

FACULTY FULL NAME: Dr. Shamsuddeen Abdullahi Haladu

Assistant Professor

Personal Data

Department | Basic Sciences

Official IAU Email | sahaladu@iau.edu.sa

Office Phone No. |

Links: (ex.: linked in, research gate, google scholar)

Language Proficiency

Language	Read	Write	Speak
Arabic	Yes	Yes	Poorly spoken
English	Yes	Yes	Yes
Others			

Academic Qualifications (Beginning with the most recent)

Date	Academic Degree	Place of Issue	Address
2005	BSc.	Bayero University Kano	Kano, Nigeria
2010	MSc.	King Fahd University of Petroleum and Minerals	Dhahran, Saudi Arabia
2014	Ph.D.	King Fahd University of Petroleum and Minerals	Dhahran, Saudi Arabia

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

PhD	Synthesis of a new class of linear and cross-linked polyzwitterion-anions and their applications as corrosion inhibitors and adsorbents
Master	Total Synthesis of Bioactive Natural Products

Professional Record: (Beginning with the most recent)

Job Rank	Place and Address of Work		Date
Assistant Professor	University of Dammam, Dammam, Saudi arabia		2015 to present
Postdoctoral Fellow	King Fahd University of Petroleum and Minerals,		2014 to 2015



		Saudi Arabia	
Lecturer		King Fahd University of Petroleum and Minerals, Saudi Arabia	2010 to 2014
Research Assistant		King Fahd University of Petroleum and Minerals, Saudi Arabia	2008 to 2010

Scientific Achievements

Published Refereed Scientific Researches

(In Chronological Order Beginning with the Most Recent)

#	Name of Investigator(s)	Research Title	Publisher and Date of Publication
1	Shamsuddeen A Haladu, Saviour A Umoren, Shaikh A Ali, Moses M Solomon, Abdul-Rashid I Mohammed	Synthesis, characterization and electrochemical evaluation of anticorrosion property of a tetrapolymer for carbon steel in strong acid media	Chinese Journal of Chemical Engineering. In Press. 2018 doi.org/10.1016/j.cjche.2018.07.015
2	Umer Mehmood, Amir Al-Ahmed, M. Afzaal, Abbas S. Hakeem, Shamsuddeen A. Haladu, Fahad A. Al-Sulaiman	Enhancement of the Photovoltaic Performance of Dye-Sensitized Solar Cells by Cosensitizing TiO ₂ Photoanode With Uncapped PbS Nanocrystals and Ruthenizer	IEEE Journal of Photovoltaics, 8, 2018 , 512 - 516
3	Nuhu DalhatMu'azu, Shamsuddeen A.Haladu, Nabeel Jarrah, MukarramZubair, Mohammad H.Essa, Shaikh A.Ali	Polyaspartate extraction of cadmium ions from contaminated soil: Evaluation and optimization using central composite design	Journal of Hazardous Materials, 342, 15 January 2018 , 58-68
4	Shamsuddeen A. Haladu, Saviour A. Umoren, Shaikh A. Ali, Moses M. Solomon	Synthesis and Characterization of Cyclic Cationic Polymer and its Anti-corrosion Property for Low Carbon Steel in 15% HCl Solution	<i>Int. J. Electrochem. Sci.</i> , (2017) 12 (10), pp. 9061-9083
5	Mukarram Zubair, Nabeel Jarrah, Mohammad Saood Manzar, Mamdouh Al-Harhi, Muhammad Daud, Nuhu Dalhat Mu'azu,	Adsorption of eriochrome black T from aqueous phase on MgAl-, CoAl- and NiFe-calcined layered double hydroxides: Kinetic, equilibrium and thermodynamic studies	Journal of Molecular Liquids, (2017) 230, 344-352.



	Shamsuddeen A Haladu		
6	Shaikh Asrof Ali, Shamsuddeen Abdullahi Haladu, Asma Mohammed Zamil El-Sharif	Synthesis and application of a cyclopolymer bearing a propylphosphonic acid and a propylcarboxylic acid pendants in the same repeating unit	Journal of Polymer Research, (2016) 23: 167
7	Shaikh A. Ali, Shamsuddeen A. Haladu, Mohammad A. J. Mazumder, Hasan A. Al-Muallem	Synthesis of a terpolymer and a tetrapolymer using monomers of diallylamine salts and SO ₂ and their application as antiscalants	Iranian Polymer Journal, (2016) 25: 747
8	Shaikh Asrof Ali, Shamsuddeen Abdullahi Haladu, Asma Mohammed Zamil El-Sharif	Diallylbis (3-ethoxycarbonylpropyl) ammonium chloride: A symmetrically substituted monomer for the synthesis of an alternate zwitterionic-anionic cyclopolymer	Macromolecular Research, (2016) 1-7
9	Shamsuddeen. A. Haladu, Tawfik A. Saleh, Shaikh A. Ali	Synthesis of novel cross-linked cyclopolymer bearing polyzwitterion-dianionic moieties and its sorption efficiency for Ni (II) removal from waters	Chemical Engineering Research and Design, 106 (2016) 337-346.
10	Tawfik A. Saleh, Shamsuddeen. A. Haladu, Shaikh A. Ali	A novel cross-linked pH-responsive tetrapolymer: Synthesis, characterization and sorption evaluation towards Cr(III)	Chemical Engineering Journal, 269 (2015) 9–19
11	Shamsuddeen A. Haladu, Othman Charles S. Al Hamouz and Shaikh A. Ali	Adsorption of Cu ²⁺ and Cd ²⁺ ions from aqueous solutions by a cross-linked polysulfonate-carboxylate resin	Arabian Journal of Chemistry (2015)
12	Shaikh A. Ali, Shamsuddeen A. Haladu and Hasan A. Al-Muallem	Bis[3-(diethoxyphosphoryl)propyl]diallylammonium Chloride: Synthesis and Use of its Cyclopolymer as an Antiscalant	Journal of Applied Polymer Science, 2014
13	Shamsuddeen A. Haladu and Shaikh A. Ali	Cyclopolymerization protocol for the synthesis of a new poly(electrolyte-zwitterion) containing quaternary nitrogen, carboxylate, and sulfonate functionalities	European Polymer Journal 49 (2013) 1591–1600
14	Shamsuddeen A. Haladu, Shaikh A. Ali A	pH-Responsive Cyclopolymer Having Phospho- and Sulfopropyl Pendants in the Same Repeating Unit: Synthesis, Characterization and its Application as an Antiscalant	Journal of Polymer Science Part A: Polymer Chemistry 2013, 51, 5130–5142.
15	Shaikh A. Ali and Shamsuddeen A. Haladu	Synthesis, solution properties and scale inhibiting behavior of a diallylammonium/sulfur dioxide cyclopolymer bearing Phospho- and Sulfopropyl Pendants,	Polymer international (2013), 63: 1682–1690.
16	Shaikh A. Ali and Shamsuddeen A.	Cyclopolymerization Protocol for the Synthesis of a Poly(zwitterion-alt-sulfur	Journal of Applied Polymer Science, 129: 1394–1404, 2013



	Haladu	dioxide) to Investigate the Polyzwitterion-to-Poly(anion-zwitterion) Transition	
17	Shaikh A. Ali and Shamsuddeen A. Haladu	A novel cross-linked polyzwitterion/anion having pH-responsive carboxylate and sulfonate motifs for the removal of Sr ²⁺ from aqueous solution at low concentrations,	Reactive and Functional Polymers, 73 (2013) 796–804
18	Nisar Ullah, Shamsuddeen A. Haladu and Basem A. Mosa	An improved total synthesis of spermatinamine, an inhibitor of isoprenylcysteine carboxyl methyltransferase	Tetrahedron Letters, 2011, 52, 212-214
19	Nisar Ullah and Shamsuddeen A Haladu	The first total synthesis of aspergillusol A, an alpha-glucosidase inhibitor	Natural Product Communications, 2010, 5, 993-1160.

Innovation & Patents

(In Chronological Order Beginning with the Most Recent)

#	Name of Investigator(s)	Research Title	Conference and Publication Date
1	Shamsuddeen A. Haladu, Shaikh A. Ali and Tawfik A. Saleh	Quaternary ammonium solvated tetrapolymers and methods of removing CR (III) from solution using the tetrapolymer	United States Patent & Trademark Office, Issued Patent number: US9,890,228, 2018
2	Shamsuddeen A. Haladu, Shaikh A. Ali and Tawfik A. Saleh	Cyclopolymeric zwitterion-dianionic resin and synthesis and uses thereof	United States Patent & Trademark Office, Issued Patent number: 9,856,334, 2018
3	Shaikh A. Ali, Shamsuddeen A. Haladu	Process for making a polyzwitterion or polyzwitterionic acid	United States Patent & Trademark Office, US9617388, 2016
4	Shaikh A. Ali, Shamsuddeen A. Haladu	Process for making a poly(zwitterion/dianion)	United States Patent & Trademark Office, Issued Patent number: US9580521, 2016
5	Shamsuddeen A. Haladu, Shaikh A. Ali	Polyzwitterionic acid antiscalant compound	United States Patent & Trademark Office, Issued Patent number: US9359458, 2016
6	Shaikh A. Ali, Shamsuddeen A. Haladu	Poly (zwitterion-alt-sulfur dioxide) copolymer	United States Patent & Trademark Office, Issued Patent number: US9481590, 2016
7	Shaikh A. Ali, Shamsuddeen A. Haladu	Synthesis of a diallylammonium/SO ₂ copolymer bearing phospho-and sulfopropyl pendants	United States Patent & Trademark Office, Issued Patent number: US9481765, 2016
8	Shaikh A. Ali, Shamsuddeen A. Haladu	Synthesis and antiscalant behavior of a novel polyzwitterionic acid	United States Patent & Trademark Office, Issued Patent number: US9309336, 2016
9	Shaikh A. Ali, Shamsuddeen A. Haladu and Hasan A. Al-Muallem	Polymerization of bis[3-(diethoxyphosphoryl)propyl]diallylammonium chloride	United States Patent & Trademark Office, Issued Patent number: US9120094, 2015
10	SA Ali, SA Haladu	Cross-Linked Polyzwitterion/Anion for the Removal of Strontium from Aqueous	United States Patent & Trademark Office, Issued Patent



	Solutions	number: US8937104, 2013
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Completed Research Projects

#	Name of Investigator(s) (Supported by)	Research Title	Report Date
1	Dr. Ali Shaikh Asrof, Dr. Hasan A. Al-Muallem, Dr. Nisar Ullah, Shamsuddeen A. Haladu (PhD student), National Science, Technology and Innovation Plan (NSTIP)	Specialty Diallylammonium salts-derived pH-responsive polymers for their use in Aqueous Two-Phase Systems and as corrosion inhibitors and antiscalants	01/09/2014
2	El-Batta, A.; Al-Muallem, H. A.; Shaikh, M. N.; Maalej, N. (Shamsuddeen A. Haladu (PhD student) National Science, Technology and Innovation Plan (NSTIP)	Biocompatible and Biodegradable Polymer Nanoparticles (PNP) for Cancer Cell Imaging	01/09/2013
3	Dr. Nisar Ullah, Dr. Ali Shaikh Asrof, Dr. Hasan A. Al-Muallem, Shamsuddeen A. Haladu (MS student) King Abdulaziz City for Science and Technology (KACST)	The Discovery of New Generation Potential Antipsychotic Agents	01/09/2013

Current Researches

#	Research Title	Name of Investigator(s)
1	Corrosion inhibition in oil and gas industries using new fine-tunable pH-responsive polymers	Shamsuddeen A. Haladu, Abdullah A. Manda, Nuhu Dalhat Mu'azu
2	Design and synthesis of new class of ionic polymers and their applications as scale inhibitors in water desalination plants	Nabeel Al Jarrah, Shamsuddeen A. Haladu, Loay Awad
3	New Method to Remove the Toxic Heavy Metals from Water	Loay Awad, Shamsuddeen A. Haladu, Abdullah A. Manda

Contribution to Scientific Conferences and Symposia



#	Conference Title	Place and Date of the Conference	Extent of Contribution
1	From Abstracts of Papers, 248th ACS National Meeting & Exposition, POLY-424.	San Francisco, CA, United States, August 10-14, 2014	Shaikh A. Ali, Shamsuddeen A. Haladu and Hasan A. Al-Muallem
2	7th Singapore International Chemical Conference (SICC-7)	University Town, National University of Singapore, Singapore (December 2012).	Shaikh A. Ali, Othman Charles S. Al Hamouz and Shamsuddeen A. Haladu
3	93rd Canadian Chemistry Conference and Exhibition	Canada; May 2010	Nisar Ullah and Shamsuddeen A. Haladu

Membership of Scientific and Professional Societies and Organizations

- Member, Saudi Arabian International Chemical Sciences Chapter of American Chemical Society (SAICSC-ACS).

Teaching Activities

Undergraduate

#	Course/Rotation Title	No./Code	Extent of Contribution (no. of lectures/Tutorials. Or labs, Clinics)
1	General Chemistry	CHEM 221	Full semester (Lecture and labs.)
2	Organic Chemistry	CHEM 321	Full semester (Lecture)
3	Environmental Chemistry	CHEM 311	On rotational basis (half a semester)
4	Research Methodology	HUMN 402	Full semester

Course Coordination

#	Course Title and Code	Coordination	Co-coordination	Undergrad.	Postgrad.	From	to
1	Organic Chemistry (CHEM 321)	Coordination		Undergraduate		2017	present
2	Environmental Chemistry (CHEM 311)		Co-coordination	Undergraduate		2017	2017
3	Research Methodology		Co-coordination	Undergraduate		2016	2018

Student Academic Supervision and Mentoring

#	Level	Number of Students	From	to
1	sophomore	20	2018	present

Committee Membership

#	From	To	Position	Organization
1	2015	2016	Member Community Service committee	College of engineering, IAU
2	2017	2017	Member of academic development committee	College of engineering, IAU
3	2018	Present	Member of Safety committee	College of engineering, IAU
4	2018	Present	Member of Practical session plan committee	College of engineering, IAU

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

1	Computer and information tech.
2	Ability to operate various equipments applicable to my research area

Last Update

16/01/2019