

Dr. Abbad Fahad Al Baroot

Assistant Professor

Personal Data

Nationality | Saudi

Department | Basic Science

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Office Phone No.

Language Proficiency

Language	Read	Write	Speak
Arabic	Mother Tongue	Mother Tongue	Mother Tongue
English	Proficient	Proficient	Proficient

Academic Qualifications (Beginning with the most recent)

Date	Academic Degree	Place of Issue	Address
Oct 2015-	PhD in condensed matter physics	University of	Sheffield, UK
June 2019	(Material Science)	Sheffield	
Aug 2012-	Master degree in Physics	Kent State	Kent, USA
May 2014		University	
2004-	Bachelor degree in Education	University of	Dammam, KSA
2008	(Physics Route)	Dammam	

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

PhD	Water gated thin film- transistors: Ion sensing and modes of operation



Professional Record: (Beginning with the most recent)

Job Rank		Place and Address of Work		Date
Assistant	KSA	Imam Abdurrahman Bin Faisal	Dammam	Oct 2019-
Professor		University		Present
Lecturer	KSA	University of Dammam	Dammam	2014-2019
Teaching Assistant	KSA	University of Dammam	Dammam	2011-2014
Teacher	KSA	Royal commission	Jubail	2009-2011

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	T. Althagafi, A. Al Baroot , S. Algarni, and M. Grell.	A membrane- free cation selective water- gated transistor.	Analyst , 2016,141, 5571- 5576.
2	T. Althagafi, A. Al Baroot and M. Grell	A new precursor route to semiconducting Zinc Oxide.	IEEE Electron Device Letters, 2016, 0741-3106
3	A. Al Baroot and M. Grell	. "Comparing electron-and hole transporting semiconductors in ion sensitive water-gated transistors."	Materials Science in Semiconductor Processing 89 (2019): 216-222.
4	A. Al Baroot, A. Alshammari, and M. Grell.	Electrochemical gating of a hydrophobic organic semiconductor with aqueous media.	Thin Solid Films, 2019, 665- 669.



Current Researches

#	Research Title	Name of Investigator(s)
1	Organic chemiresistors and water gated field effect transistors for the detection of low levels of benzene pollution in water	A. Albaroot , M. Alheshibri, K. Alsayed, T.Kayed
2	Fabrication of Hollow Metal Oxide Nanoparticles via Laser Ablation Technique	M. Alheshibri, A. Albaroot , K. Alsayed.
3	Fabrication of core shell nanoparticles via Laser Ablation Technique (Thin film Ablation)	A. Albaroot , M. Alheshibri, K. Alsayed.
4	Fabrication of nanoparticles via Laser Ablation Technique (Friendly polymer)	K. Alsayed, Shamsualdien, A. Manda M. Alheshibri, A. Albaroot .

Contribution to Scientific Conferences and Symposia

#	Conference Title	Place and Date of the Conference	Extent of Contribution
1	Electrical and Related Properties of Organic Solids (ERPOS)	Crown ethers in ion- sensitive water- gated transistors with organic and inorganic semiconductors". Conference held in University of St Andrews, Scotland (9-13 July 2017).	Poster presentation
2	UK semiconductors 16	Sensing waterborne analytes with water- gated thin film transistors. UK Semiconductors '16 , Sheffield, United Kingdom, July, 2016.	Poster presentation



Teaching Activities

Undergraduate

#	Course/Rotation Title	No./Code	Extent of Contribution (no. of lectures/Tutorials. Or labs, Clinics)
	Basic physics (CED)	Phys 312	3 credit; Lecture and Lab
	Physics I (COE)	Phys 271	4 credit; Lecture and Lab

Student Academic Supervision and Mentoring

#	Level	Number of Students	From	То
	6, 7 and 8	3	2019	PRESENT

Research skills Seminars (Attendance in University of Sheffield)

1	Tools for literature searching
2	Introduction to End note
3	Copyright for eTheses
4	Beyond the Impact Factor: using metrics to help identify influential research
5	Fast Track: literature searching & reference management
6	Standing out from the crowd: boosting your digital presence
7	Looking after your research data
8	Sharing your research: open access and open data
9	Promoting yourself well at Academic interviews
10	Getting experience during your PhD

Professional skills

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

1	Using some scientific programs (Origin software, Mathematica)
2	Laboratory safety
3	Working as a team and supporting my colleagues.
4	Collaborations with some research groups.
5	Proficient in using Microsoft office (word, excel and power point)

Last Update

30/8/2020