






## Monther Abdeljabbar Fares Khanfar

### PERSONAL INFORMATION



 Chemistry Department, Faculty of Science, The University of Sharjah, Sharjah-27272-UAE  
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Sex male | Date of birth 15/06/1974 | Nationality Jordan

### WORK EXPERIENCE

- |                              |                                                                                                      |
|------------------------------|------------------------------------------------------------------------------------------------------|
| September 2020- Present      | <b>Professor</b><br>Department of Chemistry, The University of Sharjah, Sharjah 27272- UAE           |
| September 2021- August 2023  | <b>Department Chair</b><br>Department of Chemistry, The University of Sharjah, Sharjah 27272- UAE    |
| April 2018- Present          | <b>Professor</b><br>Department of Chemistry, The University of Jordan, Amman 11942, Jordan           |
| May 2011- April 2018         | <b>Associate Professor</b><br>Department of Chemistry, The University of Jordan, Amman 11942, Jordan |
| February 2005- May 2011      | <b>Assistant Professor</b><br>Department of Chemistry, The University of Jordan, Amman 11942, Jordan |
| February 2002- February 2005 | <b>Assistant Professor</b><br>Department of Chemistry, The Hashemite University, Zarka, Jordan       |

### EDUCATION AND TRAINING

- |                             |                                                                                                                                                                                                                                                                                                                                                                                  |
|-----------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| June 2013 – September 2016  | <b>Visiting Researcher</b><br>Free University of Berlin/ Berlin, Germany <ul style="list-style-type: none"> <li>▪ Several three months summer visits during this period for developing special oxidized halogenated benzenes, for better understanding of their structure.</li> <li>▪ Preparation of special oxidized diarylchalcogens.</li> </ul>                               |
| January 2012 – January 2013 | <b>Visiting professor (on sabbatical)</b><br>Free University of Berlin/ Berlin, Germany <ul style="list-style-type: none"> <li>▪ Special equipment for reactions under super acidic conditions has been experienced.</li> <li>▪ Training on handling air and temperature sensitive compounds through X-ray measurements.</li> <li>▪ Experience on fluorine chemistry.</li> </ul> |
| July 2002 – September 2003  | <b>Visiting Researcher</b><br>BASF-Germany <ul style="list-style-type: none"> <li>▪ Two summer visits (three months each) on developing various catalysts for olefin polymerization..</li> </ul>                                                                                                                                                                                 |

June 2001 – February 2002 **Researcher and teaching assistant**

BASF/ Uni. Tuebingen- Germany

- Developing water soluble catalysts for CO/Olefins co-polymerization.

October 1998 – May 2001

**PhD-Thesis Title: “ Synthesis, Structure, and Host-Guest Investigations on Self-Assembled Nonwater-Soluble and Water-Soluble Multiple Bridged Platinacyclophanes”**

Universitaet Tuebingen, Tuebingen, Germany

- Special equipment for reactions that need inert atmosphere have been experienced.
- Minor subject examination in analytical and organic chemistry.
- Dissertation: Excellent with honour, Total average: very Good

September 1995 – August 1997

**Master of Science-Thesis Title:” Chemical Constituents of Flora of Jordan. XII. Chemical Constituents of *Caparis spinosa*”**

Department of Chemistry, The University of Jordan, Amman, Jordan

- Special separation techniques have been learned during thesis work.
- Eight different courses have been taken covering main subjects of chemistry.
- Cummulative average: 3.77 (out of 4), Overall assessment: Excellent, Rank: First of the class

September 1992 – June 1995

**Bachelor of Science in Chemistry**

Mutah University, Karak , Jordan

- Several courses covering the main subject of chemistry have been taken.
- Courses covering major field of science have been taken.
- Other wide spectra of human, social, and languages (English, Italian) courses have been taken.
- Cummulative average: 85.55%, Overall assessment :Excellent, Rank: First of the class

## PERSONAL SKILLS

Mother tongue(s)

Arabic

Other language(s)

English

German

EXCELLENT

GOOD

Communication skills

- Team work:: During my PhD and several visits to different research groups in Germany and Canada, several collaborations were established. We publish several publications with these collaborations.
- Courses evaluation committee (Department).
- Library committee (Department).
- Graduation day committee (Faculty)

Organisational / managerial skills

- Organizing committee for an international conference (EuroAsia 2010)
- Students' final results check committee (Department and Faculty).
- First conference on the chemistry between academia and industry, organizing committee.

Job-related skills

- Several tender committees for chemicals, glassware, equipments and advanced equipments. (University).
- Member of Central Tenders committee (University).
- Development of the website committee (Faculty).
- Development of the faculty members committee (Faculty).

- Social activities committee (Department).
- Graduate students examination committees (Department).

#### Computer skills

- Good command of Microsoft Office tools
- Experience with chemical structural analysis programs (SHELX, DIAMOND, PLATON, WINGX, Olex<sup>2</sup>, CrysAlis Pro, etc.).
- Good knowledge of computational methods for molecular modelling, molecular simulation, DFT, Gaussain.

#### Other skills

- Equipment experience:
  - X-ray single crystal (SCD)-(Rigaku, Oxford, Agilent, Bruker).
  - SCD Rigaku-Agilent Xcalibur Eos., Instrument service and maintenance responsibility at the Department of Chemistry, The University of Jordan. (Notice: This is the only SCD working instrument in Jordan).
  - Nuclear Magnetic Resonance spectrometer (NMR) 250, 300, 400 and 600 MHz
  - Infrared (IR) spectrometer
  - Ultraviolet (UV) spectrophotometer.
  - Liquid Chromatography (LC) techniques
  - Gas Chromatography (GC)
  - Mass spectrometer (MS), LC-MS
  - Atomic Absorption spectrometer (AAS)
  - Microwave synthesizer
  - Elements analyzer

## ADDITIONAL INFORMATION

### Courses Taught

#### PhD.

1. Organometallics.

#### MSc.

1. Inorganic Reaction mechanisms and catalysis.
2. Chemical Application of group theory.
3. Crystallography and X-ray diffraction.
4. Advanced inorganic Chemistry
5. Physical Methods in Inorganic Chemistry
6. Advanced Spectroscopy

#### BSc

1. Organometallic chemistry (for undergraduate).
2. Special topic in Inorganic chemistry.
3. Homogeneous Catalysis
4. Industrial inorganic chemistry.
5. Inorganic Chemistry 1, 2 and 3
6. Nuclear chemistry
7. Inorganic chemistry lab
8. Analytical Chemistry lab
9. General Chemistry 1 and 2
10. General Chemistry for premed students
11. General Chemistry labs.

## Supervision Graduate studies

1. **Ms. Areej Jaber** (Master student, graduated June 2014) Thesis title: "*Synthesis and structural properties of the complexes of adamantane-carbohydrazide containing ligand and some metals from late first row series*"
2. **Ms. Huthaifah Al-Malieh** (Master student, graduated June 2005) Thesis title: "*Synthesis and characterization of the coordination derivatives of derivatized chiral 4,5-Dihydro-1,2,4-triazine-6-ones*"
3. **Ms. Asma M. Askar** (Master student, graduated May 2021) Project title: "*Characterization and determination of GSR in selected 9mm ammunition using SEM/EDS*"
4. **Aisha Salim Al teneiji** (Master student, graduated May 2024) Thesis title: "*Detection of synthetic cannabinoid receptor agonists using 1-hexadecanethiol – stabilized gold nanocluster.*"

## Participation in Examination Committees

1. **Ms. Lubna Jamal Jaber** (Master student, graduated 12/ 2022).
2. **Ms. Maryam Mohd Mouselly** (Master student, graduated 5/ 2022).
3. **Mr. Akram Al-Masaed** (Master student, graduated 8/ 2019).
4. **Ms. Sediqa Saber**: (PhD student, graduated 7/ 2019).
5. **Ms. Areej Al-Ghol** (PhD student, graduated 7/ 2019).
6. **Mr. Raed Gneem** (Master student, graduated 7/ 2019).
7. **Ms. Nesreen Alwahsh** (Master student, graduated 7/ 2019).
8. **Ms. Islam Damdom** (Master student, graduated 12/ 2016).
9. **Ms. Nora Husain** (Master student, graduated 12/ 2016).
10. **Ms. Rasha Al-Rawajfeh** (Master student, graduated 8/ 2016).
11. **Ms. Haneen Husain** (Master student, graduated 5/ 2016).
12. **Ms. Enas Madi** (Master student, graduated 5/ 2016)
13. **Ms. Zainab Ahmad** (Master student, graduated 3/ 2016).
14. **Mr. Mohamad Alwahsh** (Master student, graduated 12/ 2015).
15. **Ms. Enas Abdelhai** (Master student, graduated 8/ 2015).
16. **Mr. Ahmad Abdallah** (Master student, graduated 4/ 2015).
17. **Ms. Abeer Malhees** (Master student, graduated 12/ 2014).
18. **Ms. Lilian Abusleiman** (Master student, graduated 5/ 2014).
19. **Mr. Basel Bani Huthail** (Master student, graduated 8/ 2011).
20. **Mr. Ibrahim Diab** (Master student, graduated 7/ 2011).
21. **Ms. Rana Massad** (Master student, graduated 3/ 2010)
22. **Mr. Omar Bashir** (Master student, graduated 12/ 2008)
23. **Ms Feda Al-Masri** (Master student, graduated 12/ 2007).

## Publications

1. Shahnez Chaouch, Mohamed El-Naggar, Ihsan A. Shehadi, Monther A. Khanfar, Raed A. Al-Qawasmeh "The crystal structure of 1-(1-adamantan-1-yl)ethyl-3-(3-methoxyphenyl)thiourea, C<sub>20</sub>H<sub>28</sub>N<sub>2</sub>OS" (2024) aop  
DOI: <https://doi.org/10.1515/ncrs-2023-0555>
2. Aisha Salim Alteneiji, Kamrul Hasan, Ihsan Shehadi, Monther A Khanfar "The crystal structure of bis[(4-methoxyphenyl)(picolinoyl)amido-κ<sup>2</sup>N:N']copper(II), C<sub>26</sub>H<sub>22</sub>CuN<sub>4</sub>O<sub>4</sub>" Zeitschrift für Kristallographie-New Crystal Structures, (2024) aop  
DOI: <https://doi.org/10.1515/ncrs-2024-0107>.
3. Shazia Waseem, Hafsa Saleem, Muhammad Nadeem Akhtar, Muhammad Imran, Ayesha Javaid, Murad A AlDamen, Rahman Bikas, Monther A Khanfar "A Zn-based Zig-Zag 1D chain type coordination polymer for removal of methylene blue dye from an aqueous solution" Inorganica Chimica Acta, 559 (2024) 12156.
4. Mudassir Jamil, Muhammad Nadeem Akhtar, Muhammad Imran, Ayesha Javaid, Hafiza Komal Zafar, Manzar Sohail, Murad A AlDamen, Magdalena Fitta, Monther A Khanfar, Raed A Al-Qawasmeh " Photocatalytic degradation of methylene blue dye and electrocatalytic water oxidation over copper (II) complex with mixed ligands" Journal of Photochemistry

- and Photobiology A: Chemistry, 446 (2024) 115095.
5. Sadeekah O W Saber, Raed A Al-Qawasmeh, Luay Abu-Qatouseh, Amneh Shtaiwi, Monther A Khanfar, Yaseen A Al-Soud "Novel hybrid motifs of 4-nitroimidazole-piperazinyl tagged 1, 2, 3-triazoles: Synthesis, crystal structure, anticancer evaluations, and molecular docking study" *Heliyon*, 9 (2023) e19327.
  6. Majed Shtaiwi, Mohammad Alemlah, Kayed A Abu-Safieh, Bader A Salameh, Amneh Shtaiwi, Mohammad Alwahsh, Lama Hamadneh, Monther A Khanfar "Design, Synthesis, Crystal Structure, Biological Activity and Molecular Modeling of Novel Schiff Bases Derived from Chalcones and 5-Hydrazino-1, 3-Dimethyl-4-Nitropyrazole as Anticancer Agents" *Polycyclic Aromatic Compounds*, (2023) 1.
  7. Gourishetty Srikanth, Anil Ravi, Anusha Sebastian, Jobi Joseph, Monther A Khanfar, Mohammed I El - Gamal, Raed A Al - Qawasmeh, Ihsan A Shehadi, Scott McN. Sieburth, Imad A Abu - Yousef, Amin F Majdalawieh, Taleb H Al - Tel "Diastereoselective Synthesis of Camptothecin - like Scaffolds: Construction of a New Class of Pseudo - natural Products" *European Journal of Organic Chemistry*, 26 (2023) e202300080.
  8. Ala'a A Al-Akhras, Jalal A Zahra, Mustafa M El-Abadelah, Lubna F Abu-Niaaj, Monther A Khanfar "8-Amino-7-(aryl/hetaryl) fluoroquinolones. An emerging set of synthetic antibacterial agents" *Zeitschrift für Naturforschung C*, 78 (2023) 157.
  9. Yaseen A Al-Soud, Sadeekah OW Saber, Amneh Shtaiwi, Sondos O Alsawakhneh, Kafa'AS Alhelal, Qusay FA Salman, Luay Abu-Qatouseh, Monther A Khanfar, Raed A Al-Qawasmeh "Nitroimidazoles Part 10. Synthesis, crystal structure, molecular docking, and anticancer evaluation of 4-nitroimidazole derivatives combined with piperazine moiety" *Zeitschrift für Naturforschung C*, 78 (2023) 93.
  10. Bilal O Alkubaisi, Anil Ravi, Gourishetty Srikanth, Anusha Sebastian, Monther A Khanfar, Mohammed I El-Gamal, Scott McN Sieburth, Afnan I Shahin, Taleb H Al-Tel " Divergent Protocol for the Synthesis of Isoquinolino[1,2-b]quinazolinone and Isoquinolino[2,1-a]quinazolinone Derivatives" *The Journal of Organic Chemistry*, 88 (2023) 4244.
  11. Gourishetty Srikanth, Anil Ravi, Anusha Sebastian, Jobi Joseph, Monther A Khanfar, Mohammed I El - Gamal, Raed A Al - Qawasmeh, Imad A Abu - Yousef, Amin F Majdalawieh, Taleb H Al - Tel "Stereodivergent Transformation of Azepino[3,4,5 - cd]indoles En Route to Nature - Inspired Scaffolds" *European Journal of Organic Chemistry*, 26 (2023) e202201354.
  12. Gourishetty Srikanth, Anil Ravi, Anusha Sebastian, Monther A Khanfar, Imad A Abu-Yousef, Amin F Majdalawieh, Mohammed I El-Gamal, Bilal O Alkubaisi, Afnan I Shahin, Jobi Joseph, Taleb H Al-Tel " Stereodivergent Desymmetrization of Phenols En Route to Modular Access to Densely Functionalized Quinazoline and Oxazine Scaffolds" *The Journal of Organic Chemistry*, 88 (2023) 1600.
  13. Anil Ravi, Gourishetty Srikanth, Monther A Khanfar, Raed A Al-Qawasmeh, Mohammed I El-Gamal, Taleb H Al-Tel " Blue Light-Driven [4+2]-Cycloaddition: Diastereoselective Synthesis of Chromeno[4,3-b]quinoline and Chromeno[4,3-b][1,8]naphthyridine Scaffolds" *The Journal of Organic Chemistry*, 87 (2022) 16722.
  14. Raed A Al-Qawasmeh, Sadeekah OW Saber, Yaseen A Al-Soud, Monther A Khanfar "The crystal structure of 1-(N1-benzyl-2-methyl-4-nitro-imidazol-5-yl)-4-(prop-2-yn-1-yl) piperazine, C<sub>18</sub>H<sub>21</sub>N<sub>5</sub>O<sub>2</sub>" *Zeitschrift für Kristallographie-New Crystal Structures*, 237 (2022) 207.
  15. Kamal Sweidan, Gada Idrees, Luay Abu-Qatouseh, Muhammad N Tahir, Monther Khanfar, Rajendra Joshi, Eyad Mallah, Mohammads S Mubarak "Synthesis, Characterization, and Antimicrobial Evaluation of New Furan-2-Carboxamide Derivatives" *Letters in Organic Chemistry*, 19 (2022) 314.
  16. Areej M Jaber, Jalal A Zahra, Salim S Sabri, Monther A Khanfar, Firas F Awwadi, Mustafa M El-Abadelah "New Trends in 1, 4-Dipolar Cycloaddition Reactions. Thermodynamic Control Synthesis of Model 2 -(isoquinolin-1-yl)-spiro [oxindole-3, 3 -pyrrolines]" *Current Organic Chemistry*, 26 (2022) 542.
  17. Vunnam Srinivasulu, Gourishetty Srikanth, Monther A Khanfar, Imad A Abu-Yousef, Amin F Majdalawieh, Ralph Mazitschek, Subbaiah Chennam Setty, Anusha Sebastian, Taleb H Al-Tel "Stereodivergent complexity-to-diversity strategy en route to the synthesis of nature-inspired Skeleta" *The Journal of Organic Chemistry*, 87 (2022) 1377.
  18. Mohammed M Al-Mahadeen, Jalal A Zahra, Mustafa M El-Abadelah, Areej M Jaber, Monther A Khanfar "One-pot synthesis of novel 2-oxo (2H)-spiro [benzofuran-3, 3' - pyrrolines] via 1, 4-dipolar cycloaddition reaction" *Results in Chemistry*, 4 (2022) 100643.
  19. Vunnam Srinivasulu, Scott McN Sieburth, Monther A Khanfar, Imad A Abu-Yousef, Amin Majdalawieh, Mani Ramanathan, Anusha Sebastian, Taleb H Al-Tel, " Stereoselective Late-Stage Transformations of Indolo [2, 3-a] quinolizines Skeleta to Nature-Inspired Scaffolds" *Journal of Organic Chemistry*, 86 (2021) 12872.

20. AS Abushamleh, KA Abu-Safieh, MA Khanfar, D Taher, L Tahtamouni, NJ Alwahsh, "Novel palladium (II) complexes of pyrazole-containing Schiff base ligands: synthesis, structural characterization, and cytotoxicity of the palladium (II) complexes of 2-[1-[2-(1, 3-dimethyl-4-nitro-1H-pyrazol-5-yl)hydrazono]ethyl]pyridine (APHP) and its analogue 2-[1-[2-(1, 3-dimethyl-4-nitro-1H-pyrazol-5-yl)hydrazono]methyl]pyridine (PCHP)" *Journal of Structural Chemistry*, 62 (2021) 1112
21. Kayed Abu-Safieh, Musa I El-Barghouthi, Monther A Khanfar, Bader A Salameh, Islam S Al-Aqrabawi, Baker Jawabrah Al Hourani, Basem F Ali, "Crystal structure of 1-(1, 3-dimethyl-4-nitro-1H-pyrazol-5-yl)-3, 5-diphenyl-1H-pyrazole and molecular docking studies of 1-(1, 3-dimethyl-4-nitro-1H-pyrazol-5-yl)-3, 5-diphenyl-1H-pyrazole and 5-methyl-1-(1, 3-dimethyl-4-nitro-1H-pyrazol-5-yl)-3-phenyl-1H-pyrazole towards tyrosine kinases" *Journal of Molecular Structure*, 1237 (2021) 130345.
22. Vunnam Srinivasulu, Farah Al-Marzooq, Mohamad Hamad, Monther A Khanfar, Mani Ramanathan, Nelson C Soares, Taleb H Al-Tel, "Sequencing Groebke–Blackburn–Bienaymé and Aza-Michael Addition Reactions: A Modular Strategy for Accessing a Diverse Collection of Constrained Benzoxazepine and Imidazopyrazine Systems" *Synthesis* 53 (2021) 1911.
23. Kamal Sweidan, Mansour H Almatameh, Murad A AlDamen, Monther Khanfar, Reema A Omeir, Caecilia Maichle Mössmer, Manfred Steimann, "Understanding the Formation of 5-(Diethylammoniothio)-1, 3-dimethylbarbituric Acid: Crystal Structure and DFT Studies" *Journal of Chemical Crystallography* 51 (2021) 215.
24. Eslam S Daldoom, Malak I Qadri, Jalal A Zahra, Salim S Sabri, Mustafa M El-Abadelah, Monther A Khanfar, Sanaa Bardaweel, Wolfgang Voelter, "Synthesis and Properties of N1-(indan-5-yl) amidrazones Incorporating Piperazines and Related Congeners" *Letters in Organic Chemistry* 18 (2021) 41
25. Vunnam Srinivasulu, Paul Schilf, Saleh Ibrahim, Ihsan A Shehadi, Omar G Malik, Scott Sieburth, Monther A Khanfar, Mohamad Hamad, Imad A Abu-Yousef, Amin F Majdalawieh, Taleb H Al-Tel, "Divergent Strategy for Diastereocontrolled Synthesis of Small-and Medium-Ring Architectures" *Journal of Organic Chemistry* 85 (2020) 10695.
26. Kamal Sweidan, Mansour H Almatameh, Murad A AlDamen, Monther Khanfar, Reema A Omeir, Caecilia Maichle Mössmer, Manfred Steimann, "Understanding the Formation of 5-(Diethylammoniothio)-1, 3-dimethylbarbituric Acid: Crystal Structure and DFT Studies" *Journal of Chemical Crystallography* 7 (2020) 1.
27. Raed A Al - Qawasmeh, Nura A Hussein, Ihsan Shehadi, Monther A Khanfar, Bader A Salameh, "Design and Synthesis of Aminoacetylenic Indole and Carbazole Hybrid Compounds" *ChemistrySelect* 5 (2020) 6834.
28. Raed A. AL-Qawasmeh, Yaseen A. Al-Soud, Kafa'a Ali Al-Hilal, Monther A. Khanfar, "The crystal structure of 3-(1-benzyl-2-ethyl-4-nitro-1H-imidazol-5-ylthio)-propanoic acid, C<sub>15</sub>H<sub>17</sub>N<sub>3</sub>O<sub>4</sub>S" *Zeitschrift für Kristallographie - New Crystal Structures*, 236 \*2020) 751.
29. Areej M Jaber, Jalal A Zahra, Mustafa M El-Abadelah, Salim S Sabri, Monther A Khanfar, Wolfgang Voelter, "Utilization of 1-phenylimidazo [1, 5-a] quinoline as partner in 1, 4-dipolar cycloaddition reactions" *Zeitschrift für Naturforschung B* 75 (2020) 259.
30. Ihsan A Shehadi, Fatima-Azzahra Delmani, Areej M Jaber, Hana Hammad, Murad A AlDamen, Raed A Al-Qawasmeh, Monther A Khanfar, "Synthesis, Characterization and Biological Evaluation of Metal Adamantyl 2-Pyridylhydrazone Complexes" *Molecules* 25 (2020) 2530.
31. Vunnam Srinivasulu, Monther A. Khanfar, Hany A. Omar, Raafat ElAwady, Scott McN. Sieburth, Anusha Sebastian, Dana M. Zaher, Farah Al Marzooq, Fatema Hersi, Taleb H. Al-Tel, "Sequencing [4+1]-Cycloaddition and Aza-Michael Addition Reactions: A Diastereoselective Cascade for the Rapid Access of Pyrido[2,1:2,3]/Thiazolo[2,3:2,3] -imidazo[1,5-a]quinolone Scaffolds as Potential Antibacterial and Anticancer Motifs" *Journal of Organic Chemistry* 84 (2019) 14476.
32. Bader A. Salameh, Haneen Mahmoud, Monther A. Khanfar, Raed A. AlQawasmeh, "Benzimidazole derivatives *via* regioselective substitution of dichloro pyrrolobenzimidazole" *Journal of Heterocyclic Chemistry* 56 (2019) 1530.
33. Anas J. Rasras, Mutasem Sinnokrot, Murad A. AlDamen, Monther A. Khanfar, Raed A. Al-Qawasmeh, "The crystal structure of 3-(1H-benzo[d]imidazol-2-yl)-7-chloro-1-cyclopropyl-6-fluoro-1,4-dihydroquinolin-dimethylsulfoxide (1/1), C<sub>21</sub>H<sub>19</sub>ClFN<sub>3</sub>O<sub>2</sub>S" *Zeitschrift für Kristallographie - New Crystal Structures*, 234 (2019) 645.
34. Ahmad S. Abushamleh, Kayed A. Abu-Safieh, Monther A. Khanfar, Khaleel I. Assaf, Bader A. Salameh, Nisreen J. Alwahsh, "Synthesis, Crystal Structure, Spectroscopic and Computational Studies of 2-[1-[2-(1,3-Dimethyl-4-nitro-1H-pyrazol-5-yl)hydrazono]ethyl]pyridine" *Heterocycles*, 98 (2019) 224.

35. Vunnam Srinivasulu, Ihsan Shehadeh, Monther A. Khanfar, Omar G. Malik, Hamadeh Tarazi, Imad A. Abu-Yousef, Anusha Sebastian, Nabil Baniowda, Matthew John OConnor, Taleb H. Al-Tel, " One-Pot Synthesis of Diverse Collections of Benzoxazepine and Indolopyrazine Fused to Heterocyclic Systems" *Journal of Organic Chemistry*, 84 (2019) 934.
36. Kamal Sweidan, Monther Khanfar, Alaa Al-Shamaileh, Mahmoud Sunjuk, Rajendra Joshic, " Synthesis, characterization and crystal structure of pentyl 2-(1*H*-indole-2-carboxamido)benzoate" *Current Chemistry Letters*, 8 (2019) 63.
37. Vunnam Srinivasulu, Paul Schilf, Saleh Ibrahim, Monther A. Khanfar, Scott McN Sieburth, Hany Omar, Anusha Sebastian, Raed A. AlQawasmeh, Matthew John OConnor, Taleb H. Al-Tel, " Multidirectional desymmetrization of pluripotent building block en route to diastereoselective synthesis of complex nature-inspired scaffolds" *Nature Communications* 9 (2018) 1.
38. Monther A. Khanfar, Areej M. Jaber, Murad A. AlDamen, Raed A. Al-Qawasmeh, "Synthesis, characterization, crystal structure and DFT study of a new square planar Cu(II) complex containing bulky adamantane ligand" *Molecules*, 23 (2018) 701/1.
39. Monther A. Khanfar, Basem F. Ali, Hashem Shorafa, Konrad Seppelt "Synthesis, Characterization, and Crystal Structure of a Triazine Anion Pentafluoroosmium(VI) Complex" *Crystals*, 8 (2018) 63/1.
40. Mahmoud A. Al-Qudah, Musa H. Abu Zarga, Monther A. Khanfar, Hala I. Al-Jaber, Sultan T. Abu Orabi, Konrad Seppelt, "Two new cyclopropane monoterpene epimers from *Varthemia iphionoides* of Jordanian origin" *Phytochemistry Letters*, 26 (2018) 60.
41. A. H. Abdullah, J. A. Zahra, M. M. El-Abadelah, S. S. Sabri, M. A. Khanfar, S. A. Matar, W. Voelter " Synthesis and antibacterial activity of N1-(carbazol-3-yl)amidrazones incorporating piperazines and related congeners" *Zeitschrift fuer Naturforschung, B: A Journal of Chemical Sciences*, 71b (2016) 857.
42. M. A. Khanfar K. Seppelt "Fluorinated Benzene Cations" *J. Fluorine Chem.* 179 (2015) 193.
43. O. Mallow, M. A. Khanfar, M. Malischewski, P. Finke, M. Hesse, E. Lork, T. Augenstein, F. Breher, J. R. Harmer, N. V. Vasilieva, A. Zibarev, A. S. Bogomyakov, K. Seppelt, J. Beckmann, "Diaryldichalcogenide Radical Cations" *Chemical Science* 6 (2015) 497.
44. A. M. F. Al-Aboudi, M. H. Abu Zarga, B. E. Abu-Irmaileh, F. F. Awwadia, M. A. Khanfar, " Three new seco-ursadiene triterpenoids from *Salvia syriaca*" *Natural Prod. Res.* 29 (2015) 102.
45. K. A. Abu-Safieh, M. A. Khanfar, M. I. El-Barghouthi, B. F. Ali, " Molecular Structure and Density Functional Theory Calculations of 3-(3-Nitrothien-2-yl)indole: Structural and Vibrational Analysis" *J. Chem. Crystallogr.* 44 (2014) 330.
46. M. Sunjuk, B. El-Eswed, J. N. Dawoud, A. Shtaiwi, M. A. Khanfar, M. El-khateeb, "Evidences for Chelating Complexes of Lithium With Phenylphosphinic and Phenylphosphonic Acids: a Spectroscopic and DFT Study" *Phosphorus, Sulfur Silicon Relat. Elem.* 189 (2014) 558.
47. R. Al-Qawasmeh, M. A. Khanfar, M. H. Semreen, R. Abu Odeh, T. H. Al-Tel, "Design and Synthesis of New Hybrid Triazine-Indole Derivatives as Potential Antimicrobial Agents against Hospital Resistant Strains" *Heterocycles* 87 (2013) 2385.
48. M. Molski, M. A. Khanfar, H. Shorafa, K. Seppelt, "Halogenated Benzene Cation Radicals" *Eur. J. Org. Chem.* (2013) 3131.
49. R. A. Al-Qawasmeh, M. A. Khanfar, M. H. Abu Zarga, M. A. Al Damen, "2-(4-Methylphenyl)-quinoline-4-carboxylic acid" *Acta Crystallographica, Section E* E68 (2012), o2892.
50. M. Molski, D. Mollenhauer, G. Sebastian, B. Paulus, M. A. Khanfar, H. Shorafa, S. H. Strauss, K. Seppelt, "Halogenated Benzene Cation Radicals" *Chem. Eur. J.* 18 (2012) 6644.
51. Mousa Al-Noaimi, Robert J. Crutchley, Murad Al Damen, Abdel Monem Rawashdeh, Monther A. Khanfar, Konrad Seppelt, "*Ruthenium(II) complexes with tetradentate pyridylthioazoimine [N,S,N,N] ligands: Synthesis, crystal structure and spectroscopy*" *Polyhedron* 30 (2011) 2075.
52. Monther A. Khanfar, Ismail Warad, M.A. AlDamen, "*Trans-dichloro-2,2-dimethylpropanediamine-bis (triphenylphosphine)ruthenium(II)*" *Acta Crystallographica, Section E* E66 (2010) m731
53. R. A. Al-Qawasmeh, J. A. Zahra, M. A. Khanfar, Y. M. Al-Hiari, M. M. El-Abadelah, W. Voelter: "*A convenient synthesis of 1-alkyl-7-chloro-6-fluoro-3-nitro-4-quinolones*" *Letters in Organic Chemistry* 6 (2009) 511.
54. M. R. Al-Dweik, J. A. Zahra, M. A. Khanfar, M. M. El-Abadelah, K.-P. Zeller, W. Voelter: "*Heterocycles [h]-fused to 4-oxoquinoline-3-carboxylic acid. Part VII: synthesis of some 6-oxoimidazo[4,5-h]quinoline-7-carboxylic acids and esters*" *Monatsh. Chem.* , 140 (2009) 221.
55. K. A. Abu-Safieh, M. A. Khanfar, K. Eichele, B. F. Ali: "*4-(4-Chlorophenyl)-1-(2-hydroxy-2,2-*

- diphenylacetyl)thiosemicarbazide*" Acta Cryst. E64 (2008) 2305.
56. M. A. Khanfar, B. A. Abu Thaher, J. A. Zahra, R. A. Al-Qawasmeh, M. M. El-Abadelah, W. Voelter: "Metal-Assisted Oxidative Cyclization of Arylamidrazones II. Novel Synthesis of 1,4-Diaryl[1,2,4]triazino[6,5-h]quinolines" Z. Naturforsch. 63b (2008) 1107.
  57. M. A. Khanfar, K. A. Abu-Safieh, R. Al-Far, B. F. Ali, C. M.-Moessmer: "(E)-N-[(furan-2-yl)methylene]-2-hydroxy-2,2-diphenylacetohydrazide monohydrate: crystal structure and supramolecularity" Acta Cryst. E63 (2007) 4078.
  58. R. R. Dykeman, K. L. Luska, M. E. Thibault, M. D. Jones, M. Schlaf, M. Khanfar, N. J. Taylor, J. F. Britten, L. Harrington: "Catalytic deoxygenation of terminal-diols under acidic aqueous conditions by the ruthenium complexes  $[(\eta^6\text{-arene})\text{Ru}(\text{X})(\text{N}\text{N}\text{N})](\text{OTf})_n$ ,  $\text{X}=\text{H}_2\text{O}$ ,  $\text{H}$ ,  $\eta^6\text{-arene} = p\text{-Me-iPr-C}_6\text{H}_4$ ,  $\text{C}_6\text{Me}_6$ ,  $\text{N}\text{N}\text{N} = \text{bipy, phen}$ , 6,6'-diamino-bipy, 2,9-diamino-phen,  $n = 1, 2$ ) Influence of the ortho-amine substituents on catalytic activity" Journal of Molecular Catalysis A, 277 (2007) 233.
  59. K. A. Abu-Safieh, M. Khanfar, R. Al-Far, B. F. Ali, C. M.-Moessmer, A. Abu-Rayyan: "5-Hydrazino-1,3-dimethyl-4-nitro-1H-pyrazole: crystal structure and supramolecularity" Acta Cryst. E63 (2007) 3814.
  60. J. A. Zahra, M. A. Khanfar, M. El-Abadelah, B. A. Abu Thaher, N. S. El-Abadla, W. Voelter: "Synthesis of Some Ethyl 3-(Aryldiazenyl)-7-oxo-dihydropyrido[2,3-f]quinoxaline-8-carboxylates" Z. Naturforsch. 62b (2007) 1045.
  61. Y. M. Al-Hiari, M. A. Khanfar, A. M. Qaisi, M. Y. Abu Shuheil, M. M. El-Abadelah, R. Boese: "Heterocycles [h]Fused Onto 4-Oxoquinolines. Part I. Synthesis of 6-Oxo-6,9-dihydro[1,2,5]oxadiazolo[3,4-h]-quinoline-7-carboxylic acid N-oxide" Heterocycles 68 (2006) 1163.
  62. E. Qnais, F. Abdulla, Y. Abu Ghalyun, M. Khanfar, M. Abu-Zarga: "Effects of Kreysigine, an alkaloid Isolated from Colchicum decaisnea on ileum smooth muscle and intestinal motility of rats" International Journal of Pharmacology 2 (2006) 451.
  63. R. Abdel-Jalil, M. Khanfar, S. Al-Gharabli, M. El-Abadelah, K. Eickele, M. U. Anwar, W. Voelter: "Metal-Assisted Oxidative Cyclization of Arylamidrazones II [1]. Novel Synthesis of 1,4-Diaryl[1,2,4]triazino[6,5-h]quinolines" Heterocycles 65 (2005) 1821.
  64. R. Abdel-Jalil, M. Khanfar, K. Abu Safieh, S. Al-Gharabli, M. El-Abadelah, W. Voelter: "An Efficient One-Pot Synthesis of Pyrazolopyrimidines, Intermediates for Potential Phosphodiesterase Inhibitors" Monatsh. Chem. 136 (2005) 619.
  65. S. I. Al-Gharabli, M. Khanfar, J. Rademann: "Microwave-assisted catch and release syntheses of peptide isostere via amino acyl ketenes" Peptides, (2004) 184.
  66. M. Abu-Zarga, S. S. Sabri, E. Hamed, M. A. Khanfar, K. -P. Zeller, Atta-ur-Rahman: "A new Eudesmane type sesquiterpene from Inula Viscosa" Nat. Prod. Res., 17 (2003) 99.
  67. M. A. Khanfar, S. S. Sabri, M. Abu-Zarga, K. -P. Zeller: "The Chemical Constituents of Capparis spinosa of Jordanian Origin" Nat. Prod. Res., 17 (2003) 9.
  68. M. M. El-Abadelah, S. S. Sabri, M. A. Khanfar, H. Yasin, W. Voelter: "Synthesis and Properties of isoViagra. A 2-Methyl-2H-pyrazolo[4,3-d]pyrimidin-7-one Isomer of Viagra<sup>®</sup>" J. Heterocyclic Chem. 39 (2002), 1055.
  69. A. Held, L. Kolb, M. A. Zuideveld, R. Thomann, S. Mecking, M. Schmid, R. Pietruschka, E. Lindner, M. Khanfar, M. Sunjuk: "Aqueous Polyketone Latexes Prepared with Water-Insoluble Palladium(II) Catalysts" Macromolecules 35 (2002) 3342.
  70. E. Lindner, M. Khanfar: "Preparation, properties, and reactions of metal-containing heterocycles. Part CVI. Three-dimensional water-soluble platinacyclophanes" J. Organomet. Chem. 630 (2001) 244.
  71. E. Lindner, M. Khanfar, M. Steimann: "Trifunctional Phosphine Ligands and Their Application in the Synthesis of Novel Cage-Structured Platinacyclophanes and Trinuclear Chain-Like Platinacycles by Self-Assembly" Eur. J. Inorg. Chem. (2001) 2411.
  72. E. Lindner, M. Khanfar: "Preparation, Properties, and Reactions of Metal-Containing Heterocycles; 102. A Three-Dimensional Triplatinacyclophane with an Eleven-Membered Bridge" Phosphorus, Sulfur Silicon Relat. Elem. 168 (2001) 359.
  73. M. M. El-Abadelah, S. S. Sabri, M. A. Khanfar, W. Voelter, R. Abdel-Jalil, C. M. -Mössmer, Y. El-Abed: "Synthesis and Properties of  $\alpha$ -Thiagra. A substituted 5-(2-Thienyl)pyrazolo[4,3-d]pyrimidin-7-one Bioisostere of Viagra" Heterocycles 53 (2000) 2643.
  74. W. Voelter, M. A. Khanfar, M. M. El-Abadelah, S. S. Sabri: "X-ray Crystal Structure Analysis of Substituted 5-(2,3-Dihydro-7-benzofuryl)-2-methylpyrazolo[4,3-d]pyrimidin-7-one (iso-Biagra)" Z. Naturforsch. 55b (2000) 1079.
  75. W. Voelter, C. M. -Mössmer, M. A. Khanfar, M. M. El-Abadelah, S. S. Sabri: "X-ray Crystal Structure Analysis of Substituted 5-(2,3-Dihydro-7-benzofuryl)-1-methyl-pyrazolo[4,3-d]pyrimidin-7-one (Biagra)" Z. Naturforsch. 54b (1999) 1602.



76. W. Voelter, M. M. El-Abadelah, S. S. Sabri, M. A. Khanfar: "Synthesis and Properties of Biagra A 5-(2,3-Dihydro-7-benzofuryl) Analog of Viagra" Z. Naturforsch. 54b (1999) 1469.
77. M. M. El-Abadelah, S. S. Sabri, M. A. Khanfar, W. Voelter, C. M. Mössmer: "X-Ray Structure Analysis of iso-Sildenafil (iso-Viagra)" Z. Naturforsch. 54b (1999) 1323.

- Patent**
- A Priority Patent Application-United States Provisional Patent Application-United States Provisional Patent Application 60/143,009 (field 09 July 1999). "Pyrazolopyrimidinones Derivatized by Multiply-Substituted Thiophene Moieties as Compounds for Erectile Dysfunction" M. M. El-Abadelah, S. S. Sabri, W. Voelter, M. A. Khanfar, R. J. Abdel-Jalil, Y. Al-Abed.

#### Abstracts of Papers

1. Konrad Seppelt, Moritz Malischewski, Monther Khanfar, "Oxidations of aromatic species, usually in HF" 255<sup>th</sup> ACS National Meeting & Exposition, New Orleans, LA, United States, March 18-22, 2018 (2018), FLUO-1.
2. Moritz Malischewski, Helmut Poleschner, Monther Khanfar, Konrad Seppelt, "Oxidation of fluorinated benzenes, dialkylchalcogenides, and perfluorophenyl-dichalcogenides" 251<sup>st</sup> ACS National Meeting & Exposition, San Diego, CA, United States, March 13-17, 2016 (2016), FLUO-4.
3. Moritz Malischewski, Matthias M. Molski, Monther A. Khanfar, Steven H. Strauss, Farhad Tamadon, Konrad Seppelt, "Oxidation reactions with strong and very strong fluorine containing oxidators" 248<sup>th</sup> ACS National Meeting & Exposition, San Francisco, CA, United States, August 10-14, 2014 (2014), FLUO-71.

#### Projects

- Developing new Fluorinated Platinum Phosphorus Complexes for the complexation of the Nobel gas, Xe. [DFG (Berlin-Germany)]
- Synthesis of novel derivatives of DO3A for the use in the MRI. [DAAD and DFG (Tuebingen-Germany)]
- Synthesis and characterization and catalytic activity of novel arene-bispyridyl-Ruthenium(II) deoxygenating catalysts. [University of Guelph (Guelph –Canada)]
- Development of some new isosters as anti-malarial drugs. [Institute of Molecular Pharmacology-FMP (Berlin-Germany)]
- Synthesis and catalytic activity of bis(triphenylphosphine)(diamine)ruthenium(II) catalysts for hydrogenation. [Deanship of research in the Hashemite University (Zarqa-Jordan)]
- Synthesis of new transition metal catalysis for water dispersion polymerization of butadiene. [BASF (Ludwigshafen-Germany)].
- X-ray crystal studies of some benzene derivatives cations. [DFG (Berlin-Germany)].
- Synthesis and Properties of New Trifunctional Chelating Agent based on 1,4,7,10-tetraazacyclododecane-1,4,7-triacetic acid. [Deanship of research in the University of Jordan (Amman-Jordan)].
- Coordination properties of new bispyridylquinoline ligands. [The University of Jordan (Amman-Jordan)].

#### Conferences

- TWAS-ARO 13<sup>th</sup> annual meeting, Alexandria, Egypt, 28–29.11.2017.
- World Science Forum, Dead Sea, Jordan, 7–11.11.2017.
- 1<sup>st</sup> International Conference of TWAS Young Scientist Network, Rio de Janeiro, Brazil, 22-24.08.2017.
- TWAS-ARO 12<sup>th</sup> annual meeting, Dead Sea, Jordan, 18–19.12.2016.
- The TWAS 27<sup>th</sup> General Meeting, Kigali/ Rwanda, 12– 17.11.2016.
- TWAS-ARO 11<sup>th</sup> annual meeting, Alexandria, Egypt, 16–17.12.2015.
- TWAS-ARO 10<sup>th</sup> annual meeting, Alexandria, Egypt, 29–30.12.2014.
- The TWAS 25<sup>th</sup> General Meeting, Muscat/ Oman, 26– 29.10.2014.
- TWAS-ARO 9<sup>th</sup> annual meeting, Alexandria, Egypt, 29–30.12.2013.
- The TWAS 24<sup>th</sup> General Meeting, Buenos Aires/ Argentina, 01– 04.10.2013.
- The 6<sup>th</sup> JNC Workshop, Amman/Jordan, 6.5.2010.
- Advances in Cancer Research: from the laboratory to the Clinic, An AACR international Conference, Dead Sea/ Jordan, 16 – 19.03.2008.
- Nanostructured Advanced Materials, Amman/Jordan, 10–11.11.2008.
- 6<sup>th</sup> SESAME Users' Meeting, Amman/Jordan, 17–19.11.2007.
- 3<sup>rd</sup> Workshop of Jordanian SESAME Users', Amman/Jordan, 25.04.2007.
- The 7<sup>th</sup> Jordanian Chemical Society Conference, Mafraq/Jordan, 01.03.2007.
- DAAD Alumni Conference, Amman/Jordan, 22-23.11.2006.

- The First Conference for JAQA, Amman/Jordan, 13-15.12.2005.
- The Second Conference on Scientific Research, Amman/Jordan, 12.11.2005.
- The Chemistry between the Academia and Industry, Amman/Jordan 01.10.2005.
- Third International and Twenty-Eighth European Peptide Symposium, Prague, Czech Republic, 05-10.09.2004
- The Sixth BASF Workshop on Catalytic Emulsion Polymerization, Tübingen/ Germany, 04.12.2002
- Symposium 30 Jahre Metallorganische Chemie an der Eberhard Karls Universität Tübingen, Tübingen/ Germany, 11 – 12.10.2002
- The Fifth BASF Workshop on Catalytic Emulsion Polymerization, Tübingen/ Germany, 28.08.2002
- The Third BASF Workshop on Catalytic Emulsion Polymerization, Ludwigshafen/ Germany, 04.02.2002
- The Second BASF Workshop on Catalytic Emulsion Polymerization, Tübingen/ Germany, 31.10.2001
- The First BASF Workshop on Catalytic Emulsion Polymerization, Friburg/ Germany, 26.07.2001
- The Seventh Ibn Sina International Conference on Pure and Applied Heterocyclic Chemistry, Alexandria/ Egypt, 22 – 28.03.2000
- The Ninth international Conference on Inorganic Ring Systems, Saarbrücken/ Germany, 23 – 28.07.2000.

#### Honours and awards

- TWAS-ARO young affiliate (2013-2017).
- Scholarship from DFG for 2<sup>nd</sup> semester visit to Berlin, Germany. (21.01.2012 – 20.04.2012)
- Scholarship from DAAD for summer-research visit to Berlin, Germany. (06.10 – 08.10)
- Scholarship from DFG for 1<sup>st</sup> semester visit to Berlin, Germany. (01.12.2009 – 28.02.2010)
- Scholarship from DFG for summer-research visit to Berlin, Germany. (06.09 – 09.09)
- Scholarship from DFG for summer-research visit to Berlin, Germany. (06.08 – 09.08)
- Scholarship from DFG for short preparatory visit to Tuebingen, Germany. (02.08 – 02.08)
- Scholarship from DFG for summer-research visit to Tuebingen, Germany. (06.07 – 09.07).
- Grant from deanship of research in the University of Jordan. (2006-2009).
- Grant from University of Guelph, Guelph, Canada. (08.06 – 09.06).
- Scholarship from DAAD for summer-research visit to Tuebingen, Germany. (06.06 – 08.06).
- Grant from Institute of Molecular Pharmacology-FMP-Berlin, Germany. (07.04 – 09.04).
- Grant from deanship of research in the Hashemite University. (2003-2004).
- Grant from BASF (Ludwigshafen, Germany). (2001-2002).
- Scholarship from DFG (Deutsche Forschungsgemeinschaft) (German Scientific Society), during Ph.D. work. (2000-2001). Scholarship from Landesgraduiertenförderungsgesetz (Outstanding-Graduated Students Scholarship), (Baden-Württemberg/Germany), For my second year Ph.D. work.(1999).
- Grant from the Higher Council for Science and Technology, Jordan, for research work at the chemistry department, University of Jordan, Amman-Jordan. (1997-1998).
- Teaching-assistant Scholarship from the University of Jordan during studying for the M.Sc. (1995-1997).
- First of Class-Scholarship from Mu'tah University in Jordan during studying for the B.Sc. (1992-1995).

#### Memberships

- The World Academy of Science- Arab Regional Office (TWAS-ARO) young affiliate
- The World Academy of Science Young scientist Networking (TYAN).
- Jordanian Chemical Society (JCS), Amman, Jordan
- Jordan Society for Scientific Research (JSSR)