**Curriculum Vitae**

**Tareq Z. A. Irshaidat**

**Personal**

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| ***Place of Birth*** | Jordan |  |
| ***Date of Birth*** | May 26 1974 |
| ***Marital Status*** | Married; two kids. |
| ***Nationality*** | Jordanian |
| ***Work Address*** | Department of Chemistry, College of Science, Al-Hussein Bin Talal University, Ma′an, Jordan. Phone: +962-3-2179000, E-mail: tirshaidat@yahoo.com |  |
| ***Academic Rank (date)*** | Professor (Jan-2018) |  |
| ***Permanent Address*** | Al-Huson, Irbid, Jordan. Cell Phone:+962-799514989 E-mail: tirshaidat@yahoo.com |  |

**Academic Qualifications \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

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| 2004 - 2007 | **Ph.D.,**  Chemistry, New Mexico State University, Las Cruces, USA |
| 1995 - 1998 | **M.Sc.,**  Chemistry, Yarmouk University, Irbid, Jordan |
| 1991 - 1995 | **B.Sc.,**  Applied Chemistry, Jordan University of Science and Technology, Irbid, Jordan |

**Specialty \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

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| ***General Specialization:***  | Chemistry |
| ***Specialization :***  | Organic Chemistry |

**Career History \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

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| 2018-present | **Professor,** Department of Chemistry**,** College of Sciences**,** Al-Hussein Bin Talal University, Ma'an, Jordan. |
| 2012-2017 | **Associate Professor,** Department of Chemistry**,** College of Sciences**,** Al-Hussein Bin Talal University, Ma'an, Jordan. |
| 2007-2011 | **Assistant Professor,** Department of Chemistry**,** College of Sciences**,** Al-Hussein Bin Talal University, Ma'an, Jordan. |
| 2004-2007 | Graduate teaching and research assistant, department of chemistry and biochemistry, New Mexico State University, Las Cruces, USA |
| 1999-2003 | Teaching assistant, department of chemistry, Yarmouk University, Irbid, Jordan |
| 1995-1998 | Graduate teaching assistant, department of chemistry, Yarmouk University, Irbid, Jordan |

**Administrative Experience \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

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| N. A. |

**HONORS, SCHOLARSHIPS, AWARDS AND GRANTS\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

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| 2011 | German Research Foundation (DFG) award (Germany). |
| 2008 | Grant 2008-78, Al-Hussein Bin Talal University, Ma'an, Jordan. |
| 1995 | Honors Distinction:Undergraduate students honor list, Jordan University of Science and Technology, Irbid, Jordan  |

**Professional memberships and Services \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

* The chemical society of Jordan

**Research Interest \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

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| * Computational organic chemistry.
* Organic chemistry and related fields.
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**Publications \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

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| ***Peer-reviewed journal articles*** |
| 36. Zaineh Faisal Rasheed Alazawa, **Deena M. S. Barrouq\***, Tareq Irshaidat, Noor Ehsan Sulieman Ayassrah. A cross-sectional study for assessment of menopausal symptoms and coping strategies among Jordanian women of 40-60 years age group, *International Journal of Reproduction Contraception Obstetrics and Gynecology*, 2024; 13(1):6-13.(DOI: [10.18203/2320-1770.ijrcog20234071](http://dx.doi.org/10.18203/2320-1770.ijrcog20234071))35. Shaikha Abdulla, **Deena M. S. Barrouq\***, Tareq Irshaidat. An Up-to-date Systematic Review on Real-world Evidence for the Management of Asymptomatic Hyperuricemia, *The Journal of Medical Research*, 2023; 9(4):96-103.(DOI: [10.31254/jmr.2023.9407](http://dx.doi.org/10.31254/jmr.2023.9407))34. **Deena M. S. Barrouq\***, Zaineh Faisal Rasheed Alazawa, Tareq Irshaidat. Awareness of Polycystic Ovarian Syndrome among Jordanian Females, *Open Access Indonesian Journal of Medical Reviews*, 2023; 3(3): 429-436.(DOI: 10.37275/oaijmr.v3i3.315)33. Deena M. S. Barrouq, **Tareq Irshaidat**\*. Escalating BMI Associated with the Complex Pharmacology of Propranolol: a Case Report. *Journal of Advances in Medical and Pharmaceutical Sciences*, 2020; 22(8):19-24.(DOI: <http://dx.doi.org/10.9734/JAMPS/2020/v22i830187>)32. Deena M. S. Barrouq, **Tareq Irshaidat**\*. Novel Fenofibrate Adverse Effect in Resistant Hypertension: a Case Report. *Biomedical Research and Therapy*, 2020;7(10):4052-4055.(DOI: <http://dx.doi.org/10.15419/bmrat.v7i10.64>)31. Deena M. S. Barrouq, **Tareq Irshaidat**\*. Novel Association between Gemfibrozil and Dyslipidemia: a Case Report, *Asian Journal of Medicine and Health*, 2020;18(10):38-43.(DOI: <http://dx.doi.org/10.9734/AJMAH/2020/v18i1030250>)30. Deena M. S. Barrouq, **Tareq Irshaidat**\*. Meal Plan Prescription, Biochemical Parameters, and Practicality in Poorly Controlled Type-II Diabetes Mellitus Patients, *International Journal of Advances in Medicine*, 2020;7(9):1331-1339.(DOI: <http://dx.doi.org/10.18203/2349-3933.ijam20203595>)29. Deena M. S. Barrouq, **Tareq Irshaidat**\*. Tachycardia, Diabetes, and Illness Psychology Interplay at the Edge: a Case Report. *International Journal of Medical and Biomedical Studies*, 2020;4(8):70-72. (DOI: <https://doi.org/10.32553/ijmbs.v4i8.1345>)28. **Tareq Irshaidat**. Unique and Novel Hydrogen Bonding at the Frontiers: 2-Dimethylaminobenzoic Acid and MFn Interaction as Model, *Oriental Journal of Chemistry*, 2017, 33 (5), pp. 2237-2248. (DOI: <http://dx.doi.org/10.13005/ojc/330511>)“*The first article in the literature* characterizes the strongest neutral (N…H-O) H-bond that may exist in nature”.27. **Tareq Irshaidat**. Toward Exploring Novel Organic Materials: MP4-DFT Properties of 4-Amino-3-Iminoindene, *Molecules*, 2017, 22, pp. 720-730. (DOI: <https://doi.org/10.3390/molecules22050720>)“Presents the most efficient (cost vs. accuracy) MP4-based protocol in the literature for the estimation of the proton transfer energy barrier and explores novel C3N2-based molecular system candidates for molecular logic, switching, and electronic applications”.26. Fatima Esmadi\*, Kamis Abbas, **Tareq Irshaidat**, Ayman S. Dawha, Maher Al-Duleimy, Latifa Ismail, Mohammad Esmadi, Synthesis and Characterization of Some Unsymmetrical Schiff Bases and their Copper(II) and Nickel(II) Complexes, *Jordan Journal of Chemistry*, 2015, Vol. 10 No.1, pp. 69-85. (DOI: <https://doi.org/10.12816/0025760>)25. **Tareq Irshaidat**, QCISD(T) Insight on the Electronic Structure of C3N2 Conjugated Skeletons, *Chemistry Letters*, 2015, Vol. 44, pp.589–591. (DOI: <https://doi.org/10.1246/cl.141150>)“Presents the most efficient (cost vs. accuracy) QCISD(T)-based protocol for the estimation of the proton transfer energy barrier and the first characterization of the C3N2 unit as a core segment for molecular switching applications”.24. **Tareq Irshaidat**, Modulating the Electronic Structure of Amino Acids: Interaction of Model Lewis Acids with Anthranilic Acid, *Quimica Nova*, 2014, Vol. 37, 1446-1452. (DOI: <https://doi.org/10.5935/0100-4042.20140246>)“*The first article in the literature* characterizes the electronic structure of beta-amino acid in the Zwitterion form”23. **Tareq Irshaidat**, Aromaticity versus Soft-Soft Interaction: a DFT Study on Consequences of the O-H/Au Substitution in N-Methyl Salicylaldimine, *International Journal of Chemical Modeling*, 2014, Vol. 7, pp. 53-63.“*The first article in the literature* explores the interplay between aromaticity and soft-soft interaction”.22. **Tareq Irshaidat**, Molecular Properties and H-Bonding in N-8-Quinolinyl-2-hydroxynaphthaldimine and its Azo-Analogue, *Journal of Chemical Society of Pakistan*, 2014, Vol. 36(6), pp. 1071-1078.21. **Tareq Irshaidat**, On the Factors Affecting H-bonding: a CCSD(T)//B3LYP Study on Malonaldehyde Cation-Radical, *Jordan Journal of Chemistry*, 2013, Vol. 8, pp. 125-137. (DOI: <https://doi.org/10.12816/0001523>)“Presents the most efficient (cost vs. accuracy) CCSD(T)-based protocol in the literature for the estimation of the proton transfer energy barrier and explores the consequences of ionization on the properties of the conjugated six-membered H-bond system”20. Khaleel A. Abu-Sbeih and **Tareq Irshaidat**\*, On the methyl and carbon monoxide coupling reaction: A simulation study of acetyl coenzyme-A synthase, *Journal of Chemical and Pharmaceutical Research*, 2013, Vol. 5, pp. 1354-1362.19. **Tareq Irshaidat**, Properties of Molecular Materials: the Effect of the N-H/B Substitution on the Electronic Structure of 2-Hydroxybenzaldimine, *Asian Journal of Research in Chemistry*, 2013, Vol. 6, pp. 577-583.18. **Tareq Irshaidat**\*, Ibrahim Abdelkarim Mousa Saraireh, and Oluseun. Akintola, Conformation and the Unique H-Bond of 2-(N,N-dimethylamino) Benzoic Acid in Gas Phase, *Journal of the Chemical Society of Pakistan*, 2012, Vol. 34, pp. 815-818.17. **Tareq Irshaidat**, Effect of the metal ion and the medium on the electronic structure of anthranilic acid: a modeling study on the Li and the BeH derivatives, *Molecular Simulation*, 2011, 37(5), pp. 414. (DOI: <https://doi.org/10.1080/08927022.2010.544304>)16. **Tareq Irshaidat**, Aromaticity, geometry, and charge distribution of the N,N-dimethylanthranilic acid conformers in gas phase, *Asian Journal of Chemistry*, 2011, 23(7), pp. 3243-3246.15. **Tareq Irshaidat**, Effect of the medium on the electronic structures of the anthranilic acid conformers: a theoretical study, *Jordan Journal of Chemistry*, 2011, 6(1), pp. 33-49.14. **Tareq Irshaidat**, Simulating the agostic interaction in electron deficient (16-e) group (VI) ML6 complexes: [M(CO)5(C(Me)OMe)] (2+) (M= Cr, Mo, and W) as models, *South African Journal of Chemistry*, 2011, 64, pp. 1-6.13. **Tareq Irshaidat**, A DFT Study on Selected Physical Organic Aspects of the Fischer Carbene Intermediates [(M(CO)4(C(OMe)Me], *Journal of Chemistry*, 2010, 7(2), pp. 437-444. (DOI: <https://doi.org/10.1155/2010/202161>)12. **Tareq Irshaidat**, The factors affecting tautomerism. Consequences of N-substituents (Me/NR2) in structures derived from salicylaldimines, *Molecular Simulation*, 2010, 36 (1), pp. 41-52. (DOI: <https://doi.org/10.1080/08927020903096080>)11. Fatima Esmadi\*, **Tareq Irshaidat**, Osama Hamadneh, Transimination; a synthetic route to mixed ligand Schiff base complexes, *Jordan Journal of Chemistry*, 2010, 5 (4), pp. 349-361.10. **Tareq Irshaidat**, Effect of substituents on characteristics of functional materials. Consequences of fusing Schiff bases and some of its proton substitutes on isobenzofuran, *Polycyclic Aromatic Compounds*, 2010, 30 (1), pp. 27-43.(DOI: <https://doi.org/10.1080/10406630903504663>)9. **Tareq Irshaidat**, What can the geometry tell about the charge distribution in the mesoionic heterocycles? A DFT study on the SCN4R2 system, *Journal of Physical Organic Chemistry*, 2010, 23 (1), pp. 67-74.(DOI: <https://doi.org/10.1002/poc.1586>)Presents a "charge decomposition theory" of mesoionic compounds. 8. **Tareq Irshaidat**, Computational note on selected features of the organometallic carbocation intermediate in the cycloisomerization of 1,5-enynol acetyl esters by Au(I), *Journal of Molecular Structure (Theochem)*, 2009, 897, pp. 154-154.(DOI: <https://doi.org/10.1016/j.theochem.2008.11.032>)7. **Tareq Irshaidat**, DFT study on the mono lithium and sodium salts of N-(2-hydroxyphenyl)-salicylaldimine, *Tetrahedron Letters*, 2009, 50, pp. 825-830.(DOI: <https://doi.org/10.1016/j.tetlet.2008.12.017>)6. Yi Zhang, **Tareq Irshaidat**, Haixia Wang, Kris V. Waynant, Haobin Wang\*, and James W. Herndon\*, [Coupling of Fischer carbene complexes with conjugated enediynes featuring radical traps: Novel structure and reactivity features of chromium complexed arene diradical species](http://www.sciencedirect.com/science?_ob=ArticleURL&_udi=B6TGW-4T6CTVX-1&_user=4731468&_coverDate=10%2F15%2F2008&_alid=804913762&_rdoc=1&_fmt=high&_orig=search&_cdi=5265&_sort=d&_docanchor=&view=c&_ct=3&_acct=C000064618&_version=1&_urlVersion=0&_userid=4731468&md5=584a410509d7cd07beae4d28c4e30cee), *Journal of Organometallic Chemistry*, 2008, 693(21-22), pp. 3337-3345. (DOI: <https://doi.org/10.1016/j.jorganchem.2008.08.003>)5. **Tareq Irshaidat**, [A unique and novel cyclopropylmethyl cation intermediate: a DFT study](http://www.sciencedirect.com/science?_ob=ArticleURL&_udi=B6THS-4T3DCRK-4&_user=4731468&_coverDate=10%2F06%2F2008&_alid=804913762&_rdoc=2&_fmt=high&_orig=search&_cdi=5290&_sort=d&_docanchor=&view=c&_ct=3&_acct=C000064618&_version=1&_urlVersion=0&_userid=4731468&md5=1c560e73ba12b9ff524933342a44ff69), *Tetrahedron Letters*, 2008, 49(41), pp. 5894-5898.(DOI: <https://doi.org/10.1016/j.tetlet.2008.07.136>)4. **Tareq Irshaidat**, [Some physical organic aspects of salicylaldehydes oximes, a theoretical study](http://www.sciencedirect.com/science?_ob=ArticleURL&_udi=B6THS-4R7J80D-2&_user=4731468&_coverDate=01%2F21%2F2008&_alid=804913762&_rdoc=3&_fmt=high&_orig=search&_cdi=5290&_sort=d&_docanchor=&view=c&_ct=3&_acct=C000064618&_version=1&_urlVersion=0&_userid=4731468&md5=5d2cb8742ef10e288a19bb851bbc73e5), *Tetrahedron Letters*, 2008, 49(4), pp. 631-635.(DOI: <https://doi.org/10.1016/j.tetlet.2007.11.145>)3. Fatima T. Esmadi\*, **T. Irshiadat**, Reactions of Some Schiff base Complexes of Cu(II) and Ni(II) with Sulfur-Donor Anions, *Asian Journal of Chemistry*, 2001, 13(2), pp. 603.2. Fatima Esmadi\*, **Tareq Irshaidat**, [Reaction of Some Schiff Base Complexes of Iron(III) with Nitrogen and Sulfur Donor Anions](http://www.informaworld.com/smpp/content~content%3Da792400079?words=irshaidat&hash=3115421996), *Synthesis and reactivity in Inorganic and Met.-Org. Chemistry*, 2000, 30(7), pp. 1347-1362.(DOI: <https://doi.org/10.1080/00945710009351838>)1. Fatima Esmadi\*, **Tareq Irshaidat**, Double bond transfer in 2-hydroxyl-1-naphthalidine-8-aminoquinoline and some of its nickel(II) complexes, *Canadian Journal of Analytical Sciences and Spectroscopy*, 1999, 44(4), pp. 114. |

**Conferences And Proceedings \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

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| * Deena M. S. Barrouq, **Tareq Irshaidat\***, A Unique Connection between Primary Hypertension and Cholesterol Treatment: a Case Study (The 9th International Conference of the Jordan Medical Association, Irbid Branch), November-2020.
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**Teaching\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

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| ***Courses Taught-undergraduate*** |
| * General chemistry I and II (Chem. 101 and 102),
* General chemistry laboratory I and II (Chem. 103 and 104),
* Organic chemistry for non-chemistry majors (Chem. 235),
* Organic chemistry laboratory for non-chemistry majors (Chem. 236),
* Organic chemistry I, II, & III (Chem 231, 232, and 331),
* Organic chemistry laboratory I & II (Chem. 233 and Chem. 234),
* Introduction to polymer chemistry (Chem. 351)
* Spectroscopy of organic compounds (Chem. 431),
* Special topics in organic chemistry (Chem. 433) (multi-step synthesis).
* Introduction to chemistry of heterocycles (Chem. 434)

(Small rings: properties, synthesis, and reactions)* Scientific research project (Chem. 474) (introductory computational chemistry).
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| ***Courses Taught-graduate*** |
| * Structure and mechanism of organic compounds (Chem. 631)
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**Skills\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

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| ***Languages*** |
| * Arabic (native)
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| * English (good)
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| ***Computer Programs*** |
| * ICDL (European Computer Driving License, ECDL; English-version, 2014).
* Gaussian software.
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