

Odey Bsharat – Curriculum Vitae

Mr. Odey Bsharat, Assistant Professor
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ACADEMIC HISTORY

Graduate Student in Chemistry (Ph.D.), 3.94/4.00 GPA.

University of Alberta

Edmonton, AB, Canada

September 2018 – May 2023

Research Supervisor: Dr. Rylan Lundgren

Graduate Student in Chemistry with Honours (M.S.), 3.96/4.00 GPA.

King Fahd University of Petroleum & Minerals (KFUPM)

Dhahran, Saudi Arabia

January 2015 – January 2017

Research Supervisor: Dr. Musa. Musa

Bachelor of Science with Honours, Chemistry, 3.95/4.00 GPA.

An-Najah National University

Nablus, Palestine

September 2010 – September 2013

AWARDS AND SCHOLARSHIPS

Graduate Student Teaching Assistant Award. 2022/2023

Alberta Graduate Excellence Scholarship (AGES). 2021/2022

Alberta Graduate Excellence Scholarship (AGES). 2019/2020

The University of Alberta Graduate Fellowship. 2019/2020

First rank in the BSc. program from the Department of Chemistry at An-Najah National University.

2013/2014

REFEREED CONTRIBUTIONS (IF = journal impact factor)

1. Doyle, M.G., Mair, B.A., Sib, A., Bsharat, O., Munch, M., Derdau, V., Rotstein, B.H. Lundgren, R.J.; "A practical guide for the preparation of C1-labeled α -amino acids using aldehyde catalysis with isotopically labeled CO₂" *Nature Protocols*, **2024**. pp.1–33. (IF: 17.4)
2. Doyle, M.G., Bsharat, O., Sib, A., Derdau, V. and Lundgren, R.J., "Enantioselective Carbon Isotope Exchange" *J. Am. Chem. Soc.*, **2024**, *146*, 18804–18810. (IF: 14.8)
3. Bsharat, O.; "Classical and Modern Methods for Carbon Isotope Labeling" *Mor. J. Chem.*, **2024**, *12*, 1110–1121. (IF: 2.4)
4. Bsharat, O., Doyle, M., Munch, M., Mair, B.A., Cooze, C.J., Kong, D., Bauer, A., Derdau, V. Rotstein, B.H. Lundgren, R.J. "Aldehyde-Catalyzed Carboxylate Exchange in α -Amino Acids with Isotopically Labeled CO₂" *Nat. Chem.* **2022**, *14*, 1367–1374. (IF: 24.4)
5. Kong, D., Moon, P. J., Lui, E. K., Bsharat, O., Lundgren, R. J.; "Direct reversible decarboxylation from stable organic acids in dimethylformamide solution" *Science* **2020**, *369*, 557–561. (IF: 41.8)
6. Kong, D., Moon, P. J., Bsharat, O., Lundgren, R. J.; "Direct catalytic decarboxylative amination of aryl acetic acids" *Angew. Chem. Int. Ed.* **2020**, *59*, 1313–1319. (IF: 12.257)
7. Warad, I., Bsharat, O., Tabti, S., Djedouani, A., Al-Nuri, M., Al-Zaqri, N., Kumara, K., okanath, N. K., Amereih, S., Abu-Reidah, I. M.; "Crystal interactions, computational, spectral and thermal analysis of (E)-N'-(thiophen-2-ylmethylene)isonicotinohydrazide as O-N-S-tridentate schiff base ligand" *J. Mol. Struct.* **2019**, *1185*, 290–299. (IF: 2.011)
8. Musa, M. M., Bsharat, O., Karume, I., Vieille, C., Takahashi, M., Hamdan, S. M.; "Expanding the substrate specificity of *Thermoanaerobacter pseudoethanolicus* alcohol dehydrogenase by a dual site mutation" *Eur. J. Org. Chem.* **2018**, *2018*, 798–805. (IF: 3.029)
9. Bsharat, O., Musa, M. M., Oladepo, S., Takahashi, M., Vieille, C., Hamdan S. M.; "Asymmetric reduction of substituted 2-tetralones by *Thermoanaerobacter pseudoethanolicus* secondary alcohol dehydrogenase" *ChemCatChem*, **2017**, *9*, 1487–1493. (IF: 4.495)
10. Karume, I., Musa, M. M., Bsharat, O., Takahashi, M., Hamdan, S. M., El Ali, B.; "Dual enzymatic dynamic kinetic resolution by *Thermoanaerobacter ethanolicus* secondary alcohol dehydrogenase" *RSC Adv.* **2016**, *6*, 96616–96622. (IF: 3.049)

11. Al-Noaimi, M., Suleiman, M., Darwish, H.W., Bakheit, A.H., Abdoh, M., Saadeddin, I., Shivalingegowda, N., Lokanath, N.K., Bsharat, O., Barakat, A. and Warad, I.; "DNA Binding Test, X-Ray Crystal Structure, Spectral Studies, TG-DTA, and Electrochemistry of [CoX₂(dmdphphen)](Dmdphphen Is 2, 9-Dimethyl-4, 7-diphenyl-1, 10-phenanthroline, X= Cl, and NCS) Complexes" *Bioinorg Chem Appl.* **2014**,2014, 1–8. (IF: 2.583)

NON-REFEREED CONTRIBUTIONS

1. Bsharat, O., Doyle, M., Munch, M., Mair, B.A., Cooze, C.J., Kong, D., Bauer, A., Derdau, V. Rotstein, B.H. Lundgren, R.J.; Aldehyde-Catalyzed Carboxylate Exchange in α -Amino Acids with Isotopically Labeled CO₂, the Canadian Chemistry Conference and Exhibition. Calgary, Alberta, June 13-June 17, 2022. (Poster)
2. Bsharat, O., Doyle, M., Munch, M., Mair, B.A., Cooze, C.J., Kong, D., Bauer, A., Derdau, V. Rotstein, B.H. Lundgren, R.J.; Aldehyde-Catalyzed Carboxylate Exchange in α -Amino Acids with Isotopically Labeled CO₂, Banff Symposium on Organic Chemistry. Banff, Alberta, March 31-April 3, 2022. (Oral)
3. Bsharat, O., Musa, M. M., Oladepo, S., Takahashi, M., Vieille, C., Hamdan S. M.; Effect of mutations of *Thermoanaerobacter ethanolicus* secondary alcohol dehydrogenase at tryptophan-110 on enantioselectivity of reduction of phenyl-ring-containing ketones, 2th Palestinian International Graduate Conference on Natural, Medical and Health Sciences and Humanities (SPIGCNMHSH 2017), An-Najah National University, Nablus, Palestine, April 20, 2017. (Oral)
4. Bsharat, O., Vieille, C., Hamdan S. M., Musa, M. M.; Effect of mutations of *Thermoanaerobacter ethanolicus* secondary alcohol dehydrogenase at tryptophan-110 on enantioselectivity of reduction of phenyl-ring-containing ketones, The Student Research Poster Day, King Fahd University of Petroleum and Minerals, Dhahran, Saudi Arabia, January 3, 2017. (Poster)

EMPLOYMENT

- **2023 (Spring)-present:** Assistant Professor, Department of Chemistry, An-Najah National University, Palestine.

Courses: CHEM 231 (Organic chemistry I), CHEM 235 (Practical Organic chemistry I).

- **2018 (Fall)-2023 (Winter):** Teaching Assistant, Department of Chemistry, University of Alberta, Canada.

Courses: CHEM 261 (Introductory Organic Chemistry I), CHEM 263 (Introductory Organic Chemistry II).

- **2017-2018 (Fall):** Lecturer, Department of Chemistry, An-Najah National University, Palestine.

Courses: CHEM 101 (General Chemistry), CHEM 102 (General Chemistry), CHEM 321 (Organic chemistry)

- **2012-2013:** Teaching Assistant, Department of Chemistry, An-Najah National University, Palestine.

Courses: CHEM 107 (General Chemistry I), CHEM 108 (General Chemistry II), CHEM 231 (Organic Chemistry)

REFERENCES

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