## Deeb Taher, Ph.D.

Department of Chemistry, School of Science

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#### **SUMMARY**

- Professor of Inorganic Chemistry, School of Science at *The* University of Jordan.
- Earned the Ph.D. degree in Chemistry from Chemnitz University of Technology, Germany, and M.Sc. and B.Sc. Degrees in Chemistry from Jordan University of Science and Technology.
- Taught several undergraduate and graduate Chemistry courses at *The* University of Jordan and Tafila Technical University over the past 16 years.
- Held several administrative positions at *The* University of Jordan.
- Research interests are in the fields of synthesis and characterization of organometallic compounds, and the application of inorganic complexes in catalysis, biological activity, Photoluminescence and molecular wires.
- Involved in several collaborative research projects with faculty members from *The* University of Jordan and outside *The* University of Jordan.
- Published a total of 57 peer-reviewed journal papers.
- Received several funded projects form the Deanship of Scientific Research at *The* University of Jordan, Fulbright, Deutsche Forschungsgemeinschaft (DFG), German Academic Exchange Service (DAAD), The Arab Fund for Economic and Social Development (Zamalat) and other agencies.
- Disseminated innovative research results in several prestigious national and international conferences.
- Advised 8 graduate students in their research projects.
- Supervised graduation projects for more than 20 undergraduate students since joining *The* University of Jordan.

#### **EDUCATION**

## Ph.D. Inorganic Chemistry

Chemnitz University of Technology, Germany, March 2005. *Dissertation*: "Rigid-Rod Structured Homobimetallic Complexes"

## M.Sc. Chemistry

Jordan University of Science and Technology, Jordan, March 2001 *Thesis*: "Synthesis and reaction of Silicon -Tethered oximes"

#### **B.S.** Chemistry

Jordan University of Science and Technology, Jordan, June. 1998. *First Student on the Faculty of Science*.

## PROFESSIONAL EXPERIENCE (Academia)

10/2020 - 10/2022	Vice Dean for Student Affairs, School of Science at <i>The</i> University of
	Jordan.
9/2019 - 09/2020	Department of Chemistry, University of Michigan, Ann Arbor, USA. Lab
	Prof. Nathaniel Szymczak. Funded by Zamalat.
09/2015 -9/2019	Dean Assistant for Student Affairs, School of Science at <i>The</i> University
	of Jordan.
	Professor of Inorganic Chemistry, School of Science at <i>The</i> University
11/2018	of Jordan.
	of Jordan.
11/2014 - 11/2018	Associate Professor of Chemistry at <i>The</i> University of Jordan.
	Visiting Dusfaces Department of Chamistry Tayon A and M Callege
01/2014 - 09/2014	Visiting Professor, Department of Chemistry, Texas A and M, College
	Station, Texas, USA. Lab Prof. John A. Gladysz. Funded by Fulbright.
06/2013 – 09/2013	Visiting Professor, Department of Chemistry, Chemnitz University of
	Technology, Germany. Lab Prof. Heinrich Lang. Funded by DFG.
06/2012 - 09/2012	Visiting Professor, Department of Chemistry, Chemnitz University of
	Technology, Germany. Lab Prof. Heinrich Lang. Funded by DAAD.
09/2011 - 01/2014	Assistant Profession of Chamistry at The University of Lordon
09/2011 - 01/2014	Assistant Professor of Chemistry at <i>The</i> University of Jordan.
09/2009 - 01/2011	Assistant Professor of Chemistry at Tafila Technical University.
09/2009 - 01/2011	Assistant Professor of Chemistry at Tarna Technical University.
06/2010 – 09/2010	Visiting Professor, Department of Chemistry, Chemnitz University of
	Technology, Germany. Lab Prof. Heinrich Lang. Funded by DFG.
	Visiting Scientist, Department of Chemistry, University of Guelph, Guelph,
07/2008 – 09/2009	Canada. Lab Prof. Marcel Schlaf. Funded by Natural Science and
	Engineering Research Council of Canada (NSERC).
09/2006 – 07/2008	Assistant Professor of Chemistry at Tafila Technical University.
04/2005 - 09/2009	Postdoctoral Fellow, Department of Chemistry, The University of Western
	Ontario, London, Ontario, Canada. Advisor; Prof. J. F. Corrigan

# **COURSES TAUGHT**

# **Undergraduate Level**

General Chemistry (I).

General Chemistry (II).

General Chemistry for Medical Students.

Inorganic Chemistry (I) Inorganic Chemistry (II).

Inorganic Chemistry (III)

Inorganic Lab.

Special Topics in Inorganic Chemistry.

Experimental General Chemistry.

Organometallics.

# **Graduate Level**

Organometallics

#### FORMER GRADUATE STUDENTS:

- 1) Lina Kamal Khader, M.Sc. Thesis Title "Synthesis of Some N, N'-Bis (4-nitrophenyl) Oxamide Metal Complexes, Spectral and Thermal Investigation of Their Structures, and Studies of Their Biological Activities" Department of Chemistry, The University of Jordan, Amman, Jordan, May, 2017. (Advisor)
- 2) Asma Ghazzy. Ph.D. Thesis Title "Heterocyclic-based Carbonolates: Synthesis, Solid-State Structure and Electrochemical Investigations" Department of Chemistry, The University of Jordan, Amman, Jordan, July, 2018. (Advisor)
- 3) Sumaia Aloran. M.Sc. Thesis Title "Synthesis of some nitro  $\beta$  diketiminato Palladium complexes, spectral and thermal investigation of their Structures, and studies of their biological activities" Department of Chemistry, The University of Jordan, Amman, Jordan, July, 2019. (**Advisor**)
- 4) Sara Ahmad, M.Sc. Proposal Title "Synthesis of some β- diketiminate Palladium Complexes, Spectral and Thermal Investigation of their Structures and Studies of their Biological Activities" Department of Chemistry, The University of Jordan, Amman, Jordan, July, 2023. (**Advisor**)
- 5) Belal Saleh, M.Sc. Proposal Title "Synthesis, Structural, Spectral, Biological and Thermal Studies on Homo *N*,*N*'-bisoxamide Palladium Complexes" Department of Chemistry, The University of Jordan, Amman, Jordan, July, 2023. (**Advisor**).

#### **CURRENT GRADUATE STUDENTS:**

- 1) Sundus Saleh, M.Sc. Proposal Title "Synthesis, spectral, structural characterization and biological activity of new Lanthanide (III) complexes containing chromen derived Schiff bases" Department of Chemistry, The University of Jordan, Amman, Jordan, 2022. (Advisor)
- 2) Qutaiba Aloran, M.Sc. Proposal Title "Synthesis of some *N,N*-(ethane-1,2-diyl)bisphenyloxalamide Complexes, Spectral and Thermal Investigation of their Structures and Studies of their Biological Activities" Department of Chemistry, Tafila Technical University, Tafila, Jordan, 2022. (**Co-advisor**)
- 3) Mohamad Albana, M.Sc. Proposal Title "Synthesis of Palladium (II) Complexes of pyrazol-iminophenol derivatives, Spectral and Thermal Investigation of their Structures and Studies of their Biological Activities" Department of Chemistry, Jordan University of Science and Technology, Irbid, Jordan, 2022. (Co-advisor)

## **GRADUATION PROJECTS ADVISEMENT:**

• Supervised the senior project of more than 20 undergraduate Chemistry senior students over the last 3 years.

## **RESEARCH INTERESTS**

- Synthesis and Characterization of Organic Compounds and organometallic Complexes suitable for:
- Catalysis
- Luminance
- Biological Activity

## **GRANTS**

- "Catalytic Upgrading of Renewable Alcohols" PI, The Arab Fund for Economic and Social Development (Zamalat), 2019, Awarded (60000 \$).
- "Synthesis of some nitro β- diketiminato Palladium complexes, spectral and thermal investigation of their Structures, and studies of their biological activities", PI, Deanship of Research at *The* University of Jordan, 2017, Awarded (1500 JD).
- "Heterocyclic-based Carbonolates: Synthesis, Solid-State Structure and Electrochemical Investigations", PI, Deanship of Research at *The* University of Jordan, 2016, Awarded (3000 JD).
- "Synthesis of Some N, N-Bis (4-nitrophenyl) Oxamide Metal Complexes, Spectral and Thermal Investigation of Their Structures, and Studies of Their Biological Activities", PI, Deanship of Research at *The* University of Jordan, October 2015, Awarded (1500 JD).
- "New Approaches to the Selective Oxidation of Methane" PI, Fulbright, 2014, Awarded (32000 \$)
- "Synthesis, Solid-State Structure, Supramolecular Structure and (Spectro)Electrochemistry of Ferrocenyl-Selenoester-Functionalized 5-Membered Heterocycles" PI, Deutsche Forschungsgemeinschaft (DFG) 2013, Awarded (7000 Euro).
- "A series of Se-ferrocenyl thiophene carboselenoates Synthesis, solid-state structure and electrochemistry" PI, German Academic Exchange Service (DAAD) 2012, Awarded (5520 Euro).
- "Synthesis and reactivity of cyclopentadienyl iron complexes containing ferrocenyl selenolates" PI, Deutsche Forschungsgemeinschaft (DFG) 2010, Awarded (7000 Euro).

#### REVIEWER for INTERNATIONAL JOURNALS

- Coordination Chemistry Reviews.
- Journal of Organometallic Chemistry.
- Inorganic Chemistry Communications.
- Indonesian Journal of Chemistry.
- Jordan Journal of Chemistry.

#### **SKILLS**

- Microsoft office packages: Microsoft Word, Excel, PowerPoint.
- ChemDraw Drawing.
- Operating scientific equipment, such as FT-IR, multinuclear NMR, cyclovoltammertry and UV-Vis.

## UNIVERSITY, FACULTY AND DEPARTMENT SERVICES

- Department representative at the faculty of science council board at *The* University of Jordan.
- Member of the university committee for faculty behavior and judgments
- Head of the Chemistry Department committee for syllabus developments.
- Member of Graduate Studies Committee of Chemistry Department at *The* University of Jordan.
- Head of the School of science committee for student behavior and judgments (2015-2019 and 2020-2022).
- Member of Scientific Research Committee of Chemistry Department at *The* University of Jordan.
- Member of Social Committee of Chemistry Department at *The* University of Jordan.
- Member of several faculty promotion committees.
- Member of several faculty committees.
- Coordinator for General Chemistry (I), General Chemistry (II), General Chemistry for Medical Students and Experimental General Chemistry courses.
- Member of several M.Sc. and Ph.D. students defense committees.
- Member of the organizing committee of the Eighth Jordanian International Conference of Chemistry.
- Member of the organizing committee of The Petra International Conference of Chemistry.

## **PUBLICATIONS**

- 1) Luminescent materials based on N-(3-nitrophenyl)-N'-(4-R-C<sub>6</sub>H<sub>4</sub>)oxamato zincate(II) complexes. Zakariyya Ishtaiwi, <u>Deeb Taher</u>, Marcus Korb, Wissam Helal, Hassan K Juwhari, Afnan Al-Hunaiti, Hazem Amarne, Khaleel Assaf, Lubna Alrawashdeh, Mohammad W Amer, Yaser A YouSef, Heinrich Lang. Journal of Molecular Structure 1288 (2023) 135747.
- 2) Synthesis, characterization, crystal structure and DFT calculations of dysprosiumIII (E)-ethyl-4-(2-hydroxybenzylidene amino)benzoate. Randa M Al-As' ad, Abdel-Aziz Abu-Yamin, Marcus Korb, Khaled Al Khalyfeh, Ismael A Elayan, Mansour H Almatarneh, Hassan K Juwhari, Hazem Amarne, *Deeb Taher*, Zakariyya Ishtaiwi, Heinrich Lang. Journal of Molecular Structure, 1280 (2023) 135061
- 3) Preparation, spectroscopic investigation, biological activity and magnetic properties of three inner transition metal complexes based on (2-((p-tolylimino)methyl)phenol) Schiff base. Muawia Alqasaimeh, Abdel-Aziz Abu-Yamin, Suzan Matar, Khaled Al Khalyfeh, Tobias Rüffer, Heinrich Lang, Ibrahim AM Saraerah, Mahmoud Salman, Pawel Figield Grzegorz Leniec, Hazem Amarne, *Deeb Taher*. Journal of Molecular Structure, 1274 (2023) 134458
- 4) Syntheses, Crystal Structures, DFT Calculation and Solid-State Spectroscopic Properties of New Zincate (II) Complexes with N-(4-Substituted Phenyl)-N'-(4-Nitrophenyl)-Oxamate. Zakariyya Ishtaiwi, *Deeb Taher*, Marcus Korb, Wissam Helal, Afnan Al-Hunaiti, Hassan K Juwhari, Hazem Amarne, Mohammad W Amer, Yaser A YouSef, Sami Klaib, Sultan T Abu-Orabi. Arabian Journal of Chemistry, (2022) 15, 104349.

- 5) Rearrangement of Diferrocenyl 3, 4-Thiophene Dicarboxylate. Asma Ghazzy, <u>Deeb Taher</u>, Marcus Korb, Khaled Al Khalyfeh, Wissam Helal, Hazem Amarne, Tobias Rüffer, Zakariyya Ishtaiwi, Heinrich Lang, Inorganics, 10 (2022) 96.
- 6) Synthesis, chemical and physical properties of Lanthanide(III) (Nd, Gd, Tb) complexes derived from (E)-ethyl 4-(2-hydroxybenzylideneamino)benzoate. Abdel-Aziz Abu-Yamin, <u>Deeb Taher</u>, Marcus Korb, Khaled Al Khalyfeh, Zakariyya Ishtaiwi, Hassan K. Juwhari, Hazem Amarne, Sami Mahmood, Reza Loloee, Yaser A. YouSef, Asma Ghazzy, Heinrich Lang. Polyhedron, (2022) 222, 115906.
  - 7) Triply Bridged Binuclear lanthanides- Zwitterion complexes: Synthesis and characterization of (Gd(III), Nd(III), Sm(III)) complexes. Abdel Aziz Abu-Yamin, <u>Deeb Taher</u>, Hassan K. Juwhari, Ibrahim Al-Saraerah, Muawia Alqasaimeh, Journal of Coordination Chemistry. 75 (2022) 781-795.
- 8) Crystal structure, Hirshfeld surface analysis and contact enrichment ratios of 5, 5-dimethyl-2-(2, 4, 6-tris (trifluoromethyl) phenyl)-1, 3, 2-dioxaborinane. Hazem Amarne, Wissam Helal, *Deeb Taher*, Markus Korb, Afnan Al-Hunaiti. Molecular Crystals and Liquid Crystals. (2022), 1–12.
- 9) Crystal Structure and Hirshfeld Surface Analysis of Bis(3-thienoyl) Disulfide. Khaled Al Khalyfeh, <u>Deeb Taher</u>, Wissam Helal, Marcus Korb, Hazem Amarne, Heinrich Lang. Journal of Chemical Crystallography. 52 (2022) 113–121.
- **10**) Novel Palladium(ii) Complexes of Pyrazole-Containing Schiff base Ligands. A. S. Abushamleh, K. A. Abu-Safieh, M. A. Khanfar, D. Taher, L. Tahtamouni & N. J. Alwahsh. Journal of Structural Chemistry. 62 (2021) 1112–1122.
- 11) Sulfamic acid catalyzed oxonium-ene reactions under ball milling conditions: Straightforward access to highly functionalized Oxabicyclo [3.2. 1] octenes. Trimurti L Lambat, Sami H Mahmood, *Deeb Taher*, Subhash Banerjee. Current Research in Green and Sustainable Chemistry. 4 (2021) 100118.
- **12**) Late-stage ligand functionalization via the Staudinger reaction using phosphine-appended 2, 2'-bipyridine. <u>Deeb Taher</u>, Jessica R Wilson, Grayson Ritch, Matthias Zeller, Nathaniel K Szymczak. Chemical Communications. (2021) 57 (46), 5718-5721
- 13) Synthesis and characterization of 1,4-chalcogenesters bearing 3 5-membered heterocycles. Khaled Al Khalyfeh, <u>Deeb Taher</u>, 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. (2020) 131, 1-16.
- **14)** Synthesis and Characterization of Novel Phyto-Mediated Catalyst, and Its Application for a Selective Oxidation of (VAL) into Vanillin under Visible Light. Afnan Al-Hunaiti, Qassem Mohaidat, Ibrahim Bsoul, Sami Mahmood, *Deeb Taher*, Tareq Hussein. Catalysts (2020) 10, 839-854
- 15) Synthesis of magnetic CuFe<sub>2</sub>O<sub>4</sub> nanoparticles as green catalyst for toluene oxidation under solvent-free conditions. Afnan Al-Hunaiti, Naim Al-Said, Lina Halawani, Mohammad Abu Haija, Rula Baqaien, *Deeb Taher*. Arabian Journal of Chemistry. (2020) 13, 4945-4953.
- **16) Halogen Bonding Interactions in Halopyridine-Iodinemonochloride Complexes.** Firas F Awwadi, <u>Deeb Taher</u>, Mohammed H Kailani, Manal I Alwahsh, Fadwa Odeh, Tobias Rüffer, Dieter Schaarschmidt, Heinrich Lang. Crystal Growth & Design (2020) 20, 543–551.
- 17) Aryl Ferrocenylmethylesters: Synthesis, Solid-State Structure and Electrochemical Investigations. Asma Ghazzy, <u>Deeb Taher</u>, 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.
- 18) Bis(N,N'-substituted oxamate) Zincate(II) complexes: Synthesis, Spectroscopy, Solid State Structure and DFT Calculations. <u>Deeb Taher</u>, Firas F. Awwadi, Mousa Al-Noaimi, Lina K. Khader, Hassan K. Juwhari, Hazem Amarne, Mohammed H. Kailani, Abdellatif Ibdah. Inorganica Chimica Acta. (2019) 487, 409–418.
- **19)** Ferrocenylmethyl-Functionalized 5-Membered Heterocycles: Synthesis, Solid-State Structure and Electrochemical Investigations. <u>Deeb Taher</u>, Asma Ghazzy, Firas F Awwadi, Wissam Helal, Khaled Al Khalyfeh, Marcus Korb, Alexander Hildebrandt, Eduard Kovalski, Heinrich Lang. *Polyhedron.* (2018) 152, 188–194.

- 20) Titanocene Thiolates [Ti]Cl(SCHR-2-°C<sub>4</sub>H<sub>3</sub>S) and [Ti](SCHR-2-°C<sub>4</sub>H<sub>3</sub>S)<sub>2</sub> (R = H, Me): Synthesis, Properties and Reaction Chemistry. <u>Deeb Taher</u>, Sami Klaib, Thomas Stein, Marcus Korb, Gerd Rheinwald, Asma Ghazzy, Heinrich Lang. *Polyhedron*. (2018) 147, 70–75.
- 21) Ti(η<sup>5</sup>-1-SiMe<sub>3</sub>-C<sub>9</sub>H<sub>6</sub>)(Cl)<sub>2</sub>(OR): Structure and Bonding. <u>Deeb Taher</u>, Sami Klaib, Firas F. Awwadi, Wissam Helal, Mohammed Gharaibeh, Gerd Rheinwald, Tobias Rüffer, Heinrich Lang. *Inorganica Chimica Acta* (2018) 477, 270–276.
- **22) From Ferrocenyl Selenoesters to Diferrocenyl Methanols.** <u>Deeb Taher</u>, Firas F. Awwadi, J. Matthäus Speck, Marcus Korb, Dieter Schaarschmidt, Christoph Wagner, Hazem Amarne, Kurt Merzweiler, Gerard van Koten, Heinrich Lang. *Journal of Organometallic Chemistry.* (2018) 863, 1–9.
- 23) Ferrocenyl Thiocarboxylates: Synthesis, Solid-State Structure and Electrochemical Investigations. <u>Deeb Taher</u>, Firas F. Awwadi, J. Matthäus Speck, Marcus Korb, Christoph Wagner, Emad M. Hamed, Mousa Al-Noaimi, Almeqdad Y. Habashneh, Mohammad El-khateeb, Sultan T. Abu-Orabi, Kurt Merzweiler, Heinrich Lang. *Journal of Organometallic Chemistry*. (2017) 847, 59-67.
- 24) Homeomorphic Isomerization as a Design Element in Container Molecules; Binding, Displacement, and Selective Transport of MCl<sub>2</sub> Species (M = Pt, Pd, Ni). Sugam Kharel, Hemant Joshi, Stephen Bierschenk, Michael Stollenz, <u>Deeb Taher</u>, Nattamai Bhuvanesh, John A Gladysz. Journal of the American Chemical Society (2017) 139 (6), 2172–2175.
- 25) Heterocyclic-based Ferrocenyl Carboselenolates: Synthesis, Solid-State Structure and Electrochemical Investigations. <u>Deeb Taher</u>, Firas F. Awwadi, J. Matthäus Speck, Marcus Korb, Dieter Schaarschmidt, Saddam Weheabby, Almeqdad Habashneh, Mousa Al-Noaimi, Mohammad Elkhateeb, Sultan T. Abu-Orabi, Heinrich Lang. *Journal of Organometallic Chemistry*. (2017) 845, 55–62.
- **26)** Ruthenium(II) bipyridine complexes incorporating (NN'S) azoimine ancillary ligands. Synthesis, spectroscopy, solid state structure and DFT calculations. Mousa Al-Noaimi, Firas F. Awwadi, Bara Atallah, *Deeb Taher*, Ayman Hammoudeh, Heinrich Lang, Tobias Rüffer. *Polyhedron*, (2017) 123, 47-55.
- 27) Keto–enol tautomers of mixed-ligand ruthenium(II) complexes containing α-diamine and azoimine bearing alkyne group ligands. Mousa Al-Noaimi, Ayman Hammoudeh, Mohammad El-khateeb, Firas F. Awwadi, *Deeb Taher*, Ahmad Mansi, Obadah S. Abdel-Rahman. *Inorganica Chimica Acta* (2017) 454, 222-228.
- 28) Ruthenium(II) complexes of azoimine and α-diimine ligands: synthesis, spectroscopic and electrochemical properties, crystal structures and DFT calculations. Mousa Al-Noaimi, Ismail I. Fasfous, Firas F. Awwadi, <u>Deeb Taher</u>, Abdallah Alfayyoumi, Obadah S. Abdel-Rahman. Transition Metal Chemistry. (2016) 41(7), 795-805.
- 29) Mono- and disubstitution reactions of gyroscope like complexes derived from Cl\_Pt\_Cl rotators within cage like dibridgehead diphosphine ligands. <u>Deeb Taher</u>, Agnieszka J. Nawara-Hultzschb, Nattamai Bhuvanesh, Frank Hampel, John A. Gladysz. *Journal of Organometallic Chemistry*. (2016) 821, 136-141.
- 30) Steric Control of the in/out Sense of Bridgehead Substituents in Macrobicyclic Compounds: Isolation of New "Crossed Chain" Variants of in/out Isomers. Michael Stollenz, <u>Deeb Taher</u>, Nattamai Bhuvanesh, Joseph H. Reibenspies, Zuzana Baranová, John A. Gladysz. <u>Chemical Communication</u>. (2015) 51 (89), 16053-16056
- 31) Thio- and Selenosulfonato Complexes of Iron Bearing Aromatic and Heterocyclic Groups. Mohammad El-khateeb, Khalil J. Asali, Mousa Al-Noaimi, Enas Al-Rabaee, Firas F. Awwadi, <u>Deeb Taher</u>, Marcus Korb, Heinrich Lang. *Inorganica Chimica Acta* (2014), 421, 553-558.
- **32)** The Competition between Hydrogen and Halogen Bonding Interactions: Theoretical and Crystallographic Studies. Firas Awwadi, <u>Deeb Taher</u>, Salim Haddad, Mark Turnbull. *Crystal Growth & Design*. (2014), 14, 1961-1971.
- **33) 1. 4-(4-Nitrobenzyl)pyridine**. <u>Deeb Taher</u>, Firas F. Awwadi, Mohammed H. Kailani, Acta *Crystallographica, Section E: Structure Reports Online* (2013), 69(7), o1164.
- **34)** A series of Se-ferrocenyl thiophene carboselenoates Synthesis, solid-state structure and electrochemistry. <u>Deeb Taher</u>, Firas F. Awwadi, Ulrike Pfaff, J. Matthaus Speck, Tobias Ruffer, Heinrich Lang. *Journal of Organometallic Chemistry* (2013), 736, 9-18.

- 35) Allyl-End-Grafted Carbosilane Dendrimers Based on 1,4-Phenylene Units: Synthesis, Reactivity, Structure, and Bonding Motifs. Zakariyya Ishtaiwi, Tobias Rueffer, Alexander Hildebrandt, Firas F. Awwadi, Harald Hahn, Akerke Abylaikhan, <u>Deeb Taher</u>, Uwe Siegert, Bernhard Walfort, Heinrich Lang, European Journal of Inorganic Chemistry (2013), 13, 2368-2381.
- 36) The Role of Fe-X...X-Fe Contacts in the Crystal Structures of [(2-Iodopyridinium)<sub>2</sub>FeX<sub>4</sub>]X (X =Cl, Br). Firas Awwadi, <u>Deeb Taher</u>, Tobias Rüffer, Heinrich Lang. Structural Chemistry. (2013), 24(2), 401-408.
- 37) Synthesis and reactivity of cyclopentadienyl iron complexes containing ferrocenyl selenolates. <u>Deeb Taher</u>, Firas Awwadi, Mohammad El-khateeb, Heinrich Lang. *Transition Metal Chemistry*. (2012) 37, 601-604
- **38)** Aryl(trimethylsilyl)selenides as Reagents for the Synthesis of Mono and Di-Selenoesters. <u>Deeb Taher</u>, John F. Corrigan. *Organometallics* (2011) 30, 5943–5952
- **39)** Synthesis of cyclopentadienyl ruthenium complexes containing 5-membered N-heterocyclic thiolates. <u>Deeb Taher</u>, Mousa Al-Noaimi, Sahar Mohammad, John F. Corrigan, Daniel G. MacDonald, Mohammad El-khateeb. *Inorganica Chimica Acta* (2010) 36, 4134–4139.
- **40)** Acid-, Water- and High-Temperature-Stable Ruthenium Complexes for the Total Catalytic Deoxygenation of Glycerol to Propane. <u>Deeb Taher</u>, Michelle E. Thibault, Domenico Di Mondo, Michael Jennings, Marcel Schlaf. *Chemistry A European Journal*. (2009) 15, 10132 10143.
- 41) Synthesis and reactivity of cyclopentadienyl ruthenium complexes containing ferrocenylselenolates. *Deeb Taher*. Transition Metal Chemistry. (2009) 34, 641–645
- **42)** Group 8 Metal Complexes as Homogeneous Ionic Hydrogenation and Hydrogenolysis Catalysts for the Deoxygenation of Biomass to Petrochemicals. Marcel Schlaf, Michelle E. Thibault, Domenico DiMondo, *Deeb Taher*, Elham Karimi, Devipriya Ashok. *International Journal of Chemical Reactor Engineering*. (2009) 7, Article A34.
- **43**) Phenylene-1,4- and biphenylene-4,4'-diselenolate bridged complexes of gold(I). <u>Deeb Taher</u>, Nicholas J. Taylor, John F. Corrigan. *Canadian Journal of Chemistry* (2009) 1, 380-385.
- **44)** Linear Homobimetallic Palladium Complexes with End-Capped SC(O)Me Units. Heinrich Lang, Katrin Döring, <u>Deeb Taher</u>, Uwe Siegert, Bernhard Walfort, Tobias Rüffer, Rudolf Holze. *Journal of Organometallic Chemistry*. (2009), 694, (1), 27-35.
- **45**) Efficient Protocol to Quinazolino[3,2-d][1,4]benzodiazepine-6,9-dione via Staudinger-aza-Wittig Cyclization: Application to Synthesis of Asperlicin D. <u>Deeb Taher</u>, Zakariyya Ishtaiwi, Naim Al-Said. *Arkivoc*. (2008) 16, 154-164.
- 46) Linear homobimetallic 4-thioacetyl-substituted NCN pincer palladium(II) and platinum(II) complexes with N-bidentate connecting units (NCN = [C<sub>6</sub>H<sub>2</sub>(CH<sub>2</sub>NMe<sub>2</sub>)2-2,6-R-4]-). Katrin Doering, <u>Deeb Taher</u>, Bernhard Walfort, Martin Lutz, Anthony L.Spek, Gerard P. M. van Klink,; Gerard van Koten, Heinrich Lang, *Inorganica Chimica Acta*. (2008) 361(9-10), 2731-2739.
- **47**) Half-sandwich ruthenium complexes of pentafluorobenzenethiolato ligands. Khaled Shawakfeh, Mohammad El-Khateeb, <u>Deeb Taher</u>; Helmar Goerls, Wolfgang Weigand. *Transition Metal Chemistry*. (2008) 33(3), 387-391.
- **48)** Thiol end-capped titanium-copper complexes: Synthesis, solid state structure and electrochemical behavior. Heinrich Lang, Katrin Roessler, <u>Deeb Taher</u>, Rudolf Holze, Bernhard Walfort. *Inorganica Chimica Acta*. (2008) 361(6), 1659-1667.
- 49) X-ray Structure of 2,6-Biphenyl-1,4-Diselenafulvene and its Reaction with Fe<sub>2</sub>(CO)<sub>9</sub>. <u>Deeb Taher</u>, Sami Klaib, Mohammad El-khateeb, Tobias Rüffer, Heinrich Lang. *Jordan Journal of Chemistry*. (2007) 2(3), 247-253.
- 50) Alk-2-ynyl trimethylsilyl chalcogenoethers by nucleophilic substitution of propargyl bromides. <u>Deeb Taher</u>, Andrew I.Wallbank, Elizabeth A.Turner, Heather L.Cuthbert, John F.Corrigan. *European Journal of Inorganic Chemistry*. (2006) 22, 4616-4620.
- 51) Porphyrin-based octanuclear  $Ti_4M_4$  (M = Cu, Ag) transition metal complexes. Mohammad Al-Anber, *DeebTaher*, Heinrich Lang. Jordan Journal of Chemistry. (2006) 1(1), 55-59.
- **52) Thiol end-capped one-dimensional platinum and palladium complexes.** <u>Deeb Taher</u>, Bernhard Walfort, Gerard van Koten, Heinrich Lang. *Inorganic Chemistry Communications*. (2006) 9(9), 955-958.
- **53**) **Linear homobimetallic palladium complexes.** Heinrich Lang, <u>Deeb Taher</u>, Bernhard Walfort, Hans Pritzkow. *Journal of Organometallic Chemistry*. (2006) 691(18), 3834-3845.

- **54) Rigid-rod structured palladium complexes.** <u>Deeb Taher</u>, Bernhard Walfort, Heinrich Lang. *Inorganica Chimica Acta*. (2006) 359(6), 1899-1906.
- 55) Synthesis and reaction chemistry of [(μ -SeR)(μ -σ,π -CCPh)]Fe<sub>2</sub>(CO)<sub>6</sub>. <u>DeebTaher</u>, Hans Pritzkow, Bernhard Walfort, Heinrich Lang. *Journal of Organometallic Chemistry*. (2006) 691(4), 793-798.
- **56)** A new approach to novel homobimetallic palladium complexes. <u>Deeb Taher</u>, Bernhard Walfort, Heinrich Lang. *Inorganic Chemistry Communications*. (2004), 7(9), 1006-1009.
- 57) Synthesis and characterization of  $(\mu \sigma, \pi C \equiv CPh)(\mu RSe)Fe_2(CO)_6$ . <u>Deeb Taher</u>, Heinrich Lang, *Abhath Al-Yarmouk, Basic Sciences and Engineering*. (2003) 12(2B), 563-567.

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#### References

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