

Curriculum Vitae (CV)

1- Personal data and contact information

Name: Mahmood Mohammed Saeed Abdullah

Date of Birth: 01/02/1981

Home Address: Yemen, Taiz, Alhoban.

Work Address: - Department of Chemistry, Faculty of Science, King Saud university,
Riyadh - 11451, Saudi Arabia. P.O. Box – 2455.

Department of Chemistry, Faculty of Applied Science, Taiz University, Taiz,
Republic of Yemen

Telephone: 00966114675998 - 00966547603741

E-mail: Maltaiar@ksu.edu.sa; Altaiar90@yahoo.com

Marital Status: Married

Nationality: Yemeni



2- Academic Qualification

- Ph. D. King Saud University, Riyadh, (2019), Faculty of Science, Organic Chemistry, Title: Synthesis of Some Polymeric Ionic Liquids as New Effective Surfactants and their Applications in Petroleum Industry.
- Ms. C. King Saud University, Riyadh, (2013), Faculty of Science, Chemistry, Title: Use of Extracts of Some Local Plants as Green Corrosion Inhibitors for Mild Steel.
- B.Sc. Taiz University, Taiz, Yemen (2005), Chemistry, very good degree.

3. Employment History:

- Assistant professor in Chemistry Department, Faculty of Science, King Saud University, Riyadh, Saudi Arabia 2020 – to date
- Researcher as part of time in Chemistry Department, Faculty of Science, King Saud University, Riyadh, Saudi Arabia 2010 - 2018.
- Teaching assistant in Chemistry Department, Faculty of Applied Science, Taiz University, Yemen 2008-2009
- A chemist in Quality Assurance Department, Yemen Company for Ghee and Soap Industry, Taiz, Yemen 2007-2008.

4. Training courses: -

- Determination of concentration of thyroid hormones by radiation, Sudan Atomic Energy Commission, Khartoum, Sudan during 17/07/2004 – 12/08/2004.
- Intensive English training course at advanced level, Language Centre, Taiz University, Taiz, Yemen during 16/07/2008 – 10/08/2008.
- English training course (preparation to TOFEL test) Language Centre, Taiz university, Taiz, Yemen during 20/03/2009 – 11/08/2009.

5- Teaching Experience: -

- Lecturer as part of time (2006-2008) Chemistry Department, Faculty of Education, Taiz University.
- Lecturer as part of time (2007-2009) Pharmacology Department, AL-Hikmah University
- Lecturer (2008-2009) Chemistry Department, Faculty of Applied Science, Taiz University.

6- Language skills: -

Arabic: (Mother tongue).

English: Very good (Academic Ielts 5.5).

7- Research Interests: -

- Ionic Liquids
- Poly (Ionic Liquids)
- Surfactants
- Demulsification
- Enhanced Oil Recovery
- Oil Spill Remediation
- Natural products
- Corrosion

8-Patents

1. **Mahmood M. S. Abdullah**, Ayman M. Atta, Hamad A. al-lohedan, Hamad Zaid Alkhathlan, Merajuddin Khan and A. O. Ezzat, Biosynthesised Magnetic Metal Nanoparticles for Oil Spill Remediation, U.S. patent 9901903 B1, 2018.
2. Ayman M. Atta, **Mahmood M. S. Abdullah**, Hamad A. al-lohedan, Composition for enhanced oil recovery, U.S. patent 9850420B1, 2017.
3. Ayman M. Atta, Hamad A. Al-lohedan, Abdelrahman O. Ezzat, and **Mahmood M. S. Abdullah**, Synthesis of bimetallic oxide nanocomposites using poly (ionic liquid), U.S. patent 9850389 B1, 2017.
4. Zaid Alkhathlan, Merajuddin Khan, **Mahmood M. S. Abdullah**, Abdullah Mohammed Al-mayouf, Method of Protecting Metal from Corrosion Using Plant Derived Anti-Corrosion Agent, U.S. patent 9988726 B1
5. Ayman M. Atta, **Mahmood M. S. Abdullah**, Hamad A. al-lohedan, Hydrophobic nanoparticle compositions for crude oil collection, U.S. patent 10131556 B1
6. Ayman M. Atta, **Mahmood M. S. Abdullah**, Hamad A. al-lohedan, Abdelrahman O. Ezzat, Mohamed Hasan Wahby, Modification of sand with superhydrophobic silica/wax nanoparticles, U.S. 10202548 B1

9-Publications: -

1. Hamad Zaid Alkhathlan, Merajjudin Khan, Mahmood Mohammed Saeed Abdullah, Abdullah Mohammed Al-Mayouf, Ahmed Amine Mousa, Zeid Abdullah Al-Othman, *Launaea nudiculis* as a Source of New and Efficient Green Corrosion Inhibitor for Mild Steel in Acidic Medium: Comparative Study of Two Solvent Extracts, *International Journal of Electrochemical Science* 9 (2014) 870 – 889.
2. Ayman M. Atta, Gamal A. El-Mahdy, Hamad A. Allohedan, Mahmood M. S. Abdullah, Synthesis and Application of Poly Ionic Liquid-Based on 2-Acrylamido-2-methyl Propane Sulfonic Acid as Corrosion Protective Film of Steel, *International Journal of Electrochemical Science* 10 (2015) 6106 – 6119.
3. H. Z. Alkhathlan, M. Khan, M. M. S. Abdullah, A. M. AlMayouf, A. Yacine Badjah-Hadj-Ahmed, Z. A. AlOthman and A. A. Mousa, Anticorrosive assay-guided isolation of active phytoconstituents from *Anthemis pseudocotula* extracts and a detailed study of their effects on the corrosion of mild steel in acidic media, *RSC Advances* 5 (2015) 54283 – 5492.
4. Ayman M. Atta, Gamal A. El-Mahdy, Hamad A. Allohedan, Mahmood M. S. Abdullah, Poly (ionic liquid) Based on Modified Ionic Polyacrylamide for Inhibition Steel Corrosion in Acid Solution, *International Journal of Electrochemical Science* 10 (2015) 10389 – 10401.
5. Merajuddin Khan, Mahmood Mohammed Saeed Abdullah, Ahmad Amine Mousa, Hamad Zaid Alkhathlan, Chemical Composition of Vegetative Parts and Flowers Essential Oils of Wild *Anvillea garcinii* Grown in Saudi Arabia, *Records of Natural Products* 10 (2016) 251-256.
6. Ayman M. Atta, Hamad A. Al-Lohedan, Mahmood M.S. Abdullah, Shymaa M. ElSaeed, Application of new amphiphilic ionic liquid based on ethoxylated octadecylammonium tosylate as demulsifier and petroleum crude oil spill dispersant, *Journal of Industrial and Engineering Chemistry* 23 (2016)122-130.
7. Ayman M. Att, Gamal A. El-Mahdy, Hamad A. Allohedan, Mahmood M. S. Abdullah, Adsorption Characteristics and Corrosion Inhibition Efficiency of

Ethoxylated Octadecylamine Ionic Liquid in Aqueous Acid Solution,
International Journal of Electrochemical Science, 11 (2016) 882 – 898.

8. Mahmood M.S. Abdullah, Abdulrahman A. AlQuraishi, Hamad A. Allohedan, Abdullah O. AlMansour, Ayman M. Atta, Synthesis of novel water soluble poly (ionic liquids) based on quaternary ammonium acrylamidomethyl propane sulfonate for enhanced oil recovery, Journal of Molecular Liquids 233 (2017) 508–516.
9. Ayman M. Atta, Abdelrahman O. Ezzat, Mahmood M. Abdullah, and Ahmed I. Hashem, Effect of different families of Hydrophobic anions of Imadazolium Ionic Liquids on Asphaltene Dispersants in Heavy Crude Oil, Energy Fuels 31 (2017) 8045–8053.
10. Abdelrhman O. Ezzat, Ayman M. Atta, Hamad A Allohedan, Mahmood M.S. Abdullah, and Ahmed I. Hashem, Synthesis and Application of Poly(ionic liquid) Based on Cardanol as Demulsifier for Heavy Crude Oil Water Emulsions, Energy Fuels 32 (2018) 214 – 225.
11. Ayman M. Atta, Mahmood M.S. Abdullah, Hamad A. Al-Lohedan, Abdelrahman O. Ezzat, Demulsification of heavy crude oil using new nonionic cardanol surfactants, Journal of Molecular Liquids 252 (2018) 311–320.
12. P. Iyyappa Rajan, J. Judith Vijaya, S. K. Jesudoss, K. Kaviyarasu³, Seung-Cheol Lee, L. John Kennedy, R. Jothiramalingam, Hamad A. Al-Lohedan and Mahmood M.S. Abdullah, Investigation on preferably oriented abnormal growth of CdSe nanorods along (0002) plane synthesized by henna leaf extract mediated green synthesis, Royal Society Open Science 5 (2018) 171430
13. Ayman M. Atta, Mahmood M. S. Abdullah, Hamad A. Al-Lohedan, and Amany K. Gaffer, Synthesis and application of amphiphilic poly(ionic liquid) dendron from cashew nut shell oil as a green oilfield chemical for heavy petroleum crude oil emulsion, Energy Fuels, 32 (2018) 4873–4884.
14. Ayman M. Atta, Ayman El-Faham, Hamad A. Al-Lohedan, Zeid A. AL Othman, Mahmood M.S. Abdullah, Abdelrahman O. Ezzat, Modified triazine decorated with Fe₃O₄ and Ag/Ag₂O nanoparticles for self-healing of steel epoxy coatings in seawater, Progress in Organic Coatings 121 (2018) 247–262.

15. Ayman M. Atta, Nermen H. Mohamed, Merit Rostom, Hamad A. Al-Lohedan, Mahmood M.S. Abdullah, New hydrophobic silica nanoparticles capped with petroleum paraffin wax embedded in epoxy networks as multifunctional steel epoxy coatings, *Progress in Organic Coatings* 128 (2019) 99-111.
16. Mohd. Sajid Ali, Hamad A. Al-Lohedan, Mohammad Tariq, Mohammad Abul Farah, Mohammad Altaf, S.M. Wabaidur, S.M. Shakeel Iqbal, Sartaj Tabassum, Mahmood M. S. Abdullah, Modulation of amyloid fibril formation of plasma protein by saffron constituent "safranal": Spectroscopic and imaging analyses, *International Journal of Biological Macromolecules*, 127(2019) 529-535.
17. Ayman M. Atta, Mahmood M. S. Abdullah, Hamad A. Al-Lohedan, Nermen H. Mohamed, Novel Superhydrophobic Sand and Polyurethane Sponge Coated with Silica/Modified Asphaltene Nanoparticles for Rapid Oil Spill Cleanup, *Nanomaterials* 9 (2019) 1877; doi:10.3390/nano9020187
18. Ayman M. Atta, Mahmood M. S. Abdullah, Hamad A. Al-Lohedan, Nermen H. Mohamed, Coating of Sand with New Hydrophobic and Superhydrophobic Silica/Paraffin Waxes Nanocapsules for Desert Water Storage and Transportation, *Coatings*, 9 (2019) 124
19. Ayman M. Atta, Amany K. Gafer, Hamad A. Al-Lohedan, Mahmood M. S. Abdullah, and Abdelrahman O. Ezzat, Preparation of Magnetite and Silver Poly (2-Acrylamido-2-methyl propane sulfonic acid -co-acrylamide) Nanocomposites for Adsorption and Catalytic Degradation of Methylene Blue Water Pollutant, *International polymer*, 68 (2019) 1164–1177.
20. Mohd S. Ali, Hamad A. Al-Lohedan, Mahmood M. S. Abdullah, Zeenat Afsan, Sartaj Tabassum, Catalytic induced Morphological transformation of Porous ZnO to ZnO Nanorods by Sn(IV) and their effect on Photocatalytic reduction of Methylene Blue and DFT calculations, *Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy* 220 (2019) 117101.
21. Ayman M. Atta, Amany K. Gafer, Hamad A. Al-Lohedan, Mahmood M. S. Abdullah, Ahmed M. Tawfeek and Abdelrahman O. Ezzat, Hybrid Ionic Silver and Magnetite Microgels Nanocomposites for Efficient Removal of Methylene Blue, *Molecules* 2019, 24, 3867;

22. Merajuddin Khan, Mahmood M. S. Abdullah, Adeem Mahmood, Abdullah M. Al-Mayouf, Hamad Z. Alkhathlan, Evaluation of *Matricaria aurea* Extracts as Effective Anti-Corrosive Agent for Mild Steel in 1.0 M HCl and Isolation of Their Active Ingredients, *Sustainability* 2019, 11(24), 7174;
23. Ayman M. Atta, Abdelrahman O.Ezzat, Ashraf M. El-Saeed, Mohamed H. Wahby, Mahmood M. S. Abdallah, Superhydrophobic organic and inorganic clay nanocomposites for epoxy steel coatings, *Progress in Organic Coatings*, 2020, 140, 105502
24. Merajuddin Khan, Mujeeb Khan, Mahmood M. S. Abdullah, Lamya H. AlWahaibi, Hamad Z. Alkhathlan, Characterization of Secondary Metabolites of Leaf and Stem Essential Oils of *Achillea fragrantissima* from Central Region of Saudi Arabia, *Arabian Journal of Chemistry*, 13 (2020) 5254- 5261.
25. Fuad Ameen, Mahmood M. S. Abdullah, Ali A. Al-Homaidan, Wafa A. Alshehri, Abdullah A. Al-Ghanayem and Abobakr Almansob, Fabrication of silver nanoparticles employing the cyanobacterium *Spirulina platensis* and its bactericidal effect against opportunistic nosocomial pathogens of the respiratory tract, *Journal of Molecular Structure*, 1217 (2020) 128392
26. Amar Al-khawlani, Yanyun Wang, Jiehua Bao, Xiaoli Sheng, Mahmood M. S. Abdullah, Yiwei Zhang, and Zhou Yuming, Enhanced catalytic activity and high stability of treated Pt-Ru/zeolite Y catalysts for levulinic acid hydrogenation reaction, *Catalysis Communications* 183 (2023) 106761.
- Merajuddin Khan, Tanmoy Dutta, Mujeeb Khan, Khaleel Al-hamoud, Shams Tabrez Khan, Mahmood M.S. Abdullah, Hamad Z. Alkhathlan, Exploring various extracts and compounds of *Grewia velutina* as potential anticancer agents: An in vitro and in silico investigations, *Journal of King Saud University – Science* 36 (2024) 103427
<https://doi.org/10.1016/j.jksus.2024.103427>

10- Conferences Attendance: -

1. 5th Saudi Sciences Conference, 16-18/04/2012, Umm Al-Qura University, Makkah, KSA.
2. 3rd International Conference of Young Scientists - Chemistry Today 17-19/05/2013, Tbilisi, Georgia, Europe, Composition of *Matricaria aurea* growing in

Saudi Arabia and Jordon, **Mahmood Mohammed Saeed Abdullah**, Hamad Zaid Alkhathlan, Merajjudin Khan.

3. 6th International Chemistry Conference 8-10 / 11 /2016, Riyadh, Saudi Arabia, Demulsification of Saudi Heavy Crude Oil by New Synthesized Poly Ionic Liquid, **Mahmood M. S. Abdullah**, Hamad A. Allohedan and Ayman M. Atta
4. International Conference and Exhibition for Science (ices2023) 6-8/2/2023, Riyadh, Saudi Arabia, Sustainable Oil Spill Cleanup by the use of Functionalized
5. Magnetite Nanoparticles formed from Novel Ionic Liquids, **Mahmood M. S. Abdullah**, Hamad A. Allohedan, Noorah A. Faqihi.

11- Awards

- Awarded the Graduate Students Research Excellence Prize from King Saud University during the year 2017.