



# Azza Abdullah Alghamdi

Assistant professor

## Personal Data

Nationality | Saudi

Date of Birth | -

Department | Chemistry

Official IAU Email | azaalghamdi@uod.edu.sa

Office Phone No. | 33722

## Language Proficiency

Language	Read	Write	Speak
Arabic	✓	✓	✓
English	✓	✓	✓

## Academic Qualifications (Beginning with the most recent)

Date	Academic Degree	Place of Issue	Address
11-9-2014	Ph.D	University of Dammam	College of Science– Al Rayan Campus
13-3-2010	Master	University of Dammam	College of Science– Al Rayan Campus
21-3-2001	Bachelor	Science college of girls	College of Science– Al Rayan Campus

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

<b>PhD</b>	Studies on the use of modified Cellulose acetate as a biodegradable polymer in the industry of plastics and fibers
<b>Master</b>	Studies on the Improvement of Poly(acrylonitrile) and Poly (vinyl chloride) Properties through Metal Complexation



Professional Record: (Beginning with the most recent)

Job Rank	Place and Address of Work	Date
Assistant professor	College of Science– Al Rayan Campus	11-9-2014 till now
Lecture	College of Science– Al Rayan Campus	13-3-2010 to 11-9-2014
Teacher Assistant	College of Science– Al Rayan Campus	31-8-2008 to 13-3-1010

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
	Dr.Azza Alghamdi & Dr.Abir Abdel-Naby	Poly(vinyl chloride) blend with biodegradable cellulose acetate in presence of N-(phenyl amino) maleimides	Elsevier, 25-6-2014
	Dr.Azza Alghamdi & Dr.Abir Abdel-Naby	Chemical modification of cellulose acetate by N-(phenyl amino) maleimides: Characterization and properties. Abir S. Abdel-Nabya, Azza A. Al-Ghamdi. (2014). International Journal of Biological Macromolecules. Volume 68, pages 21–27	Elsevier, 5-4-2014
	Dr.Azza Alghamdi & Dr.Abir Abdel-Naby	Chemical modification of Cellulose Acetate by Diallylamine. Abir S. Abdel-Naby and Azza A. Al-Ghamdi, (2014), International Journal of current Microbiology and Applied Science. ISSN: 2319-7706 Volume 3, pages 10-24	International Journal of Current Microbiology and Applied Sciences (IJCMAS), (2014), (2014)
	Dr.Azza Alghamdi & Dr.Abir Abdel-Naby	Effect of cyanoguanidine-metal and urea-metal complexes on the thermal degradation of poly(vinyl chloride). Abir S. Abdel-Naby, Refaa F. Al-Ghamdi, Azza A. Al-Ghamdi, (2010), Journal of Vinyl and Additive Technology. Volume 16, Issue 1, pages 15–22.	Wiley, 2010



### Completed Research Projects

#	Name of Investigator(s) (Supported by)	Research Title	Report Date
1	Dr.Azza Alghamdi & Dr. Abir Abdel-Naby. Supported by the deanship of scientific research, University of Dammam	Improvement of thermal properties of PVC through chemical blend using Microwave and ultrasonic techniques. (2015102)	29-3-2016
2	Dr.Azza Alghamdi & Dr. Abir Abdel-Naby. Supported by the deanship of scientific research, University of Dammam.	Stabilization of poly vinyl chloride against photo and thermal degradation. (2013133)	2013-2014

### Current Researches

#	Research Title	Name of Investigator(s)
1	Effect of the graft copolymerization on the hydrophilicity, thermal and mechanical properties of cellulose based biodegradable polymers	Dr.Azza Alghamdi & Dr. Abir Abdel-Naby.

### Contribution to Scientific Conferences and Symposia

#	Conference Title	Place and Date of the Conference	Extent of Contribution
1	The 4th Saudi international : Nanotechnology Conference	King Fahd university of petroleum and meniral. 25-27 october, 2016	Attendance
2	A meeting of environment and development in the gulf region	Sheraton hotel (25-27)/2/2014	Attendance

### Membership of Scientific and Professional Societies and Organizations

- Saudi chemical society



## Teaching Activities

### Undergraduate

#	Course/Rotation Title	No./Code	Extent of Contribution (no. of lectures/Tutorials. Or labs, Clinics)
1	Polymer Chemistry I	CHM411	Lectures
2	Organometallic Chemistry		Lectures
3	General Chemistry (I)		Lectures
4	Organic spectroscopy		Labs
5	Organic Chemistry 1		Labs
6	Organic Chemistry 2		Labs
7	General Chemistry (2)		Labs
8	Biochemistry (1)		Labs
9	Chemistry of heterocyclic compounds		Labs

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

1	<p>Polymer Chemistry CHM411</p> <p>The course aims to emphasize the properties of macromolecules and their reaction mechanisms as well as the practical method of their preparations .</p>
2	<p>Organometallic Chemistry Chem 475N</p> <p>The course aims to give the student the theoretical bases performing the ionic character of organometallic compounds . Also it gives a direct scope on organometallic synthesis and reactions including several techniques depending on the nature of the metal. Various organometallic reactions should be covered e.g. insertion and deinsertion, self condensation oxidative addition and reductive elimination reactions, Grignard reactions and photochemical reactions, use of organometallic in polymerization reactions and formation of isotactic polymers. The course aims also to give students the experience to use organometallic compounds in the synthesis of some medical drugs.</p>
3	<p>General chemistry 1 Chem 101N</p> <p>To study the Matter</p> <p>To study the laws of definite proportions and the Law of Multiple.</p> <p>The student learns the matter, atoms, chemical bond and structures.</p> <p>The student discusses content of atoms and periodical table and realizes, structures of elements.</p> <p>The student learns methods used to calculate moles/molarity and write Lewis structures.</p> <p>The student realizes Chemical Bonds and its types.</p> <p>The student familiarizes with atomic, Molecular, and structural Formula.</p> <p>The student knows chemical formula To study and calculate the moles, molarity, oxidation reduction reactions</p>
4	<p>General Chemistry (2) (Lab) Chem 203N</p> <p>Viscosity of liquids, Density of liquids and solids, Surface tension of liquids , Molar mass of volatile liquids Heat of combustion of naphthalene, Heat of neutralization, Heat of fusion of ice, Heat of solution of ammonium nitrate, Measuring the equilibrium constant, Determination of pH and pOH Acid- base titration, Preparation of buffer solution and determination of buffer capacity.</p>



5	Organic spectroscopy (Lab) CHEM 436N IR spectroscopy and molecular mode vibrations - Infrared absorption process - Instrumentation – Sample preparation (solid, liquid and gas). (Training exercise: Spectroscopic identification of Organic compounds: how to use the synergistic information afforded from the combination of mass, UV, IR and NMR spectra to identify the structure of an organic molecule.
6	Organic Chemistry 1 (Lab) Chem 126N To know the basis of organic chemistry and its importance. To know relationship between the molecular structure and properties of organic compounds To recognize the functional groups in organic compounds and classification of organic compounds . To study the different sections of the aliphatic organic compounds in terms of the nomenclature , structure physical properties , methods of preparation , chemical reactions and common uses.
7	Organic Chemistry 2 (Lab) Chem 321N The course will include: an overview of the liquid purification of organic compounds, purification of solid organic compounds, hydrocarbon aromatic compounds, identification of hydroxyl group (OH) such as alcohols, phenols, carbonyl group (C = O), such as aldehydes and ketones, 4 - carboxyl group (COOH), such as carboxylic acids and their derivatives.
8	Biochemistry 1 (lab) Chem 261N To recognize carbohydrates, lipids, proteins, and these materials of great importance in terms of human life provide him with the necessary energy to do all the vital processes.

#### Course Coordination

#	Course Title and Code	Coordination	Co-coordination	Undergrad	Postgrad.	From	to
1	Chemistry of polymer	✓		✓		2016	Till now
2	Organometallic compounds	✓		✓		2014	2015
3	General Chemistry 1		✓	✓		2014	2015

#### Student Academic Supervision and Mentoring

#	Level	Number of Students	From	To
1	Different levels	24	1 November 2016	Till now

#### Ongoing Research Supervision

#	Degree Type	Title	Institution	Date
	Master degree	-	University of Dammam	

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



### Committee Membership

#	From	To	Position	Organization
1	1-11-2016	Till now	Coordinator of electronic learning committee	Chemistry department
2	24-2-2013.	Till now.	Member of postgraduate committee	Chemistry department
3	2008	Till now.	Member of student advisor committee	Chemistry department
4	1-10-2014	2015	Head the exam progress committee	Chemistry department
5	2012	2013	Member of libraries committee	Chemistry department

### Volunteer Work

#	From	To	Type of Volunteer	Organization
1	26-11-2016	Till now	medical succor program in neighborhood and First Aid Program	Saudi Red Crescent Authority
2	20-4-2015	Till now	Member of Mawhiba program	King Abdulaziz and His Companions Foundation for Giftedness and Creativity (Mawhiba)
3	30-5-2015	Till now	Training the alumni students from Chemistry department in researching labs	Alumni and Career Development Centre.

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

1	Computer experience in Microsoft Office and Chem draw program
2	Ability to deal with some instruments in research labs such as (IR, UV & TGA)
3	Ability to work as part of a team
4	Ability to motivate others and make them aware of an overall aim
5	Attention to detail
6	Good communication and interpersonal skills

### Last Update

...29... / ...11.../2016