

Nedah AlKattan

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Profile

- Excellent analytical thinking and problem solving skills gained through years of research work and resulted in high quality research outputs.
- Excellent communication skills read and interpret citations for the different types of scientific literature and in maintaining good communications with my faculty and academic supervisor.
- Demonstrated ability to work under pressure and meet firm deadlines evident in the finalizing the teaching curriculum completely on time.

Education

2012 - 2014 | **King Abdullah University of Science and Technology, KAUST, Thuwal, KSA**

M.S. in Chemical Science, December 2014, GPA 3.56/4

Thesis Topic: Magnetic Carbon Nanotubes as a Theranostic Platform for drug delivery and Magnetic Resonance Imaging (MRI).

Professor Name: Niveen Khashab

2005 - 2009 | **King Faisal University, Dammam, KSA**

B.S. in Chemistry, August 2009, GPA 90.19/100

Professional Experience

2015 - present

King Abdul-Aziz City for Science and Technology (KACST), Riyadh, KSA

Research Associate: Member of Joint Center of Excellence program (JCEP) and Joint Center of Excellence in Integrated Nanosystem (JCIN).

Porous Metal-Organic Framework (MOF) nanoparticles for drug Delivery - In collaboration with Sir Fraser Stoddart's laboratory at Northwestern University.

- Synthesis of Metal-Organic Framework (MOF) using alkali metal cations and γ -Cyclodextrin (CD).
- Characterization and experimental evaluation of the CD-MOFs nanoparticles.
- Encapsulation of various drugs into the CD-MOFs pores.
- In vitro evaluation of drug release on normal and metastasized cell-lines.

Fall 2016

Northwestern University, Evanston, IL, U.S.A
Sir Fraser Stoddart's laboratory, Department of Chemistry.

Visitor Scholar

Project name: A Novel Triangular Motif of Chiral Macrocycles for Use in CO₂ Reduction.

- Synthesis of a new triangle motif
- Use ¹H & ¹³C NMR Spectra for characterization the samples.
- Use X-Ray crystal to prove that the sample is crystal.
- Use mass spectroscopy.

2010 -2012

Saad Specialist Hospital, AL Khobar, Saudi Arabia
Department of Medical Affairs.

Coordinator

- Corresponded with new employees and applied with them the Saudi Commission for Health Specialties forms and the Ministry of Health forms.
- Entered new employer data into hospital system.
- Contacted with Saudi Commission for Health Specialties and Ministry of Health to issue a medical license for employees
- Organized employee's files.

Summer
2007

Saudi Aramco, Dhahran, Saudi Arabia
Elemental analysis unit.

Internship

- Analyzed oil samples to know what elements contain inside these samples.
- Used inductively coupled plasma optical emission spectroscopy to know the type of elements.

Research Experience

Master Researcher

(2012-2014)

Research group of Prof. Niveen Khashab

Advanced Membranes and Porous Materials (AMPM), Smart Hybrid Materials (SHMs), Physical Science and Engineering Division, KAUST.

- Worked on decorated carbon nanotubes (CNTs) with magnetic particles (Fe₃O₄).
- Functionalized CNTs-Fe₃O₄ by polyethylene glycol (PEG) to form a platform containing CNTs-Fe₃O₄-PEG.
- Use a platform to medical application such as drug delivery and magnetic resonance imaging (MRI).

Awards and Certifications

- Awarded full PhD graduate scholarship from the King Abdulaziz City for Science and Technology.
- King Abdullah University for Science and Technology KAUST fellowship award for master program.
- Received many certificates for achieving English courses.

TECHNICAL AND COMPUTER SKILLS

Characterization and Analysis Techniques:

- Strong educational background and experience in inductively coupled plasma optical emission spectroscopy (ICP-OES), Raman spectroscopy, Fourier Transform Infrared Spectroscopy FT-IR, and UV-Vis spectroscopy.
- Good experience with Magnetic Nanoparticles and Poly (ethylene glycol) Functionalized Single Walled Carbon Nanotubes for Magnetic Resonance Imaging

COMPUTAR SKILLS

- ChemBioDraw, EndNote, Origin, sigma plot.
- Word, Excel, PowerPoint Access.

LANGUAGES

- Arabic: Native.
- English: Fluent.