



Eman Abdulrahman Ahmed Al-Abbad

Associated Professor

Personal Data

Nationality | Saudi

Department | Department of Chemistry, Science collage.

Official IAU Email | ealabbad@iau.edu.sa

Office Phone No. | 013-333-7265

Language Proficiency

Language	Read	Write	Speak
Arabic	√	√	√
English	√	√	√

Academic Qualifications (Beginning with the most recent)

Date	Academic Degree	Place of Issue	Address
2022	Associated Professor	Chemistry Department – College of science- Imam Abdulrahman bin Faisal university	Dammam, Saudi Arabia
2014	Doctorate	Chemistry Department – College of science- University of Dammam	Dammam, Saudi Arabia
2009	Master	Chemistry Department – College of science- University of Dammam	Dammam, Saudi Arabia
2003	Bachelor	Chemistry Department – College of science- University of Dammam	Dammam, Saudi Arabia

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

PhD	Effect of nanoclay addition on treatment of wastewater containing dyes by electrocoagulation and study the other factors affecting the treatment process
Master	Adsorption of some fatty acids on sodium- montmorillonite clay

Professional Record: (Beginning with the most recent)

Job Rank	Place and Address of Work	Date
----------	---------------------------	------



Associated professor	Chemistry Department	College of Science	Imam Abdulrahman Bin Faisal University (University of Dammam Formerly)	2022
Assistant Professor	Chemistry Department	College of Science	Imam Abdulrahman Bin Faisal University (University of Dammam Formerly)	2014
Researcher	Chemistry Department	University of Dammam	University of Dammam	2009
Lecturer	Chemistry Department	College of Science	College of Science	2006
Demonstrator	Chemistry Department	College of Science	College of Science	2008
Demonstrator-literacy item	Chemistry Department	College of Science	College of Science	2005
Demonstrator-Hour item	Chemistry Department	College of Science	College of Science	2002

Administrative Positions Held: (Beginning with the most recent)

Administrative Position	Office	Date
Head of Field Training	Science college, Imam Abdulrahman Bin Faisal University	2018-2019

Scientific Achievements

Published Refereed Scientific Research

(In Chronological Order Beginning with the Most Recent)

#	Name of Investigator(s)	Research Title	Publisher and Date of Publication
1	Eman A. AlAbbad Muhammad Aadil, Moutaz Aldrdery , Noura Dawas Alkhaldi , Awais Khalid , Mazen R. Alrahili , Meri Algarni , Atef El Jery , Mohamed.R. El-Aassar	Nanostructured Codoped Neodymium Orthoferrite Synthesized via the Hydrothermal Route for Photocatalytic Annihilation of Crystal Violet Dye	Ceramics International (2024)
2	Idrees Khan, Eman A. Alabbad, Khalid Saeed, Shujaat Ahmad and Nisar Ali	Nanotechnology for Oil-water separation Chapter 15 Nanomaterials Fundamentals and applications	Book (2024)



3	Sana Ullah Asif, Nusrat Shaheen, Gideon F. B. Solre, Ahmad M. Saeedi, Eman A. Alabbad, Ebraheem Abdu Musad Saleh, M. M. Moharam, Fatma A. Ibrahim, Mohamed S. Hamdy, Sayed M. Eldin & Usman Nawaz	Trends in Structural and Magnetic Properties of Sol- Gel Routed Ca-Mg Based $\text{Ca}_{0.5}\text{Mg}_{0.5}\text{Fe}_{12-x}\text{Cr}_x\text{O}_{19}$ Hexaferrites by Chromium Substitution	Journal of Inorganic and Organometallic Polymers and Materials (2024)
4	M. Zahid Shafiq Wajeehah Shahid , Samiah Shahid , M.I. Khan , Jeong Ryeol Choi , Eman A. Al-Abbad	Enhancing photocatalytic efficiency of type II $\text{V}_2\text{O}_5/\text{TiO}_2$ heterojunctions for malachite green dye using solar simulator irradiation	Journal of Saudi Chemical Society (2024)
5	Hend Ghnaim Alotaibi, Eman Al-Abbad, Dana Almohazey, Vijaya Ravinayagam, Sultan Akhtar, Hatim Dafalla,B. Rabindran Jermy.	Zeolitic Imidazole Framework/Silica Nanocomposite for Targeted Cancer Therapeutics: Comparative Study of Chemo-Drug Cisplatin (CPt) and Green Platinum (GPt) Efficacy.	International Journal of Molecular Sciences (2024)
6	Muhammad Irfan, Nusrat Shaheen, Gideon F. B. Solre, Eman A. Alabbad, Ebraheem Abdu Musad Saleh, M. M. Moharam, Adel A. El-Zahhar, Sana Ullah Asif, Sayed M. Eldin, Mudassir Hussain Tahir, Muhammad Aslam.	Fe and Rh Doping Nanoarchitectonics on Properties of $\text{Sr}_2\text{YGaX}_2\text{O}_7$ Pyrochlore Oxides with a DFT-Based Spin-Polarized Calculation for Optoelectronic and Thermoelectric Applications	Journal of inorganic and organometallic polymers and materials (2024)
7	Rabia Rehman, Muhammad Sadiq Hussain, Ghufrana Samin, Muhammad Muzammil Jahangir, Amara Dar, Zahrah T. Althagafi, Reem I. Alsantali, Eman A. Al-Abbad, Mehwish Akram.	Effective application of citric acid treated Trapa natans and Citrullus lanatus lignocellulosic macromolecules for adsorptive remediation of acid Violet-7 dye	International Journal of Biological Macromolecules (2024)
8	Sana Ullah Asif, Ubaid-ur-Rehman Ghorri, Muhammad Ahsan, Fahim Ahmed, Ebraheem Abdu Musad Saleh, M. M. Moharam, Eman A. Alabbad, Fatma A. Ibrahim, and Mohamed S. Hamdy.	Structural and magnetic influence by mg on $\text{BaFe}_{10}\text{Al}_2\text{O}_{19}$ hexaferrites prepared via ceramic route for potential magnetic applications	Journal of Materials Science: Materials in Electronics (2023)
9	Muhammad Sajid, Irum Batool, Afaq Ullah Khan, Kamran Tahira, Eman A. Alabbad, Khulood Fahad Alabbosh, Hamza S. Al-Shehrie, Hassan M.A. Hassan, Sameerah I. Al-Saeedi, Magdi E.A. Zaki	Synthesis of Adenosine 5-monophosphate monohydrate functionalized mesoporous Ag/CuO/MCM-41 nanostructures for enormous mineralization of insistent organic contaminants and photoinhibition of bacteria	Journal of Molecular Liquids (2023)
10	Afaq Ullah Khan, Kamran Tahir, Muhammad Zia Ullah Shah, Magdi E.A. Zaki, Ebraheem Abdu Musad Saleh, Hongying Hou, Eman A. Alabbad, Talal M. Althagafi, Adel A. El-Zahhar, Sara Alqarni, Samar Almeahmadi	Polypyrrole decorated on irregular SnSe particles: A high energy density and stable durability for asymmetric supercapacitor applications	Journal of Energy Storage (2023)
11	Mehwish Akram, Rabia Rehman, Ghufrana Samin, Zahrah T. Althagafi, Maha E Al-Hazemi, Eman A.Al-Abbad	Decontamination of malachite green and Victoria blue-B dyes by high-speed photo-catalyze reactor	Journal of Water Process Engineering



		using titania and zinc oxide as catalysts	(2023)
12	Irum Batoool, Karma Albalawi, Afaq Ullah Khan, Kamran Tahir, Zia Ul Haq Khan, Magdi E.A. Zaki, Ebraheem Abdu Musad Saleh, Eman A. Alabbad, Talal M. Althagafi, Fahad Abdulaziz	The construction of novel CuO/SnO ₂ @g-C ₃ N ₄ photocatalyst for efficient degradation of Ciprofloxacin, methylene blue and photoinhibition of bacteria through efficient production of reactive oxygen species.	Environmental Research (2023)
13	Rabia Rehman, Naila Tahir, Ghufrana Samin, Muhammad Muzammil Jahangir, T. Al-thagafi Zahrah, E Al-Hazemi Maha, A. Al-Abbad Eman, Mehwish Akram	Exploring use of titania–bentonite composite for adsorptive detoxification of crystal violet dye in eco-friendly way	Journal of Dispersion Science and Technology (2023)
14	Redouane Haounati, Hamza Ighnih, Rahime, Eshaghi Malekshah, Said Alahiane, Fadi Alakhras, Eman Alabbad, Huda Alghamdi, Hassan Ouachtak, Abdelaziz Ait Addi, Amane Jada	Exploring ZnO/Montmorillonite Photocatalysts for the Removal of Hazardous RhB Dye: A Combined Study using Molecular Dynamics Simulations and Experiments	Materials today communication (2023)
15	Muhammad Sana Ullah Shah, Xiaoqing Zuo, A. Shah, Sameerah I. AlSaeedi, Muhammad Zia Ullah Shah, Eman A. Alabbad, Hongying Hou, Syed Awais Ahmad, Muhammad Arif, Muhammad Sajjad, Tauseef Ul Haq.	Cose nanoparticles supported NiSe ₂ nanoflowers cathode with improved energy storage performance for advanced hybride supercapacitors	Journal of energy storage (2023)
16	Lolwah Alfuhaid, Eman Al-Abbad, Shouq Alshammari, Aljawharah Alotaibi, Naved Malek and Azza Al-Ghamdi	Preparation and Characterization of a Renewable Starch-g-(MA-DETA) Copolymer and Its Adjustment for Dye Removal Applications	Polymers (2023)
17	Memona Idrees, AbidInayat, Irfanullah, Eman A. Alabbad, Zainab M. Almarhoon, Hassan M.A. Hassan, Adela. El-Zahhar, Ata-ur-Rehman, Ali Haider, Syed Mustansar Abbas, Qin Zhang, Xuanke Li	Sulphonated graphene-encapsulated Fe ₂ N in the PANI matrix as a high Performance lithium ion battery anode	Materials Today Chemistry (2023)
18	M.I. Khan, Shazia Mumtaz, Ghulam M. Mustafa, Mongi Amami, Urram Shahzad, Eman A. Al-Abbad.	Improving the current density and reducing the recombination rate of dye sensitized solar cells by modifying the band gap of Titania using Novel heterostructures	Optical Materials (2023)
19	Muhammad Aadil, Tehmina Kousar, Mehtab Hussain, H.H. Somaily, Aliaa Kareem Abdulla, Eman Ramzy Muhammad, Eman A. Al-Abbad, Mohamed Abdel Salam, Soha M. Albukhari, Doaa F. Baamer, Mohd Zahid Ansari	Generation of mesoporous n-p-n (ZnO-CuO-CeO ₂) Heterojunction for Highly efficient photodegradation of Micro-organic pollutants.	Ceramics International (2023)
20	Nisar Khan, Tamanna Gul, Idrees Khan, Eman A. Alabbad, Shahid Ali, Khalid Saeed, and Ibrahim Khan	Scavenging of Organic Pollutant and Fuel Generation through Cost-Effective and Abundantly Accessible Rust: A Theoretical Support with DFT Simulations	Materials (2023)



21	Fares Alsewailem and Eman A Alabbad	Potential of utilizing immiscible polymer blends as porous materials	Physica Scripta (2023)
22	Eman A. Alabbad	Effect of Direct yellow 50 removal from an aqueous solution using Nano bentonite; Adsorption isotherm, kinetic analysis and also thermodynamic behavior	Arabian Journal of Chemistry (2023)
23	Muhammad Arif Ullah, Munirah Sulaiman Othman Alhar, Afaq Ullah Khan, Kamran Tahir, Magdi E. A. Zaki, Eman A. Alabbad, Ebraheem Abdu Musad Saleh, Hassan M. A. Hassan, Adel A. El-Zahhar, Alaa M Munshi	Photocatalytic removal of alizarin red and photoinhibition of microbes in the presence of surfactant and Bio-template mediated Ag/SnO ₂ /Nb ₂ O ₅ -SiO ₂ nanocomposite	Journal of Molecular Liquids (2023)
24	M. Irfan , M.I. Khan , Ikram-ul-haq , Mongi Amami , R. Ahson , Eman A. Alabbad	Effect of Fe ions beam on the structural, optical, photovoltaic properties of TiO ₂ based dye-sensitized solar cells	Optical Materials (2022)
25	Muhammad Sadiq Hussain, Rabia Rehman, Muhammad Imran, Amara Dar, Mehwish Akram, and Eman A. Al-Abbad	Eco-friendly detoxification of Congo Red dye from water by Citric acid activated bio-adsorbents consisting of watermelon and water chestnuts peel collected from indigenous resources	Adsorption science & technology (2022)
26	Bilal Ahmad, M.I. Khan, M.A. Naeem, Aiyeshah Alhodaib, Mahvish Fatima, Mongi Amami, Eman A. Al-Abbad, Abida Kausar, Norah Alwadai, Arif Nazir, Munawar Iqbal,	Green synthesis of NiO nanoparticles using Aloe vera gel extract and evaluation of antimicrobial activity	Materials chemistry and physics (2022)
27	Khalil ur Rehman, Afaq Ullah Khan, Kamran Tahir, Sadia Nazir, Karma Albalawi, Hassan M.A. Hassan, Eman A. Alabbad, Moamen S. Refat, Hamza S. Al-Shehri, Afrah Mohammed Aldawsari	Facile synthesis of copper oxide nanoparticles (CuONPs) using green method to promote photocatalytic and biocidal applications	Journal of Molecular Liquids (2022)
28	Eman A. Alabbad Sajid Bashir Jingbo Louise Liu	Efficient Removal of Direct Yellow Dye using Chitosan Crosslinked Isovannillin Derivative Biopolymer utilizing Triboelectric Energy Produced from Homogeneous Catalysis.	Catalysis today (2022)
29	Arif Nazir, Ali Akbar, Hanadi B. Baghdadi, Shafiq ur Rehman Eman A. Alabbad, Mahvish Fatima, Munawar Iqbal, Nissren Tamam, Norah Alwadai, Mazhar Abbas	Zinc oxide nanoparticles fabrication using Eriobotrya japonica leaves extract: Photocatalytic performance and antibacterial activity evaluation	Arabian Journal of Chemistry (2021)
30	Eman Al-Abbad and Reyad A. Al Dwairi	Removal of nickel (II) ions from water by Jourdan natural zeolite as sorbent material	Journal of Saudi Chemical Society (2021)



31	Eman Al-Abbad	Efficacy assessment of natural zeolite containing wastewater on the adsorption behavior of Direct Yellow 50 from; equilibrium, kinetics and thermodynamic studies	Arabian Journal of Chemistry (2021)
32	Eman Al-Abbad	Efficient removal of methyl orange dye from wastewater by chitosan-iso-vanillin	Open Chemistry journal (2020)
33	Eman Alabbad and Fadi Alakhras	Removal of dye acid red 1 from aqueous solutions using chitosan-iso-vanillin sorbent material	Indonesian Journal of physical chemistry (2020)
34	Eman A. Alabbad, Fadi Alakhras, Ioannis Anastopoulos, Ahmad Hosseini-Bandegharai	Chitosan-Based Materials for the Removal of Nickel Ions from Aqueous Solutions	Russian Journal of Physical Chemistry (2020)
35	Eman Al-Abbad	Estimation the sorption capacity of chemically modified chitosan toward cadmium ion in wastewater effluents	Oriental Journal of Chemistry (2019)
36	Fadi Alakhras, Hanin Al-Shahrani, Eman Al-Abbad, Fuad Al-Rimawi, Nouredine Ouerfelli	Removal of Pb (II) Metal Ions from Aqueous Solutions Using Chitosan-Vanillin Derivatives Chelating Polymers	Polish Journal of Environmental studies (2019)
37	Fadi Alakhras, Nouredine Ouerfelli, Ghassab Al-Masaideh, Taher Ababneh, Eman Al-abbad, Fatma Abouzeid.	Optimal Pseudo-average order kinetic model for correlating the removal of nickel ions by adsorption on nano bentonite.	Arabian journal for Science and Engineering (2019)
38	Fadi Alakhras, Hanin Al-Shahrani Eman Al-Abbad, Ghassab ALMazaideh, Nouredine Ouerfelli	Sorption of Co (II) Metal Ions from Aqueous Solutions by Types of Chemically Modified Chitosan	Global nest (2018)
39	A.A.Al-ARFAJ, F. Alakhras, S.REDA, E. Al-Abbad, N. Ouerfelli.	Removal of orange 2G Dye from Aqueous solutions using TiO ₂ -based nanoparticles: Isotherm and kinetic studies	Asian journal of chemistry (2018)
40	N.O. Alzamel, F.Alakhras, A.A. Alarfaj, M.A.Al-Khaldi, N.A. AlOmair, E. Al-Abbad, A.A.Wassel N.Ouerfell.	On the Homographic Dependence of Activation Energy and Viscosity Arrhenius Temperature for Some Pure Fluids	Asian journal of chemistry (2018)
41	F. Alakhras, E. Al-Abbad, N.O. Alzamel, F.M. Abouzeid, N. Ouerfelli.	Contribution to modelling the effect of temperature on removal of Nickel ions by adsorption on nano-bentonite.	Asian journal of chemistry (2018)

Contribution to Scientific Conferences and Symposia

#	Conference Title
---	------------------



1	Attend (Arab Conference on the Developmental and Economic Impacts of Nanotechnology) (2010)
2	Attend (Third scientific conference for students of higher education in the Kingdom) (2012)
3	Attend (The fifth scientific conference for postgraduate students) (2013)
4	Attend (Twenty-ninth meeting of the Saudi Society for Life Sciences (Environment and Development in the Gulf Region) (2014)
5	Attend (Meeting with the Scientific Research Committee for Awareness and Communication) (2015)
6	Attend (The first national conference in Saudi universities in cooperation with American, Canadian and Australian universities) (2015)
7	Attend (Preparatory meeting for the seventh student conference) (2016)
8	Attend (The Fourth Saudi International Conference on Nanotechnology) (2016)
9	Visit program of prof -Sang Gook kim form MIT (2016)
10	The effectiveness of the Arab Chemistry Week (Symposium) (2017)
11	The Symposium -Sustainable Energy: How Quantum Chemistry Can Help (2019)
12	Scientific symposium (Theoretical and experimental investigation of two alkyl carboxylates as corrosion inhibitors for steel in acidic medium) (2020)
13	Scientific symposium (Hexamethylene-1,6-bis(N-Dglucopyranosylamine) as a novel corrosion inhibitor for oil and gas industry: Electrochemical and computational analysis) (2020)
14	Synthesis of new class corrosion inhibitors derived from natural fatty acid: 13-Docosenoic acid amide derivatives for oil and gas industry (2020)
15	Scientific symposium (Synthesis of carbon nanotubes grafted with copolymer of acrylic acid and acrylamide for phenol removal) (2020)
16	Scientific symposium (Localized corrosion and mitigation approach of steel materials used in oil and gas pipelines- An overview) (2020)
17	Scientific symposium (Effective acid corrosion inhibitors for steel under turbulent flow condition based on benzimidazoles: electrochemical, theoretical, SEM) (2020)
18	Attend (The first joint scientific meeting between faculty members in the Department of Chemistry at King Fahd University of Petroleum and Minerals and faculty members in the Department of Chemistry in Imam Abdulrahman bin Faisal University) (2021)
19	Contribution and attend of '5th International Conference on Materials Engineering and Nanotechnology 'In Kuala Lumpur Malaysia- 4th-5th Dec (2021)
20	Scholars Frontiers in Chemistry Forum, In Berlin, Germany & online 20-21 June (2022)
21	The third researchers' forum to discuss the Ministry of Education's project "Enhancing the efficiency of scientific research and studies in Arabic in the fields of social sciences and humanities in Saudi universities" (2022)
22	The second international webinar on science, sustainable development and ecosystems in Saudi Arabian (2022)
23	9th International Conference Gap Summit Scientific Research congress, Adiyaman, Turkey 1-3 July (2022)



24	Atlas international conference on research in applied sciences, Barcelona, Spain 9-10 July (2022)
25	10th International Istanbul Scientific Research Congress İstanbul, Turkey on July 23-25 (2022)
26	6th International Conference on Innovative Studies of Contemporary Sciences, Tokyo , Japan August 1-2 (2022)
27	VI-International European Conference on Interdisciplinary Scientific Research, Bucharest, Romania August 26-27 (2022)
28	7th International New York Conference on Evolving Trends in Interdisciplinary Research & Practices, Manhattan, New York October 1-3, (2022)
29	Attend of “2nd Laboratory Technical Exchange Forum”, Saudi Aramco, (2023)
30	Participated as Attendees in “Open Innovation and Digital Transformation Conference” Held on 3& 4 March, The Diplomat Radisson Blu Hotel, Manama, Bahrain kingdom. (2024)
31	Attend of Conference title “The Green Sustainable Future in the Kingdom of Saudi Arabia”, King Fahad university petroleum and minerals. (2024)
32	Attend of Conference title “KFUPM Research Forum 2024 New Research Identity for a Better KSA and World” -Dhahran (2024)
33	Attend of Conference title “Aramco Entrepreneurship Summit: TecShift (Empowering pioneers, Transforming Tomorrow)” - Dhahran (2024)
34	Attend of Conference title "IDWS Innovation driven water sustainability” – Jeddah (2024)

Workshops and training:

#	Workshop Title
1	Scientific Research: Its status, Rewards, and Forms of support (2008)
2	Workshop of (The product of the pioneers) (2008)
3	Workshop of (Using the electronic index of university libraries and the unified search engine) (2011)
4	Workshop on (Communication Skills in Courses) (2012)
5	Training Course (Your Colors is the Secret of Your Happiness) (2013)
6	Workshop on (program description and program report) (2014)
7	Workshop on (the description and report of the program) held in Hafar Al-Batin (2014)
8	Workshop Science (file of the decision) in the province of Dammam (2014)
9	Workshop on (Teaching through Learning Teams) (2014)
10	Workshop on (Advancing Differentiated Induction) (2014)
11	Workshop on (The Use of iPads in Education) (2014)
12	Workshop on (Mashups) (2014)
13	Workshop on (Cooperative Training in Saudi Aramco) (2014)
14	The training program (Raising the level of international rankings in universities) (2014)



15	Workshop on (How to benefit from electronic resources using Summon & OPAC) (2014)
16	Workshop on "assessment without exams) (2014)
17	The training course entitled (Chemical Message Marketing) (2015)
18	Workshop on (Nanotechnology for Sustainable World Industrial and Environmental Applications of Nanomaterials) (2015)
19	Workshop on (Formulating multiple test questions to measure thinking skills) (2016)
20	Workshop on (Educational Coffee Forum) (2016)
21	Workshop of (Use of resources in teaching) (2016)
22	Workshop of (How to benefit from the electronic resources on the university website) (2016)
23	Workshop of (Research mechanism in libraries, periodicals, and scientific and international services centers at the scientific researcher's facility) (2016)
24	Workshop of (Using the calendar in the teaching process and how to build a table of specifications) (2016)
25	Workshop of (Laboratories Technical Exchange) (2017)
26	Workshop of (Upgrading the quality of research in preparation for scientific publishing using web of science) (2017)
27	Workshop of (Achieving Excellence in Graduate Education) (2017)
28	Workshop of (Emotional Intelligence for Academic Leaders) (2018)
29	Workshop of (Excellence in Undergraduate Education) (2018)
30	Workshop of (Computational chemistry and its most important applications) (2018)
31	Webinar of (Technical development and its impact on teaching and learning) (2018)
32	Workshop of (Chemists the kingdom Needs to Meet Future Industrial Challenges) (2019)
33	Workshop of (Finnish education, success in entrepreneurship and innovation) (2019)
34	Workshop of (Innovation Life - Teaching and Learning to Innovate) (2019)
35	Workshop of (Google scholar "Manage searchers' accounts for citation services) (2020)
36	Workshop on (Creative Thinking) (2020)
37	Workshop on (Leadership Awareness) (2020)
38	Workshop on (Leadership Basics) (2020)
39	Workshop on (The training program "Developing the basic competencies in teaching and learning for the university professor) (2020)
40	Workshop on (Methodology for preparing the operational plan) (2020)
41	Workshop on (Graphic Design Workshop) (2020)
42	Workshop on (Machine Learning for Intermolecular Interactions) (2020)
43	Workshop on (The impact of volunteering on society) (2020)
44	Workshop on (Using the British Academic Encyclopedia for interactive teaching) (2020)
45	Workshop on (Qualitative practices in academic development) (2021)
46	Workshop on (Electronic test development workshop) (2021)
47	Workshop on (Volunteering workshop is community culture) (2021)
48	Workshop on) Research-based study program design workshop within training activities)(2021)
49	Workshop on (a forum for modern trends in building academic programs in university education) (2021)
50	Workshop on (Practical Applications of Mind Maps in Classrooms) (2021)



51	Workshop on (Office 365 Integration) (2021)
52	Workshop on (International Webinar on Science, Sustainable Development and Ecosystems in Saudi Arabia) (2021)
53	Workshop on (Saudi Arabian International Chemical; Sciences (Chapter of American Chemical Society) (2021)
54	Workshop on (Promoting Deep Learning in your Classroom (SOLO Taxonomy) (2021)
55	Workshop on (Instructional design according to the ADDIE model) (2021).
56	Workshop on (Positive Thinking The key to Excellence) (2021)
57	Workshop on (Mendeley)(2021)
58	Workshop on (Education and the challenges of the digital age) (2021)
59	Workshop on (The impact of volunteering on work and personal life) (2021)
60	Workshop on (Introduction to artificial intelligence) (2021)
61	Workshop on (Develop creative thinking among students) (2021)
62	Workshop on (writing Philosophy in Teaching) (2021)
63	Workshop on (Communication skills) (2021)
64	Workshop on (Universal teaching values) (2021)
65	Workshop on (Values Form in Saudi Academic Societies) (2021)
66	Workshop on (Development through Peer Observation of Teaching) (2021)
67	Workshop on (Scientific publishing (Part 1) (2021)
68	Workshop on (The effect of ionizing radiation on human's) (2021)
69	Workshop on (Natural radioactive materials) (2022)
70	Workshop on (Plasma physics and technology) (2022)
71	Workshop on (Problem based learning strategies to enhance conceptual understanding of chemistry) (2022)
72	Workshop on (The active leadership program and its role in ensuring the quality of student assessment) (2022)
73	Workshop on (Student behavior management strategy) (2022)
74	Workshop on (Blackboard interaction tool (groups) (2022)
75	Workshop on (Accredited Scientific Journals System Workshop) (2022)
76	Workshop on (Blackboard achievement tool) (2022)
77	Workshop on (Electronic archiving using Microsoft Word and Excel) (2022)
78	Workshop on (Virtual Reality) (2022)
79	Workshop on (Cybercrime system) (2022)
80	Workshop on (use of application on distance education) (2022)
81	Workshop on (Specifications of a good research paper) (2022)
82	Forum values in Saudi academic community (2022)
83	Workshop on (Teaching the gifted in the school curricula)(2022)
84	Workshop on (Global Professional Values)(2023)
85	Workshop on (your way towards creating a competitive scientific poster)(2023)
86	Measurement underpins the global food system. (Affiliated to the World Measurement Day 2023 program)(2023)
87	Workshop on (the first and second training program for the Social Responsibility Bank platform)(2023)



88	Workshop on (Challenges the readiness of institutions for innovation)(2023).
89	Attend a Professional Fellowship Program in University Teaching and Learning (2023).
90	Workshop on (archiving electronic educational content on the Blackboard learning management system) (2023)
91	Workshop on (Tools and applications of generative artificial intelligence in education) (2023).
92	Workshop on (The employee's role in enhancing cybersecurity) (2023).
93	Workshop on (Design thinking lecture) (2023).
94	Workshop on (A training workshop on a journey in project management) (2023).
95	Workshop on (The institutional assessment tool "Itqan" and its uses and results)(2023).
96	Workshop on (Digital Citizenship for Generation Z)(2023).
97	Workshop on (National Landscaping Management System)(2023).
98	Workshop on (Effective teaching practices) (2023)
99	Workshop on (Safe handling of peroxide-forming solvents)(2023)
100	Participation in the training course entitled (General Course on Intellectual Property)(2023)
101	Attendance of webinar (The faculty digital assistant: Artificial Intelligent support in student assessment)(2024)
102	A workshop entitled (Presentation and Deliverance Skills in Scientific Conferences)(2024)
103	Attendance of Workshop on (Fostering Future-Ready Minds: How to Prepare University Students for the Future in the AI Era)(2024)

Training course

1	Attend a training course entitled (social guidance and counseling students in the role of the university adjustment process) (2008).
2	Attend of training course entitled (Chemical message marketing) (2015)
3	Attend a training course entitled (To raise the ranking of universities), held in Istanbul-Turkey (2015).
4	Attend a training course entitled (Developing the basic competencies in teaching and learning for the university professor) (2021)
5	Training course (Game work with Education" within the summer camp for the future of e-learning) (2021)
6	Training course (Radiation applications in industry, medicine, agriculture, and environmental protection) (2021)
7	Training course (Innovative Leadership) (2022)
8	Training course (Interactive educational competition on platform Kahoot) (2022)
9	Training course (Converse system and research ethics) (2022)
10	Training course (Plasma physics and technology) (2022)
11	Training course (Introduction of cyber security) (2022)
12	Workshop on (Microsoft Project) (2023)

Membership of Scientific and Professional Societies and Organizations

- Member of Saudi Chemical Society.



- Member of American Chemical Society.
- Member of Saudi Nuclear Society.

Teaching Activities

Undergraduate

#	Course/Rotation Title	No./Code	Extent of Contribution (no. of lectures/Tutorials. Or labs, Clinics)
1	General Chemistry I	CHEM 101	Lectures, labs
2	General Chemistry II	CHEM 102	Lectures, labs
3	Kinetic chemical reaction	CHEM 322	Lectures, labs
4	Chemistry of Corrosion	CHEM 512	Lectures, labs
5	Thermodynamics Chemistry	CHEM 306	labs
6	Electrochemistry	CHEM 406	labs
7	Instrumental Chemical Analysis	CHEM 304	labs
8	Coordination	CHEM 409	labs
9	Inorganic chemistry	CHEM 231	labs
10	Organic chemistry	CHEM 162	labs
11	Surface chemistry and catalysis	CHEM 507	Lectures, labs
12	Research project	CHEM 508	Research

Brief Description of Undergraduate Courses Taught: (Course Title – Code: Description)

1	General Chemistry I- CHEM 101: Matter, atomic structure and the periodic table, chemical bonding, stoichiometry of pure substances, reaction in aqueous solutions, states of matter (gases, liquids, and solids), mixtures (with emphasis on some physical aspects of solutions), thermochemistry.
2	General Chemistry II - CHEM 102: This course continues the examination of principles and applications of chemistry that was begun in CHM/150: General Chemistry I. Topics include properties of solutions, acids and bases, kinetics, equilibrium, thermodynamics, oxidation & reduction, ionic and redox equations, and electrochemistry. Students apply these concepts using practical examples, facilitated discussions, and experiments conducted through completion of virtual labs.
3	Kinetic chemical reaction - CHEM 322: It is the branch of physical chemistry that is concerned with understanding the rates of chemical reactions. It is to be contrasted with thermodynamics, which deals with the direction in which a process occurs but in itself tells nothing about its rate. Chemical kinetics includes investigations of how experimental conditions influence the speed of a chemical reaction and yield information about the reaction's mechanism and transition states, as well as the construction of mathematical models that also can describe the characteristics of a chemical reaction.



4	Chemistry of Corrosion - CHEM 512: This course provides natural process that converts a refined metal into a more chemically stable form such as oxide, hydroxide, or sulfide. It is the gradual destruction of materials (usually a metal) by chemical and/or electrochemical reaction with their environment. Corrosion engineering is the field dedicated to controlling and preventing corrosion.
5	Surface chemistry and catalysis- CHEM 507: Introduction to surface chemistry, the structure of surface, thermodynamics of an interface, dynamics at surfaces, electrical properties of surfaces, adsorption-induced charge transfer at surfaces, the surface chemical bond and catalysis by surfaces.
6	Research project – CHEM 508: Deals with the basic and fundamental steps on doing scientific research, writing proposal, citation, and skills of presentation.

Postgraduate

#	Course/Rotation Title	No./Code	Extent of Contribution (no. of lectures/Tutorials. Or labs, Clinics)
1	Materials, surface and Interfaces	CHEM 546	Lectures
2	Advanced photochemistry	CHEM 545	Lectures
3	Methodology research	CHEM	Lectures

Brief Description of Postgraduate Courses Taught: (Course Title – Code: Description)

1	Materials, surface and Interfaces - It covers different theoretical aspects of surfaces and interfaces, their physical properties, and spectroscopic techniques that have been applied to a wide class of different materials. The diversified technological areas of surface science reflect the explosion of scientific information on surfaces and interfaces of materials and their spectroscopic characterization.
2	Photochemistry is the branch of chemistry concerned with the chemical effects of light. Generally, this term is used to describe a chemical reaction caused by absorption of ultraviolet (wavelength from 100 to 400 nm), visible light (400–750 nm) or infrared radiation (750–2500 nm).

Course Coordination

#	Course Title and Code	Coordination	Co-coordination	Undergrad.	Postgrad.	From	To
1	General Chemistry I - CHEM 101	-	√	√	-	2017	2018



2	Kinetic chemical reaction - CHEM 322	√	-	√	-	2018	2019
3	Surface chemistry and catalysis- CHEM 507	√	-	√	-	2017	2022
4	Chemistry of Corrosion- CHEM 512	√	-	√	-	2017	2022
5	Materials, surface and Interfaces - CHEM 546	√	-	-	√	2019	2020
6	Surface chemistry and catalysis- CHEM 507	√	-	√	-	2022	2023
7	General chemistry II – CHEM 207	√	-	√	-	2022	2023
8	Advanced photochemistry - CHEM 545	√	-	-	√	2022	2023

Student Academic Supervision and Mentoring

#	Level	Number of Students	From	To
1	Graduate student (research mentoring)	25	2014	Until now
2	Postgraduate student (research supervision)	4	2018	2023

Supervision of Master and/or PhD Thesis

#	Degree Type	Title	Institution	Date
1	Master	Removal of some Heavy Metal Ions from Aqueous Solutions Utilizing the Jordanian Natural Zeolites	Imam Abdulrahman bin Faisal university	2020-10-15
2	Master	Using of Chemically Modified for the Sorption of some Toxic Metal Ions in Aqueous Systems	Imam Abdulrahman bin Faisal university	2020-10-22
3	Master	Synthesis of Biodegradable Starch Grafted Copolymers	Imam Abdulrahman bin Faisal university	2023-5-18



		Using Free Radical Polymerization for Dye Removal Application		
4	PhD	Green and Chemical Synthesis of Platinum based Nanoformulations, Characterization and pH Stimuli Drug Delivery for Targeted Breast Cancer Therapy	Imam Abdulrahman bin Faisal university	2024-4-25

Ongoing Research Supervision

#	Degree Type	Title	Institution	Date

Administrative Responsibilities, Committee and Community Service (Beginning with the most recent)

Administrative Responsibilities

#	From	To	Position	Organization
1	2018	2019	Head of Field Training	Science college, University of Dammam

Committee Membership:

#	From	To	Type of Volunteer	Organization
1	2007	2014	Member	Committee on Academic Advising in Chemistry Department.
2	2011	2013	Member	Committee of tables in Chemistry Department
3	2008	2019	Member	Community service in Chemistry department (2008-2009).
4	2009	2010	Member	Member of the committee for Security and Safety in Chemistry Department
5	2010	2011	Member	Activities committee in Chemistry Department
6	2016	2018	Head	Safety and Security Institute in Chemistry Department
7	2018	2019	Head	Monitoring exams Committee in Chemistry Department.



8	2018	2019	Head	Qasd program for committee in Academic Accreditation
9	2018	2019	Member	Community service in Chemistry department in 10 standards
10	2018	2020	Member	Public Relations Committee in Chemistry Department
11	2019	2021	Member	Community Service Committee in Chemistry Department
12	2021	2022	Head	Committee for Community Service, Public Relations and Media
13	2022	2023	Head	Head of Field Training
14	2022	2023	Member	Member of the Curriculum Committee
15	2022	-2023 2024	Head	Head of the Comprehensive Examination Committee.

Volunteer Work

#	Date	Type of Volunteer	Organization
1	2004	Participation in the summer activity program	College of Science, University of Dammam, Under the supervision of the Ministry of Education
2	2007	Participation in the summer talent program	College of Science, University of Dammam, King Abdelaziz & his Companions Foundation for Giftedness & Creativity.
3	2016	Supervising the training of female students of the College of Science	College of Science, University of Dammam, Graduate and Professional Development Unit.
4	2017	Laboratory safety exhibition	College of Science, University of Dammam, and Secondary school students, And laboratory technicians.
5	2017	Chemistry Pulse exhibition	College of Science, University of Dammam, and Secondary school students.
6	2018	The speed of the reactions	College of Science, University of Dammam, and Secondary school students.
7	2018	Training talented students in the scientific research program within the activities of the talent incubators	Talent management



8	2018	Declamation a lecture on the Enrichment talent program to talented students from different regions of the Kingdom (secondary school)	Education Office of the Department of Education in the Eastern Province
9	2019	Talent Enrichment Program 2019	College Vice Deanship for Studies, Development and Community Service
10	2022	Arab Chemistry Week	College Vice Deanship for Studies, Development and Community Service
11	2023	Surface Chemistry Application	College Vice Deanship for Studies, Development and Community Service

Scientific Visits:

1	Scientific visit of Prince Sultan bin Abdelaziz City for Science and Technology (SciTech) with the students (2011).
2	Scientific visit to King Abdullah University with the students to learn about the types of laboratory and medical tests (2015).
3	Scientific visit to research center in Aramco Saudi Arabia (2016)

International Research Awards

#	Title research	Name of award	Date
1	Efficient Removal of Direct Yellow Dye using Chitosan Crosslinked Isovanillin Derivative Biopolymer utilizing Triboelectric Energy Produced from Homogeneous.	Best Research Award (NESIN 2021 ward)	12-7-2021

Science Posters Awards

#	Title research	Name of award	Date
1	Winning the first place in the Chemathon program organized by the Ministry of the Gulf Organization for Chemistry (GCA) and Chemistry Conference at King Fahd University, 2022.	Best of Poster	10-6-2022

Excellence in Scientific Research Awards



1	Removal of nickel (II) ions from water by Jourdan natural zeolite as sorbent material (2021)
2	Efficacy assessment of natural zeolite containing wastewater on the adsorption behavior of Direct Yellow 50 from; equilibrium, kinetics and thermodynamic studies (2021)
3	Facile synthesis of copper oxide nanoparticles (CuONPs) using green method to promote photocatalytic and biocidal applications (2022)
4	Efficient Removal of Direct Yellow Dye using Chitosan Crosslinked Isovanillin Derivative Biopolymer utilizing Triboelectric Energy Produced from Homogeneous Catalysis (2022)
5	Green synthesis of NiO nanoparticles using Aloe vera gel extract and evaluation of antimicrobial activity (2022)
6	Eco-friendly detoxification of Congo Red dye from water by Citric acid activated bio-adsorbents consisting of watermelon and water chestnuts peel collected from indigenous resources (2022)
7	Effect of Direct yellow 50 removal from an aqueous solution using Nano bentonite; Adsorption isotherm, kinetic analysis and also thermodynamic behavior(2023).
8	Photocatalytic removal of alizarin red and photoinhibition of microbes in the presence of surfactant and Bio-template mediated Ag/SnO ₂ /Nb ₂ O ₅ -SiO ₂ nanocomposite (2023).
9	Generation of mesoporous n-p-n (ZnO-CuO-CeO ₂) Heterojunction for Highly efficient photodegradation of Micro-organic pollutants.(2023).
10	Sulphonated graphene-encapsulated Fe ₂ N in the PANI matrix as a high Performance lithium ion battery anode (2023).
11	Preparation and Characterization of a Renewable Starch-g-(MA-DETA) Copolymer and Its Adjustment for Dye Removal Applications (2023).
12	Cose nanoparticles supported NiSe ₂ nanoflowers cathode with improved energy storage performance for advanced hybride supercapacitors (2023).
13	Decontamination of malachite green and Victoria blue-B dyes by high-speed photo-catalyze reactor using titania and zinc oxide as catalysts (2023).
14	Polypyrrole decorated on irregular SnSe particles: A high energy density and stable durability for asymmetric supercapacitor applications (2023).
15	Synthesis of Adenosine 5-monophosphate monohydrate functionalized mesoporous Ag/CuO/MCM-41 nanostructures for enormous mineralization of insistent organic contaminants and photoinhibition of bacteria (2024).
16	Effective application of citric acid treated Trapa natans and Citrullus lanatus lignocellulosic macromolecules for adsorptive remediation of acid Violet-7 dye (2024).
17	Enhancing photocatalytic efficiency of type II V ₂ O ₅ /TiO ₂ heterojunctions for malachite green dye using solar simulator irradiation (2024).
18	Nanostructured Codoped Neodymium Orthoferrite Synthesized via the Hydrothermal Route for Photocatalytic Annihilation of Crystal Violet Dye (2024).

Discussing master's and doctoral theses



#	Theses title	Theses	Name of student
1	Study of the viscosity-temperature dependence and its derived properties in some liquid systems (2021)	Master	Doaa Alotaibi
2	Microwave Synthesis of Metal -Free Doped Hexagonal Boron Nitride for Photocatalytic Hydrogen Production and Water Treatment (2022)	Master	Suaad Alqahtani

Editorial / Reviewing Commitment

#	Scientific Journal Title	Date
1	Journal of chemistry	2021
2	Edelweiss Chemical Science	2021
3	Journal of Saudi Chemical Society	2022
4	Desalination and water treatment	2022
5	Arabian Journal of Chemistry	2023

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

1	Laboratory experiences during different techniques in the lab Products such as UV-vis spectrophotometry, Potentiostate techniques, Preparation of different solution for adsorption
2	Active participation in the work of academic development initiatives in global teaching in 2018
3	Heading and managing the field training unit at the College of Science in 2019
4	Participation in the success of the project to design electronic courses for the basic level at the level of academic programs
5	Active participation in the work of academic development initiatives (practical teaching) during the academic year 1439/1440
6	Depositing a copy of a master's thesis titled (Adsorption of some fatty acids on the surface of sodium montmorillonite clay) in King Fahd National Library
7	Active participation in enriching the second scientific meeting of the Deanship of Scientific Research
8	Participation in the cooperative program with Saudi Aramco
9	Participation in the supervision and training of graduates of the Faculty of Science
10	Discussion and arbitration of a master's titled (Study of the viscosity-temperature dependence and its derived properties in some liquid systems) submitted by student Doaa Al Otaibi.
11	I have many services provided to the community and a number of them have been registered in the Social Responsibility Bank, including, for example:



	<p>1-Presenting a lecture on scientific research and its stages within the activities of the Enriching Talent Program for secondary school students</p> <p>2-Presenting an introductory lecture for laboratory technicians in general education schools aimed at the safety and security of chemical laboratories, in addition to the technical exhibition held in the hall of the Faculty of Science</p>
12	Participation in the Mawhiba Summer Program under the supervision of the King Abdelaziz and His Companions Foundation for the Gifted
13	Most of the research papers have been published in internationally renowned and highly-ranked Q1, Q2 journals with high .impact factor in the fields of Catalysis, Surface chemistry, and Adsorption
14	Submitted to the Excellence Award for Research Publication for Research entitled (Removal of nickel (II) ions from water by Jourdan natural zeolite as sorbent material)
15	Submitted to the Excellence Award for Research Publication for Research entitled (Efficacy assessment of natural zeolite containing wastewater on the adsorption behaviour of Direct Yellow 50 from; equilibrium, kinetics and thermodynamic studies)
16	Received International Research Awards on New Science Inventions and honourable achievement the Best Research Award Publication for entitled (Efficient Removal of Direct Yellow Dye using Chitosan Crosslinked Isovanillin Derivative Biopolymer utilizing Triboelectric Energy Produced from Homogeneous) (2021)
17	Participation in the technical exchange of laboratories in Saudi Aramco
18	Computer Skills: skills in computer programs as office word - Microsoft excel, outlook-power point of all kinds.
19	Searching data bank: Chemical abstracts and Sc Finder.
20	Professional Using the different Infographic Programs.
21	Professional in iPad in teaching and teamwork between student also use in solving exercise.
22	Professional in Prezi program, Microsoft office and proficient use of Adobe Photoshop
23	Professional in research publishing process, academic writing, scientific reviewing, writing proposal, white papers, and critiques
24	Professional in scientific presentation and poster, Working on developing Leadership skill and self-improvement, communication skills and networking, Leading and coordinating many group teams and meetings.
25	Extensive experience with Mendeley and using chemdraw, chemwindow, origin, Extensive experience using all library and online academic resources.
26	Winning the first place in the Chemathon program organized by the Ministry of the Gulf Organization for Chemistry (GCA) and Chemistry Conference at King Fahd University, 2022.

Last Update

13/ 1 /2025