

Muhannad Abdelwahhab Said Alhudhud

h.mohannad@gmail.com | Mob: 597782546 | LinkedIn: [muhannad-alhudhud-9b129024](#)

Professional Summary

Ph.D. in Analytical Chemistry & Bioanalysis with over nine years of international university-level teaching and research experience. Expertise in Analytical and General Chemistry, Biochemistry and Biology, with a proven track record in undergraduate teaching, course design, and mentorship. Committed to fostering inclusive, active learning environments that engage and empower diverse student populations.

Education

- ❖ Ph.D. in Analytical Chemistry – Bioanalysis, University of Huddersfield, UK, 2015
- ❖ M.Sc. in Analytical Chemistry, University of Huddersfield, UK, 2010
- ❖ B.Sc. in Chemical & Physical Science, Damascus University, Syria, 2003

Teaching Experience

- ❖ Assistant Professor, AlZaytonah University, Salfit, Palestine (2022 – Present)
- ❖ Assistant Professor, An-Najah National University, Nablus, Palestine (2018 – 2022)
- ❖ Adjunct Professor, AlRawdah College University, Nablus, Palestine (2021– Present)
- ❖ Adjunct Professor, Arab American University, Jenin, Palestine (2018 – 2019)

Courses Taught (Lectures and Labs)

Analytical Chemistry, Instrumental Analysis, General Chemistry, Biochemistry, Organic Chemistry, Advanced Analytical Techniques, Chemistry for Medical Sciences & Biology.

Teaching Highlights

- ❖ Extensive experience teaching courses and labs in Analytical Chemistry, Organic Chemistry and Biochemistry.
- ❖ Emphasis on practical training using advanced instrumentation: HPLC, GC-MS, FTIR, UV-Vis, PCR, and 2D-NMR.
- ❖ Implementation of inclusive and active learning techniques: peer discussions, formative assessments, and real-world case studies.
- ❖ Collaboration with faculty teams in multi-section lab courses to ensure consistency and instructional quality.
- ❖ Mentored undergraduate students in laboratory research, data analysis, capstone projects, and scientific communication

Research Experience & Interests

Recent research has focused on the development and application of analytical techniques for the extraction, separation and structural elucidation of bioactive molecules. Experience includes testing the bioactivity of bacterial exopolysaccharides for potential probiotic activities, and collaborative work with multidisciplinary teams. Demonstrated ability to correlate analytical outputs with clinical and environmental parameters that bridges laboratory findings with real-world applications.

Recently I completed a training course in “Writing & Publishing Research with AI support”

Analytical & Biochemical Instrumentation Expertise

- ❖ HPLC, GC-MS, FPLC, HPAEC, SEC-MALLS, 1D & 2D NMR.
- ❖ UV-Vis, FTIR, Fluorimetry.
- ❖ Microbial Growth Curve Systems, Isolation and Identification.
- ❖ PCR, SDS-PAGE, protein purification & kinetic assessment.

Undergraduate Mentorship and Service

Mentored undergraduate students in research design, data analysis, and scientific communication. Supported capstone project development and helped students prepare for conferences and publications.

Selected Publications

- ❖ Alhudhud, M. et al. (2017). Extraction of the same novel homoglycan mixture from two different strains of *Bifidobacterium animalis*. doi:10.3920/BM2017.0145
- ❖ Alhudhud, M. et al. (2014). Development of a growth medium suitable for exopolysaccharide production. doi:10.1016/j.mimet.2014.02.021

Conference Presentations

Multiple international conferences including but not limited to: Baltic Meeting on Microbial Carbohydrates (2014) Gdansk, PL; Carbohydrate Group Meeting (2014) Bath, UK, and Polysaccharides-Glycoscience (2013) Prague, CZ; RSC Bio-Organic Postgraduate Symposium (2013) Manchester, UK; Capillary GC Tips & Tricks, Agilent Technologies and Crawford Scientific (2010) Cambridge, UK; Agilent technologies (2010) Manchester, UK.

Professional Memberships

Member, Royal Society of Chemistry (MRSC)