



Salha Nasser Mohammed Alharthi

Assistant Professor

Personal Data

Nationality | Saudi

Department | Chemistry

Official IAU Email | snalharthi@iau.edu.sa

Office Phone No. | 966133337419

Language Proficiency

Language	Read	Write	Speak
Arabic	Fluent	Fluent	Fluent
English	Fluent	Good	Good
Others	No		

Academic Qualifications (Beginning with the most recent)

Date	Academic Degree	Place of Issue	Address
April 14, 2021	PhD Degree in Chemical Engineering / Nanotechnology	University of Waterloo, Canada	University Ave W, Waterloo, ON N2L 3G1, Canada 200
Nov 12, 2013	Master Degree in Organic Chemistry	Imam Abdulrahman Bin Faisal University	King Faisal Rd, King Faysal University, Dammam 34212
Jun 07, 2006	Bachelor Degree in Chemistry	Imam Abdulrahman Bin Faisal University	King Faisal Rd, King Faysal University, Dammam 34212



PhD, Master or Fellowship Research Title: (Academic Honors or Distinctions)

PhD	Cationic Cellulose Nanocrystals for the Flocculation of Mature Fine Oil Sands Tailings
Master	Studies on the Improvement of Poly(acrylonitrile) Properties Through Copolymerization

Professional Record: (Beginning with the most recent)

Job Rank	Place and Address of Work	Date
Assistant professor	Imam Abdulrahman Bin Faisal University (IAU)	2022-present
Lecturer	Imam Abdulrahman Bin Faisal University (IAU)	2013-2022
Teaching assistant	Imam Abdulrahman Bin Faisal University (IAU)	2009-2013
Teacher	Al-Tarbia Al-Ahlia School	2006-2008

Scientific Achievements

Published Refereed Scientific Researches

(In Chronological Order Beginning with the Most Recent)

#	Name of Investigator(s)	Research Title	Publisher and Date of Publication
1	Hind A. AlGhamdia, Yasmien M. AlZahrana, Salha Alharthi , Mohamed S. Mohy-Eldin, Ekram H. Mohamed Safwat A. Mahmoud and Mohamed S. Attia	Novel sensor for the determination of CA 15-3 in serum of breast cancer patients based on Fe-gallic acid complex doped in modified cellulose polymer thin films.	RSC advances 2023.
2	Yasmien M. AlZahrana, Salha Alharthi , Hind A. AlGhamdia, A. O. Youssef, Shahenda S. Ahmedb, Ekram H. Mohamed, Safwat A. Mahmoud and Mohamed S. Attia	Highly selective optical sensor N/S-doped carbon quantum dots (CQDs) for the assessment of human chorionic gonadotropin β -hCG in the serum of breast and prostate cancer patients.	RSC advances 2023.
3	Sarah Aldulaijan, Sara Nabil, Salha Alharthi , Bushra AL Abdullatif and Abir S. Abdel-Naby	Use of a bioresource nanocomposite as a heterogeneous base catalyst for the green synthesis of novel bioactive pyrazoles: antibacterial evaluation using molecular docking	New Journal of Chemistry 2023.
4	Salha Alharthi , Nathan Grishkewich, Richard M. Berry, Kam C. Tam	Functional cellulose nanocrystals containing cationic and thermo-responsive polymer brushes.	Elsevier Ltd, 2020.



5	Azza A Al-Ghamdi, Salha N Alharthi , Asma M EL-Sharif, Abir S Abdel-Naby	Cyclocopolymerization of N, N-diallylammonium and N, N-diallylguanidinium Acetate with acrylonitrile characterization, thermal and morphological properties.	Springer Berlin Heidelberg, 2019.
6	Abir S Abdel-Naby, Salha N Alharthi	Dyeability and mechanical properties of acrylonitrile-diallylamine salts copolymers.	Science Publications, 2013.

Contribution to Scientific Conferences and Symposia

#	Conference Title	Place of the Conference	Date and Extent of Contribution
1	Urban water supply reinvention for dry cities/ Richard Luthy	University of Waterloo	Jan 30,2017, Attendance and open discussion
2	The fundamentals and applications of fluorescence	University of Waterloo	April 06, 2018, Attendance and open discussion
3	Physical chemistry of polymer materials via molecular simulation; from engineered plastic or bio-nanomaterials	University of Waterloo	April 18, 2018, Attendance and open discussion
4	Precis chemical, physical, and electronic nanoscale contacts	University of Waterloo	April 29, 2019, Attendance and open discussion
5	Engineering Nanomaterials for Applications in Regenerative Medicine and Cancer Immunotherapy	University of Waterloo	May 31, 2019, Attendance and open discussion
6	Surface engineering of biomedical materials via bio-inspired strategy	University of Waterloo	Sep 04,2019, Attendance and open discussion
7	Soft nanoparticles, hard science and the path from discovery to commercialization	University of Waterloo	Sep 09,2019, Attendance and open discussion
8	Fliexible, stretchable, and healable electronics	University of Waterloo	Oct 27,2019, Attendance and open discussion
9	Performance and structural stability of cathodic electrocatalysts with complex nanoscale morphology	University of Waterloo	Feb 11, 2020, Attendance and open discussion
10	Detection and Identification of New Biomarkers for Disease Diagnostics	University of Waterloo	July 16, 2020, Attendance and open discussion
11	Engineering Biomimetic Organs-on-a-chip Systems	University of Waterloo	Aug 06, 2020, Attendance and open discussion



12	The Thermal Chiral Anomaly in ideal field-induced Weyl semimetals	University of Waterloo	Sep 22, 2020, Attendance and open discussion
13	Introduction of water-based polyurethane	University of Waterloo	Nov 19, 2020, Attendance and open discussion
14	Discussion on some Polysaccharides: Their Structures, Properties, and Applications	University of Waterloo	Feb 26, 2021, Attendance and open discussion

Membership of Scientific and Professional Societies and Organizations

- American Chemical Society (ACS)

Teaching Activities

Undergraduate

#	Course/Rotation Title	No./Code	Extent of Contribution (no. of lectures/Tutorials. Or labs, Clinics)
1	General chemistry I	CHEM203	Lectures/ Lab
2	Computer applications in chemistry	CHEM303	Lectures
3	Organic chemistry I	CHEM302	Lab
4	Bio chemistry	BIOCH401	Lab
5	Spectroscopy of organic compounds	CHEM408	Lab
6	Organic chemistry II	CHEM305	Lab
7	Polymer chemistry II	CHEM 513	Lectures
8	Advanced Laboratory	CHEM 505	Lab
9	Research project	CHEM 508	Lab
10	Organic chemistry 1	CHEM 203	Lectures
11	Organic chemistry	CHEM 212	Lectures

Course Coordination

#	Course Title and Code	Coordination	Co-coordination	Undergrad.	Postgrad.	From	To
1	Organic chemistry II, CHEM305	✓		✓		Jan 2022	May 2022
2	Organic chemistry 1. CHEM 203	✓		✓		Aug 2024	Dec 2024
3	Organic chemistry CHEM 212	✓		✓		Jan 2025	May 2025



Student Academic Supervision and Mentoring

#	Level	Number of Students	From	To
1	Research Assistant	1	Oct 2021	June 2022

Administrative Responsibilities, Committee and Community Service

Committee Membership

#	From	To	Position	Organization
1	Aug 2021	Aug 2022	Head	The organizing committee of conducting midterm and final exams in the chemistry department
2	Aug 2021	Aug 2022	Head	Chemistry club
3	Aug 2021	Jan2022	Member	Tables committee
4	Aug 2022	Present	Coordinator	Quality committee

Volunteer Work

#	From	To	Type of Volunteer	Organization
1	May 2019	Aug 2019	Mentor- Working on a research project.	University of Waterloo

Personal Key Competencies and Skills: (Computer, Information technology, technical, etc.)

1	Experience with Mendeley.
2	Experience in using ChemDraw, Origin.
3	Professional in academic use of Microsoft office.
4	Extensive experience using all library and online academic resources.

Last Update

Jan/ 23/2024