Dr. ARWA ABOU RAJAB
Chemistry Department
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EDUCATION

Ph.D. in Chemistry
Eastern Mediterranean University 2018 - 2024

Cumulative GPA: 3.96/4.00

Major: Organic Chemistry

Minor: Photochemistry, Electrochemistry

Thesis Title: Novel Naphthalene and Perylene Diimides Synthesis for Photonic Applications: Synthesis, Photophysical, Electrochemical and Morphological Properties

M.Sc. in Chemistry
Eastern Mediterranean University 2016 - 2018

Cumulative GPA: 3.96/4.00

Thesis Title: Interactions of Novel Sets of Perylene Dianhydrides and a Diimide with G-Quadruplex Structures in Human DNA

B.Sc. in Molecular Biology and Genetics,
Eastern Mediterranean University 2012 - 2016

Cumulative GPA: 3.84/4.00

CURRENT POSITION

Senior Instructor 2024 - present

Eastern Mediterranean University, Famagusta, North Cyprus

Faculty of Arts and Sciences, Department of Physics and Chemistry, Program of Chemistry

PREVIOUS POSITIONS

Research and Teaching Assistant (General and Organic Chemistry) 2016 - 2024

Eastern Mediterranean University, Famagusta, North Cyprus

TEACHING EXPERIENCE

Undergraduate Courses, Eastern Mediterranean University 2024 - present

General Chemistry (CHEM101, CHEM103)

Biochemistry (CHEM116, CHEM119, CHEM120)

Instrumental Analysis (CHEM431)

PUBLICATIONS

1) Pelin Karsili, **Arwa Abourajab**, Meltem Dinleyici, Sinem Altınısık, Sermet Koyuncu, Gamze Dolek, Mahmut Kus, Huriye Icil, **Aggregation− induced red− shift emission from self-assembled planar naphthalene diimide dye: Interlayer in a Schottky-type photodiode and DFT studies.** *Optical Materials* 155, (2024) 115902.

2) **Arwa Abourajab**, Pelin Karsili, Rebwar Rashid, Meltem Dinleyici, Nur Pasaogullari, Sinem Altınışık, Sermet Koyuncu, Huriye Icil, **A new water-soluble naphthalene diimide as a highly selective fluorescent chemosensor for Cu(II) ion: Synthesis, DFT calculations, photophysical and electrochemical properties.** *J. Photochem. Photobiol. A: Chemistry* 454, 2024, 115719.

3) Selin Temurlu, Mosab A. A. Abureesh, **Arwa Abourajab**, Pelin Karsili, Meltem Dinleyici, Sinem Altınışık, Sermet Koyuncu & Huriye Icil, **Grafting of perylene and naphthalene fluorophores onto chitosan for improved thermal, optical and electrical properties.** *Macromolecular Research* 32, 2024 281–297.

4) Ilke Yucekan, Meltem Dinleyici, Selin Temurlu, Rebwar Rashid, Jagadeesh B. Bodapati, Basma Al-Khateeb, **Arwa Abourajab**, Pelin Karsili, Sinem Altınışık, Sermet Koyuncu, Huriye Icil, **Synthesis, photophysical, electrochemical and morphological properties of a novel cross-linked chitosan-based fluorescent polymer: A fluorescence sensor for single-stranded DNA.** *European Polymer Journal* 196, 2023, 112306.

5) **Arwa Abourajab**, S Melika Mostafanejad, Meltem Dinleyici, Basma Al-Khateeb, Imge Kunter, Sukru Tuzmen, Huriye Icil, **Synthesis, characterization, anti-cancer evaluation, and DNA-binding study of new bay-substituted perylene derivatives.** *Journal of Biology and Medicine* 7, 2023, 31.

6) Rebwar Saeed M. Rashid, Selin Temurlu, **Arwa Abourajab**, Pelin Karsili, Meltem Dinleyici, Basma Al-Khateeb Huriye Icil, **Drug Repurposing of FDA Compounds against ff-Glucosidase for the Treatment of Type 2 Diabetes: Insights from Molecular Docking and Molecular Dynamics Simulations.** *Pharmaceuticals* 16, 2023, 555.

7) Meltem Dinleyici, Basma Al-Khateeb, **Arwa Abourajab**, Duygu Uzun, Sermet Koyuncu, Huriye Icil. **Synthesis, photophysical, electrochemical and DFT studies of two novel triazine-based perylene dye molecules.** *J. Photochem. Photobiol. A: Chemistry* 421, 2021, 113525.

8) Basma Al-Khateeb, Meltem Dinleyici, **Arwa Abourajab**, Cansu Kök, Jagadeesh B. Bodapati, Duygu Uzun, Sermet Koyuncu, Huriye Icil. **Swallow tail bay-substituted novel perylene bisimides: Synthesis, characterization, photophysical and electrochemical properties and DFT studies.** *J. Photochem. Photobiol. A: Chemistry* 393, 2020, 112432.

CONFERENCES (ORAL & POSTER PRESENTATIONS)

1) **A. Abou Rajab**, S. Koyuncu, H. Icil. Synthesis and Characterization of Two Novel Mono Bay-Substituted Perylene Diimide Derivatives. 3rd International Natural Science, Engineering and Material Technologies Conference (NEM 2023), Famagusta, North Cyprus (Oral Presentation)
2) **A. Abou Rajab**, S. Koyuncu, H. Icil. A Water-Soluble NDI Derivative as a Detector for Heavy Metal Cations. 2nd International Natural Science, Engineering and Material Technologies Conference (NEM 2022), İğneada-Kırklareli, Türkiye (Oral Presentation)
3) **A. Abou Rajab**, S. Koyuncu, H. Icil. A Water-Soluble NDI Derivative as a Chemosensor for the Detection of Heavy Metal Cations. 8th International Conference on New Trends in Chemistry, Famagusta, North Cyprus (Poster Presentation)
4) **A. Abou Rajab**, S. Koyuncu, H. Icil. Perylene Diimide Based Interlayer for Application in Perovskite Solar Cells. 8th International Conference on New Trends in Chemistry, Famagusta, North Cyprus (Poster Presentation)
5) **A. Abou Rajab**, Ş. Tüzmen, H. Icil. Perylene dyes interacting with G-Quadruplex structures for future therapeutic agents. 1st International Natural Science, Engineering and Material Technologies Conference (NEM 2019), İstanbul, Türkiye (Oral Presentation)
6) **A. Abou Rajab**, Ş. Tüzmen, H. Icil. Interactions of Novel sets of Perylene Dianhydrides and a Diimide with G-Quadruplex Structures in Human DNA. 4th International EMU Genetics Club Student Science Symposium, Famagusta, North Cyprus (Oral Presentation)

PROJECTS

A water-soluble naphthalene diimide derivative as a chemosensor for the detection of heavy metal cations (BAPC-04-21-03), Type C (BAP-C) Scientific Research Project, Researcher: Arwa Abou Rajab, Duration of the Research Project: April 2021−April 2022.

M.Sc. THESIS SUPERVISED (Ongoing)

Polen Yazgın 2025 - present
Eastern Mediterranean University, 2024
Eco-Friendly Carminic Acid Loaded Chitosan for Removal of Metals from Aqueous Solution

HONORS AND AWARDS

2nd Best Oral Presentation Award, NEM 2019 2019

OTHER RELEVANT EXPERIENCE

- EMU Genetics Club Director 2013 - 2016
- IELTS: 7 2016
- TOEFL-iBT: 91 2018

TRAINING PROGRAMS ATTENDED

- Occupational Health and Safety in Laboratory Works (Robust Ltd.) 2019
- Fire Topics Training (General Directorate of Police) 2019
- First Aid (Eastern Mediterranean University) 2019

LANGUAGE SKILLS

- Turkish (Native)
- English (Fluent)
- Arabic (Intermediate)
- French (Beginner)