

Curriculum Vitae



Nathir Ahmad Faisal Al-Rawashdeh

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Professor of Physical Chemistry

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Academic Employments

🏠 Director of Center Excellence in Education & Learning and Acting Director of the Admissions and Registration Department, University of Al Dhaid, Al Dhaid, UAE, April 2025-Present.

🏠 Dean of Deanship of Academic Support Services, University of Al Dhaid, Al Dhaid, UAE, Professor, 6th Jan. 2025-April 2025.

🏠 ETS, Math & Natural Science (Chemistry), Fujairah Campus, Higher Colleges of Technology, Fujairah, UAE; Professor, August-2022-2024.

🏠 ETS, Math & Natural Science (Chemistry), Sharjah Campus, Higher Colleges of Technology, Sharjah, UAE; Professor, August-2020-2021.

ETS, Math & Natural Science (Chemistry), RAS Al-Khaimah Women's Campus, Higher Colleges of Technology, Ras Al Khaimah, UAE; Professor, August-2017-2020.

Department of Applied Chemical Sciences, Faculty of Science and Arts, Jordan University of Science & Technology, Jordan, Professor, 2014-present.

Department of Chemistry, College of Science, United Arab Emirates University, Al Ain, UAE, Associate Professor, August 2009-2014

University of Cincinnati; Department of Chemistry; Visiting Scientist (Fulbright Fellow), Prof. Bill Connick's lab, Sept. 15, 2005 - June 30, 2006.

Jordan University of Science & Technology

Associate Professor, Oct. 2004-2009

Jordan University of Science & Technology

Assistance Professor, January 1997 - Oct. 2004

Higher Education

Georgetown University/Washington D.C., U.S.A.

Ph.D. in Physical Chemistry (Spectroscopy & Material Science); Jan 1997

Yarmouk University/Irbid-Jordan

M.S. in Physical Chemistry (Photochemistry); September 1989

Yarmouk University/Irbid-Jordan

B.S. in Chemistry; June 1986

Research

Diversity of research interests:

Although both areas of science – ‘pure’ and ‘applied’, are important for human progress and societal development, it is the applied aspect of research that has always captivated my interest. Furthermore, I strongly believe in the interdisciplinary nature of scientific research and in exploring newer and challenging areas of research, otherwise one runs the risk of getting pegged in a very specialized and niche area of science. Therefore, my research accomplishments at JUST and UAEU fall neatly in ‘applied chemistry’ area, they are nevertheless heavily leveraged on my experience as a physical chemist and are aligned with the strategic research interests of the university and the country – namely, environment, energy, and water resources. Therefore, my research interests are basically spread out in three different dimensions:

1- Material Sciences: Self-Assembled Monolayers (SAMs), Surface-Enhanced Spectroscopy; Corrosion. Graphene-Based Nanomaterials for Catalysis

The major thrust of my research interests focusses on investigating the self-assembled monolayers (SAMs) of organic thiol and selenols on gold surfaces using a nanometer scale device. The self-assembly of molecules into structurally organized monolayers (SAMs) uses the flexibility of organic chemistry and coordination chemistry to generate well-defined, synthetic surfaces with known molecular and macroscopic properties. Molecular self-assembly is a strategy for nanofabrication that involves designing molecules and supramolecular entities so that shape-

complementarity causes them to aggregate into desired structures. Alkane thiolates or selenates adsorbed on gold, silver, mercury, palladium, and platinum are currently the best-defined systems of SAMs. *Due to a fundamental interest in their surface science and their many potential applications in Material Sciences: mainly in Surface-Enhanced Spectroscopy, corrosion inhibition, biosensors, nanopatterning, and molecular electronics*, they have extensively studied. SAMs have made organic surfaces a central part of surface science. Understanding the principles by which they form, and connecting molecular-level structure with macroscopic properties, opens a wide range of areas to study and exploitation.

2- The Use of Ruthenium Complexes in Solar-Energy Conversion.

Ruthenium complexes have many desirable features including high chemical and photochemical stability, a high light absorptivity in the visible region, the existence of relatively long-lived MLCT (metal-to-ligand-charge-transfer) excited states, and rich redox chemistry. Therefore, ruthenium (II)-polypyridine complexes have been studied extensively for many years, *to seek the potential applicability of these complexes to solar energy conversion, luminescence sensors, electroluminescence display, and biotechnology*. In our research Lab., the electronic structure of several ruthenium complexes is currently investigated using cyclic voltammetry, as well as UV-visible absorption and emission spectroscopy, aiming to develop the approaches to tune the spectroscopic and electrochemical properties of the excited-state of ruthenium complexes. Furthermore, we are trying to correlate between these properties.

3- Thermodynamic, Spectroscopic, and Kinetic Studies of the Inclusion Complexes of Compounds with Macro-Cyclic Host Molecules, such as Cyclodextrins and Cucurbit [6]uril.

This part of my research interests is focused on studying the influence of inclusion complexation with cyclodextrins and cucurbit [6]uril on the spectroscopic and electrochemical properties, and the photostability of several compounds (drugs, sunscreens, organosulfur compounds,) is investigated by our research group. The characteristics of complexation, such as stoichiometry, geometry of the complex, binding constants, and thermodynamic parameters have been evaluated by using several techniques, these are ultraviolet-visible absorption spectroscopy, fluorescence, nuclear magnetic resonance, potentiometry, and X-rays.

4- Development of cost effective and eco-friendly technology using several materials for industrial wastewater treatment and reuse.

This part of my research interests represents collaborative research, aiming at developing high performance, cost-effective and environmentally friendly system for heavy metal removal/recovery from different wastewaters. This work focused on basic and applied research. The overextending goal of this area of research is to develop, characterize, and evaluate the effectiveness of the system for wastewater treatment and reuse using efficient adsorbent materials. This research could be expanded to pilot scale investigations and has the potential for future studies that are necessary for the eventual development of this new technology.

Doctoral Research:

Advisor: Prof. Colby A. Foss, Jr.

Focus: Evaluation of electromagnetic enhancements (EM) in the surface-enhanced infrared absorption via polarization spectroscopy studies of IR probe species bound to the surfaces of nanoscopic gold rods oriented in polyethylene matrices. Thus, research goals center on 1) Develop an electrochemical method for preparing optical composites which contain high aspect ratio oriented rodlike gold particles of sub-micron dimensions, i.e., the metal particles should be oriented with principal axes in one direction; 2) apply these oriented nanoscopic particle composites to surface-enhanced IR studies, with a particular emphasis on EM theory-experiment comparison.

M.S. Research:

Advisor: Professor Talal S. Akasheh

Focus: The use of Ruthenium Complexes in Solar-Energy Conversion. Specifically, research was pursued in the following areas:

- 1- Synthesis of high valent Ru complexes and their characterization using UV-Vis, IR, Fluorescence spectroscopy, and Cyclic Voltammetry.
- 2- Photogalvanic and photophysical behavior of several mixed-ligand ruthenium (II)-diimine complexes have been studied in water and in sodium lauryl sulfate solutions.

Professional experience/Academic Service

✍ Director of Center Excellence in Education & Learning and Acting Director of the Admissions and Registration Department, University of Al Dhaid, Al Dhaid, UAE, April 2025-Present.

✍ Dean of Deanship of Academic Support Services, University of Al Dhaid, Al Dhaid, UAE, Professor, and Director of Centre Excellence in Education and Learning, 6th Jan. 2025-April 2025.

✍ Dean of Academic Operations, Fujairah Campus, Higher Colleges of Technology, Fujairah, UAE; 17 August 2022-2023.

✍ Head of Chemistry Department, Faculty of Science and Arts, Jordan University of Science & Technology, Jordan, Professor, September 2021- 13 August 2022.

✍ Dean of Academic Operations, RAS Al-Khaimah Campus, Higher Colleges of Technology, Ras Al Khaimah, UAE; August-2017-July-2020; and Sharjah Campus (August-2020-July 2021).

✍ Dean of Students' Affairs, JUST, Sep. 1, 2015-Sep. 2016

✍ Head of Chemistry Department, UAEU, Sep. 2012-2014.

✍ Vice Dean of Faculty of Science and Arts, JUST, Sep. 2006-2009.

✍ Vice Dean of Students' Affairs, JUST, Sep. 2004- Sep. 2005.

✍ Assistant Dean of Students' Affairs, JUST, Sep. 2003- Sep. 2004.

- ✍ Assistant Dean of Students' Affairs, JUST, Feb. 2000- Sep. 2002.
- ✍ Coordinator of the Organizing Committee of International Conference on Advanced Materials (ICAM-2015), JUST, 10-13 July 2017, Irbid, Jordan.
- ✍ Coordinator of the Organizing Committee of International Conference on Advanced Materials (ICAM-2015), JUST, 27-29 April 2015, Irbid, Jordan.
- ✍ Member of University Council-JUST (Representative of Faculty of Science & Arts), and Member of Faculty of Science & Arts Council (Representative of Chemistry Department) (Sep.2014- Sep. 2015).
- ✍ Active member in various committees at UAEU and JUST: Educational Methodology and Internet Technology, Peer Evaluation of Teaching, MS program development and PhD examination committees, Accreditation committee (RSC), Promotion committee.
- ✍ University Achievement Exam Coordinator at Jordan Univ. of Science & Technology, 2007-2008.
- ✍ Pre-Freshman Program Coordinator at Faculty of Science and Arts, Sep. 2006-2009. This program is established as a compulsory program to the premed Saudi students at Jordan university of Science & Technology and it is an Elective program to other premed freshman students. The coordinator of this program will be the student's academic advisor while the students are enrolled in the program.
- ✍ Member of University Council (Representative of Faculty of Science & Arts), Sep.1998- Sep. 1999.
- ✍ Courses Taught at Jordan University of Science & Technology, Irbid- Jordan, Jan. 1997-2015. (I have been teaching, and coordinating, numerous courses to undergraduates & graduate students for the past 18 years. Average teaching load (contact hours) is about 9-12/week. A complete list is shown below:
 - Chem101 &102: Freshman level, General Chemistry-I&II
 - Chem103: Freshman level, General Chemistry for Medical students
 - Chem105, 106& 107: Freshman level, general Chemistry labs
 - Chem247: Sophomore level, Physical Chemistry-I (Thermodynamics and Chemical Equilibrium)
 - Chem248 & 243: Sophomore level, Physical Chemistry Labs-I
 - Chem347: Senior level, Physical Chemistry-II (Chemical Kinetics and Electrochemistry)
 - Chem348: Senior level, Physical Chemistry Lab-II
 - Chem302: Junior level, Computer Applications in Chemistry
 - Chem391: Junior level, Literature Survey & Seminar
 - Chem442: Senior level, Applied Electrochemistry
 - Chem447: Senior level, Physical Chemistry-III (Quantum, molecular spectroscopy and surface chemistry)
 - Chem492: Junior level, Laboratory Project

Chem791: Graduate Course, Literature Survey & Seminar
Chem741: Graduate Course, Quantum & Molecular Spectroscopy
Chem743: Graduate Course, Applied Kinetics of Chemical Reactions
Chem853: Graduate Course (Ph.D. level), Advanced Physical
Pharmacy for Pharmacology students.

✍ Courses Taught at Department of Chemistry, United Arab Emirates University, Sept. 2009-Present.

Chem351: Physical Chem. II
Chem111: General Chemistry I
Chem355&356: Physical chemistry Lab. - Supervision
Chem112: General Chemistry II,
Chem1701: General Chem. & Engineering Application- I
Chem452: Electrochemistry
Chem115: General Chemistry Lab-Supervision
BIOE 598: Selected Topics- "Advanced Issues in Environmental Nanotechnology";
Master Course.
Chem251: Physical chemistry I
Chem561: Advanced Physical Chemistry-I, Ph.D. course.
Chem418: Research project

✍ Courses Taught at ETS, Math & Natural Science (Chemistry), Higher Colleges of Technology, 2017-Present.

CHM 1103 - Engineering Chemistry
HSC 1023 - Chemistry for Health Sciences
EGN 3012 - Project Management
HSE 100- Health Safety Environment- NQC Diploma

✍ Research Assistant, Georgetown University, Washington, D.C., USA, 1995-1996.

✍ Teaching Assistant, Georgetown University, Washington, D.C., USA, 1991-1995.

Chem224: Sophomore level, Physical lab
Chem368: Junior level, Instrumental Methods of Analysis
Chem226: Junior level, Advanced Chemistry Lab, Inorganic/Physical lab.

✍ Lecturer-B, King Fahd University of Petroleum and Minerals, Dhahran, Saudi Arabia, Sep.1989-June 1991

General Chem. and Physical Chem. Labs

✍ Teaching Assistant, Yarmouk University, Irbid-Jordan, 1986-1989

General Chem., Physical Chem., and Organic labs

Dissertation

 “UV/Visible and Surface-Enhanced Infrared Studies of Polyethylene/Oriented Gold Nanoparticle Composite Films: The Effects of Gold Particle Size, Shape, and Orientation” **Ph.D. Dissertation**, Georgetown University, Washington, D.C., U.S.A., December 16, 1996.

 “The Use of Ruthenium (II)-Diimine Complexes in Solar Energy Conversion” **M.S. Thesis**, Yarmouk University, Irbid-Jordan, September 16, 1989.

Publications: ORCID ID: <https://orcid.org/0000-0003-3072-1629>

1. “Enhancing the Photocatalytic Activity of TiO₂ Nanoparticles with Cyclodextrin-Functionalized Graphene and Noble Metals for Organic Pollutant Degradation”, Ibtisam M. N. Hamdan, Mohannad T. Aljarrah, and Nathir A. F. Al-Rawashdeh, *Molecules*, **2026**, 31(8), 1296. <https://doi.org/10.3390/molecules31081296> (registering DOI). Special Issue: [Advanced Materials for Environmental Remediation: Design and Applications](#)
2. “Cyclodextrins-digitonin inclusion complexes: Synthesis, characterization, and thermal stability for enhanced encapsulation performance”, Bashar Aljawrneh, Khaled Shawakfeh, Heba Haddad, Nathir Al-Rawashdeh, Lona Shawakfeh, *Journal of Molecular Structure*, **2026**, 1360, 145624. <https://doi.org/10.1016/j.molstruc.2026.145624>
3. “Lime and Nano-Limestone Composite-Based Pretreatment and Adsorption Strategies for Olive Mill Wastewater Treatment: Toward Efficient and Sustainable Solutions”, Abeer Al Bawab, Razan Afaneh, Muna A. Abu-Dalo, Fadwa Odeh, Mustafa Al Kuisi, Nathir A. F. Al-Rawashdeh, *Journal of Composites Science*, **2025**, 9, 618. <https://doi.org/10.3390/jcs9110618>
4. “GRAPHENE OXIDE-BASED HYDROGEL IN PHENOL SENSORS”, Razan AL-Zghou, Borhan Albiss, Nathir A. F. Al-Rawashdeh, *Journal of Chemical Technology and Metallurgy*, 60(5), **2025**, 777-789. DOI: [10.59957/jctm.v60.i5.2025.9](https://doi.org/10.59957/jctm.v60.i5.2025.9)
5. “Advances in Photocatalytic Methods for Organic Pollutant Removal”, Nathir A. F. Al-Rawashdeh, *Catalysis Research* **2025**, 5(3), 007; doi:10.21926/cr.2503007
6. “Removal of phenolic compounds from olive mill wastewater (OMW) by tailoring the surface of activated carbon under acidic and basic conditions”; Abeer F. Al Bawab, M. A. Abu-Dalo, H. Kanaan, N. Al-Rawashdeh and F. Odeh, *Water Science & Technology* **2025**, 91 (5), 567–580. <https://doi.org/10.2166/wst.2025.007>
7. “The recent progress on nanomaterial-based chemosensors for diagnosis of human exhaled breath: a review.”; Abdullah A. Ghawanmeh, Samer A. Tanash, Nathir A. F. Al-Rawashdeh & Borhan Albiss, *Journal of Materials Science* **2024**, vol. 59, issue 20, pp. 8573-8605. <https://doi.org/10.1007/s10853-024-09680-8>. Published online: 15 May 2024.
8. “An Ammonia Gas Sensor Based on Reduced Graphene Oxide Nanocomposite Hydrogels”; Asala M. Saleh, Borhan A. Albiss, Nathir A. F. Al-Rawashdeh, and Edreese H. Alsharaeh, *ChemistrySelect*, **2024**, 9, 1-14. (e202401500). DOI: 10.1002/slct.202401500.
9. "Imaging of Terphenyldithiol Molecules in Highly Orientated and Ordered Aromatic Dithiol SAMs on Au(111)"; Waleed Azzam; Abdu Subaihi; Nathir A. F. Al-Rawashdeh; and Ali Nawaiseh; *The Journal of Physical Chemistry C* **2024**, 128, 9,

4093-4103 (*C: Physical Properties of Materials and Interfaces*), **Published date (Web): February 26, 2024.** DOI: 10.1021/acs.jpcc.4c00102.

10. "Phenolic Compounds Removal from Olive Mill Wastewater Using the Composite of Activated Carbon and Copper-Based Metal-Organic Framework", Muna A. Abu-Dalo, Nathir A. F. Al-Rawashdeh, Moath Almurabi, Jihad Abdelnabi and Abeer Al Bawab. *Materials* **2023**, 16(3), 1159; <https://doi.org/10.3390/ma16031159>.
11. "The Recent progress of Graphene-Based Nanomaterials in Biomedical Applications"; Nathir AF Al-Rawashdeh, and Abdullah A Ghawanmeh; *COJ Reviews & Research* **2022**, 4(1). Mini Review COJRR. 000576. DOI: [10.31031/COJRR.2022.04.000576](https://doi.org/10.31031/COJRR.2022.04.000576).
12. "Coupling coagulation-flocculation to volcanic tuff-magnetite nanoparticles adsorption for olive mill wastewater treatment", Muna Abu-Dalo, Jihad Abdelnabi, Nathir A.F. Al-Rawashdeh, Borhan Albiss, Abeer Al Bawab, *Environmental Nanotechnology, Monitoring and Management*, May **2022**, Volume 17, 100626-. <https://doi.org/10.1016/j.enmm.2021.100626>
13. "Photocatalytic Activity of Graphene Oxide/Zinc Oxide Nanocomposites with Embedded Metal Nanoparticles for the Degradation of Organic Dyes", Nathir A. F. Al-Rawashdeh*, Odai Allabadi, and Mohannad T. Aljarrah, *ACS Omega* **2020**, 5, 28046-28055. <https://doi.org/10.1021/acsomega.0c03608>.
14. "Green synthesis of TiO₂ NPs/pristine pomegranate peel extract nanocomposite and its antimicrobial activity for water disinfection", Muna Abu Dalo, Azza Jaradat, Borhan A. Albiss, Nathir A.F. Al-Rawashdeh, *Journal of Environmental Chemical Engineering*, Volume 7, Issue 5, October **2019**, 103370. <https://doi.org/10.1016/j.jece.2019.103370>
15. "Graphene-Based Transparent Electrodes for Dye Sensitized Solar Cells", Nathir A.F. Al-Rawashdeh, Borhan A Albiss and Mo'ath H.I. Yousef, IOP Conf. Series: Materials Science and Engineering, 305 (**2018**) 012019. doi:10.1088/1757-899X/305/1/012019. [International Conference on Advanced Materials (ICAM 2017)]
16. "Misconceptions about Atomic Models Amongst the Chemistry Students", Ehab O. Malkawi, Safwan M. Obeidat, Nathir A.F. Al-Rawashdeh, Nacir Titl, Ihab M. Obaidat, *International Journal for Innovation Education and Research*, 6(02) (**2018**) 156-263. Published Date: 2/28/2018.
17. "Spectral and theoretical study on complexation of sulfamethoxazole with β - and HP β -cyclodextrins in binary and ternary systems", Beena Varghese, FakhrEldin O. Suliman, Aalia Al-Hajri, Nahed Surur S. Al Bishri, **Nathir Al-Rawashdeh**, *Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy*, Volume 190, (5 February **2018**), Pages 392-401. <https://doi.org/10.1016/j.saa.2017.09.060>
18. "The Efficiency of Eco-friendly Schiff Bases as Corrosion Inhibitor for Stainless Steel in Hydrochloric Acid Solution", **Nathir A. F. Al-Rawashdeh**, Ahmed S. Alshamsi, Soleiman Hisaindee, John Graham, Noura Al Shamisi, *Int. J. Electrochem. Sci.*, 12 (**2017**) 8535 – 8551, doi: [10.20964/2017.09.53](https://doi.org/10.20964/2017.09.53)
19. "SEPARATION OF SOLUBLE PHENOLIC COMPOUNDS FROM OLIVE MILL WASTEWATER (OMW) USING MODIFIED SURFACTANT", Abeer Al Bawab,

Fida'a Alshawawreh, Muna A Abu-Dalo, **Nathir A F Al-Rawashdeh**, Ayat Bozeya, *Fresenius Environmental Bulletin*, 26 (3), **2017**, 1949-1958. (March 2017).

20. "Preparation of 3-(9-Anthryl)acrylates and 9-Aroylethenylanthracenes as Pi-Extended Anthracenes and Their Diels–Alder Type Adducts with Electron-Poor Dienophiles", Hasnaa Sadeq, Thies Thiemann, John P. Graham, Yosef al Jasem, Bernhard Bugenhagen, **Nathir Al-Rawashdeh** & Mazen al Sulaibi, *Polycyclic Aromatic Compounds*, 37(2-3), **2017**, 148-160. ISSN: 1040-6638 (Print) 1563-5333 (Online) Journal homepage: <http://www.tandfonline.com/loi/gpol20>
21. "Green Approach to Corrosion Inhibition of Mild Steel by Lignin Sulfonate in Acidic Media", Muna A. ABU-DALO, **Nathir A. F. AL-RAWASHDEH**, Ahmed A. MUTLAQ, *Journal of Iron and Steel Research, International*, July 23(7), **2016**, 722-732. **July 15, 2016**. doi:10.1016/S1006-706X(16)30112-1
22. "Preparation and evaluation of new uranyl imprinted polymer electrode sensor for uranyl ion based on uranyl-carboxybenzotriazole complex in pvc matrix membrane", Muna A. Abu-Dalo*, **Nathir A.F. Al-Rawashdeh***, Ismaeel R. Al-Mjeidat, Nabil S. Nassory, *Sensors and Actuators B: Chemical*, 227, **2016**, 336-345. <http://dx.doi.org/10.1016/j.snb.2015.12.076>. (May 2016)
23. "Removal of Pb(II) ions from aqueous solutions by sulphuric acid-treated palm tree leaves", Ahmed M. Soliman, Hanan M. Elwy, Thies Thieman, Yasmin Majedi, Flex T. Labata, **Nathir A.F. Al-Rawashdeh**, *Journal of the Taiwan Institute of Chemical Engineers*, Volume 58, January **2016**, Pages 264-273. doi:10.1016/j.jtice.2015.05.035
24. "Photochemistry of 9-Vinyl Substituted Anthracenes of Their Reduce Derivatives and of Diels Alder Type Adducts of 9-Vinyanthracenes With Activated Dienophiles" Hasnaa Sadeq, Thies Thiemann, John P Graham, Yosef Al Jasem, Bernhard Bugenhagen and Nathir Al-Rawashdeh, *In Proceedings of the The 19th International Electronic Conference on Synthetic Organic Chemistry*, 1–30 November **2015**, paper No. a037.
25. "Construction of Uranyl Selective Electrode Based on Complex of Uranyl Ion with New Ligand Carboxybenzotriazole in PVC Matrix Membrane", M A Abu-Dalo, **N A F Al-Rawashdeh**, I R Al-Mheidat and N S Nassory *IOP Conf. Series: Materials Science and Engineering* 92, **2015**, 012023. doi:10.1088/1757-899X/92/1/012023 [*International Conference on Advanced Materials (ICAM 2015)*]
26. "Synthesis and luminescent spectroscopy of lanthanide complexes with dimethylpyridine-2,6-dicarboxylate (dmcp)", Ziyad A. Taha, Abdulaziz M. Ajlouni, Ahmed K. Hijazi, Nathir A. Al-Rawashdeh, Khader A. Al-Hassan, Yaser A. Al-Haj, Mohammad A.Ebqa'ai, Ammar Y. Altalafha, *Journal of Luminescence* Volume 161, May **2015**, Pages 229-238; DOI:10.1016/j.jlumin.2015.01.013.
27. "Extended Anthracenes and Their Use as Dienes in Diels-Alder Reactions " Hasnaa Sadeq, Thies Thiemann, John P Graham, Yosef Al Jasem, Bernhard Bugenhagen and

Nathir al Rawashdeh, *In Proceedings of the The 18th International Electronic Conference on Synthetic Organic Chemistry*, 1–30 November **2014**, paper No. a045.

28. "Treatment of Dye-Loaded Wastewater with Activated Carbon from Date Palm Leaf Wastes", Y. Majedi, E. Alhilali, M. Al Nehayan, A. Rashed, S. Ali, N. al Rawashdeh, T. Thiemann, A. Soliman, *In Proceedings of the 4th World Sustainability Forum, Sciforum Electronic Conference Series 1-3- November 2014*, Vol. 4, 2014, d009. Doi:10.3390/wsf-4-d009. <http://www.sciforum.net/conference/wsf-4/>
29. "Sinapis Alba Extract as Green Corrosion Inhibitor for Aluminum in Alkaline Media", Tareq T. Bataineh, Mahmoud A. Al-Qudah, Eyad M. Nawafleh, Nathir A.F. Al-Rawashdeh*, *International Journal of Electrochemical Science*, 9, 2014, 3543-3557.
30. "On the Influence of the Aliphatic Linker on Fabrication of Highly Ordered and Orientated Self-Assembled Monolayers of Aromatic Selenols on Au(111)" Waleed Azzam, Nathir A.F. Al-Rawashdeh, Najd Al-Refaie, Osama Shekhah, and Asif Bashir, *J. Phys. Chem. C*. 118(9), **2014**, pp 4846-4859 (DOI: 10.1021/jp500069g).
31. "Tuning the spectroscopic and electrochemical properties of Ruthenium diimine-dithiolate complexes", **Nathir A. F. Al-Rawashdeh**, Sayande Chatterjee, Jeanette A. Krause Bauer, William B. Connick, *Inorg. Chem.*, **2014**, 53(1), pp. 294-307.
32. "(E)-Methyl 3-(10-bromoanthracen-9-yl) acrylate", Bugenhagen, B; Al Jasem, Y; Hindawi, B al; **Al Rawashdeh, N**; Thiemann, T; *Acta Crystallographica Section E: Surface reports Online*, **2013**, 69(7), o1138-o1139. [doi:10.1107/S1600536813016905]
33. "Inclusion Complexes of Sunscreen Agents with β -Cyclodextrin: Spectroscopic and Molecular Modeling Studies", **Nathir A. F. Al-Rawashdeh***, Khaled S. Al-Sadeh, and Mohammad Bassam Al-Bitar, *Journal of Spectroscopy* , Volume **2013**, Article ID 841409, 11 pages <http://dx.doi.org/10.1155/2013/841409>
34. "Evaluating the Performance of Sulfonated Kraft Lignin Agent as Corrosion Inhibitor for Iron-Based Materials in Water Distribution Systems"; Muna A. Abu-Daloa*, Nathir A.F. Al-Rawashdehb*, Ayman Ababneh, *Desalination*, 2013, 313, 105-114.
35. "Ethyl (E)-3-(anthracen-9-yl)prop-2-enoate", B. Bugenhagen, Y. Al Jasem, B. al Hindawi, N. Al Rawashdeh and T. Thiemann, *Acta Crystallographica Section E*, 2013, 69(1), o130-o131. [doi:10.1107/S1600536812051033]
36. "Exudate Gum from *Acacia Trees* as Green Corrosion Inhibitor for Mild Steel in Acidic Media"; M. A. Abu-Dalo, A. A.Othman, N. A.F. Al-Rawashdeh*, *International Journal of Electrochemical Science*, 2012, 7(10), 9303-9324.
37. "Current Achievement and Future Potential of Fluorescence Spectroscopy", Nathir A.F. Al-Rawashdeh; Chapter 12, section 4, pp. 209-250, June 2012, in *Macro To*

Nano Spectroscopy, J. Uddin (Ed.); InTech d.o.o., Janeza Trdina 9, 5100 Rijeka, Croatia, (ISBN: 978-953-51-0664-7). Online: www.intechopen.com

38. "Gold Nanoparticles Chemisorbed by a Terphenyldithiol Self-Assembled Monolayer for fabrication of a Protein Biosensor"; Nathir A. F. Al-Rawashdeh*, W. Azzam, *Research on Chemical Intermediates*, 2011, 37(7), 759-770. DOI: 10.1007/s11164-011-0309-8.
39. "Activation of H₂O₂ by Methyltrioxorhenium(VII) Inside β -Cyclodextrin", N. A. F. Al-Rawashdeh*, A. M. Al-Ajlouni, S. B. Bukallah, N. Bataineh, *J. of Inclusion Phenomena and Macrocyclic Chemistry*, 2011, 70(3-4), 471-480. DOI: [10.1007/s10847-010-9876-3](https://doi.org/10.1007/s10847-010-9876-3)
40. " Polycrystalline YBa₂Cu₃O_{7- δ} with Nano-sized Al₂O₃ Inclusions", B.A. Albiss, N. Al-Rawashdeh, Alaa Abu Jabal, M. Gharaibeh, I.M. Obaidat, M.K. Hasan (Qaseer), K.A. Azez, *Journal of Superconductivity and Novel Magnetism* 2010, 23(7), 1333-1340.
41. " Physicochemical study on microencapsulation of Hydroxypropyl- β -Cyclodextrin in dermal preparations", Nathir A. F. al-Rawashdeh*, K. S. Al-Sadeh, M.B Al-Bitar, *Drug Development and Industrial Pharmacy*, 2010, 36(6), 688-697.
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44. "Influence of inclusion complexation with β -cyclodextrin on the photostability of selected imidazoline-derived drugs", Abdulilah D. bani-Yaseen, **Nathir Al-Rawashdeh**, Idrees Al-Momani, *J. of Inclusion Phenomena and Macrocyclic Chemistry*, **2009**, 63, 109-115.
45. "Magnetotransport and structural properties of superconducting BPSCCO thick film on MgO substrate", B.A. Albiss, M. Gharaibeh, I.M. Obaidat, **N. Al-Rawashdeh**, R. Oweis, N. Hamdi, and M. K. Hasan Qaseer, *Physica Status Solidi a*, **2008**, 205(8), 1851-1854.
46. "Spectrofluorometric, thermal, and molecular mechanics studies of the inclusion complexation of selected imidazoline-derived drugs with β -cyclodextrin in aqueous

media", Abdulilah A. dawoud, **Nathir Al-Rawashdeh**, *J. of Inclusion Phenomena and Macrocyclic Chemistry*, **2008**, 60, 293-301.

47. "Cyclic Voltammetry Study of Asymmetrical Trityl Di- and Trisulfides on Coated and Bare Gold Electrodes", **Nathir A. F. Al-Rawashdeh***, Imad A. Abu-Yousef, Sofian M. Kanan, *Journal of Physical Chemistry C*, **2008**, 112, 7062-7068.
48. "The Effect of Applied Potential on Plasmon Resonance Bands of Nanoscopic Silver Particles Adsorbed on Transparent Electrodes", **Nathir A. F. Al-Rawashdeh***, Abbas I. ElAkhras, Mohammed Abbo, Mohammed O. Al-Mubarak, *Jordan Journal of Chemistry*, **2008**, 3(1), 57-68.
49. "Electrochemical Studies of New Unsymmetrical Trityl Di- and Trisulfides", Imad A. Abu-Yousef, **Nathir A.F. Al-RAWashdeh**, Sofian M. Kanan, *Research & Reviews in ElectroChemistry* **2008**, 1(2), 81-89.
50. "Photostability Study of Ciprofloxacin with Cyclodextrins", **Nathir A. F. Al-Rawashdeh***, Khaled Q. Shawakfeh, Samah A. Ata, *Pure and Applied Chemistry Conference 2008 (PACCON 2008) Proceeding*, Bangkok, Thailand, **2008**, 416-421.
51. "Fabrication of an Amino-Terminated Organic Surface by Chemical Conversion of a Nitro-Terminated Self-Assembled Monolayer", **N. A. F. Al-Rawashdeh**, W. Azzam, and Ch. Wöll, *Zeitschrift für Physikalische Chemie*, **2008**, 222(5-6), 965-978.
52. "Fluorescence Enhancement of Carbendazim Fungicide in Cucurbit[6]uril", Na'il Saleh, **Nathir A. F. Al-Rawashdeh***, *Journal of Fluorescence*, **2006**, 16, 487-493.
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54. "Cationic surfactant as corrosion inhibitor for aluminum in acidic and basic solutions", **Nathir Al-Rawashdeh***, A.K. Maayta, *Anti-Corrosion Methods and Materials*, **2005**, 52(3), 160-166.
55. "Interactions of Nabumetone and γ -Cyclodextrin Studied by Fluorescence Measurement", **Nathir Al-Rawashdeh**; *J. of Inclusion Phenomena and Macrocyclic Chemistry*, **2005**, 51, 27-32.
56. "Inhibition of acidic Corrosion of Pure Aluminum by Some Organic Compounds", A.K. Maayta, **Nathir Al-Rawashdeh***, *Corrosion Science*, **2004**, 46(5), 1129-1140.
57. "The Effect of organic Solvents on the Inclusion of Sparfloxacin and Norfloxacin with β -Cyclodextrin", **Nathir Al-Rawashdeh**, *Asian J. of Chemistry*, **2004**, 16(1), 483-488.
58. "Synthesis and Spectroscopic Characterisation of Mercury (II) Complexes with 2-(2'-Pyridyl)Quinoline", Hanan A. Qaseer, **Nathir Al-Rawashdeh**, Arab K. El-Qisairi; *Acta Chim. Slov.*, **2003**, 50 (4), 687-696. 14 December 2003
59. "Analysis of Palladium Complexes Containing N-Heterocyclic Ligands by Electrospray Ionization and Ion Trap Mass Spectrometry", Duane M. Huffer, M. Paul

- Chiarelli, Hanan A. Qaseer, Arab K. Qisairi, M. H. Zaghal, **Nathir Al-Rawashdeh**, *Proceeding of the 50th Annual ASMS Conference*, Orlando, Florida, **2002**.
60. "Synthesis and Characterization of Some Ruthenium -Mixed Ligand Complexes", K. Q. Shawakfeh, **N.A.F. Al-Rawashdeh** and S. Khader; *Russian J. of Coord. Chem.*, **2002**, 28(11), 789-792.
 61. "Luminescence quenching of mixed-ligand ruthenium (II) complexes by different quenchers", **Al-Rawashdeh, N.A.F.***; Shawakfeh, K.; Khadir, S.; *Acta. Chem. Slov.* **2002**, 49(3), 425-436.
 62. "Synthesis and characterization of molybdenum and tungsten complexes containing tert-butyl group". M. El-Khateeb; **N. Al-Rawashdeh**; Q. Abu-Salem, *Acta. Chem. Slov.* **2001**, 48(2), 247-256.
 63. "Visible Region Polarization Spectroscopic Studies of Template-Synthesized Gold Nanoparticles Oriented in Polyethylene". **Al-Rawashdeh, N.A.F.**; Sandrock, M.L.; Seugling, C.J.; Foss, C.A., Jr. *J. Phys. Chem. B*, **1998**, 102(2), 361-371. (*Out of PhD's Thesis*) January 8, 1998.
 64. "UV-Visible and Infrared Spectra of Polyethylene/Nanoscope Gold Rod Composite Films: Effects of Gold Particle Size, Shape, and Orientation". **Al-Rawashdeh, N.A.F.**; Foss, C.A., Jr. *NanoStructured Materials*, **1997**, 9, 383-386. (*Out of PhD's Thesis*)
 65. "Sodium Lauryl Sulfate-Ruthenium(II) Interaction: Photogalvanic and Photophysical Behavior of Ru(II)-Diimine Complexes". Akasheh, T.S.; **Al-Rawashdeh, N.A.F. J. Phys. Chem.**, **1990**, 94, 8594-8598. (*Out of Master's Thesis*)
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Presentations

1. "Photocatalytic degradation of methylene blue using Zinc Oxide-Graphene Oxide nanocomposite hydrogel" Nathir A. F. Al-Rawashdeh, Borhan A. Albiss, Shatha M. S. khrisat, 15th Annual International Workshop on Advanced Materials (IWAM 2024); Morjan Iland, Ras Al Khaimah, United Arab Emirates. **February 19 – 21, 2024**. Organized by Ras Al Khaimah Center for Advanced Materials (RAK-CAM), Ras Al Kaimah, UAE.
2. "Synthesis of a novel mixed-shape ZnO with metals nanoparticles embedded in graphene oxide with a powerful photoactivity for degradation of methylene blue". 2nd Virtual Congress on Materials Science & Engineering held during **March 29-31, 2021 (A Virtual Event)**. Oral presentation. Materials Info 2021 was a virtually hosted with the theme " Outlining the Importance of Materials Science for a Better Future".
3. "Modification of the Photocatalytic Activity of TiO₂ Nanoparticles by Cyclodextrin Functionalized Graphene and Noble Metals for Degradation of Organic Pollutants", Mohannad T. Aljarrah, Nathir A. Al-Rawashdeh, Borhan A. Albiss, Ibtisam M. Hamdan, 12th Annual International Workshop on Advanced Materials (IWAM 2020); Al Hamra Hotels & Resort, Ras Al Khaimah, United Arab Emirates. **February 23 – 25, 2020**. Organized by Ras Al Khaimah Center for Advanced Materials (RAK-CAM), Ras Al Kaimah, UAE.

4. "Synthesis of a novel mixed-shape ZnO with metals nanoparticles embedded in graphene oxide with a powerful photoactivity for degradation of methylene blue", Nathir A. F. Al-Rawashdeh, Mohannad Theeb Al-Jarrah, Odai Monzer Allabadi, 11th Annual International Workshop on Advanced Materials (IWAM 2019); Al Hamra Hotels & Resort, Ras Al Khaimah, United Arab Emirates. **February 24 – 26, 2019**. Organized by Ras Al Khaimah Center for Advanced Materials (RAK-CAM), Ras Al Kaimah, UAE.
5. "Nanoparticles Embedded in Graphene Oxide: Toward Photochemical Applications" Nathir A. F. Al-Rawashdeh, Mohannad Theeb Al-Jarrah, Odai Monzer Allabadi, Tenth Annual International Workshop on Advanced Materials (IWAM 2018); Al Hamra Hotels & Resort, Ras Al Khaimah, United Arab Emirates. **February 18 – 20, 2018**. Organized by Ras Al Khaimah Center for Advanced Materials (RAK-CAM), Ras Al Kaimah, UAE.
6. "Graphene-based transparent electrodes for Dye Sensitized Solar Cells", Nathir A. F. Al-Rawashdeh, Borhan Albiss, Moath Yousef, Ninth Annual International Workshop on Advanced Materials (IWAM 2017); Al Hamra Hotels & Resort, Ras Al Khaimah, United Arab Emirates. **February 19 – 21, 2017**. Organized by Ras Al Khaimah Center for Advanced Materials (RAK-CAM), Ras Al Kaimah, UAE.
7. Meeting ERASMUS PLUS projects VTC and INVENT at Leipzig University of Applied Sciences-Leipzig-Germany. **24-28 October 2016**. The meeting handled the management of the projects, exchange of knowledge and experiences in training courses and visiting a well-established inventories place in Leipzig.
8. ENPI CBCMED Med-Mobil final Conference "Mobility in the Mediterranean: Results, Recommendations and the Way Forward", held on **16-17 May 2016** at the International University (UNINT) of Rome. Università degli Studi Internazionali di Roma- UNINT. Venue: UNINT Library, Via delle Sette Chiese, 139, Roma-Italy. UNIMED, Mediterranean Universities Union, Palazzo Baleani, Corso Vittorio Emanuele II, 244, 00186 Rome (Italy). Funded by European Union under the Programme ENPI, CBC, MED.
9. "Comprehensive Characterization of Self-Assembled Monolayers of Aromatic selenol on Au(111): Solvent, Immersion-Time, and Structure Effects", W. Azzam, **N. A. F. Al-Rawashdeh**, Najd Al-Refaie, O. Shekhah and A. Bashir; Eighth Annual International Workshop on Advanced Materials (IWAM 2016); Al Hamra Hotels & Resort, Ras Al Khaimah, United Arab Emirates. **February 21 – 23, 2016**. Organized by Ras Al Khaimah Center for Advanced Materials (RAK-CAM), Ras Al Kaimah, UAE.
10. "Training course called Capacitation Tour for Sectoral Stakeholders, Professionals and professors (CapTour)" under the framework of the project MED-MOBIL (supportive international approach to increase and improve the mobility and exchange programs for young people in the Mediterranean. Seville-Spain, **13-16 October 2015**. Organized by the Chamber of Commerce of Seville

and the University of EUSA in Seville. Funded by European Union under the Programme ENPI, CBC, MED.

11. "Influence of the aliphatic linker on fabrication of highly ordered and oriented self-assembled monolayers of aromatic selenols on Au(111)", Waleed Azzam **Nathir A. F. Al-Rawashdeh**, Najed Al-Refaie, Osama Shekhah, and Asif Bashir: Seventh Annual International Workshop on Advanced Materials (IWAM 2015); Al Hamra Hotels & Resort, Ras Al Khaimah, United Arab Emirates. **February 22 – 24, 2015**. Organized by Ras Al Khaimah Center for Advanced Materials (RAK-CAM), Ras Al Kaimah, UAE.
12. "Magnetic Field Effect on the Inhibition of Aluminum and Iron Corrosion with Surfactants in Acidic Solution", **Nathir A. F. Al-Rawashdeh**, Akram Rosan, Inaam Sryheen: International Symposium on Advanced Polymeric Materials 2014 (ISAPM 2014) under the auspices of 9th International Materials Technology Conference & Exhibition (IMTCE 2014); **14 – 15 May 2014**, Putra World Trade Centre, Kuala Lumpur, Malaysia. (**Oral**)
13. "Gold Nanoparticles Chemisorbed by a Terphenyldithiol Self-Assembled Monolayer for Fabrication of a Protein Biosensor" **Nathir A. F. Al-Rawashdeh**, Waleed Azzam: Sixth Annual International Workshop on Advanced Materials (IWAM 2014); Al Hamra Hotels & Resort, Ras Al Khaimah, United Arab Emirates. **February 22 – 26, 2014**. Organized by Ras Al Khaimah Center for Advanced Materials (RAK-CAM), Ras Al Kaimah, UAE. (**Poster**).
14. "Influence of cyclodextrins on the photostability of selected drug molecules in solution and the solid-state", **Nathir A.F. Al-Rawashdeh***, Hani A. Eldeab, FakhrEldin O. Suliman, Noura Al-Shamsi, Leena Al-Kaabi; 6th International Conference on Drug Discovery & Therapy. **February 10-12, 2014**, Dubai, UAE. Organized by Higher Colleges of Technology. (**Poster**)
15. "Chemical Modification of Self-Assembled Monolayers by Surface Reduction Reactions" **Nathir A. F. Al-Rawashdeh**; Fifth Annual International Workshop on Advanced Materials (IWAM 2013); *Al Hamra Hotels & Resort, Ras Al Khaimah*, United Arab Emirates. **February 24 – 26, 2013**. Organized by Ras Al Khaimah Center for Advanced Materials (RAK-CAM), Ras Al Kaimah, UAE. (**Poster**). (**THE BEST POSTER PRIZE**)
16. "Oxidation of Organic Sulfides by Hydrogen Peroxide as Catalyzed by Methyltrioxorhenium (VII)-Cyclodextrin Complex", **N. A. F. Al-Rawashdeh**, A. M. Al-Ajlouni, S. B. Bukallah, R. M. Al-Salman; 15th International Congress on Catalysis (ICC-2012), **July 1-6, 2012**; Munich, Germany.
17. "Self-Assembled Monolayers of dibenzylidisenide and diphenyldisenide on Gold (111) substrate"; **N. A. F. Al-Rawashdeh**, W. Azzam, and Ch. Wöll; Fourth Annual International Workshop on Advanced Materials (IWAM 2012); *Al Hamra Hotels & Resort, Ras Al Khaimah*, United Arab Emirates. **February 19 – 21, 2012**.

Organized by Ras Al Khaimah Center for Advanced Materials (RAK-CAM), Ras Al Kaimah, UAE. **(Oral)**

18. "Cyclic Voltammetry Study of Asymmetrical Trityl Di- and Trisulfides on Coated and Bare Gold Electrodes"; **Nathir A. F. Al-Rawashdeh**, Imad A. Abu-Yousef, Sofian M. Kanan; First United Arab Emirates Conference on Pure and Applied Chemistry (ECPAC11); **Sharjah, UAE, March 1-3, 2011**. Organized by American University of Sharjah, UAE. **(Invited Speaker)**.
19. "Protein biosensor based on gold nanoparticles chemisorbed onto a Terphenyldithiol self-assembled monolayer"; **Nathir A. F. Al-Rawashdeh**, W. Azzam, Saeed Bukallah; Third Annual International Workshop on Advanced Materials (IWAM 2011); *Al Hamra Hotels & Resort, Ras Al Khaimah*, United Arab Emirates. **February 20 – 22, 2011**. Organized by Ras Al Khaimah Center for Advanced Materials (RAK-CAM), Ras Al Kaimah, UAE.
20. "Activation of H₂O₂ by Methyltrioxorhenium(VII) Inside β - Cyclodextrin"; **N. A. F. Al-Rawashdeh**, A. M. Al-Ajlouni, S. B. Bukallah, N. Bataineh; *9th International Symposium of the Romanian Catalysis Society (ROMCAT2010)*; **Lasi, Romania; June 23-26, 2010**. Organized by "Gh. Asachi" Technical University of Iasi.
21. "Activation of H₂O₂ by Methyltrioxorhenium(VII) Inside β -Cyclodextrin"; **N. A. F. Al-Rawashdeh**, A. M. Al-Ajlouni, S. B. Bukallah, N. Bataineh; *15th International Cyclodextrin Symposium (ICS15)*; **Vienna, Austria; May 9th -12th, 2010**. Organized by University of Vienna-Department of pharmaceutical Technology and Biopharmaceutics; Dr. Helmut Viernstein.
22. Second Annual International Workshop on Advanced Materials (IWAM 2010)
Hilton Ras Al Khaimah Resort and Spa, Ras Al Khaimah, United Arab Emirates.
February 20 – 23, 2010. Organized by Ras Al Khaimah Center for Advanced Materials (RAK-CAM), Ras Al Kaimah, UAE.
23. RAK-CAM Advanced Studies Institute Intensive Short Course on
"Nanomaterials and Nanotechnology: from Basic Knowledge of Nanomaterials to Innovation & Nanotechnology", Ras Al Khaimah, United Arab Emirates.
October 17-19, 2009. Organized by Ras Al Khaimah Center for Advanced Materials (RAK-CAM), Ras Al Kaimah, UAE.
24. The Eight International Symposium on NEW TRENDS IN CHEMISTRY and the Second Congress of the Federation of African Societies of Chemistry (FASC)
"Chemistry and National Development", **Cairo University, Giza, Egypt, January 3-7, 2009**. Organized by The Egyptian Society of Analytical Chemistry

(ESAC). One of the main activities of this conference was the Chemical Safety and Security Workshop, Organized and supported by Sandia National Laboratories (Nancy B. Jackson), Albuquerque, NM, USA and US State Department.

25. "Fabrication and Preparation of Amnio-Terminated Self-Assembled Monolayers by Chemical Reduction of Aromatic-Nitro Groups". **Nathir A. F. Al-Rawashdeh**, W. Azzam, and Ch. Wöll; Nanostructured Advanced Materials, **University of Jordan, Jordan, November 10-13, 2008**. Organized by University of Jordan, and National Science Foundation-Washington DC, USA. In this conference I was one of the National Organizing Committee.
26. "Study the Effect of β -Cyclodextrins on the Photostability of Ciprofloxacin". **Nathir A. F. Al-Rawashdeh**, Khaled Q. Shawakfeh, Samah A. Ata; Pure and Applied Chemistry Conference 2008 (PACCON 2008), **Sofitel Centara Grand Bangkok, Bangkok, Thailand, Jan 30-Feb 1, 2008**. Organized by Department of Chemistry, faculty of Science, Kasetsart University, and the Chemical Society of Thailand.
27. "Tuning the spectroscopic and electrochemical properties of Ruthenium diimine-dithiolate complexes". **Nathir A. F. Al-Rawashdeh**, Jeanette A. Krause Bauer, William B. Connick; 12th Asian Chemical Congress (12ACC), **Putra World Trade Center, Kuala Lumpur, Malaysia, August 23-25, 2007**. Organized by Institute Kimia Malaysia (IKM), University of Malaya, and Malaysian Science Society of Malaysia.
28. "Fabrication and Preparation of Amnio-Terminated Self-Assembled Monolayers by Chemical Reduction of Aromatic-Nitro Groups". **Nathir A. F. Al-Rawashdeh**, W. Azzam, and Ch. Wöll; PETRA International Chemistry Conference (PICC), **Tafila-Jordan, June 25-28, 2007**. Department of Chemistry, Tafila Technical University and Jordanian Chemical Society.
29. "Tuning the spectroscopic and electrochemical properties of Ruthenium diimine-dithiolate complexes". **Nathir A. F. Al-Rawashdeh**, Jeanette A. Krause Bauer, William B. Connick; 10th IBN SINA International Conference on Pure and Applied Heterocyclic Chemistry, **Isis Hotel-Luxor-Egypt, February 17-20,**

2007. Chemistry Department, Faculty of Science, Assiut University and Egyptian Heterocyclic Chemical Society.

30. "Inclusion of Methyltrioxorhenium (VII) in cyclodextrins and activation of hydrogen peroxide towards oxidation reactions". **Nathir A. F. Al-Rawashdeh**; Ahmad Al-Ajlouni; Nezar Bataineh; 2nd International Conference on Chemistry and its Applications, **Doha, Qatar, Dec. 6-9, 2003**. Department of Chemistry, University of Qatar.
31. "The Effects of Applied Potential on Plasmon Resonance Bands of Nanoscopic Silver Particles Adsorbed on Transparent Electrodes". **Nathir A. F. Al-Rawashdeh**; M. Elmubarak Osman; Abbas Al-Akhras; 203rd Meeting of The Electrochemical Society, **Paris, France, 27/4-2/5 2003**. The Electrochemical Society, Inc., www.electrochem.org.
32. "Study the Effect of α -, β -, γ -Cyclodextrins on the Photostability of Ciprofloxacin". **Nathir A.F. Al-Rawashdeh**; Khaled Q. Shawakfeh, Samah Atta; *11th International Cyclodextrin Symposium*, Reykjavik, **Iceland, 5-8 May 2002**. Dr. Thorsteinn Loftsson, Chairman.
33. "Thermodynamic and Spectroscopic Studies of Inclusion Complexes of Some Imidazolines with β -Cyclodextrins". **Nathir A.F. Al-Rawashdeh**; Idress Al-momani, Abdulilah A. Dawoud; *11th International Cyclodextrin Symposium*, Reykjavik, **Iceland, 5-8 May 2002**. Dr. Thorsteinn Loftsson, Chairman.
34. "Distance-Dependence of Surface-Enhanced Raman Spectroscopy". **Al-Rawashdeh, N. A. F.**; Wolfgang Kiefer; *European Research Conference on "Interfaces and Colloidal Systems"*, Acuafredda di Maratea, **Italy, 8-13 September 2001**. Organized by European Science Foundation (EURESCO Conferences).
35. "Study of Photophysical Behavior of Mixed-Ligand Ruthenium (II) Complexes". **Al-Rawashdeh, N.A.F.**; Shawakfeh K.; Khadir S. *Photophysics and Photochemistry 2000*, Costa do Estoril, **Portugal, 19-21 October 2000**. Organized by Instituto de Tecnologia Quimica Biològica (ITQB)/Universidade Nova de Lisboa/Oeiras, Portugal. (www.itqb.unl.pt)
36. "UV-Vis and Infrared Spectra of Polyethylene/Nanososcopic Gold Rod Composite Films: Effects of Gold Particle Size, Shape, and Orientation". **Al-Rawashdeh,**

N.A.F.; Foss, C.A., Jr. *3rd International Symposium on Nanostructured Materials*, Kona, **Hawaii, USA, 1996.**

37. "UV-Visible and Surface-Enhanced Infrared Absorption Studies using Template-Synthesized Nanoscopic Gold Particles". **Al-Rawashdeh, N.A.F.;** Foss, C.A., Jr. *3rd Jordanian Chemical Symposium*, J.U.S.T., **Jordan, Oct. 21, 1997.**
38. "Visible Region Polarization Spectroscopic Studies of Template-Synthesized Gold Nanoparticles Oriented in Polyethylene". **Al-Rawashdeh, N.A.F.;** Sandroek, M.L.; Seugling, C.J.; Foss, C.A., Jr. *The First Annual Scientific Day of the Faculty of Science & Arts*, J.U.S.T., **Jordan, May 18, 1998.**
39. "UV-Visible and Infrared Spectra of Polyethylene/Nanoscope Gold Rod Composite Films: Effects of Gold Particle Size, Shape, and Orientation". **Al-Rawashdeh, N.A.F.;** Foss, C.A., Jr. *45th International Field Emission Symposium*, J.U.S.T., **Jordan, Sept. 12-18, 1998.**

Master Students Supervision (M. Sc. Established in 1998 at JUST)

1. Shatha Mohammad Saleh Khraisat; "Photocatalytic degradation of methylene blue using Zinc Oxide-Graphene Oxide nanocomposite hydrogel"; **September 2023 (PI but due to working outside Jordan changed to Co-PI).**
2. Razan Osama'a Mustafa AL-Zghoul; "GRAPHENE OXIDE-BASED HYDROGEL IN PHENOL SENSOR"; **July 2023(PI but due to working outside Jordan changed to Co-PI).**
3. Asala Mohammad Khairi Saleh: "NH₃ GAS SENSOR BASED ON GRAPHENE NANOCOMPOSITE HYDROGELS"; **9 August 2023 (PI but due to working outside Jordan changed to Co-PI).**
4. Ibtesam Hamdan; "Cyclodextrin Functionalized Graphene: application for nanoparticles as Photocatalyst for Degradation of organic Pollutants". **August 2018 (Main Advisor).**
5. Uday Elabidy "Graphene-Gold Nanoparticle-Zinc oxide nanoparticles composite as photocatalytic materials"; **2016. (Main Advisor).**
6. Mo'ath Helmi Ibrahim Yousef "Graphene-based transparent electrodes for Dye Sensitized Solar Cells"; **2016. (Main Advisor).**
7. Hasnaa A. A. Sadeq: "Photoreactions of Organic Molecules (Studies of the preparation of pi-extended anthracenes and their reactivity with an emphasis on

their photoreactivity); UAEU, May 2015. (Co-Advisor; advisor: Prof. Thies Thiemann).

8. Ahmad Ali Mutlaq: "*NATURAL MATERIALS AS GREEN CORROSION INHIBITORS FOR MILD STEEL IN ACIDIC MEDIA*"; 2013. (Co-Advisor; advisor: Dr. Muna Abu-Dalo)
9. Ala'a Mahmoud Abu-Jabal: "*Effect of Nanoparticles Addition on High Temperature Superconductors*", 2008. (Main Advisor).
10. Salam Salah Hussein: "*Inclusion Complexation of Cyclodextrins with Dyes in Aqueous Solution of Inorganic Cations and Anions*", 2008. (Main Advisor).
11. Anas Adib Al-Shishani: "*Synthesis, Characterization and Thermotropic behavior of New Symmetric and Asymmetric B-Diketoimine Liquid Crystals*" January 2006. (Co-Advisor)
12. Abdullah Bader: "*Synthesis, Characterization and Luminescence of π -Conjugated Carbosilazan, Carbosiloxane and Carbosiloxazane*" March 2006. (Co-Advisor)
13. Ina'm Abd El-Kareem Sraihien: "*Magnetic Field Effect on the Inhibition of Metal Corrosion with Surfactants in Acidic Solution*" August 2005. (Main Advisor)
14. Hanan Numan: "*A Study of the properties of inclusion complexes of β -cyclodextrin with surfactants using surface tension method*", May 2005. (Main Advisor)
15. Samah Mahmoud Bareishi: "*Spectrophotometric study of the Inclusion Complexes of Levofloxacin with Cyclodextrins in Aqueous Solutions*", May 2004. (Main Advisor)
16. Khaled Saleh Al-Sadeh: "*Phsicochemical Study of Cyclodextrins Microencapsulation in Dermal Preparations*", January 2004. (Main Advisor)
17. Anwar Al-Rshdan: "*Oxidation of halides with Hydrogen Peroxide as Catalyzed by Methyltrioxorhenium (VII)-Cyclodextrin*", January 2004. (Co-Advisor)
18. Rehab Mohamoud Al-Salman: "*Oxidation of Organic Sulfides with Hydrogen Peroxide as Catalyzed by Methyltrioxorhenium (VII)-Cyclodextrin*", August 2003. (Co-Advisor)
19. Abbas Ishaq Al-Akhras (Ph.D. student): "*Electrochemical Effects on Optical Properties of Colloidal Silver Particles Adsorbed on Transparent Electrode*", September 2002. Sudan University of Science & Technology (Main Advisor)
20. Nezar Qaseem Al-Bataineh: "*Inclusion of Methyltrioxorhenium (VII) in Cyclodextrins and Activation of Hydrogen Peroxide Toward Oxidation Reactions*", October 2002. (Main Advisor)
21. Samah Abbas Saleh Ata: "*Spectrophotometric Study of the Inclusion Complexes of Ciproloxacin with Cyclodextrins in Aqueous Solutions*", August 2001. (Main Advisor)
22. Abdulilah Abdulqader Dawoud: "*Study of the Inclusion Complexes of Some Imidazolines with β -Cyclodextrin in Aqueous Solutions*", November 2000. (Main Advisor)
23. Qutaiba S. Abu-Salem: "*Synthesis and Characterization of Molybdenum and Tungsten Complexes Containing ter-Butylcyclopentadienyl Ligand*", November 2000. (Co-Advisor)
24. Sumaia A. Khader: "*Preparation, Luminescence Quenching, and Photolysis of Some Mixed-Ligand Ruthenium Complexes*", July 2000. (Main Advisor)

Master Theses Examining Committees

1. Maram Yahya Bakiro: "Synthesis, characterization, electronic structure of reduced graphene oxide and NH₂-MIL-125(Ti) modified BiNbO₄ and their photocatalytic activities, April 16th, 2020 (Main Advisor: Dr. Ahmed AlZamly, UAEU)
2. Rana T. K. AlSaidi: "Fabrication, Characterization and Applications of Planar Metallic & Chemically Modified Electrodes from Copper Clad Sheets", June 14th, 2020 (Main Advisor: Prof. Dr. Sayed A. Marzouk, UAEU)
3. Mo'ath Ahmad Hasan Ahmad: "Preparation and characterization of γ -Al₂O₃ doped with selected elements and correlating surface properties with the catalytic activity in methanol dehydration to dimethyl ether", June 14th, 2020 (Main Advisor: Prof. Dr. Abbas Khaleel, UAEU)
4. Ayat Bozeya: "The Effect of carbon Nanotubes Functionalization on Structure and Properties of Polymer/Carbon nanotube nanocomposites", August 2018 (Main Advisor: Prof. Abeer Al Bawab, University of Jordan)
5. Jihad Abdelnabi "Coupling Magnetite Nanoparticles with Sorbent Material(s) for Olive Mill Wastewater Remediation", July 2017, (Main Advisor: Dr. Muna Abu-Dalo Co-Advisor: Prof. Abeer Al Bawab, JUST)
6. Muttaz Ismail Saeed Al-Meslih: "The Role of Cyclodextrin Cavity Size on the Fluorescence of p-pyrrole-benzonitrile in Aqueous Solutions", Feb. 2017 (Main Advisor: Prof. Khader A. Al-Hassan, Yarmouk University).
7. Noor Ribhi Mustafa Ghannam "DEVELOP A COST-EFFECTIVE MEDIA OF ACTIVATED CARBON PARTICLES IMPREGNATED WITH ACTIVE MATERIALS FOR TREATMENT OF OLIVE MILL WASTEWATER"; The University of Jordan- Degree of M.Sc. in chemistry; April 2016 (Advisor: Prof. Abeer Al-Bawab, Co-Advisor: Dr. Muna Abu-Dalo). External Examiner.
8. Maliha Parvin "Adsorption of dyes on activated carbon from agricultural wastes"; United Arab Emirates University- Degree of M.Sc. in chemistry; May 12th, 2015 (Advisor: Prof. Thies Thiemann, UAEU). External Examiner.
9. Fida'a Ahmad Alshawawreh "Separation of soluble phenolic compounds from olive mill wastewater (OMW) using modified surfactants; The University of Jordan- Degree of M.Sc. in chemistry; May 4th, 2015 (Advisor: Prof. Abeer Al-Bawab, Co-Advisor: Dr. Muna Abu-Dalo). External Examiner.
10. Seham Nasser Al Hadrami "PREPARATION, CHARACTERIZATION AND CATALYTIC ACTIVITY STUDY OF TRANSITION METAL DOPED POROUS γ -ALUMINA"; United Arab Emirates University- Degree of M. Sc. Material Science and Engineering; Jan. 17th, 2012 (Advisor: Dr. Abbas Khaleel; Co-Advisor :Dr. Yaser E. Greish)
11. Noor "Mohammad Eid" Muhee Al-Deen AlRejaal: ".....", August, 2011 (Main Advisor: Prof. Mohammad El-Khateeb, JUST).
12. Samah Ibrahim Matalka: "Laser Photodegradation of α -Tocopheryl Acetate (Vitamin E acetate) in Different Solvents; Comparative Study with α -Tocopherol (Vitamin E)", May 2008 (Main Advisor: Dr. Yaser A. Yousef).

13. Maha Mahmoud Al-Fararjeh: "Impedance Spectroscopy Measurements on Stainless Steel (302) in Aqueous Media", May 2008 (Main Advisor: Dr. Mohammad Qudah).
14. Afnan A. Al-Karakay: "Kinetic and Thermodynamic Studies of Adsorption of Cd (II) and Cu(II) from Aqueous Solution on the Carbons Prepared from the Wastes of Olive Tree Wood and Olive Stone/Cake", January 2007 (Main Advisor: Dr. Mohammad I. sway, Mu'tah University)
15. Suhaib Mohammad Mohammad: "Synthesis, Characterization and Reactions of Selected Multi-Chalcone Derivatives", May 2007 (Main Advisor: Dr. Mousa Al-Smadi, JUST)
16. Mohammed Al-Beqain: "Complexation and Thermodynamic Studies of Oxathiadibenzocrown Ethers with Some Transition Metals", May 2007 (Main Advisor: Dr. Muhammad Al-Shram, Mu'tah University).
17. Najd Al-Refai: "Hydrogenation of CHCl_3 Over Pt Supported on BaF_2 , ZnF_2 , CaF_2 , and SrF_2 : Study of Surface Characteristics, Reactivity and Selectivity", December 2006 (Main Advisor: Dr. Rateb Hina, JUST).
18. Zeinab Mustafa Al-Amawi: "Cyclopentadienyl Ruthenium Complexes Containing 2-Thiophenethiolate, 2-Furanthiolate and 2-Selenophenethiolate Ligands", December 2006 (Main Advisor: Dr. Mohammad El-Khateeb, JUST).
19. Abd Al-Rahman R. Shwyat: "Identification of PAHs and Toxic Heavy Metals in Air Samples from Zarqa City, Jordan", July 2005 (Main Advisor: Dr. Yaser A. Yousef, Yarmouk University).
20. Areen N. Rabadi: "Synthesis, structural characterization and Solid State Electrical Conductivity and Photoluminescence of $[-\text{R}_2\text{Si}-\text{OC}_6\text{H}_4\text{CH}=\text{N}-\text{Ar}-\text{N}=\text{CHC}_6\text{H}_4\text{O}-]_n$ and their Copper(II) complexes", May 2004 (Main Advisor: Dr. Isam Arafa, JUST).
21. Wasim Nazmi Abdullah: "Synthesis of Directed-DNA Alkylating Agents", Jan. 2003 (Main Advisor: Dr. Naim Al-said, JUST).
22. Safa El-Momani: "Effect of Imidazoles on the Catalytic Activation of H_2O_2 by CH_3ReO_3 Toward Oxidation", Jan. 2003 (Main Advisor: Dr. Ahmad Al-Ajlouni).
23. Ahmad Shawqi Barham: "Sol-Gel Encapsulation & Interpenetration of Aminoplast Resin-Silica and Siloxane Hybrid Materials: Preparation, characterization & Properties", May 2002 (Main Advisor: Dr. Isam Arafa, JUST).
24. Morad F.I. Mustafa: "The Role of Cyclodextrin Cavity Size on the Normal and Twisted Intramolecular Charge Transfer (TICT) Fluorescence of N, B-Disubstituted p-Cyanoanilines in Aqueous Solutions", May 2001 (Main Advisor: Prof. Khader A. Al-Hassan, Yarmouk University).
25. Rula Al-Shalabi: "Synthesis, Characterization and Electrical Conductivity of Mixed Valence Metallopolycarbosilazane: A New Class of Low-Dimensional Metallopolymer", May 2001 (Main Advisor: Dr. Isam Arafa, JUST).
26. Rasha Kh. Al-Fayyumi: "Conversion Under Hydrogen of Dichlorodifluoromethane Over Supported Palladium & Ruthenium Catalysts: A Selectivity & Kinetic Study", May 2001 (Main Advisor: Dr. Rateb Hina, JUST)
27. Qasim Yahia M.A. Al-Jabori: "Study of the Electrical Conductivity and Thermodynamic of Some Transition Metals and Some Amine Salts with Crown Ether on Different Solvents", December 2001 (Main Advisor: Dr. Theeb Marji, Yarmouk University).

Honors, Fellowships and Workshops

1. Outstanding reviewer for Journal of Environmental Chemical Engineering, Achieved: June 2016 and December 2014.
2. Outstanding reviewer for Desalination, Achieved: January 2016.
3. **THE BEST POSTER PRIZE**, Fifth Annual International Workshop on Advanced Materials (IWAM 2013); *Al Hamra Hotels & Resort, Ras Al Khaimah*, United Arab Emirates. **February 24 – 26, 2013**. Organized by Ras Al Khaimah Center for Advanced Materials (RAK-CAM), Ras Al Kaimah, UAE. ENTITLED OF “Chemical Modification of Self-Assembled Monolayers by Surface Reduction Reactions”.
4. Award of the Ministry of Higher Education and Scientific Research of Jordan for the **Distinguished Research Paper of 2009!** I have won the award for my paper "*Cyclic Voltammetry Study of Asymmetrical Triyl Di- and Trisulfides on Coated and Bare Gold Electrodes*", Journal of Physical chemistry C, 112, 7062-7068, 2008.
5. DFG Scholarship. Short term research scholarship (two and half months) in Self-Assembled Monolayers. **Prof. Dr. Christof Wöll's lab.**, Physikalische Chemie I, Ruhr-Universität Bochum, Universitätsstr. 150, D-44801 Bochum, Germany. Funded from the **DFG** (The Deutsche Forschungsgemeinschaft (German Research Foundation)). During the period **3 June to 18 August 2008**.
6. Fulbright Visiting Scholar. Long term research scholarship (9 and ½ months) in Synthesis of metal complexes and study the use of these complexes in solar energy conversion. **Prof. Bill Connick's lab.**, University of Cincinnati; Department of Chemistry; P.O. Box 21072, Cincinnati, OH 45221-0172, USA; Phone: (513) 556-0148; FAX: (513) 556-9239; E-mail: bill.connick@uc.edu. Funded from the Jordanian-American Commission for educational exchange (**Fulbright Commission**); BINATIONAL FULBRIGHT COMMISSION, P.O. Box 850215, Amman 11185, Jordan, Tel : (011-962-6) 568-4760 or 560-4630, Fax: (011-962-6) 568-4820, E-Mail: fulbright@nets.com.jo **September 15, 2005-June 23, 2006**.
7. DAAD Scholarship. Short term research scholarship (two months) in Self-Assembled Monolayers. **Prof. Dr. Christof Wöll's lab.**, Physikalische Chemie I, Ruhr-Universität Bochum, Universitätsstr. 150, D-44801 Bochum, Germany. Funded from the **DAAD** (German Academic Exchange Service). During the period **1 August to 1 October 2004**.

8. DAAD Scholarship. Short term research scholarship (two months) in surface-enhanced Raman spectroscopy. **Prof. Wolfgang Kiefer's lab.**, Institut für Physikalische Chemie, Wuerzburg University, Am Hubland, 97074 Wuerzburg, Germany. Funded from the **DAAD** (German Academic Exchange Service). During the period **15 July to 10 Sept. 2000**.
9. Fellowship for Ph.D. degree **1991-1996**: *A-* Georgetown University/Chemistry Department/ Washington, D.C. 20057, U.S.A. *B-* Jordan Univ. of Science & Technology/Chemistry Department/IRBID-22110/Jordan.
10. Fellowship for M.Sc. degree **1986-1989**. Yarmouk University/Chemistry Department/Irbid/Jordan.
11. Advanced Training Course in the field of Chemistry of Natural Products (Alkaloids). The Scientific and Applied Research Center, University of Qatar. Funded from UNESCO's regional office for science and technology in the Arab states. During the period **26 Nov. to 8 Dec. 1988**.
12. Participated in the Debating Workshop, under the European Union MEDA Democracy Program "Towards Democratic Thinking", Jordan University of Science and Technology Project, **1999**.
13. Participated in the training course "Application of Immunohistochemistry and two-Dimensional Gel Electrophoresis in Research and Diagnosis", 16 Training Hours, JUST, **24-26/12/2002**.

Current and Previous Research Grants

Grant Number (<i>Graduate Student</i>)	Grant Amount (JD)	Source	Title of Proposal	Year of completion
328/2016	6030	JUST	Graphene-based transparent electrodes for Dye Sensitized Solar Cells	2019
UAEU/SQU 03_31_02_13/12 (31S084)	400,000	Joint grant from SQU and UAEU	INVESTIGATION OF PHOTOSTABILITY OF SOME DRUGS IN THE PRESENCE OF CYCLODEXTRINS IN AQUEOUS SOLUTION	2014

FOS/MRG-04/11 (31S036)	94,000 AED	UAE University Research Affairs (Interdisciplinary RESEARCH GRANT).	Fabrication of Photoresponsive Molecular Crystal Nanorods Using Anodic Aluminum Oxide Template	2013
1564-02-01-01	14,000 AED	UAE University Research Affairs (INDIVIDUAL RESEARCH GRANT).	Evaluation of Magnetic Field Effect on the Inhibition of Metal Corrosion with Natural Material in Acidic Solution	2011
	40,000	Ministry of Higher Education and Scientific Research/Scientific Research Fund	<i>Mixed-ligand Metal Complexes: Towards a Molecular Photochemical Device</i>	2010
9/99 (Sumaia Khader)	3500	JUST	<i>Preparation, Luminescence Quenching, and Photolysis of Some Mixed-Ligand Ruthenium Complexes</i>	2000
144/99 (Abdulilah Dawoud)	4200	JUST	<i>Study of the Inclusion Complexes of Some Imidazolines with β-Cyclodextrin in Aqueous Solutions</i>	2001
8/2000 (Samah Ata)	5900	JUST	<i>Spectrophotometric Study of the Inclusion Complexes of Ciprofloxacin with Cyclodextrins in Aqueous Solutions</i>	2002
126/2001 (Nezar Al-Bataineh)	1400	JUST	<i>Inclusion of Methyltrioxorhenium (VII) in Cyclodextrins and Activation</i>	2003

			<i>of Hydrogen Peroxide Toward Oxidation Reactions</i>	
30/2003 (Khaled Al-Sadeh)	2900	JUST	<i>Physicochemical Study of Cyclodextrins Microencapsulation in Dermal Preparations</i>	2004
134/2003 (Samah Bareish)	1900	JUST	<i>Spectrophotometric study of the Inclusion Complexes of Levofloxacin with Cyclodextrins in Aqueous Solutions</i>	2005
89/2004 (Hanan Numan)	1000	JUST	<i>A Study of the properties of inclusion complexes of β- cyclodextrin with surfactants using surface tension method</i>	2005
(Ina'm Sraiheen)		JUST	<i>Magnetic Field Effect on the Inhibition of Metal Corrosion with Surfactants in Acidic Solution</i>	2005
110/2007 (Salam Hussein)	2700	JUST	<i>Inclusion Complexation of Cyclodextrins with Dyes in Aqueous Solution of Inorganic Cations and Anions</i>	2008
33/2008 (Ala'a Abu-Jabal)	3100	JUST	<i>Effect of Nanoparticles Addition on High Temperature Superconductors</i>	2009

Additional professional activities & Experiences

- I. Guest Editor of a Special Issue “Advances in Photocatalytic Methods for Organic Pollutant Removal” published in *Catalysis Research* (ISSN 2771-490X) Submission Deadline: October 31, 2025 (Open). *Catalysis Research* is an international peer-reviewed Open Access journal published quarterly online by LIDSEN Publishing Inc.
- II. Guest Editor of a conference proceeding published in the *Material Science and Engineering (MSE)* journal, 2015. International Conference on Advanced Materials (ICAM-2015), 27-29 April 2015, Irbid, Jordan.
- III. I have referred to several articles in physical chemistry published in ACS journals (such as: *Journal of Physical Chemistry C*, and *Langmuir*), also in *Supramolecular Chemistry*, *applied surface sciences*, and *Research on Chemical Intermediates*. *Talanta*; *Arabian Journal of Chemistry*, *Desalination*, *Journal of Environmental Chemical Engineering*, and *National Journals in the field of interest*, *ChemistrySelect*, *Jordan Journal of Earth and Environmental Sciences*, *Inorganic Chemistry Communications*
- IV. Participating in all the steps which led to the establishment of the Graduate program at Department of Applied Chemical Sciences at JUST, including preparing the courses plans and furnishing several laboratories serving departmental courses with necessary supplies.
- V. **I have experiences in:**
Synthesis of transition metal complexes; UV-Vis Spectroscopy; FT-IR Spectroscopy; Fluorescence Spectroscopy; Laser Flash Photolysis; Cyclic Voltammetry; Gas Chromatography & GC-MS Spectroscopy; Scanning Tunneling Microscopy (*a little*)
- VI. **Professional Memeberships:**
 1. Member of Japanese Society of Cyclodextrins
 2. Member of Society of Friends of Scientific Research at Public Universities in Jordan
 3. Member of Jordanian Chemical Society
 4. Member of Jordanian Environmental Society
 5. Member of American Chemical Society, 1991-1997.

Achievements in Department, University and Community Services

Over the year of my employment at Jordan University of Science & technology (JUST) - Jordan and United Arab Emirates University (UAEU)-UAE, I have actively involved in several committees at a level University, College, and Department.

At HCT at have involved in the following:

- 1- As A Dean of Academic Operations of RKC, SJC and FJC, I have managed and oversees the execution of all facets of operations needed for the delivery of academic programs and curricula at the specific campus.
- 2- I have supervised all academic operations in campus such as, Academic Affairs issues, Teaching, Advising and Scheduling issues, Faculty Wide Assessments Exam (FWA).
- 3- I have a direct oversight of three functions that provide the infrastructure needed for effective academic operations, namely: Labs and Workshops; Academic Services and Advising; and Learning Resources.
- 4- Share overall daily administrative responsibility, with the Head of Campus Services, for smooth and effective operational environment that ensures high quality student educational experience.
- 5- Work effectively within the campus's dual system of decision making with appropriate responses, follow ups and coordination with Campus Director and the Executive Dean(s)
- 6- Lead all the meetings that pertain to academic operational matters and ensure campus-wise communication and dissemination of appropriate actions and recommendations after appropriate consultation with the campus director.
- 7- Collaborate actively with different campus service teams and supervisors and initiate joint operational protocols when needed to ensure efficient delivery of courses across campus.
- 8- Assist in developing a multi-year plan for the provision of IT and non-IT instructional equipment.
- 9- Play a pivotal role in both the development of campus academic operational plan and in monitoring its implementation.
- 10- Monitor course offerings throughout the year and partner closely with all campus program chairs to address and resolve curricular operational issues.
- 11- Identifies areas where operations could be improved or enhanced through technology, organizational and/or process change and submits the appropriate recommendations to campus director.
- 12- Prepares/compiles end of semester reports on the implementation status of academic operations with suggestions for overcoming problems and challenges.
- 13- Assist in performance evaluation of all campus program chairs and faculty as requested.
- 14- Develop and foster effective collaboration between faculty, staff, and appropriate campus services to ensure an integrated approach to the implementation of the campus's academic goals and objectives.

- 15- Oversees and accounts for gathering data from program chairs, students, faculty and staff about ways and means to improve academic operations to provide students with better learning experience and success rates.
- 16- Oversees and accounts for class schedules, faculty teaching schedules, and operations impacting the student ability to access, receive, and complete education.
- 17- Develop and maintain records as required for preparation, presentation, and communication of pertinent information to necessary departments for System-wise operations, audits, etc.
- 18- Participate as a member of committees as assigned by the campus director.
- 19- Participate jointly with Executive Deans in evaluating, contract renewal, and hiring of Program Chairs
- 20- Monitor daily availability of Program Chairs at locations, oversight all types of leaves and consult with Executive Deans when and if needed.
- 21- Other duties as assigned by the Campus Director.
- 22- Acted in the absence of campus director.

At UAEU at have involved in the following:

- 1- Accreditation of the Chemistry Degree by Canadian Society for Chemistry (CSC) and Royal Society of Chemistry (RSC) in Britain: this is one of the biggest achievements during my work at UAEU, is to see our chemistry program has been accredited by one of the top chemistry societies in the world. Fortunately, all the faculty members and I was honored to be one of them, were participated in the negotiations and discussion between the Chemistry Department and the RSC, where at the end our hard work convinced the RSC to approve our application for the accreditation of our chemistry program on 16th December 2010.
- 2- Peer Evaluation of Teaching Committee-FOS (member).
- 3- Academic Affairs Committee (member); development the curriculum and solving any academic issues related to the student's study plan.
- 4- Laboratory Development & Supervision Committee (member representing the physical chemistry division). Consistently involved in improving various courses, especially the lab-based physical chemistry courses.
- 5- Teaching, Advising and Scheduling Committee (Coordinator; 2010/2011 academic year): scheduling courses for males and females' students during the academic year, and to ensure proper communications and coordination between Departments at COS.
- 6- Male Academic Advisor and Male campus coordinator (2010/2011 academic year): liaison between the Head of Department and Male students; plan to solve any academic problems they have during the registration of their courses. i.e. Act as an Academic Advisor for Male students (Falaj Hazzaa campus)
- 7- Student activities committee (member): my role as a member of this committee will be to: Participate in planning the departmental social gathering, participate in organizing internal workshops for students and participate in organizing the celebration of National day and chemistry day. I actively participated with the Chemistry Club Students activities committee (giving talks in "Chemistry Days", and welcoming students in my labs).
- 8- Faculty of Science Scheduling Committee (representing chemistry department): This committee oversaw avoiding conflicts between the different science courses required

- by students' especially compulsory and pre-requisite courses, and to ensure proper communications and coordination between Departments.
- 9- Organized a workshop on "How to write a scientific report" for chemist major students and for all other interested students.
 - 10- Recognition of excellence in teaching by all department chairs, based on annual evaluations.

At JUST at have involved in the following:

- 1- Accreditation committee-coordinator at chemistry department and member at the Faculty Science and Arts.
- 2- Academic Affairs Committee at the Department and at the Faculty of Art and Sciences (member); development the curriculum and solving any academic issues related to the student's study plan.
- 3- Faculty Strategic Planning Committee (2006-2008) (member).
- 4- Member of the Organizing Committee of the Scientific Week for Higher Council of Science & Technology-Jordan. Theme of Nanotechnology. (May 2009)
- 5- Member of the Organizing Committee of Nanotechnology at Jordan University (10-13/11/2008)
- 6- Scientific Research and Graduate Studies Committee at the Department and College level (Coordinator)
- 7- College Promotion Committee (member)
- 8- Peer Evaluation of Master Program Curriculum Committee (Coordinator)
- 9- Member of General Accreditation Committee of Yarmouk University-The Higher Council for Science & Technology-Jordan, 2009.
- 10- Member of Specialized Accreditation Committee of Chemistry Program-Department of Chemistry at Al Bait University-The Higher Council for Science & technology-Jordan, 2009.
- 11- Member of the Accreditation Committee for Linguistics laboratory at Applied English Department at JUST as a Center lab for Self-learning.
- 12- Peer Evaluation of Teaching Committee-at College and Department level (Coordinator).
- 13- Involved in the establishing of graduate programs (MSc in Chemistry).
- 14- Involved in outcome assessment of the General Chemistry courses for ABET accreditation.

References

Will provided upon request.