

CURRICULUM VITAE

THURAYA SALIM `ABDULLAH AL HARTHY

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Personal Details:

Name: Thuraya Salim Abdullah Al Harthy

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Educational Qualifications:

- **Ph.D.** Organic Chemistry, Sultan Qaboos University (SQU), Oman (**January 2018**)
Dissertation title: "Design, synthesis, and antimicrobial evaluation of benzazoles incorporating fluorine and piperazine moieties".
- **M.Sc.** Chemistry (course and research master's program) Sultan Qaboos University (SQU) (**January 2014**)
Dissertation title: "Synthesis and anti-tumor activity of 5-fluoro-2-methyl-6-(4-(substituted-phenyl)piperazin-1-yl) benzoxazoles"
- **B.Ed.** Chemistry / Biology, Sultan Qaboos University (SQU) (**June 2009**)

Teaching Experience:

- **September 2018-present:** Assistant professor, Basic and Applied Sciences Department, College of Applied and Health Sciences, A'Sharqiyah University.
- College of Applied and Health Sciences:
 - CHEM101, Chemistry I
 - CHEM181, Chemistry I Lab
 - CHEM201, Organic Chemistry I
 - CHEM281, Organic Chemistry I Lab
 - VTMD102- Biochemistry
 - VTMD182, Biochemistry Lab
 - CHEM216- Polymer Chemistry
 - CHEM286, Polymer Chemistry Lab
 - CHEM312- Biochemistry
- College of Engineering:

- CHEM111- Applied Chemistry
- College of Art and Humanities:
 - CHEM101E- الكيمياء العامة
 - CHEM201E- الكيمياء العضوية
 - CHEM202E- الكيمياء التحليلية
 - CHEMIE- Chemistry IE
- **February-June 2018:** Part-time Assistant professor, Basic Sciences Department, College of Applied and Health Sciences, A'Sharqiyah University.
 - CHEM201- Organic Chemistry
 - CHEM281- Organic Chemistry Lab
- **(2012-2017):** Teaching assistant in different courses lab sessions, Chemistry Department, SQU.
 - CHEM 2101, General Chemistry I
 - CHEM 2110, General Chemistry for Medicine
 - CHEM 2102, General Chemistry II
 - CHEM 3322, Organic Chemistry I
 - CHEM 4425, Advanced Organic Chemistry Laboratory

Research Experience

- Research Experience
 - Multi-step organic synthesis of compounds with medicinal potential
 - Low and high temperature reactions and moisture sensitive reactions
 - Purification using different techniques; flash column chromatography (FCC), preparative TLC, and recrystallization
 - Organic structure elucidation using spectroscopic data; FTIR, HRMS, ^1H and ^{13}C NMR (BB & DEPT) spectra
 - Handling biological assay testing.
- Co-Principal Investigator of GR Program Grant for proposal title, "Acetylde-Functionalized Hybrid Metal Complexes as Electrocatalysts for CO₂ Reduction" Ministry of Higher Education, Research, and Innovation (MoHERI), Oman, Project ID: (BFP/RGP/EI/22/229).

- Co-Investigators of GR Program Grant for proposal title “Frankincense Oil/Omega Fatty Acid Oil based Nano-emulsion for Transdermal Delivery of Anti-Cancer Drugs for Treatment of Breast and Skin Cancer”, Ministry of Higher Education, Research, and Innovation (MoHERI), Oman, Project ID: (BFP/RGP/HSS/20/105).
- Supervisor of GRG Program Grant for proposal title “Phytochemical Screening and Chemical analysis of one Omani medicinal plant” Ministry of Higher Education, Research, and Innovation (MoHERI), Oman, Project ID: BFP/GRG/EBR/19/046.
- An external member in a research team for His Majesty Trust Fund for a proposal title “Development of novel fungicides for the management of soil borne fungal diseases of vegetables in Oman”, Oman, Project ID: SR/SCI/CHEM/19/01.

Conference Participation

1. **T. Al-Harthy**, R. Abdel-Jalil, and W. Zoghaib
 - Importance of Fluorine in Benzazole Compounds, International E-Conference on Recent Advances in chemistry, 08-09 December 2022, Oline Conference.
2. **Al-Harthy, T. S.**; Shongwe, M. S.; Husband, J.; Stoll, R.; Merz, K.; Abdel-Jalil, R. J
 - Spectroscopic characterization, crystallographic elucidation and DFT investigation of 5-fluoro-6-(4-methylpiperazin-1-yl)benzo[d]thiazol-2-amine, 3rd International Webinar on Chemistry and Applied Sciences, November 11 - 12, 2021 | Virtual Conference.
3. **Al-Harthy, T.**; Al-Sadi, A.M.; Zoghaib, W.; Moghadam, E.S.; Stoll, R.; Abdel-Jalil, R.
 - Design, Synthesis and Bioactivity of Benzimidazole-2-Carbamates as Soil-Borne Anti-Fungal Agent, the 24th International Electronic Conference on Synthetic Organic Chemistry (2020), Basel, Switzerland 15 Nov.-15 Dec. 2020.
4. **T. Al-Harthy**, R. Abdel-Jalil, Abdullah Al-Sadi and W. Zoghaib
 - Design, Synthesis, and Antifungal Evaluation of Benzimidazole-2-carbamates incorporating fluorine and piperazine Moieties, SQU International Chemistry Conference (2017) Green and sustainable Chemistry, Muscat, Oman, 13-15th November 2017.
5. **T. Al-Harthy**, R. Abdel-Jalil, and W. Zoghaib

- Design and synthesis of some 2-aryl-5-fluoro-6-(4-methyl-1-piperazinyl) benzothiazoles of potential antitumor activities, 3rd EFMC Young Medicinal Chemist Symposium (EFMC-YMCS 2016), Manchester, United Kingdom, 1-2 September 2016.
- 6. **T. Al-Harthy**, R. Abdel-Jalil, W. Zoghaib, M. Pflüger, E. Hofmann and H. Hundsberger
 - Design and synthesis of benzothiazole Schiff bases of potential antitumor activity, XXIV EFMC International Symposium on Medicinal Chemistry (EFMC-ISMC 2016), Manchester, United Kingdom, 28th August -2nd September 2016.
- 7. **T. Al-Harthy**, A. Al-Rashdi and **R. Abdel-Jalil**
 - Design and synthesis of benzimidazoles-2-carbamate of potential antimicrobial activities, 1st International Caparica Christmas Conference on Translational Chemistry IC3TC, Lisbon-Caparica, Portugal, December 2015
- 8. **T. Al-Harthy**, R. Abdel-Jalil, and W. M. Zoghaib
 - Design and synthesis of benzothiazole Schiff bases of potential biological activities, First SQU International Chemistry Conference: Recent Trends in Drug Development (RTDD), Muscat, Oman, November 2015
- 9. **R. Abdel-Jalil**, **T. Al-Harthy** and W. M. Zoghaib
 - Design and synthesis of benzothiazoles schiff bases of potential antimicrobial activities, 45th IUPAC World Chemistry Congress, Busan, Korea, August 2015
- 10. **R. Abdel-Jalil**, **T. Al-Harthy**, W. Zoghaib, M. Pflüger, K. Önder, M. Reitsammer and H. Hundsberger
 - Synthesis and QSAR study of 5-fluoro-2-methyl-6-(4-(substituted-phenyl) piperazin-1-yl)benzoxazoles, Challenges in Organic Chemistry: ISACS14, Shanghai, China, August 2014.
- 11. **R. Abdel-Jalil**, **T. Al-Harthy**, W. Zoghaib, M. Pflüger, K. Önder, M. Reitsammer and H. Hundsberger
 - Cytotoxicity and COX-2 inhibition activities of novel benzaxozoles, 11th International Life Science Meeting, IMC FH KREMS, March 2014.

List of publications

1. The Impact of Incorporation Piperazine on Biological Activities of Benzazoles, Thuraya Al-Harthy, Wajdi Zoghaib, Raid Abdel-Jalil, IntechOpen, 2024.
2. Multi-segmented nanowires for vortex magnetic domain wall racetrack memory, M Al Bahri, M Al Hinaai, T Al Harthy, Chinese Physics B, 32, 127508, 2023.

3. Unlocking the Anticancer Potential of Frankincense Essential Oils (FEOs) Through Nanotechnology: A Review, Rayya A Al-Balushi, Ashanul Haque, Mohd Saeed, Thuraya Al-Harthy, Mohammed Al-Hinaai, Salim Al-Hashmi, *Molecular Biotechnology*, 1-12, 2023.
4. Suitable Catalysts for Electrosynthesis of Ammonia as Green Hydrogen Storage, Mohammed Al Hinaai, Rayya A Al Balushi, Mohammed Al-Bahri, Thuraya Al Harthy, *Journal of Environmental and Soil Sciences*, 6, 2023.
5. Ebrahim Saeedian Moghadam, Abdullah Mohammed Al-Sadi, **Thuraya Al-Harthy**, Mohammad Ali Faramarzi, Musa Shongwe, Mohsen Amini, Raid Abdel-Jalil, Synthesis, bioactivity, and molecular docking of benzimidazole-2-carbamate derivatives as potent α -glucosidase inhibitors, *Journal of Molecular Structure*, 1278, 134931, 2023.
6. Mohammed Al Bahri, **Thuraya Al Harthy**, Vortex Domain Wall Thermal Stability in Magnetic Nanodevices with In-Plane Magnetic Anisotropy, *physica status solidi (a)*, 220, 2200586, 2023.
7. M Al Bahri, **T Al-Harthy**, K Al Hashmi, I Al Rishidi, Noise Measurements in Industrial Areas in North A'Sharqiyah Region-Oman, *International Journal of Research, and Innovation in Applied Science*, 2022, 7, 43-47.
8. Mohammad Changez, Mohammad Faiyazanwar, Rafia Khatoon, **Thuraya Al-Harthy**, Mohammed Al-hanaai, Rayya Albalushi, Controlled release of vancomycin hydrochloride from biopolymer-based hydrogels, *IJLTET*, 2021, 19.
9. Rayya A Al Balushi, Ashanul Haque, **Thuraya Al Harthy**, Mohammed Al Hinaai and Muhammad S Khan, Conjugated Pt(II) Poly-Ynes for OptoElectronic Applications, *Annals of Chemical Science Research*, 2021, 2.
10. **T Al-Harthy**, W Zoghaib, R Abdel-Jalil, Importance of fluorine in benzazole compounds, *Molecules*, 2020, 4677.
11. **Al-Harthy, T. S.**; Shongwe, M. S.; Husband, J.; Stoll, R.; Merz, K.; Abdel-Jalil, R. J. Spectroscopic characterization, crystallographic elucidation and DFT investigation of 5-fluoro-6-(4-methylpiperazin-1-yl)benzo[d]thiazol-2-amine. *Journal of Molecular Structure* 2019, 1176, 614-621.
12. **Al-Harthy, T.**; Zoghaib, W. M.; Stoll, R.; Abdel-Jalil, R. Design, synthesis, and antimicrobial evaluation of novel 2-arylbenzothiazole analogs bearing fluorine and piperazine moieties, *Monatshefte für Chemie -Chemical Monthly* 2018, 149, 645.

13. Schöpel, M.; Potheraveedu, V. N.; **Al-Harthy, T.**; Abdel-Jalil, R.; Heumann, R.; Stoll, R. The small GTPases Ras and Rheb studied by multidimensional NMR spectroscopy: structure and function. *Biological chemistry* 2017, 398, 577-588.
14. **Al-Harthy, T.**; Zoghaib, W. M.; Pflüger, M.; Schöpel, M.; Önder, K.; Reitsammer, M.; Hundsberger, H.; Stoll, R.; Abdel-Jalil, R., Design, Synthesis, and Cytotoxicity of 5-Fluoro-2-methyl-6-(4-aryl-piperazin-1-yl) Benzoxazoles. *Molecules* 2016, 21,1290-1301.
15. **Al-Harthy, T.**, Abdel-Jalil, R., Zoghaib, W., Pflüger, M., Hofmann, E., Hundsberger, H., Design and Synthesis of Benzothiazole Schiff Bases of Potential Antitumor Activitiy. *Heterocycles* **2016**, 92, 1282-1292
16. Abdel-Jalil, R. J., Steinbrecher, T., **Al-Harthy, T.**, Mahal, A., Abou-Zied, O. K., Voelter, W., Stereoselective synthesis and molecular modeling of chiral cyclopentanes. *Carbohydrate Research* **2015**, 415, 12-16

Conference Proceeding Publications:

1. **Al-Harthy, T.**; Al-Sadi, A.M.; Zoghaib, W.; Moghadam, E.S.; Stoll, R.; Abdel-Jalil, R. Design, Synthesis and Bioactivity of Benzimidazole-2-Carbamates as Soil-Borne Anti-Fungal Agent. *Chem. Proc.* 2021, 3, 64. <https://doi.org/10.3390/ecsoc-24-08093>.
2. R. A. Al-Balushi, A. Haque, **T. S. Al-Harthy** and M. S. Khan, Mixed Metal Acetylide Complexes for Opto-Electronic Applications, IGRC Muscat, 24-26 Feb.2020.

Membership:

1. A member in the reviewer Board of International Journal of Research and Innovation in Applied Science (IJRIAS) [Social Science Journal I 30 \\$ Registration Fees I DOI | IJRISS \(rsisinternational.org\)](https://www.scribd.com/document/53111111/Social-Science-Journal-I-30-Registration-Fees-I-DOI-IJRISS-rsisinternational.org), DOI: 10.51584/IJRIAS, June 2022 to date.
2. A member of the Editorial Board of Sci. Med Central Journal\ JSM Chemistry, <https://www.jsmedcentral.com/editorial-board/JSM-Chemistry>, 2021 to date.
3. A member in the reviewer Board of Mediterranean Journal of Chemistry, [Mediterranean Journal of Chemistry \(medjchem.com\)](https://www.medjchem.com), ISSN: 2028-3997, 2020 to date.
4. A peer reviewer in Research Information Management System (RIMS), Ministry of Higher Education, Research, and Innovation (MoHERI) Oman, 2019 to date.

References:

- Dr. Wajdi Michael Zoghaib, Associate Professor
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