

Abrar Emhemed Arafa

Contact Details: Email: ab.arafa@uot.edu.ly, LinkedIn: Abrar Arafa.

Employment

- **Assistant Lecturer**, Chemical Eng. Department, University of Tripoli, Dec. 2022 – Present.

Lecturer of level 200 to level 500 students. Taught modules: ChE201, ChE202, ChE311, ChE312, ChE431, ChE432, ChE531. Supervisor of graduation projects involved in solar engineering & petroleum processing applications. Coordinator of the unit operations laboratory.

- **Consultant**, Various International Contractors, Worldwide, 2019 - 2022.

Consultant Process Engineer provided services for engineering companies in the oil & gas industry as well as renewables (solar PVs). Services covered from FEED to detailed engineering phases. Skilled in process simulation, PFD & P&ID development, operating philosophies, equipment design, etc.

Education & Qualifications

- **MSc Chemical Engineering**, Swansea University, Jan. 2021 – Jan. 2022, distinction (+83%).

IChemE accredited program, consists of 10 modules & a research-project. Core modules: environmental analysis (90%), water & wastewater treatment (89%), optimisation (85%), research practice (81%), etc.

- **BSc Chemical Engineering**, University of Tripoli (Libya), 2015 – 2019, excellent (+90%).

A 5-year program, core modules: fluid mechanics (99%) heat transfer (99%), Mass transfer (85%), petrochemical oil refinery (100%), chemical reaction kinetics (96%), thermodynamics (99%), etc.

- **High School**, Mokhtar Bel-Haj High School (Libya) 2013 – 2014, excellent (+99%).

Voluntary Experience

- **Tutor to Secondary School & Undergraduate Students** (post-civil war), 2016 – 2021.

Software Skills

- Certified user of Aspen HYSYS software, certification granted from Aspen Tech University.
- Full proficiency in MS Office, all applications.
- Skilled user of UniSim, Python, MATLAB & other useful engineering related programs.

Achievements

- Best MSc Chemical Engineering Student at Swansea University, 2021 – 2022.
- Top of the Chemical Engineering class at the University of Tripoli, throughout all scholastic terms.
- Ranked 4th best engineering student, across all departments, at the University of Tripoli, Fall 2019.
- Awarded a scholarship for being within the top 10 highest ranking senior high-school students, nationwide (Libya) in 2014.

Memberships

- IChemE member, 2020 – present.

Languages

- Arabic: native or bilingual proficiency.
- English: native or bilingual proficiency.
- Italian: limited working proficiency.

References

1. Dr Matthew Davies, Professor & Head of the SPECIFC IKC group, Chemical Engineering, Swansea University, email: m.l.davies@swansea.ac.uk, tel.: +44 (0) 1792 606955.
2. Dr Gavin Bunting, Associate Professor & SMaRT Assistant Chief Executive, General Engineering, Swansea University, email: g.t.m.bunting@swansea.ac.uk, tel.: +44 (0) 1792 602803.