



# Sahar Abdulrahman Alfayez

Assistant Professor

## Personal Data

Nationality | Saudi

Department | Chemistry

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## Language Proficiency

Language	Read	Write	Speak
Arabic	√	√	√
English	√	√	√
Others			

## Academic Qualifications (Beginning with the most recent)

Date	Academic Degree	Place of Issue	Address
16/06/2022	PhD	Cardiff University	Cardiff University Main building Park place CF10 3AT Cardiff
14/03/2010	Master	Dammam University	Dammam University Ar Ryyan Prince Naif Bin Abdulaziz street 32256-7667 Dammam
05/06/2001	Bachelor	Science College	Science College Ar Ryyan Prince Naif Bin Abdulaziz street 32256-7667 Dammam



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

PhD	The catalytic applications of titanium complexes in epoxide/anhydride ring opening copolymerization and umpolung cross-coupling reactions
Master	Synthesis and Characterization of New Mixed-Ligand Copper(I) Complexes Involving Chelating Nitrogen Ligands and Phosphines
Fellowship	

### Professional Record: (Beginning with the most recent)

Job Rank	Place and Address of Work	Date
Assistant Professor	Imam Abdulrahman Bin Faisal University Chemistry Department Ar Ryyan Prince Naif Bin Abdulaziz street 32256-7667 Dammam	Present
Lecturer	Dammam University Ar Ryyan Prince Naif Bin Abdulaziz street 32256-7667 Dammam	27/07/2010
Teaching Assistant	Science College Ar Ryyan Prince Naif Bin Abdulaziz street 32256-7667 Dammam	20/09/2008

### Administrative Positions Held: (Beginning with the most recent)

Administrative Position	Office	Date

### 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	Atif Fazal , Sahar Al-Fayez , Laila H. Abdel-Rahman , Zaki S. Seddigi , Abdul Rahman Al-Arfaj , Bassam	Mixed-ligand complexes of copper(I) with diimines and phosphines: Effective catalysts for the coupling of phenylacetylene with halobenzene	Polyhedron 2009



	El Ali, Mohammad A. Dastageer , Mohammad A. Gondal , Mohammed Fettouhi		
2	Sahar Al-Fayez, Laila H. Abdel-Rahman, Ahsan M. Shemsi, Zaki S. Seddigi and Mohammed Fettouhi.	Crystal structure of bromo-(1,10-phenanthroline- N,N%)- tri-p-tolyl-phosphino-copper(I) dimethylformamide solvate, CuBr(C <sub>12</sub> H <sub>8</sub> N <sub>2</sub> )(C <sub>21</sub> H <sub>21</sub> P) · C <sub>3</sub> H <sub>7</sub> NO	Z. Kristallogr. (2007)
3	Sahar Al-Fayez, Laila H. Abdel-Rahman, Ahsan M. Shemsi, Zaki S. Seddigi and Mohammed Fettouhi.	Crystal structure of bromo-(1,10-phenanthroline- N,N%)- (4-(N,N-dimethylamino)phenyldiphenylphosphine)- copper(I), CuBr(C <sub>12</sub> H <sub>8</sub> N <sub>2</sub> )(C <sub>20</sub> H <sub>20</sub> NP)	Z. Kristallogr. (2007)
4	Sahar Al-Fayez, Laila H. Abdel-Rahman, Ahsan M. Shemsi, Zaki S. Seddigi and Mohammed Fettouhi.	Synthesis and Crystal Structures of Bromo(1,10- phenanthroline-N,N')tris(2- cyanoethyl)phosphinocopper(I) and Bromo(2,2'- bipyridine-N,N')tris(2- cyanoethyl)phosphinocopper(I)	Journal of Chemical Crystallography. (2007)

### Refereed Scientific Research Papers Accepted for Publication

#	Name of Investigator(s)	Research Title	Journal	Acceptance Date

### Scientific Research Papers Presented to Refereed Specialized Scientific Conferences

#	Name of Investigator(s)	Research Title	Conference and Publication Date

### Completed Research Projects

#	Name of Investigator(s) (Supported by)	Research Title	Report Date

### Current Researches



#	Research Title	Name of Investigator(s)

### Contribution to Scientific Conferences and Symposia

#	Conference Title	Place and Date of the Conference	Extent of Contribution
	CDT in Catalysis conference	Cardiff University 4-6/6/2019	Attendance
	18 <sup>th</sup> Annual Cardiff Chemistry Conference	Cardiff University 14-15/5/2019	Poster
	17 <sup>th</sup> Annual Cardiff Chemistry Conference	Cardiff University 14-15/5/2018	Attendance
	Towards Understanding the Energy Coupling Mechanism of Respiratory Complex I: Defining the Proton-Coupled Electron Transfer Reaction at Fe-S Cluster N2 using Hyperfine EPR Spectroscopy	Cardiff University 6/11/2017	Attendance
	16 <sup>th</sup> annual Cardiff Chemistry Conference	Cardiff University 15-16/5/2017	Attendance
	Molecules in Extreme Magnetic Fields: Exotic Electronic Structure, Bonding and Properties'	Cardiff University 12/12/2016	Attendance
	The Wonderful World of Carbohydrates: from Enzyme Mechanism to Clinical Tools'	Cardiff University 3/7/2016	Attendance
	The developmental and Economic Effects of Nanotechnology in Arabia	King Fahad University of Petroleum and Minerals, 27-29/3/210	Attendance

### Membership of Scientific and Professional Societies and Organizations

- Saudi Chemical Society
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### Workshops and trainings:

#	Title
1	Demonstrating/Laboratory Based Teaching in the Sciences 18/10/2016
2	Health and Safety induction 10/10/2016
3	An Introduction to SciFinder 20/10/16
4	NMR training session 24/10/2016



5	Mendeley: An Introduction 2/12/2016
6	Gas and Liquid Chromatography Basics Training Course 25/1/2017
7	Zotero: a Free Alternative to EndNote 16/3/17
8	Writing a Literature Review (Sciences) 30/6/17
9	Gas Cylinder Safety Training Course 6/12/2017
10	Mass Spectrometry Training Session 12/1/2018
11	Shimadzu Spectroscopy Workshop 24/1/2018
12	Working with Long Documents, Microsoft 14/5/19
13	Introduction to Single Crystal X-ray Structure Determination 16/5/19
14	Origin Software training 11/2/2020

## Teaching Activities

### Undergraduate

#	Course/Rotation Title	No./Code	Extent of Contribution (no. of lectures/Tutorials. Or labs, Clinics)
1	General Chemistry (1)		Lab
2	General Chemistry (2)		Lab
3	Inorganic Chemistry		Lab
4	Coordination Chemistry		Lab
5	Chemistry of transition elements		Lab
6	Physical Chemistry (thermodynamic)		Lab
7	Analytical Chemistry		Lab
8	Organic Chemistry (2)		Lab
9	Biochemistry (1)		Lab
10	Biochemistry (2)		Lab
11	Surface and Catalysis Chemistry		Lab
12	General Chemistry		Lecture
13	Inorganic Chemistry		Lecture
13	Inorganic Spectroscopy		Lecture
14	Coordination Chemistry		Lecture

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

**General Chemistry (CHEM 110):** General chemistry course is an introduction to the chemistry that emphasizes the chemical foundations, atoms, molecules, and ions, stoichiometry, types of chemical reactions, atomic structure, periodicity and bonding.

**Inorganic Chemistry (CHEM 205):** Inorganic Chemistry provides a sound foundation for undergraduate and graduate students in physical inorganic principles, descriptive inorganic chemistry, bioinorganic chemistry, and applications, including catalysis, industrial processes, and inorganic materials



**Inorganic Spectroscopy (CHEM 503):** This course focuses on fundamental aspects of molecular spectroscopy and aims to apply group theory and character tables on infrared, Raman and electronic spectroscopy of chemical compounds. This course enables students to understand and predict IR and Raman spectra of inorganic compounds.

**Coordination Chemistry (CHEM 409):** This course deals with coordination compounds: definition, naming, Isomerism, Valence Bond Theory, Crystal Field Theory, Molecular orbitals theory

## Postgraduate

#	Course/Rotation Title	No./Code	Extent of Contribution (no. of lectures/Tutorials. Or labs, Clinics)
1			
2			

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

1	
2	

## Course Coordination

#	Course Title and Code	Coordination	Co-coordination	Undergrad.	Postgrad	From	To
	General Chemistry	√		√		2022	2024
	Inorganic Chemistry	√		√		2023	
	Inorganic Spectroscopy	√		√		2024	

## Guest/Invited Lectures for Undergraduate Students

#	Activity/Course Title and Code	Subject	College and University or Program	Date

## Student Academic Supervision and Mentoring

#	Level	Number of Students	From	To
	Different levels	23	2022	Present



### Supervision of Master and/or PhD Thesis

#	Degree Type	Title	Institution	Date

### Ongoing Research Supervision

#	Degree Type	Title	Institution	Date

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

#### Administrative Responsibilities

#	From	To	Position	Organization

#### Committee Membership

#	From	To	Position	Organization
1	2022	Present	Vice President	Department timetables committee
2	2011	2016	member	Commission for academic accreditation and quality
3	2010	present	member	Lecture rooms and timetables committee
4	2008	present	member	academic advisory committee

#### Scientific Consultations

#	From	To	Institute	Full-time or Part-time

#### Volunteer Work

#	From	To	Type of Volunteer	Organization



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

1	Research
2	Experience in using Microsoft Office
3	Experience in using Zotero and Menedely.
4	Experience in using Origin and Chemdraw.
5	Laboratory Skilis
6	Work effectively both as a team member and independently

**Last Update**

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