



## Rahmah Ali Algarni

### Personal Data

Nationality | Saudi

Date of Birth | 2/2/1984

Department | Physics

Official UoD Email | raalgarni@iau.edu.sa

Office Phone No. | 37069

### Language Proficiency

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

### Academic Qualifications (Beginning with the most recent)

Date	Academic Degree	Place of Issue	Address
2019-2022	P.H Degree		Dammam
2013-2014	Master's Degree	King Faisal University	Hufuf
2004-2005	Bachelor's Degree	Girls College of Science (Imam Abdulrahman bin Faisal University)- Physics Department	Dammam

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

PhD	Impact of nano-Dy <sub>2</sub> O <sub>3</sub> particles on the structure, superconducting and flux pinning properties of YBa <sub>2</sub> Cu <sub>3</sub> O <sub>7-δ</sub> polycrystalline.
Master	Synthesis and Controlling of Nano-Structures for Nanolayered Materials and Study of their Effects on Polyvinyl Alcohol

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

Job Rank	Place and Address of Work			Date
Lecturer	College of Science-Physics Department	Imam Abdulrahman bin Faisal University	Dammam	12/9/1435
Demonstrator	College of Science-Physics Department	Imam Abdulrahman bin Faisal University	Dammam	20/8/1430



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	Algarni, R., E. Hannachi, Y. Slimani, M. A. Almessiere, and F. Ben Azzouz.	"Flux pinning mechanisms of $(YBa_2Cu_3O_{y-d})_{1-x}/(Dy_2O_3)_x$ superconductors ( $x=0.1$ and $0.5$ wt%)." $(YBa_2Cu_3O_{y-d})_{1-x}/(Dy_2O_3)_x$	<i>Ceramics International</i> 47, no. 5 (2021) 6675-6682
2	Algarni, R., M. A. Almessiere, Y. Slimani, E. Hannachi, and F. Ben Azzouz.	"Enhanced critical current density and flux pinning traits with $Dy_2O_3$ nanoparticles added to $YBa_2Cu_3O_{7-d}$ superconductor."	<i>Journal of Alloys and Compounds</i> 852 (2021) 157019.
3	Algarni, R., Y. Slimani, E. Hannachi, M. A. Almessiere, B. H. Alqahtani, S. Akhtar, and F. Ben Azzouz.	"Intergrain connectivity in $YBa_2Cu_3O_{7-\delta}$ superconductor added with $Dy_2O_3$ nanoparticles: AC susceptibility investigation."	<i>Current Applied Physics</i> 27 (2021) 89-97
4	Almessiere, M. A., Y. Slimani, E. Hannachi, R. Algarni, and F. Ben Azzouz.	"Impact of $Dy_2O_3$ nanoparticles additions on the properties of porous YBCO ceramics."	<i>Journal of Materials Science: Materials in Electronics</i> 30, no. 19 (2019) 17572-17582.
5	Y. Slimani, M.A. Almessiere, E. Hannachi, A. Manikandan, R. Algarni, A. Baykal, F. Ben Azzouz.	"Flux pinning properties of YBCO added by $WO_3$ nanoparticles."	<i>Journal of Alloys and Compounds</i> 810 (2019) 151884.

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
1	The second scientific conference for students of higher education. Post titled "Effect of the confinement in the nanoscale on the optical properties of nanohybrid material."	Jeddah (28-31 Mars 2011)	participant
2	The 4th Saudi International Nanotechnology Conference (SINC 2016)	King Fahd University of Petroleum and Minerals (KFUPM)-Dhahran (25-26 Oct. 2016)	Attendance
3	Electron Microscopes	Imam Abdulrahman bin Faisal University (2013)	Attendance
4	Arab conference on development and economic impacts of nanotechnology	King Fahd University of Petroleum and Minerals (KFUPM)-Dhahran (27-29 Mars 2010)	Attendance
5	Carbon Nanotubes (CNTs): Synthesis, Purification, Characterization and Applications	King Fahd University of Petroleum and Minerals (KFUPM)-Dhahran (26-27 May 2009)	Attendance

#### Membership of Scientific and Professional Societies and Organizations

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#### Teaching Activities

#	Course/Rotation Title	No./Code	Extent of Contribution (no. of lectures/Tutorials. Or labs, Clinics)
1	Physics I	PHYS 102	Labs + Lectures (theoretical)
2	Physics I	PHYS 202	Labs
3	General Physics (1)	PHYS 101N	Labs



4	General Physics (2)	PHYS 132N	Labs
5	General Physics (3)	PHYS 201N	Labs
6	Electronics (2)	PHYS 308N	Labs
7	Solid state physics I (structure of materials and diffraction)	PHYS 511	Labs
8	Practical Physics (1)	PHYS 306N	Labs
9	Practical Physics (2)	PHYS 407N	Labs
10	Electricity and magnetism (1)	لا يوجد	Labs
11	Electricity and magnetism (2)	لا يوجد	Labs
12	Properties of the material and heat	لا يوجد	Labs
13	Atomic and molecular spectroscopy	لا يوجد	Lectures (exercises)
14	Principle of physics	لا يوجد	Labs+ Lectures (exercises)

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


**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

**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
	All undergraduate levels	19	2014	2017

#### 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
1	1435	1436	Member	Scientific Research committee
2	1436	1437	Member	Student guidance
3	1437	1438	Member	Physics club committee
4	1437	1438	Member	Library affairs committee
5	1438	1439	Member	Strategic planning and risk management committee
6	1444	Now	Head	Activities committee

##### Committee Membership

#	From	To	Position	Organization

##### Scientific Consultations

#	From	To	Institute	Full-time or Part-time

##### Volunteer Work

#	From	To	Type of Volunteer	Organization



1	5 June 2016	26 June 2016	instructor	Mawhiba Summer Enrichment Program 2016 - King Abdul-Aziz & his Companions Foundation for Giftedness and Creativity

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

1	Analyzing data by using programs such as origin, match3! and fullprof program ect.
2	Certificate of Coaching training program from Medex international training and research
3	Attended several workshops as planning, management of training and meetings etc.
4	Participate in several social activities and some of the charity and Holy Quran associations

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**Last Update**

2/2/2023

<https://scholar.google.com/citations?user=RrsBGagAAAAJ&hl=en>

<https://orcid.org/my-orcid?orcid=0000-0002-6835-1996>

<https://www.scopus.com/authid/detail.uri?authorId=57210570753>

<https://www.linkedin.com/feed/?trk=onboarding-landing>