Curriculum Vitae Dr. Abdulrahman I. Alharthi

Personal Profile

Date of Birth: Jul 1977

Nationality: Saudi

Home Address:

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Academic Qualification

PhD. in Science (*Chemistry*) 2014. From University of Glasgow, United Kingdom.

Title of Thesis: *Hydrogen and Carbon Nanostructure Formation from Methane Cracking over Iron and Zeolite Based Catalysts.*

Master in Science (*Chemistry*) 2007. From King Saud University, Riyadh, KSA.

Title of Dissertation: Copolymerization of Ethylene and α -Olefins Using Ziegler-Natta Supported Catalysis.

Bsc. in Science (Chemistry) 1999. From King Saud University, Riyadh, KSA.

On-job Training

- **1.** Attended training for health and safety in a chemical laboratory.
- 2. Attended training course for using computers in office.
- **3.** Attended training course for radiation protection.

- **4.** Attended English language course.
- 5. Short Course, XPS (X-ray Photoelectron Spectroscopy).

Professional Experience

- **1.** Worked as a Research Assistant for about eight years in the Chemistry Department, King Saud University. The experience includes:
 - **a.** Extensive Teaching in Laboratory.
 - **b.** NMR Spectroscopy (JEOL 400 MHZ multinuclear)
 - c. Chemical Research Laboratories.
 - d. Preparation and Testing of Ziegler Natta Catalysts for Polymerization.
 - e. Worked on SABIC project for catalyst preparation, characterization and evaluation for polymerization catalysts.
 - **f.** Handling air sensitive material with a glove box.
- **2.** Lecturer at the The College of Science and Humanitiesat, Prince Sattam bin Abdulaziz University, from 2008 to 2014.
- **3.** Assistant professor at the The College of Science and Humanities, Prince Sattam bin Abdulaziz University, 2014 to date.
- **4.** Coordinator of The College of Science and Humanities, The University of Sattam bin Abdulaziz, for the Sixth Scientific Conference for students of the Ministry of Higher Education.
- 5. Vice Dean for Academic Affairs, from 15/3/2015 to 27/9/2016.
- **6.** Dean of the College of Science and Humanities, Prince Sattam bin Abdulaziz University, from 27/9/2016 to date.

Teaching Experience

- Laboratory teaching courses, general chemistry, organic chemistry and inorganic chemistry.
- General chemistry (1)

• General chemistry (2), Fundamentals in Physical Chemistry.

Publications

- 1. Abdulrahman I. Alharthi, Efficient Catalytic Performance of Calcined Tungstophosphoric Acid for the Claisen-Schmidt Condensation under Solvent-Free Reaction, Asian Journal of Chemistry; Vol. 31, No. 11 (2019), 2579-2584.
- 2. Abdulrahman I. Alharthi, Simple Protocol for the Knoevenagel Condensation Under Solvent Free Conditions using Tungstophosphoric Acid as Catalyst, Asian Journal of Chemistry; Vol. 31, No. 10 (2019), 2181-2184.
- Ahmed Sadeq Al-Fatesh, Yasir Arafat, Ahmed Aidid Ibrahim, Samsudeen Olajide Kasim, Abdulrahman Alharthi, Anis Hamza Fakeeha, Ahmed Elhag Abasaeed, Giuseppe Bonura and Francesco Frusteri, Catalytic Behaviour of Ce-Doped Ni Systems Supported on Stabilized Zirconia under Dry Reforming Conditions, Catalysts 9 (2019) 473.
- **4.** E. Abdel-Fattah, **A. I. Alharthi**, T. Fahmy, Spectroscopic, optical and thermal characterization of polyvinyl chloride-based plasma-functionalized MWCNTs composite thin films, Applied Physics A (**2019**) 125:475.
- 5. Mohamed E. Assal, Mohammed Rafi Shaik, Mufsir Kuniyil, Mujeeb Khan, Abdulrahman Al-Warthan, Abdulrahman Ibrahim Alharthi, Ravi Varala, Mohammed Rafiq H. Siddiqui, Syed Farooq Adil, Ag2O nanoparticles/MnCO3, – MnO2 or –Mn2O3/highly reduced graphene oxide composites as an efficient and recyclable oxidation catalyst, Arabian Journal of Chemistry 12 (2019) 54–68.
- Israf Ud Din, Maizatul S. Shaharun, Mshari A. Alotaibi, Abdulrahman I. Alharthi, A. Naeemc, Recent developments on heterogeneous catalytic CO2 reduction to methanol, Journal of CO₂ Utilization 34 (2019) 20–33.
- Nor Zakiah Nor Hashima, El Hassane Anouar, Karimah Kassim, Hamizah Mohd Zaki, Abdulrahman I. Alharthi, Zaidi Embong, XPS and DFT investigations of corrosion inhibition of substituted benzylidene Schiff bases on mild steel in hydrochloric acid, Applied Surface Science 476 (2019) 861–877.
- Maged N. Shaddad, Prabhakarn Arunachalam, Abdullah M. Al-Mayouf, Mohamed A. Ghanem, Abdulrahman I. Alharth, Enhanced photoelectrochemical oxidation of alkali water over cobalt phosphate (Co-Pi) catalyst-modified ZnLaTaON2 photoanodes, Ionics 25(2019) 737–745.
- **9.** Abdulrahman I. Alharthi, Saeed Ahmad, Tobias Rüffer, Heinrich Lang, Mshari A. Alotaibi, Ghulam Murtaza, Anvarhusein A. Isab, Synthesis and crystal structures of cadmium(II) complexes of 1,3- diazinane-2-thione (diaz); Cd(diaz)4Cl2], [Cd(diaz)2(NCS)2] and [Cd(diaz)2(N3)2]n, Inorganica Chimica Acta 469 (**2018**) 312–317.

- 10. Bilal Khalid, Abdur Rahim, Mazhar Amjad Gilani, Nawshad Muhammad, Abdur Rehman Younus, Sobia Tabassum, Jibran Iqbal, Abdulrahman I. Alharthi, In situ immobilization of CuO on SiO2/graphite matrix, modified with benzimidazolium-1-acatate ionic liquid: Application as catechol sensor, Journal of Molecular Liquids 251 (2018) 450–457.
- 11. Mazhar Amjad Gilani, Sobia Tabassum, Urooj Gul, Tariq Mahmood, Abdulrahman I. Alharthi, Mshari A. Alotaibi, Mohammed Geesi, Rizwan Sheikh and Khurshid Ayub, Copper-doped Al12N12 nano-cages: potential candidates for nonlinear optical materials, Applied Physics A (2018) 124: 14.
- 12. Mohammed B. Alshammari, Mohammed H. Geesi, El Hassane Anouar, Rashad Al-Salahi, Abdulrahman I. Alharthi, Yasser Elnakady and Mohamed Marzouk, Quantum Chemical Calculations and Statistical Analysis: Structural Cytotoxicity Relationships of some Synthesized 2-thiophen-naphtho (benzo)oxazinone Derivatives, Cell Biochemistry and Biophysics 76 (2018) 377–389.
- 13. Abida Kausar, Gillian MacKinnon, Abdulrahman Alharthi, Justin Hargreaves, Haq Nawaz Bhatti and Munawar Iqba, A green approach for the removal of Sr(II) from aqueous media: Kinetics, isotherms and thermodynamic studies, Journal of Molecular Liquids 257 (2018) 164–172.
- Rashad Al-Salahi, Moustapha E. Moustapha, Hatem A. Abuelizz, Abdulrahman I. Alharthi, Khalid A. Alburikan, Ismail T. Ibrahim, Mohamed Marzouk, Mohamed A. Motaleb, Radioiodination and biodistribution of newly synthesized 3-benzyl-2-([3-methoxybenzyl]thio)benzo[g]quinazolin-4-(3H)-one in tumor bearing mice, Saudi Pharmaceutical Journal 26 (2018) 1120–1126.
- 15. Syed Mobasher Ali Abid, Hafiza Amna Younus, Mariya Al-Rashida, Zunaira Arshad, Tooba Maryum, Mazhar Amjad Gilani, Abdulrahman I. Alharthi and Jamshed Iqbal, Sulfonyl hydrazones derived from 3-formylchromone as non-selective inhibitors of MAO-A and MAO-B: Synthesis, molecular modelling and in-silico ADME evaluation, Bioorganic Chemistry 75 (2017) 291–302.
- 16. Amalina Mohd Tajuddin, El Hassane Anouar, Kalavathy Ramasamy, Bohari M. Yamin, Abdulrahman I. Alharthi and Hadariah Bahron, DFT analysis and bioactivity of 2-((E)-(4-methoxybenzylimino) methyl) phenol and its Ni(II) and Pd(II) complexes, Arabian Journal of Chemistry (2017) 10, 769–780.
- 17. Muhammad Akhtar, Mshari A. Alotaibi, Abdulrahman I. Alharthi, Wiktor Zierkiewicz, Muhammad Nawaz Tahir, Muhammad Mazhar, Anvarhusein A. Isab, Muhammad Monim-ul-Mehboob and Saeed Ahmad, Spectroscopic and DFT studies of zinc(II) complexes of diamines and thiocyanate; crystal structure of (cis-1,2-diaminocyc- lohexane) bis(thiocyanato-kN)zinc(II), Journal of Molecular Structure 1128 (2017) 455-461.

- **18.** Mshari A. Alotaibi, **Abdulrahman I. Alharthi**, Wiktor Zierkiewicz, Muhammad Akhtar, Muhammad Nawaz Tahir, Muhammad Mazhar, Anvarhusein A. Isab and Saeed Ahmad, Synthesis, crystal structure and DFT studies of a Zinc(II) complex of 1,3-diamino- propane (Dap), [Zn(Dap) (NCS)2][Zn(Dap)(NCS)2]n. The additional stabilizing role of S/p chalcogen bond, Journal of Molecular Structure 1133 (**2017**) 271-277.
- 19. Muhammad Akhtar , Abdulrahman I. Alharthi, Mshari A. Alotaibi, Natasha Trendafilova, Ivelina Georgieva, Muhammad Nawaz Tahir, Muhammad Mazhar, Anvarhusein A. Isab, Muhammad Hanif and Saeed Ahmad, Synthesis, X-ray structure, spectroscopic (IR, NMR) analysis and DFT modeling of a new polymeric Zinc(II) complex of cystamine ,[Zn(Cym-Cym)Cl2]n, Polyhedron 122 (2017) 105–115.
- 20. Muhammad Muhsin Faraz, Anvarhusein A. Isab, Mshari A. Alotaibi, Abdulrahman I. Alharthi, Muhammad Nawaz Tahir, Muhammad Monim-ul-Mehboob, and Saeed Ahmad, Zinc(II) Complexes of 4-Amino- antipyrine (AAP).Crystal Structure of [Zn(AAP)2Cl2]1, Russian Journal of Inorganic Chemistry 62 (2017) 925–930.
- 21. Saeed Ahmad, Mohammed Fettouhi, Thierry Roisnel, Mshari A. Alotaibi, Abdulrahman I. Alharthi, Muhammad Riaz Malik, Irshad Ahmad and Anvarhusein A. Isab, Structural diversity in pseudo- alide complexes of cadmium(II) with N-methylthiourea (Metu): Polymeric [Cd(Metu)2(NCS)2]n Versus monomeric [Cd(Metu) 2(CN)2], Journal of Coordination Chemistry 70 (2017) 3692–3701.
- 22. Justin SJ Hargreaves and Abdulrahman I. Alharthi, Biogenic and bio-structured inorganic materials in heterogeneous catalysis: a brief overview, Journal of Chemical Technology & Biotechnology 91(2016) 296-303.
- 23. A. I. Alharthi, J. S. J. Hargreaves, I. D. Pulford, N. Gupta, M. Balakrishnan, V. S. Batra and R. K. Singh, Hydrocarbon Cracking Over Red Mud and Modified Red Mud Samples, Journal of Sustainable Metallurgy 2 (2016) 387–393.
- **24. Abdulrahman Alharthi**, Ross A. Blackley, T. Hugh Flowers, Justin S. J. Hargreaves, Ian D. Pulford, James Wigzell and Wuzong Zhou, Iron ochre a precatalyst for the cracking of methane, Journal of Chemical Technology & Biotechnology 89 (**2014**) 1317-1323.

Paper Presented

- A.I. Alharthi, J.S.J. Hargreaves, I. D. Pulford, H. Flowers and J. Wigzell, *Waste iron oxides as catalysts for hydrogen production via direct decomposition of methane*, Scottish Dalton Meeting, University of Strathclyde- April 2012.
- A.I. Alharthi, J.S.J. Hargreaves, I. D. Pulford, H. Flowers and J. Wigzell, *Hydrogen production via direct decomposition of methane over iron-containing waste materials*, Dennis Dowden Commemoration meeting, the University of Durham, April 2013.
- A.I. Alharthi, J.S.J. Hargreaves, I. D. Pulford, H. Flowers and J. Wigzell, *Tubular Biogenic iron oxide ochre as a pre-catalyst for methane cracking*, British Zeolite Association Conference, The University of Glasgow, March 2014.
- A.I. Alharthi, J.S.J. Hargreaves, Direct decomposition of methane over H-ZSM5 supported Ni, Pd and Cu catalysts for the production of hydrogen carbon nanostructure, the 24th North American Catalysis Society Meeting, the David L. Lawrence Convention Center in Pittsburgh, Pennsylvania,2015.

Conferences and Workshops

- Surcat Ecosse Meeting, Heriot-Watt University, 2010.
- Scottish Dalton meeting, April 2012.
- Universities of Scotland inorganic Chemistry, Conference 2011.
- Europacat X Conference, University of Glasgow, August 2011.
- Applied Catalysis Subject Group Chemical Engineering& workshop. university of Leeds - Februilry 2012.
- Catalysis Meeting, University of Oxford, October 2011.
- British Zeolite Association Conference, University Of Chester, 2012.
- British Zeolite Association Conference, Keele University, 2013.
- Dennis Dowden Commemoration meeting, the university of Durham, April 2013.
- British Zeolite Association Conference, University of Glasgow, 2014.
- The 24th North American Catalysis Society Meeting, the David L. Lawrence Convention Center in Pittsburgh, Pennsylvania, 2015.

Committees

- 1. Member of the Standing Committee for Student Disciplinary Actions 2015 to date.
- **2.** Member of the Curative Committee for College Appliances at the College of Science and Humanities, 2016 to date.
- **3.** Member of the Employment Committee of the Demonstrators and Lecturers in the College of Science and Humanities, 2016 to date.
- 4. Member of the Standing Committee for Incentives and Allowances 2017 to date.
- 5. Member of the Committee for the Evaluation of Faculty Requirements, 2016-2017.
- 6. Member of the Higher Committee for the Preparatory Year, 2016-2017.
- **7.** Member of the Higher Committee for Equivalent Education and Bridging Programs, 2016-2017.
- 8. Member of the Supervisory Committee for the Seventh Scientific Conference, 2015-2016.
- 9. Member of the Council of the Deanship of the Preparatory Year, 2015-2016.
- 10. Chairman of the Committee for Anti-Drug Awareness at the PSAU 2017.
- **11.** Member of the Committee of initiatives of the Ministry of Education at the Sattam bin Abdulaziz University, 2017 to date.

External Examiner

External Examiner MSc, Thesis Title: Development of Silica Nanoparticles Catalyst for

Esterification Reaction, Department of Chemistry, King Saud University, 2018.