

CURRICULUM VITAE

Khaled Mohammad Al Khalyfeh

Feb. 2025



PERSONAL

<i>Place of Birth</i>	Al Aqaba / Jordan
<i>Date of Birth</i>	June 11, 1983
<i>Marital Status</i>	Married
<i>Nationality</i>	Jordanian
<i>Work Address</i>	Department of Chemistry, College of Science, Al-Hussein Bin Talal University, Ma'an, Jordan. Phone: +962-3-2179000 Ext.:6331, E-mail: k.khalyfeh@ahu.edu.jo
<i>Academic Rank (date)</i>	Associate Professor (2021)
<i>Permanent Address</i>	71873 Tayybeh, Ma'an, Jordan. E-mail: Khalyfeh@gmail.com

ACADEMIC QUALIFICATIONS

2014 - 2016	Ph.D. , Inorganic Chemistry (Organometallics/ Electrochemistry), Chemnitz University of Technology, Chemnitz, Germany (2017).
2008 - 2012	M.Sc. , Chemistry, Mu'tah University, Al-Karak, Jordan (2012).
2001 - 2005	B.Sc. , Applied Chemistry, Al-Balqa' Applied University (2005), Al-Balqa', Jordan

SPECIALTY

<i>General Specialization:</i>	Chemistry
<i>Specialization :</i>	Inorganic Chemistry / Organometallics / Electrochemistry

CAREER HISTORY

Dec. 2021 – Now	Associate Professor , Department of Chemistry, College of Science, Al-Hussein Bin Talal University, Ma'an, Jordan.
Dec. 2016 – Dec. 2021	Assistant Professor , Department of Chemistry, College of Science, Al-Hussein Bin Talal University, Ma'an, Jordan.
Feb. 2007 – Apr. 2014	Laboratory Supervisor and Technician , Department of Chemistry, College of Science, Al-Hussein Bin Talal University, Ma'an, Jordan.
Mar. 2006 – Feb. 2007	Laboratory Technician , Department of Chemistry, College of Science, Al-Tafila Technical University, Al-Tafila, Jordan.
April 2005 – Mar. 2006	Technical and Analyst , Research and development laboratory, Hikma pharmaceuticals company, Amman, Jordan.

ADMINISTRATIVE EXPERIENCE

Positions

Sep. 2017 – Oct. 2018	Head of Chemistry Department , Department of Chemistry, College of Science, Al-Hussein Bin Talal University, Ma'an, Jordan.
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Committees

Sep. 2024 – Now	Membership of Quality committee, Department of Chemistry.
Sep. 2020 – Now	Membership of Scientific Research and Projects committee, Department of Chemistry.
Sep. 2020 – Sep. 2022	Membership of General Laboratory Safety Committee, Department of Chemistry.
Sep. 2018 – Sep. 2021	Membership of Scientific Research and Projects committee, Faculty of Science.
May 2021 – Jun. 2021	Membership of Tenders of Faculty of Science, Faculty of Science.

Sep. 2020 – Jun. 2021	Membership of Council of Faculty of Science, Faculty of Science.
Sep. 2018 – Oct. 2020	Membership of Study plans committee, Faculty of Science.
Sep. 2017 – Oct. 2018	Membership of Council of Faculty of Science, Faculty of Science.
Sep. 2017 – Oct. 2018	Head of Council of Chemistry, Department of Chemistry.
Sep. 2017 – Oct. 2018	Head of Study plans committee, Department of Chemistry.

HONORS, SCHOLARSHIPS, AWARDS AND GRANTS_____

- 2018 **DFG- Research Project Grant.**
Project title “Ferrocene- / ferrocenyl-functionalized Dendrimers: Synthesis, Characterization and their electrochemical Behavior”, 06/2018-09/2018, Chemnitz, Germany.
- 2019 **DFG- Research Project Grant.**
Project title “Core and End-Grafts Ferrocene-containing Dendrimers: Synthesis, Characterization and electrochemical Behavior”, 07/2018-09/2018, Chemnitz, Germany.
- 2020 **Visiting Scholar Program Award.**
Research Stay, Chemnitz University of Technology, Chemnitz, Germany.
(Not enrolled due to Covid-19 closure in the whole world).
- 2020 **Research Project Grant_Deanship of Scientific Research (Al Hussein bin Talal University) - (78800 JD).**
Project title “Ferrocenyl-Triazole Complexes for Sensor Application; - Synthesis, Characterization and Electrochemistry-”
- 2021 **Visiting Scholar Program Award.**
Research Stay, Chemnitz University of Technology, Chemnitz, Germany.
- 2022 **Deanship of Scientific Research (Al Hussein bin Talal University)-
Visiting Research Stay.**
Research Stay, Chemnitz University of Technology, Chemnitz, Germany.

Project title "Ferrocenyl-Triazole Complexes for Sensor Application; -
Synthesis, Characterization and Electrochemistry-"

2023

Visiting Scholar Program Award.

Research Stay, Chemnitz University of Technology, Chemnitz, Germany.

Project title "Ferrocenyl-Triazole Complexes Sensing Application for
Heavy Metal cations"

EXAMINING COMMITTEES

M. SC. Thesis

- 04/12/2024 The Potential of Agave angustifolia " Marginata " Natural Fiber in Fluorescein Dye Adsorption from Water. Aya Abdel-Rahman Khamis Al-Ewirat. Thesis defended at the Department of Chemistry and Chemical Technology, Tafila Technical University / Jordan.
- 07/01/2024 A click Synthesis and Biological Evaluation of 1,2,3-Triazoles-Indole Hybrid. Moath Hatem AL-Alawneh. Thesis defended at the Department of Chemistry, Mutah University / Jordan.
- 18/05/2023 Density Functional Theory Calculations for the Stability of Gold(1) N-heterocyclic Triazole Complexes. Rozita Alzyoud, Thesis defended at the Department of Chemistry, the University of Jordan / Jordan.
- 21/05/2023 Density Functional Theory Calculations for the Stability of Gold(1) N-heterocyclic Carbene Complexes. Sahar Ferwaneh, Thesis defended at the Department of Chemistry, the University of Jordan / Jordan.

RESEARCH INTEREST

- Organometallics.
- Electrochemistry of Inorganic and Organometallic compounds.
- Metal Containing Polymer for Batteries and Sensor Applications.

PUBLICATIONS

Peer-reviewed journal articles

- Ferrocenyl-Triazole Complexes and their Use in Heavy Metal Cation Sensing. **K. Al Khalyfeh**, A. Ghazzy, R. M. Al-As'ad, T. Ruffer, O. Kanoun and H. Lang. Journal of RSC Advances 14 (2024) 20572. <https://doi.org/10.1039/D4RA04023F>.
- Synthesis, characterization, and electrochemical properties of ferrocenyl-based 1,4-disubstituted-1,2,3-triazole derivatives. R. M. Al-As'ad, **K. Al Khalyfeh**, D. Taher, K. I. Assaf, M. H. Tawara, T. Ruffer, H. Lang. Journal of Organometallic Chemistry 1013 (2024) 123170. <https://doi.org/10.1016/j.jorganchem.2024.123170>.
- Synthesis, characterization, crystal structure and DFT calculations of dysprosiumIII - (E)-ethyl-4-(2-hydroxybenzylidene amino)benzoate. R. M. Al-As'ad, A.A. Abu-Yamin, M. Korb, **K. Al Khalyfeh**, I. A. Elayan, M. H. Almatarneh, H. K. Juwhari, H. Amarne, D. Taher, Z. Ishtaiwi, H. Lang. D. Taher. Journal of Molecular Structure 1280 (2023) 135061. <https://doi.org/10.1016/j.molstruc.2023.135061>
- Preparation, spectroscopic investigation, biological activity and magnetic properties of three inner transition metal complexes based on (2-((p-tolylimino)methyl)phenol) Schiffbase. M. Alqasaimah, A.A. Abu-Yamin, S. Matar, **K. Al Khalyfeh**, T. Ruffer, H. Lang, I. A. M. Saraerah, M. Salman, P. F. G. Leniec, H. Amarne, D. Taher. Journal of Molecular Structure 1274 (2023) 134458. <https://doi.org/10.1016/j.molstruc.2022.134458>
- Rearrangement of Diferrocenyl 3,4-Thiophene Dicarboxylate. A. Ghazzy, D. Taher, M. Korb, **K. Al Khalyfeh**, W. Helal, H. Amarne, T. Ruffer, Z. Ishtaiwi and H. Lang. Inorganics 10, 96 (2022) 1-12. <https://doi.org/10.3390/inorganics10070096>

- Synthesis, chemical and physical properties of lanthanide(III) (Nd, Gd, Tb) complexes derived from (E)-ethyl 4-(2-hydroxybenzylideneamino)benzoate. A. A. Abu-Yamin, D. Taher, M. Korb, **K. Al Khalyfeh**, Z. Ishtaiwi, H. Juwhari, W. Helal, H. Amarne, S. Mahmood, R. Loloee, Y. YouSef, A. Ghazzy and H. Lang. *Polyhedron* 222 (2022), 115906. <https://doi.org/10.1016/j.poly.2022.115906>.
- Crystal structure, spectroscopic studies, DFT calculations, and biological activity of 5-bromosalicylaldehyde-based Schiff bases. A. A. Abu-Yamin, A. A. Q. M. Jbarah, **K. Al Khalyfeh**, S. Matar, W. Helal, M. Korb, H. Amarne and H. Lang. *Journal of Molecular Structure* 1262 (2022), 132976. <https://doi.org/10.1016/j.molstruc.2022.132976>
- Crystal Structure and Hirshfeld Surface Analysis of Bis(3-thienoyl) Disulfide. **K. Al Khalyfeh**, D. Taher, W. Helal, M. Korb, H. Amarne and H. Lang. *Journal of Chemical Crystallography* 52 (2022) 113-121, <https://doi.org/10.1007/s10870-021-00896-z>
- Thiocrown Ethers Engaged C₆₀ through Charge Transfer: Experimental and Theoretical Study. **Khaled Al Khalyfeh**, Akef T. Afaneh, Ali Marshdeh, Mansour H. Almatarneh, Ghassab M. Al-Mazaideh, Shehadeh Mizyed, and Muhammad Ashram. *ACS Omega* 5 (2020), 25049–25058. <https://doi.org/10.1021/acsomega.0c01877>.
- Synthesis and Characterization of 1,4-chalcogenesters Bearing 5-Membered Heterocycles. **Khaled Al Khalyfeh**, Deeb Taherb, Wissam Helal, Marcus Korb, Imad Hamadneh, Ammar Al-Dujaili, Amer Imraish, Hana M Hammad, Randa M. Al-As'ad, Sultan T Abu-Orabi, Alexander Hildebrandt, Heinrich Lang. *Journal of Chemical Sciences* 132:117 (2020). <https://doi.org/10.1007/s12039-020-01825-x>.
- Aryl ferrocenylmethylesters: Synthesis, solid-state structure and electrochemical investigations. Asma Ghazzy, Deeb Taher, Wissam Helal, Marcus Korb, **Khaled Khalyfeh**, Firas F. Awwadi, Rasha K. Al-Shewiki, Saddam Weheabby, Naim Al-Said, Sultan T. Abu-Orabi, Heinrich Lang. *Arabian Journal of Chemistry* 13 (2020), 3546-3557. <https://doi.org/10.1016/j.arabjc.2018.12.006>
- Corrosion and Electrochemical Studies on the Stability of New Thiocrown Ethers Derived from Quinoline. Ghassab Al-Mazaideh, Muhammad Ashram, **Kahled Al Khalyfeh**, Mansour Almatarneh. *Jordan Journal of Chemistry*, 14 (2019), 89-96.

- Study the effect of Substituents X on Methylene-cyclopentane and 1-Methylcyclopentene System. Ghassab Al-Mazaideh, Ashraf Al-Msiedeen, Fadi Alakhras, Hammad Aldal'in, Haya Salman, Zeinab Al-Itiwi, **Khaled Al Khalyfeh**, Salim Khalil. *Jordanian Journal of Engineering and Chemical Industries (JJEI)*, 1 (2018) 63-70.
- Ferrocenylmethyl-Functionalized 5-Membered Heterocycles: Synthesis, Solid-State Structure and Electrochemical Investigations. D. Taher, A. Ghazzy, F. F. Awwadi, W. Helal, **K. Al Khalyfeh**, M. Korb, A. Hildebrandt, E. Kovalski, H. Lang. *Polyhedron*, 152 (2018) 188-194. <https://doi.org/10.1016/j.poly.2018.06.038>
- Anionic Polymerization of Multi-Vinylferrocenes. **Khaled Al Khalyfeh**, Jonas F. Nawroth, Martin Uhlemann, Ulrich Stoeck, Lars Giebeler, Rainer Jordan and Alexander Hildebrandt. *J. Organomet. Chem.* 853 (2017) 149–158. <https://doi.org/10.1016/j.jorganchem.2017.10.009>.
- Ferrocene-Based Monomers, Oligomers and Polymers as Electro-Active Materials. **K. Al Khalyfeh** - 2016 - qucosa.de.
- Electron Transfer Studies on Conjugated Ferrocenyl Containing Oligomers. A. Hildebrandt, **K. Al Khalyfeh**, J. F. Nawroth and R. Jordan. *Organometallics*, 2016, 35, 3713–3719. <https://pubs.acs.org/doi/abs/10.1021/acs.organomet.6b00673>.
- Multi-functionalized ferrocenes: -Synthesis and characterization-. A. Hildebrandt, **K. Al Khalyfeh**, D. Schaarschmidt and M. Korb. *J. Organomet. Chem.*, 2016, 804, 87–94. <http://dx.doi.org/10.1016/j.jorganchem.2015.12.027>.

CONFERENCES AND PROCEEDINGS

- Poster: Multi-functionalized ferrocenes: -Synthesis and characterization- **K. Al Khalyfeh**, A. Hildebrandt. 14th Ferrocene Colloquium Konstanz, 2016, Konstanz, Germany.
- Talk: New Ferrocene Based Monomers and Polymers as Electro-Active Materials. **K. Al Khalyfeh**, A. Hildebrandt. MANS–14 (2016), Halle, Germany.

- Talk: New Ferrocene Based Monomers and Polymers as Electro-Active Materials. **K. Al Khalyfeh**. International Conference on Advanced Materials, 2017, Irbid, Jordan.

TEACHING

Courses Taught-undergraduate

- General Chemistry 1 (Chem. 101), Al-Hussein Bin Talal University.
- General Chemistry 2 (Chem. 102), Al-Hussein Bin Talal University.
- General Chemistry Lab. 1 (Chem. 103), Al-Hussein Bin Talal University.
- General Chemistry Lab. 2 (Chem. 104), Al-Hussein Bin Talal University.
- Inorganic Chemistry 1 (Chem. 221), Al-Hussein Bin Talal University.
- Inorganic Chemistry 2 (Chem. 321), Al-Hussein Bin Talal University.
- Inorganic Chemistry 3 / Organometallics (Chem. 421), Al-Hussein Bin Talal University.
- Inorganic Chemistry Lab (Chem. 322), Al-Hussein Bin Talal University.
- Electrochemistry (Chem. 414), Al-Hussein Bin Talal University.
- Industrial Inorganic Chemistry 1 (Chem. 461), Al-Hussein Bin Talal University.
- Descriptive Chemistry of the Elements (Chem. 423), Al-Hussein Bin Talal University.
- Chemistry and Life (Chem 236), Al-Hussein Bin Talal University.
- Seminar and Research (Chem. 470), Al-Hussein Bin Talal University.
- Scientific Research Project (Chem. 474), Al-Hussein Bin Talal University.
- Organic Chemistry Lab 1 (Chem. 233), Al-Hussein Bin Talal University.
- Organic Chemistry Lab for non-chemistry students (Chem. 236), Al-Hussein Bin Talal University.

SKILLS

Languages

- Arabic (native)
- English (excellent)
- Germany (Level A1)

Computer Programs

- ICDL