM for Novel Beam Sensitive Materials”</p>	20 min
4.00 – 4.20	<p>Wolfgang Betz, Physical Electronics “Advances in XPS Analysis of Battery Materials”</p>	<p>Nour Hafi, Oxford Instruments “Understanding Chemistry across the Forensic Science Lab”</p>	20 min
4.20 – 4.40	<p>Angelo Lanzilotto, Merck KGaA “Integrated Drug Discovery – Augmenting your Research Capabilities with AI and Improving Synthesis Outcomes”</p>	<p>Xu Lu, King Abdullah University of Science and Technology (KAUST) “Electrochemical Upcycling of High-pressure CO₂ into Valuables”</p>	20 min
4.40 – 5.00	Coffee break		20 min

5.00 – 5.45	Keynote speaker 4 (Chair: Aleksander Rebane) Fernando Albericio, University of KwaZulu-Natal <i>"The Power of the Solid-Phase Peptide Synthesis Methodology"</i>	45 min
5.45 – 6.00	Closing remarks	15 min

February 8, 2024 (Thursday) - optional

Time	Activity	Note
9.00 – 10.30	Campus and labs tour OR Tour to Dubai (pre-registration at the registration desk is required)	Optional

February 4, 2024 (Sunday)

Time	Activity (all activities in the Lecture Hall)	Time slot
8.30 – 9.00	Registration	30 min
9.00 – 9.15	Welcoming Remarks	
	Student Workshop	
9.15 – 10.15	Shabana Khan, ACS on Campus: Demystifying Scientific Collaborations (including Q&A)	60 min
10.15 – 11.00	Break or hand-on experience for students (TBC)	45 min
11.00 – 12.00	Panel Discussion: Exploring UAE Graduate Programs and Careers: Chemistry & Beyond Panelists: <ul style="list-style-type: none"> • Abdulrahman Aljanaah, <i>Bomb Disposal Technician & Executive Secretary at Dubai Police Scientist Council, PhD Candidate in Chemistry at United Arab Emirates University</i> • Waqas Ahmad, <i>PhD Candidate in Material Science and Engineering at American University of Sharjah</i> • Ahamad Irfan, <i>PhD Candidate in Chemistry at Khalifa University, Vice President of the ACS Student Chapter at Khalifa University</i> • Ibrahim Tahir, <i>PhD Candidate in Chemistry at New York University Abu Dhabi</i> • Wegood Awad, <i>PhD Candidate in Chemistry at New York University Abu Dhabi</i> 	60 min
12.00 – 1.00	Group photo and lunch	
1.00 – 1.15	Opening of the Student Symposium	
	Research Presentations Chair: Hamda Nasser Abdulla Aleissaee	15 min
1.15 – 1.30	Sara Alkhatib, Khalifa University of Science and Technology <i>"A Hybrid Approach using MoS₂ Nanoflakes and Conducting Polymers as an Artificial Biocatalyst"</i>	15 min
1.30 – 1.45	Shahd Habiba, American University of Sharjah <i>"Exposure to Airborne Pollutants: A Public Health Risk Assessment in Sharjah"</i>	15 min
1.45 – 2.00	Augustine Boakye, University of Energy and Natural Resources <i>"Effectiveness of Crescentia cujete Fruit Shell Powder as a Natural Coagulant for Water Turbidity Reduction"</i>	15 min
2.00 – 2.15	Abeer Obeidat, Al-Balqa Applied University <i>"Synthetic Peptides as Inhibitors for Efflux Pumps of Multidrug-Resistant Bacteria"</i>	15 min
2.15 – 2.30	Pelin Demirci, New York University Abu Dhabi <i>"Optical and Mechanical Characterization of Sucrose-Based Fibers"</i>	15 min
2.30 – 2.45	Oshiya RA, Indian Association for the Cultivation of Science <i>"Machine Learning Approach towards Chiral Phosphoric Acid Catalysed Asymmetric Arene Functionalization of Nitrosonaphthalenes"</i>	15 min

2.45 – 3.45	Coffee break / POSTER SESSION – Posters (Room –001C)	60 min
	Research Presentations Chair: Fatima Mahroos	
3.45 – 4.00	Rinad Khataby, Qatar University <i>“Synthesis and Characterization of di-nuclear Zinc Biomimetic models for Aeromonas Proteolytic Aminopeptidase Hydrolase Enzymes and Their Inhibition with Benzohydroxamic Acid”</i>	15 min
4.00 – 4.15	Amna Al-Farsi, Sultan Qaboos University <i>“The Role of Choline-Based Ionic Liquids in Enhancing Micellization of Ionic Surfactants in Aqueous Medium – Comparative Study”</i>	15 min
4.15 – 4.30	Saadiyah Liakhat Ali, University of Sharjah <i>“Unravelling the Language of Blood - A Comprehensive Study on Bloodstain Pattern Analysis”</i>	15 min
4.30 – 4.45	Shovan Das, Indian Association for the Cultivation of Science <i>“London Dispersion Interactions Acts as Internal Pressure for Molecular Crystals”</i>	15 min
4.45 – 5.00	Houda Al-Sharji, Sultan Qaboos University <i>“Bright Orange Organic Light-Emitting Diodes of $[Eu(hfaa)_4] \cdot (DpaH)^+$”</i>	15 min
5.00 – 5.15	Nazmi Alsaafeen, Khalifa University <i>“Personalized Robust, Natural and Conductive Hydrogel Electrodes for Wearable Electronics”</i>	15 min
5.15 – 5.30	Wegood Awad, New York University Abu Dhabi <i>“Unraveling the Secret of the <i>Corymbia calophylla</i> One Crack at a Time”</i>	15 min
5.30 – 5.45	Closing Remarks	