Dr. Enshirah Da'na

Associate Professor

Personal Data:

Nationality | Canada
Date of Hire | 2014
Date Rank Obtained | 2014
Department | Biomedical Engineering Department
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Education:

Academic Degree	Major	specialty	Place of Issue	Address	Date
Doctorate (PhD)	Chemical Engineering	Adsorption Separation	The University of Ottawa	Canada	2012
Masters (M.Sc.)	Chemical Engineering	Adsorption Separation	The University of Ottawa	Canada	2008
Bachelor (B.Sc.)	Chemical Engineering	Chemical Engineering	The university of Jordan	Jordan	1999

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

PhD	Amine-modified SBA-15 (prepared by co-condensation) for adsorption of copper from aqueous solutions.
Master	Amine-Modified Mesoporous Silica for Adsorption of Copper from Aqueous Solutions.

Experiences:

Title of Job	Address of Work	Country	Date	
Assistant professor	Faculty of Engineering King Faisal University	Kingdom of Saudi Arabia	From	2019
			To	Current
Assistant professor	Faculty of Science King Faisal University	Kingdom of Saudi Arabia	From	2014
			To	2019
Postdoctoral Fellowship	Center for Catalysis Research and Innovation	Canada	From	2012
			To	2013

Research Interests:

1. Architecture of advanced meso-structured materials.
2. Synthesis, characterization, and applications of nanomaterials.
3. Adsorption separation.
4. Heterogeneous Catalysis.

Publications:

#	Name of author(s)	Title of Publication	Publisher and Date of Publication	Link of Publication
1	A. Sayed, E. Da'na, A. Taha.	Preconcentration of charged molecules on paper pads using greenly synthesized smart nano-composite membranes.	Materials Research Express, 8(2021)1-9.	https://iopscience.iop.org/article/10.1088/2053-1591/ac1534/meta
2	A. Taha, E. Da'na, H. A. Hassanin.	Modified activated carbon loaded with bio-synthesized Ag/ZnO nanocomposite and its application for the removal of Cr (VI) ions from aqueous solution.	Surfaces and Interfaces, 23(2021)1-8.	https://www.sciencedirect.com/science/article/abs/pii/S2468023021000055
3	E. Da'na, A. Taha, M. Hessien.	Application of ZnO–NiO greenly synthesized nanocomposite adsorbent on the elimination of organic dye from aqueous solutions: Kinetics and equilibrium.	Ceramics International, 47(2021)4531-4542.	https://www.sciencedirect.com/science/article/pii/S0272884220330558
4	M. Hessien, E. Da'na, A. Taha.	Phytoextract assisted hydrothermal synthesis of ZnO–NiO nanocomposites using neem leaves extract.	Ceramics International, 47(2021)811-816.	https://www.sciencedirect.com/science/article/pii/S0272884220325724
5	A. Taha, Melek Ben Aissa, E. Da'na.	Green Synthesis of an Activated Carbon-Supported Ag and ZnO Nanocomposite for Photocatalytic Degradation and Its Antibacterial Activities.	Molecules, 25 (2020)1586.	https://www.mdpi.com/1420-3049/25/7/1586
6	M. Khalaf; E. Da'na; K. Alamer; M. Hessien.	Experimental design modeling of the effect of hexagonal wurtzite – ZnO synthesis conditions on its characteristics and performance as a cationic and anionic adsorbent.	Molecules, 24(2019) 3884-3900.	https://www.mdpi.com/1420-3049/24/21/3884
7	A. Taha, E. Da'na, M. Hessien.	Evaluation of catalytic and adsorption activity of iron nanoparticles greenly prepared under different conditions: Box Behnken design.	Molecular simulation, (2020)1-11.	https://www.tandfonline.com/doi/abs/10.1080/08927022.2020.1784475
8	M. Hessien, E. Da'na, K. Al-Amer, M. Khalaf.	Nano ZnO (hexagonal wurtzite) of different shapes under various conditions: Fabrication and characterization.	Materials Research Express, 6(2019)1-11.	https://iopscience.iop.org/article/10.1088/2053-1591/ab1c21/meta
9	8- E. Da'na, A. Taha, E.Afkar.	Green synthesis of iron nanoparticles by Acacia nilotica pods extract and its catalytic, adsorption, and antibacterial activities.	Applied Sciences, 8(2018)1-17.	https://www.mdpi.com/2076-3417/8/10/1922

10	E. Da'na, Awatef Awad.	Regeneration of spent activated carbon obtained from home filtration system and applying it for heavy metals adsorption.	Journal of Environmental Chemical Engineering 5 (2017)3091-3099.	https://www.sciencedirect.com/science/article/abs/pii/S2213343717302725
11	E. Da'na	Adsorption of heavy metals on functionalized-mesoporous silica: A review.	Microporous and Mesoporous Materials 247(2017)145-157.	https://www.sciencedirect.com/science/article/abs/pii/S1387181117302275
12	E. Da'na, Sayari, A.	Modeling adsorption of copper on amine-functionalized SBA15: Predicting breakthrough curves.	J. Environ. Eng. 139 (2013) 95-103.	https://ascelibrary.org/doi/abs/10.1061/(ASCE)EE.1943-7870.0000602
13	A. Sayari, belmabkhout, Y., Da'na, E.	CO2 Deactivation of Supported Amines: Does the Nature of Amine Matter.	Langmuir 28 (2012) 4241-4247.	https://pubs.acs.org/doi/abs/10.1021/la204667v
14	E. Da'na, Sayari, A.	Adsorption of heavy metals on amine-functionalized SBA-15 prepared by co-condensation: Applications to real water samples.	Desalination 285 (2012) 62-67.	https://www.sciencedirect.com/science/article/abs/pii/S0011916411008290
15	E. Da'na, Sayari, A.	Effect of regeneration conditions on the cyclic performance of amine-modified SBA-15 for removal of copper from aqueous solutions: Composite surface design methodology.	Desalination 277 (2011)54-60.	https://www.sciencedirect.com/science/article/abs/pii/S0011916411003158
16	E. Da'na, Sayari, A.	Optimization of copper removal efficiency by adsorption on on amine-modified SBA-15: Experimental design methodology.	Chem. Eng. J. 167 (2011) 91-98.	https://www.sciencedirect.com/science/article/abs/pii/S138589471001209X
17	E. Da'na, N. D. Silva, A. Sayari.	Adsorption of copper on amine-functionalized SBA-15 prepared by co-condensation: Kinetics properties.	Chem. Eng. J. 166 (2011) 454-459.	https://www.sciencedirect.com/science/article/abs/pii/S1385894710011010
18	E. Da'na, A. Sayari.	Adsorption of copper on amine-functionalized SBA-15 prepared by co-condensation: Equilibrium properties.	Chem. Eng. J. 166 (2011) 445-453.	https://www.sciencedirect.com/science/article/abs/pii/S1385894710011009
19	R. Serna-Guerrero, E. Da'na.	A. Sayari, New insights into the interactions of CO2 with amine-functionalized silica.	Ind. Eng. Chem. Res. 47 (2008) 9406-9412.	https://pubs.acs.org/doi/abs/10.1021/ie801186g

Language Proficiency:

1. Arabic- Native
2. English- Fluent