

#### **PROFILE**

#### SEHAM S. ALTERARY

Associate Professor in Organic Chemistry & Nanotechnology

#### **CONTACT**

Office Phone Number: +966-118055452

#### WEBSITE:

https://fac.ksu.edu.sa/salterary/home

**EMAIL:** 

salterary@ksu.edu.sa

#### Education

## Bachelor of Science degree in *chemistry* [1994]

with VERY GOOD grade, from KAU, Faculty of Science. Master degree of science degree in *chemistry* [2003] with EXCELLENT grade, from KAU, Faculty of Science.

PhD degree of science degree in spectroscopic methods [2008]

HORONABLE grade, from **Paris VII** "Denis Diderot" Université.

#### **ADMINSTRATIVE POSITIONS**

Vice-chairman of Physics & Astronomy Department [From 2014-2017]

At College of Science, King Saud University

Vice-chairman of Chemistry Department

[06/10/2017-29/07/2021]

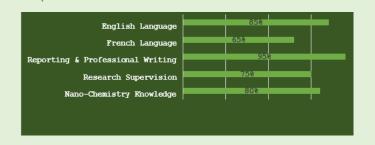
At College of Science, King Saud University

Nanotechnology unit supervisor in Girls University City [2016- 2020]

A female branch of King Abdullah Institute for Nanotechnology

Deputy Dean of King Abdullah institute for Nanotechnology for the female branch [2020-till now]

#### **SKILLS**



Research an	d experience
Conferences	
2021	Participate in attendance "9th International Scientific Conference on Water Resources & Arid Environments (ICWRAE)" 29-31 March 2021
2019	Participate in attendance in <b>4</b> <sup>th</sup> <b>Symposium on Women in Chemistry</b> at The Hague, Netherlands 24,June 2019,1 day.
2019	Participate in a poster at 6 <sup>th</sup> Nano Today Conference, Lisbon-Portugal. 16-20 June,4 days
2019	Participate in <b>Riyadh Valley Company RVC Venture Capital Conference</b> , Burj Rafal Hotel-Kempiniski, Riyadh. 28-29 Jan 2019, 2 days
2018	Participate in International conference on Education Evaluation, Kingdom Hall-Four Seasons Hotel-Riyadh. 04-06/12/2018, 3 days
2018	participate by presenting a poster in 7 <sup>th</sup> International Chemical Conference Riyadh-KSU. 12-14 Nov. 3 days
2016	Participate in attendance in 6 <sup>th</sup> International Chemistry Conference, Riyadh-KSU. 08-10 Nov. 3 days
2016	Participate as speaker in Nano 2016-XIII International Conference on Nanostructured Materials. Québec, Canada Québec City Convention Centre, 07-12/08/2016. 6 days.
2015	Participate in attendance in <b>the 2<sup>nd</sup> Saudi International Conference on Scientific Publishing</b> , Deanship of Scientific Research, KSU. 11-13 Oct, 3 days.
2015	Participate in attendance in <b>12</b> <sup>th</sup> International conference on material chemistry MC12, York-UK. 20-23 July. 4 days
2014	Participate in attendance in the 3 <sup>rd</sup> Saudi International Nanotechnology conference 2014 (3SINC) And KACST-KAUST-UCSB workshops on solid state lighting Riyadh (1436), <i>King Abdulaziz City for Science and Technology</i> (KACST). 3 days
2013	Participate in attendance in The MiMe- Materials in Medicine International Conference 1st edition, Faenza-Italy. 8-11/Oct. 4 days
2012	Participate in attendance in the 2 <sup>nd</sup> Saudi International Nanotechnology conference 2012 (2SINC) "Nanotechnology innovation opportunities for future", Riyadh (1433), <i>King Abdulaziz City for Science and Technology</i> (KACST). 3 days
2012	Participate in attendance in <b>The International Symposium on Click Chemistry; The Way Forward</b> , 2012 (1433), Nottingham UK. Organized by <b>The University of Nottingham</b> . 3 days
2011	Participate in attendance in the Fourth International Chemistry Conference 2011 (1432), Riyadh, Chemistry and its Role and Application in Development. Organized by <i>The Saudi Chemical Society</i> and <i>King Saud University's Chemical Department</i> . 3days
2007	Participate in the E-MRS 2007 SPRING MEETING CONFERENCE, Strasbourg (France), in Symposium O, Functional organic & inorganic materials for micro and nano Bio-sensing system with Oral presentation and Submitted article; "Preparation and characterization of water-

soluble CdS QD through surface modification of carboxylate end-capped group".

WORKSHOPS		
2022	Webinar: "Improving student outcomes in Chemistry" Organized by: Cengage. 29 March 2022	
2022	Symposium on "Innovative Materials for a Sustainable Future" Organized by: College of Chemicals and Materials at King Fahad University of petroleum and minerals. 24 Feb 2022	
2021	Webinar: Challenges and opportunities for Saudi Arabian Economy in the Era of COVID-19 and Post COVID-19. Organized by; Asian Universities Aliance & Director of International Cooperation and Scientific Twinning Department, King Saud University. 21 Oct. 2021	
2021	Workshop titled "Quality of drinking water and its impact on human health and the environment" organized by Ministry of Environment, Water and Agriculture. 29/06/2021	
2021	Virtual attendance "Awareness program to combat desertification according to the Kingdom's vision 2030" organized by College of Science-KSU-17/06/2021	
2021	Virtual symposium "Empowering Diversity in Science: Gender in Academia and Publishing" organized by Chemistry Europe Angewandte Chemie- Wiley-VCH. 25/02/2021	
2020	Online Workshop on <b>Entrepreneurial Universities</b> ; organized by Ministry of Education Agency for Research and Innovation with the Participation of Private and Governmental Universities 04/10/2020	
2020	International Workshop :Foresight: Science for Navigating Critical Transitions, August 10- 11, 2020- Science 20 TF Circular Economy-2 days.	
2020	International virtual Symposium organized by" Chemistry Europe titled with 'Self Care is Not the Enemy of Performance" Presented by Jen Heemstra. 28/07/2020-07/12/1441	
2020	Attending the virtual meeting entitled "Women Leaders Meeting on Saudi Universities and the Coronavirus Crisis" organized by the University deanship of Female Student Affairs at King Khalid University held on 11/29/1441 corresponding to 07/20/2020	
2020	Attendance workshop titled with; Workshop on "Circular Carbon Economy (CCE) Technology and Innovation"; Climate Stewardship working Group (CSWG). Hosted by Saudi G20 Presidency; held at The Ritz-Carlton, Riyadh; for 2 days 01-02/03/2020	
2019	Attendance workshop titled with; "MATLAB Campus Wide License" organized by Deanship of e-Transaction and Communication; 20/10/2019; 1 day	

2019	Attendance at "The Third Quality Forum in Higher Education" Organized by Education & Training Evaluating Commissions. held at Fairmont Riyadh Hotel; 10/10/2019
2019	Workshop titled with "The Integration between The Professional Standards and The Teacher Preparation Program in Saudi universities". Organized by Education & Training Evaluating Commissions. held at Crowne Plaza Hotel Riyadh; 03/10/2019
2018	Attendance workshop titled with; "Activating Distance Learning" organized by Center for Excellence in Learning and Teaching ksu, 1 day
2018	Attendance workshop titled "Assessment of Learning Outcomes using RUBRICS" provided by Education Evaluation Commission National Center for Academic Accreditation & Evaluation 2 day, 12 hours
2018	Attendance workshop on "partnership between the university and industry and business "opportunities and challenges" on Monday, 1439/05 / 26H corresponding to 2018/02/12; Organized by the University Agency for Graduate Studies and Scientific Research at King Saud University
2018	Attendance a workshop in "Developing Women Leaderships for Departments Vice Chairs" Which was held at King Saud University During the Period of 23/01/2018 for a total of 3 training Hours
2017	Attendance workshop on "Academic Accreditation Requirements" Wednesday, 19 February 1439 H conciliator, November 8, 2017 As part of the International Day of Quality
2017	Attendance workshop at Science Collage titled with: "Academic Counselling Concepts and Skills".
2017	Attendance of the induction meeting of faculty members at the University Translation Center and the accompanying workshop titled with "How to Translate a Book" held at King Saud University; On Tuesday, 24/4 / 1439H corresponding to 24/10/2017
2016	Attendance in workshop on "Nanotechnology and Applied Chemistry."  Organized by King Saud University and Saudi Chemical Society. 1 day
2016	Participate in workshop on "How to Fill Application Forms for Patents."  Organized by King Abdul-Aziz City for Science and Technology (KACST). 2 days
2015	Participate in work shop on "How to Create an Electronic Course Evaluation Questionnaire?" Collage of Science; 1 day
2015	Attending Lecture in "Innovatively Functionalized Nanomaterials for Biomedical, Sensing and Composites Applications", which was organized by The Research Center of Science and Medical Studies and held at KSU during the period of 2/12/1436-15/9/2015.
2015	Participate in The First Scientific Cultural Forum for The Students of Universities and Higher Education Institutions in The Countries of The Arab Gulf Cooperation Council. KSU.5 days
2012	Participate in <b>The Chemical Safety and Security Officer (CSSO) Training.</b> Organized by chemical security engagement program, sponsored by the US Department of state. 5 days
2012	Participate in <b>The Training Program on Fundamentals of Polymer Science</b> and its Industrial Applications. Petrochemical Research Chair,

	Department of Chemistry, College of Science, King Saud University. 2 days. The program includes a visit to some of SABIC laboratories.
2012	Participate in workshop on "Electrospinning: An Effective Technique in Nanofibers Production". Petrochemical Research Chair, Department of Chemistry, College of Science, King Saud University. 3 days
2011	Participate in workshop in the 4 <sup>th</sup> International Chemistry Conference 2011 (1432), Riyadh, <b>Chemistry and its Role and Application in Development</b> . Organize by the Saudi Chemical Society and King Saud University's Chemical Department. "Green Chemistry in Education". 1 day
2007	Participate in workshop 'Atelier d'Histoire et de Philosophie des sciences organise pare l'ED SMAE'; Science Mécaniques, Acoustique et Électronique de Paris, UPME; SORBONNE UNIVERSITÉS. 5 days
2006	Participate in workshop 'SPECTROSCPIES OPTIQUE APPLIQUEES AUX MOLECULES D'INTERT BIOLOGIQUE'; laboratoire de Biophysique Moléculaire Cellulaire et Tissulaire (BioMoCeTi) spécialisé dans les spectroscopies optiques, 5 days

# COURSES & WORKSHOPS OFFERED BY THE DEAN OF SKILLS DEVELOPMENT

2020	Attendance in online workshop titled with;" <b>Evaluating Student Performance and Online Learning</b> " KSU, 01/04/2020; 1 day
2017	Attend in workshop titled with " <b>Infographics</b> ". Organized by Deanship of Skills Development. 1 days
2016	Attend in workshop titled with "The Basics of E-Learning Management System". Organized by the Deanship of Skills Development, KSU. 3days
2016	Participate in training on "Department Vice-Heads Roles for Learning Process Development" Organized by the Deanship of Skills Development, KSU. 1day
2016	Participate in training on " <b>Teaching Excellence</b> " Organized by the Deanship of Skills Development, KSU. 1day.
2015	The basics of academic leadership, Organized by the Deanship of Skills Development, KSU. 1day.
2014	Professional certificate courses, <b>Elaborating Tables and Registration Mechanisms</b> , Organized by the Deanship of Skills Development, KSU. 2 days.
2012	Professional certificate courses, <b>Safe and Comfortable Learning Environment.</b> Organized by the Deanship of Skills Development, KSU. 1 day.
2012	Professional certificate courses, learning theories, Organized by the Deanship of Skills Development, KSU. 1 day.
2012	Professional certificate courses, <b>The Use of Technology in university teaching "Black board"</b> , Organized by the Deanship of Skills Development, KSU. 3 days.

2012	Sessions of the new faculty members, <b>Micro Teaching</b> . Organized by the Deanship of Skills Development, KSU. 2 days
2012	Sessions of the new faculty members, Assessing Student Learning Outcomes. Organized by the Deanship of Skills Development, KSU. 3days.
2011	Sessions of the new faculty members, <b>Effective University Teaching Skills</b> . Organized by the Deanship of Skills Development, KSU. 3days.
2011	Sessions of the new faculty members, <b>Design and Construction of Course</b> . Organized by the Deanship of Skills Development, KSU. 2 days
2011	Participate in workshop in the 1st Annual Forum for University Teaching. Riyadh, KSU. Organized by the Deanship of Skills Development. "Improvement Students Critical Thinking Skills". 1 day
2011	Participate in workshop in <b>the 1st Annual Forum for University Teaching.</b> Riyadh, KSU. Organized by the Deanship of Skills Development. Using Testing, Grading and Feedback to Enhance Student Learning. 1 day

Patents	
2020	U. S. Patent 10,702,550 B1: "Synthesis of Olive Leaf Extract Silver Nanoparticles", Hassna M. Alhajri, Wedad S. Al-Qahtani, Seham S. ALTERARY, Bahauddeen M.Alrfaei. King Saud University. Jul. 7 2020
2020	U.S. Patent 10,703,641 B1.: "Synthesis of Metal Oxide Nanoparticles Using KALANCHOE BLOSSFELDIANA Extract" Ali K. Aldalbahi, Seham S. ALTERARY, Ruba A. A. Almoghim. Manal A. G. Awad, Noura S. Aldosari, Shoog F. A. Algannam, Alhanouf N. A. Alabdan, Shaden A. Alharbi, Bedoor A. Al-Ateeg, Atheer A. Al-Mohssen, Munirah A.A. Alkathri, Raghad A. Alrashed. King Saud University. Jul. 7 2020

	ANTOUN Tarek;	BRAYNER Roberta;	ALTERARY Seham;	FIEVET Fernand;
1-	CHEHIMI Moham	ed; YASSAR Abderrah	im; "Facile synthesis	of oligothiophene-

**PUBLICATIONS** 

- 1- CHEHIMI Mohamed; YASSAR Abderrahim; "Facile synthesis of oligothiophene-capped CdS nanoparticles", European journal of inorganic chemistry, Vol. 2007, No 9, pp. 1275-1284, 2007.
- 2- Al Terary, S.; Mangeney, C.; Brayner, R.; Antoun, T.; Fiévet, F.; Yassar, A." Biotin-Bioconjugated Water-Soluble CdS Nanoparticles", Sensor Letters, American Scientific Publishers, Vol. 6, No 4, pp. 511-517, August 2008
- AL-TERARY Seham; BASAIF Salim; EL-AWADY Abbas A.," Solvent effects on ester linkage of 4-nitrophenyl acetate in aqueous and ethanol solutions with imidazole and hydroxide ion as nucleophiles ", Indian journal of chemistry-Section A Inorganic, Physical, Theoretical and Analytical Chemistry, Vol. 47, No10, pp. 1491-1496,2008

4-	Yahia Nasser Mabkhot , Nahed Ahmed Kaal,, Seham Alterary, Salim S. Al-Showiman, Assem Barakat, Hazem A. Ghabbour, and Wolfgang Frey. "Synthesis, In-Vitro Antibacterial, Antifungal, and Molecular Modeling of Potent Anti-Microbial Agents with a Combined Pyrazole and Thiophene Pharmacophore" Molecules 20, 8712-8729, 2015
5-	Zeinab A. Muhammad, Mastoura M. Edrees, Rasha A. M. Faty, Sobhi M. Gomha, Seham S. Alterary and Yahia N. Mabkhot. "Synthesis, Antitumor Evaluation and Molecular Docking of New Morpholine Based Heterocycles". Molecules, 2017, 22, 1211.
6	Yahia Nasser Mabkhot, Nahed Ahmed Kaal, Seham Alterary, Salem S. Al-Showiman, Thoraya A. Farghaly and Mohammad S. Mubarak. " Antimicrobial activity of thiophene derivatives derived from ethyl (E)-5-(3-(dimethylamino) acryloyl)-4-methyl-2-(phenylamino) thiophene-3-carboxylate". Chemistry Central Journal, 2017, 11,75
7	Magda A. Abdallah 1, Sobhi M. Gomha, Ikhlass M. Abbas, Mariam S. H. Kazem, Seham S. Alterary and Yahia N. Mabkhot. "An Efficient Synthesis of Novel Pyrazole-Based Heterocycles as Potential Antitumor Agents". Appl. Sci. 2017, 7, 785
8	Sobhi M. Gomha1, Mohamad R. Abdelaziz, Nabila A. Kheder, Hassan M. Abdel-aziz, Seham Alterary and Yahia N. Mabkhot." A facile access and evaluation of some novel thiazole and 1,3,4-thiadiazole derivatives incorporating thiazole moiety as potent anticancer agents" Chemistry Central Journal 2017 11:105
9	Khalid Karrouchi, Smaail Radi, El bekkaye Yousfi, Nada Kheira Sebbar, Jamal Taoufik, Younes Ouzidan, Hazem A. Ghabbour, Yahia N. Mabkhot, Salim S. Al-Showiman, Seham Alterary, M'hammed Ansar. "Synthesis, X-ray Crystal Structures, Computational Studies and Catechol Oxidase Activity of New Acylhydrazone Derivatives". Preprints 2018.
10	Khalid Karrouchi, Saad Fettach, Smaail Radi, El bekkaye Yousfi, Jamal Taoufik, Yahia N. Mabkhot, <b>Seham Alterary</b> , My El Abbes Faouzi and M'hammed Ansar. "Synthesis, Characterization, Free-radical Scavenging Capacity and Antioxidant Activity of Novel Series of Hydrazone, 1,3,4-oxadiazole and 1,2,4triazole Derived from 3,5-dimethyl-1H-pyrazole" BENTHAM SCIENCE; Volume 16, Issue 7, 2019
11	Yahia Nasser Mabkot, Nahed Ahmed Kaal, Seham Alterary, Mohammad S. Mubarak, Abdulrhman Alsayari, and Abdullatif Bin Muhsinah "New Thiophene Derivatives as Antimicrobial Agents". Journal of Heterocyclic Chemistry; 2019. Vol. 65; Issue 10 P. 2845-2953
12	Khalid Karrouchi1, Saad Fettach, Smaail Radi, El bekkaye Yousfi, Jamal Taoufik1, Yahia N. Mabkhot, Seham Alterary, My El Abbes Faouzi and M'hammed Ansar. "Synthesis, Characterization, Free-radical Scavenging Capacity and Antioxidant Activity of Novel Series of Hydrazone, 1,3,4-oxadiazole and 1,2,4triazole Derived from 3,5-dimethyl-1H-pyrazole" Letters in Drug Design & Discovery. 2019; Volume 16, Issue 7, p.9.
13	Taibi Ben Hadda1, Abdur Rauf, Hsaine Zgou, Fatma Sezer Senol, Ilkay Erdogan Orhan, Yahia Nasser Mabkhot, Ismail I. Althagafi, Thoraya A. Farghalyand Seham Alterary. "Drug Design of Inhibitors of Alzheimer's Disease (AD): POM and DFT Analyses of Cholinesterase Inhibitory Activity of β-amino di-Carbonyl Derivatives" Mini Reviews in Medical Chemistry. 2019; Volume 19, Issue 8; P. 688-705

14	Nawal Madkhali1, Hadi. R Alqahtani, Seham Al-Terary, Amel Laref, Adel Hassib. "Control of optical absorption and fluorescence spectroscopies of natural melanin at different solution concentrations". Optical and Quantum Electronics.2019; 51:227
15	Nawal Madkhali, Adel Hassib1, Hadi R. Alqahtani1, Hamad Al-Britain, Seham Alterary, and Amel Laref. "Systematic Investigation of the Electrochemical Properties of Natural Melanin for Various Electrode Cells" Journal of Biobased Materials and Bioenergy. 2019; Vol. 13, 429–437,
16	N.Madkhali, H.R.Alqahtani, Seham Al-Terary, A.Laref, A.Haseeb. "The doping effect of Fe, Cu and Zn ions on the structural and electrochemical properties and the thermostability of natural melanin extracted from Nigella sativa L" Journal of molecular Liquids. 2019; vol. 285, P. 436-443
17	Nawal Madkhali, Hadi R. Alqahtani, Seham Alterary, Hamad A.Albrithen, Amel Laref, Adel Hassib . "Characterization and electrochemical deposition of natural melanin thin films". Arabian Journal of Chemistry. 2020; Vol. 13, Issue 4, P. 4987-4993
18	Ali Aldalbahi, Seham Alterary, Ruba Ali Abdullrahman Almoghim , Manal A. Awad,, Noura S. Aldosari, Shouq Fahad Alghannam, Alhanouf Nasser Alabdan, Shaden Alharbi , Budur Ali Mohammed Alateeq , Atheer Abdulrahman Al Mohsen , Munirah A. Alkathiri and Raghad Abdulrahman Alrashed . "Greener Synthesis of Zinc Oxide Nanoparticles: Characterization and Multifaceted Applications". Molecules 2020, 25, 4198
19	Seham Alterary, and Narguess H. Marei "The Impact of Coal Fly Ash Purification on Its Antibacterial Activity". Minerals 2020, 10, 1002
20	F. Barakat, Mohamad.S. AlSalhi, S. Prasad, S. Alterary, S. Faraji, A. Laref. "Synthesis of nanocomposite films based on conjugated oligomer-2D layered MoS2 as potential candidate for optoelectronic devices". Journal of King Saud University - Science 33 (2021) 101389
21	Seham S. Alterary and Anfal Al-Khamees "Synthesis, surface modification, and characterization of Fe3O4@SiO2 core@shell nanostructure " Green Processing and Synthesis 2021; 10: 384–391
22	F. Barakat, A. Laref, <b>S. Alterary</b> , S. Faraji, M. Alsalhi " <b>Structural and optical behaviors of 2D-layered molybdenum disulfide thin film: experimental and abinitio insights</b> ". Journal of Materials Research and Technology (2021); 14: 780-789
23	Seham S. Alterary, Narguess H. Marei." Fly ash properties, characterization, and applications: A review". Journal of King Saud University - Science 33 (2021); 101536
24	Hassna Alhajri, <b>Seham Alterary</b> , Bahauddeen M. Alrfaei, and Wedad S. Al-Qahtani. <b>Therapeutic potential evaluation of green synthesized silver nanoparticles derived from olive (Olea europaea L.) leaf extracts against breast cancer cells</b> . Journal of Nanophotonics. 2021; Vol. 15(3)

- Ibrahim A. AlShunaifi, Samira Elaissi, Imed Ghiloufi, Seham S. Alterary and Ahmed A. Alharbi. Modelling of a Non-Transferred Plasma Torch Used for Nano-Silica Powders Production. *Applied Sciences* 2021, 11(21),9842
- Shimaa Kamal, Hamed Ahmed Derbala, Seham Soliman Alterary, Abir Ben Bacha, Mona Alonazi, Mohamed Kandeel El-Ashrey, and Nahed Nasser Eid El-Sayed

  Synthesis, Biological, and Molecular Docking Studies on 4,5,6,7Tetrahydrobenzo[b]thiophene Derivatives and Their Nanoparticles Targeting
  Colorectal Cancer. ACS Omega 2021 6 (43), 28992-29008

Rais Ahmad Khan, Ibtisam I. BinSharfan, Seham S. Alterary, Huda Alsaeedi, Faizan Abul Qais, Amal AlFawaz, Arman D. Hadi, Ali Alsalme. Organometallic (n6 -p-cymene)ruthenium(II) complexes with thiazolyl-based organic twigs: En route towards targeted delivery via human serum albumin of the potential anticancer agents. WIELY-

27 Appl. Organomet Chem. 2021; e6550

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### Supervising Undergraduate and graduate Students

1-	A Mild and Accessible Synthesis of Alanine methyl ester, 1st sem, 2011
2-	A Mild and Accessible Synthesis of Glycine methyl ester, 1st sem, 2011
3-	A Mild and Accessible Synthesis of phenylalanine methyl ester, 1st sem, 2011
4-	The application of green chemistry techniques in the construction of N-acetanilide derivatives, 1st sem, 2012
5-	Synthesis of 1-Benzyl-4-phenyl-1H-1,2,3-triazole Using Click Chemistry Techniques, 1st sem, 2013
6-	Synthesis of a Tri-Substituted Imidazole Using Ionic Liquids as Green Chemistry Techniques, 1st sem, 2014
7-	Synthesis of Zinc ferrites nanoparticles to use it as Catalyst in Organic Reactions, 2nd sem, 2015
8-	Synthesis and use Copper Ferrites Nanoparticles as Catalyst in Reduction Reaction, 1st sem, 2015
9-	Synthesis and Characterization of Two types of Magnetic Nanocatalysts for Organic Reactions, 1st sem, 2016. The graduation project has honored the first awards.
10-	Synthesis and Characterization of Magnetic Nano-catalysts with Different Silica Shell Thickness, 1st Sem 2017.

Synthesis and Comparative Catalytic Behavior of Metal Oxide 11- nanoparticles ZnONPs and MgONPs :An Insite of Glycerol Carbonate Production. 2<sup>nd</sup> Sem 2022

Supervising Graduate Students		
Graduation Year	Thesis Title	
_	Co -supervisor of Master Student: Manal Alonizi (zoology Dep.)  "Effect of Microplastics in Wastewater Effluents Nile Tilapia and Potential Remediation with Zinc Oxide Nanoparticles";2021	
_	2 <sup>nd</sup> Co-supervisor of Master Student: Khaulah Al-Hamazani Synthesis of Some Copolymers Based on Chloroethyl vinyl ether and Their Modifications with Some amines for Water Treatment; 2021	
2022	Master student Raya Alyabes," Synthesis, Characterization and Evaluation of Polyamide as Reverse Osmosis (RO) Membrane" main supervisor	
2022	Master student, "Synthesis, Surface Modification and Functionalization of Metal Oxide Nanoparticles by Organic Ligands for Water Treatment Application."; co-supervisor. Student Name: Athar AlHadi	
2020	Master student, "Synthesis of New Organometallic compounds for Biological application."; main-supervisor. Student Name: Ibtisam Bin Sharfan	
2020	Master student, "Chemical constituents and biological activity of the olive leaves grown in Saudi Arabia"; main-supervisor. Student Name: Nora Al Habib	
2014	Master student, "Synthesis of Novel Heterocyclic Compounds Containing Sulphur"; co-supervisor. Student Name: "Nahed Kaal"	

Member of G	Graduate Studies thesis Jury committees
2014	Mater Student Lamia Al-Lehaib "Chemical Constituents of Some Tamaricaceae Plants"
2014	Master Student Nhed Kaal "Synthesis of Novel Heterocyclic Compounds Containing Sulphur"
2015	Master Student "Nawal AL-Balawi "Synthesis of Novel 2-aminothiazole derivatives anticipated biological activities"
2018	Master student <i>Lina Alqahtani</i> "Synthesis docking and biological evaluation of certain class of Nonsteroidal anti-inflammatory drugs"
2020	Master student <i>Norah Alhabib</i> "Chemical constituents and biological activity of the olive leaves grown in Saudi Arabia
2020	Master Student Shatha lahmadi "Synthesis of Silica nanoparticles for drug delivery"

2020	Master student <i>Taghreed Alotaibi</i> "Synthesis of some Novel Nitrogen and Oxygen Containing Hetero Cyclic Compounds with Evaluation of their Biological Activity"
2022	Master student: Athar AlHadi "Synthesis, Surface Modification and Functionalization of Metal Oxide Nanoparticles by Organic Ligands for Water Treatment Application.";
2022	Master student <i>Raya Alyabes</i> ," Synthesis, Characterization and Evaluation of Polyamide as Reverse Osmosis (RO) Membrane"

Department & Faculty Committees	
2017-2021	Member of Higher Committee for Chemistry Program
2011-2019	Member of Evaluation and Academic Accreditation Committee, in chemistry department, Faculty of science.
2011-2015	Member of Development and Quality Committee, in chemistry department, Faculty of science.
2018-till now	Member of Study Plan Committee, in chemistry department, Faculty of science.
2017-till now	Member of Student Guidance Committee, in chemistry department, Faculty of science.
2017-till now	Member of Alumni and Human Resources Committee, in chemistry department, Faculty of science.
2017-till now	Member of Interdisciplinary Academic Programs Committee, in Faculty of science.

Professional affiliations	
Since 1996	Member of Saudi Chemical Society (SCS)
2015-2016	Member of Royal Society of Chemistry (RSC)
2020	Member of American Chemical Society (ACS)

Community Action Service	
2020	Participate as Lecture presenter at workshop titled with "SciFinder; The source & guide for chemist and non-chemist" organized by Training and
	Community Service Unit at college of Science; 03/03/2020

2019	Participate at workshop of The Role of Scientific Chairs in Research and Development as lecture presenter about "Introducing King Abdullah Institute for Nanotechnology as one of the supporting Institutions for scientific research and development". Organized by the chemistry council Sponsored by the Saudi chemical association; 12/11/2019
2019	Participate as Lecture presenter Titled with "Nanotechnology: Benefits and Risks" organized by the student club CHEMISTRY is MY LIFE On the occasion of The Arab Week of Chemistry; 22/10/2019
2019	Participate at the student's summer program training organized by nanotechnology unit at Female Campus at KSU Affiliated with King Abdullah Institute for Nanotechnology as Lecture presenter Titled with "Green Nanotechnology Principles and Goals"; 22/07/2019
2019	Participate at the student's summer program training organized by nanotechnology unit at Female Campus at KSU Affiliated with King Abdullah Institute for Nanotechnology as Lecture presenter Titled with "Introduction to Nanotechnology Concept and Its Applications"; 15/07/2019
2019	Participate as Lecture presenter Titled with "The 6th workshop of Faculty of Science for the interdisciplinary program Natural Products Challenges", Reality and Hope; held at Crowne Plaza Hotel Riyadh; 10/02/2019
2019	Participate as Lecture presenter Titled with "Chemistry is The Comprehensive and Renewable Science"; at the workshop (we met to improve ourselves by Chemistry) organized by the chemistry council; Sponsored by the Saudi chemical association; 22/01/2019
2018	Participate as Lecture presenter Titled with "Employment fields for female graduates of the Chemistry program & Introducing the Collaborative Researcher Program" organized by the student club CHEMISTRY is MY LIFE. 21/12/2018
2018	Participate in Scientific Training Series for Nanotechnology in workshop titled with: Magnetic Nanoparticles: the importance and wide applications.
2018	Participate in First Meeting of Dean's Faculties in Saudi Universities during the 1st session titled with; "Contributions of Sciences Colleges and Vision 2030". 04-05/02/2018.
2017	Trainer for technicians of Departments of Science and Medical Studies in a program titled with ( <b>Proper Methods for Conserving and Storing Chemicals in Lab and Storage Rooms</b> ) This was organized under the supervision of the Deanship of skills development programs. The workshop was held at the Deanship of skills development building at Female Campus at King Saud University. For two consecutive days Tuesday and Wednesday 24-25 / 03/1439 equal with 12-13 / 12/2017.
2017	Trainer for technicians of Departments of Science and Medical Studies in a program titled with ( <b>Proper Methods for Conserving and Storing Chemicals in Lab and Storage Rooms</b> ) This was organized under the supervision of the Deanship of skills development programs. The workshop was held at the Deanship of skills development building at Female Campus at King Saud University. For two consecutive days Tuesday and Wednesday 17-18 / 03/1439 equal with 05-06 / 12/2017.
2017	Trainer for technicians of Departments of Science and Medical Studies in a program titled with (Proper Methods for Conserving and Storing Chemicals in Lab and Storage Rooms) This was organized under the supervision of the Deanship of skills development programs. The workshop was held at the

	Deanship of skills development building at Female Campus at King Saud University. For two consecutive days Tuesday and Wednesday 25-26 / 02/1439 equal with 14-15 / 11/2017.
2017	Trainer for technicians of Departments of Science and Medical Studies in a program titled with ( <b>Proper Methods for Conserving and Storing Chemicals in Lab and Storage Rooms</b> ) This was organized under the supervision of the Deanship of skills development programs. The workshop was held at the Deanship of skills development building at Female Campus at King Saud University. For two consecutive days Tuesday and Wednesday 6-7 / 8/1438 equal with 2-3 / 5/2017.
2017	Trainer for technicians of Departments of Science and Medical Studies in a program titled with (How to Deal Safely with Chemical Spills in the Lab) This was organized under the supervision of the Deanship of skills development programs. The workshop was held at the Faculty of Sciences building at Female Campus at King Saud University. For one day; Tuesday 28 / 7/1438 equal with 25 / 4/2017.
2016	Establish a training program for technicians includes several topics: (Chemical Compatibility - Optimal Storage of Chemicals in Laboratories - Transfer Explosive Chemicals - To Get Rid of Chemicals - Chemical Labels - Material Safety Data Sheet) and its associated practical training. This was organized under the supervision of the Deanship of skills development programs. The workshop was held at the Faculty of Sciences building at Female Campus at King Saud University. For two consecutive days Tuesday and Wednesday 26-27 / 7/1437 equal with 3-4 / 5/2016
2015	Participation in the training of health colleges technicians within the workshop safety work in scientific laboratories Program of the Deanship of Skills Development. Managed workshop entitled "Management of Chemicals in The Laboratory: Best Practices for Dealing with Chemicals." And practical application belongs to "good storage procedures." Which was held at King Saud University on Tuesday, 08/15/1436 corresponding to 06/02/2015.
2015	Give a workshop to laboratory technicians health colleges "The management of chemicals in the laboratories: Best practices for dealing with chemicals" followed by "Practical application: good storage procedures", Organized by the Deanship of Skills Development, KSU. 1day.

## Qualitative initiatives

2017	Establishing solvent recycling unite
2017	Creating a cooperative student program for low performance students; called (Learning together)
2017	"Courses Semester Events" in each semester a group of students from different course have separate corner in the college hall showing examples materials on How to apply fundamental understanding from scientific information from courses in life areas.

2018	"The chemistry consultant" participation idea submitted to Nationwide Service at KSU
2018	Suggestion of establishing a master program on "Cosmetic chemistry"
2019	(The first forum to Compatibility the learning outcomes of the chemistry program (female students) and the labor market).
2019	The First Festival for The Short Scientific Film of the College of Science
2021	Suggestion of establishing Saudi Association for Sustainability of Resources (Chemistry)

#### Other



Participation as a member of Science Group 20, a group representing civil society, in order to develop recommendations that are presented to G20 leaders for consideration.

2020

I was honored to work within **the S20 Science Group**, which formed a steering committee composed of the most prominent Saudi research universities in addition to the King Abdulaziz City for Science and Technology, as the committee contributed to the initial discussions to define the topic of this year's science group and also hosted a series of specialized seminars on the topics of the vital group. Furthermore, the S20 science group formed four working groups, and it was an absolute pleasure and great honour to participate among 180 scientists from different G20 countries. The type of meetings varied between virtual meetings, discussions and preparing reports focusing on four vital areas: future health, the circular economy, the digital revolution and Foresight: Connecting the dots.