

# Dr. Nuhu Dalhat Mu'azu's CV

#### ASSOCIATE PROFESSOR

#### Personal Data

Nationality | Nigerian Department | Environmental Engineering Imam Abdulrahman bin Faisal University Dammam, Saudi Arabia Official IAU Email |nmdalhat@iau.edu.sa Office Phone No |+966 13 333 1695 Mobile No | +966 507532689 Google Scholar https://scholar.google.com/citations?user=31d4ME0AA AAJ&hl=en



#### Language Proficiency

Language	Read	Write	Speak
Arabic	Excellent	Very good	Fair
English	Excellent	Excellent	Excellent
Others (Hausa)	Excellent	Excellent	Excellent

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

Date	Academic Degree	Place of Issue	Address
2010	PhD	King Fahd University of Petroleum and Minerals	Dhahran, Saudi Arabia
2005	MSc	King Fahd University of Petroleum and Minerals	Dhahran, Saudi Arabia
2000	BSc	Ahmadu Bello University	Zaria, Nigeria

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



PhD	Electrochemical Oxidation of Phenol in Simulated Petrochemical Wastewater Using Boron Doped Diamond Electrode: Investigating Effects of CN-, NH4+ and S2- Presence
Master	Effect of Water table Rise on LNAPL Entrapment in Uniform & Well-graded Sands

## Professional Record:

Job Rank	Place and Address of Work	Date
Associate Professor	Imam Abdulrahman bib Faisal University, Dammam, Saudi Arabia	2018-till date
Assistant Professor	University of Dammam, Dammam, Saudi Arabia	2010-2017
Lecturer	Civil Engineering Department, King Fahd University of Petroleum and Mineral, Dhahran, Saudi Arabia	2005-2010
Research Assistant	Civil Engineering Department, King Fahd University of Petroleum and Minerals, Dhahran, Saudi Arabia	2002-2005
Assistant Lecturer	Civil Engineering Department, Ahmadu Bello University, Zaria, Nigeria	2002-2002
National Service Corps member	Osun State Environmental Protection Agency, Osogbo Osun State, Nigeria	2001-2002

## Administrative Positions Held:

Administrative Position	Office	Date
Chairman dept research committee	Environmental Engineering Department UoD	2017- till date
Coordinator community service committee	College of Engineering and Environmental Engineering Department UoD	2015- till date
Dept coordinator Summer training program committee	College of Engineering and Environmental Engineering Department UoD	2012- Date
Coordinator senior design project committee	College of Engineering and Environmental Engineering Department UoD	2011- till date

## Scientific Achievements

# Published Refereed Scientific Researches

N	o Research Title	Journal Title	Authors	Publication Date	Volume, Issue, number & Pages	DOI
1	Inhibition of low carbon steel corrosion by a cationic gemini surfactant in 10wt.% H <sub>2</sub> SO <sub>4</sub>	South African Journal of	Nuhu Dalhat Mu'azu, Shamsuddeen	2023	(43) page 232-244	https://doi.org/1 0.1016/j.sajce.20 22.10.006



	and 15wt.% HCl under static condition and hydrodynamic flow.	Chemical Engineering	A Haladu, Jwaher M AlGhamdi, Hissah A Alqahtani, Mohammad Saood Manzar, Mukarram Zubair, Nurudeen A Odewunmi, Nouf Essa Aldossary, Zainab Hussain Alshaer, Shaikh A Ali, Hany M Abd El-Lateef			
2	K-nearest neighbor based computational intelligence and RSM predictive models for extraction of Cadmium from contaminated soil Issue	. Ain Shams Engineering Journal	<b>Nuhu Dalhat</b> <b>Mu'azu</b> and S.O Sunday	2022	<u>Volume</u> <u>14, Issue</u> <u>4</u> , 5 April 2023, 101944	<u>https://doi.org/1</u> 0.1016/j.asej.202 2.101944
3	New generation neurocomputing learning coupled with a hybrid neuro- fuzzy model for quantifying water quality index variable: A case study from Saudi Arabia	Ecological Informatics	Mohammad Saood Manzar, Mohammed Benaafi, Romulus Costache, Omar Alagha, Nuhu Dalhat Mu'azu, Mukarram Zubair, Jazuli Abdullahi, SI Abba	2022,	70, Article 101696	<u>https://doi.org/1</u> 0.1016/j.ecoinf.2 022.101696
4	Synthesis and adsorptive performance of a novel triazine-core containing resin for the ultrahigh removal of malachite green from water Arabian	Journal for Science and Engineering	Tauqir Ahmad, Mohammad Saood Manzar, Saif Ullah Khan, Izzat Wajih Kazi, Nuhu Dalhat Mu'azu, and Nisar Ullah			<u>https://doi.org/1</u> <u>0.1007/s13369-</u> <u>022-07015-w</u>
5	Insight into ANN and RSM Models' Predictive Performance for Mechanistic Aspects of Cr(VI) Uptake by Layered Double	Water	<u>Nuhu Dalhat</u> <u>Mu'azu</u>	May 2022	14 (10), 1644 1-27	https://doi.org/10. 3390/w14101644



	Hydroxide Nanocomposites from					
	Water					
6	Comparative performance evaluation of anodic materials for electro-kinetic removal of Lead (II) from contaminated clay soil.	Soil and Sediment Contamination: An International Journal	Nuhu Dalhat Mu'azu and Mohammad Hussain Essa	Oct 2019	29 (1) 69-95	<u>https://doi.org/10.</u> <u>1080/15320383.20</u> <u>19.1673698</u>
7	Sewage Sludge ZnCl2 activated carbon intercalated MgFe-LDH nanocomposites: insight of sorption mechanism of improved removal of phenol from water	International Journal of Molecular Sciences	NuhuDalhatMu'azu,MukarramZubair,NabeelJarrah;OmarAlagha,MamdouhA.Al-HarthiMohammedH.Essa	Feb 2020	21(5) : 1563.	<u>https://doi.org/10.</u> <u>3390/ijms2105156</u> <u>3</u>
8	Effect of montmorillonite content in natural Saudi Arabian clay on its adsorptive performance for single aqueous uptake of Cu (II) and Ni (II)	Journal of King Saud University- Science	<u>Nuhu Dalhat</u> <u>Mu'azu</u> , A Bukhari and K Munef	Jan 2020	32(1), 412-422	<u>https://doi.org/10.</u> <u>1016/j.jksus.2018.</u> <u>06.003</u>
9	Public acceptability of treated wastewater reuse in Saudi Arabia: Implications for water management policy	Science of the Total Environment	<u>Nuhu Dalhat</u> <u>Mu'azu</u> , Ismaila Rimi Abubakar, and Nawaf I. Blaisi	June 2020	721; 137659	https://doi.org/10. 1016/j.scitotenv.20 20.137659
10	Mechanistic aspects of magnetic MgAlNi barium-ferrite nanocomposites enhanced adsorptive removal of an anionic dye from aqueous phase.	Journal of Saudi Chemical Society	NuhuDalhatMu'azuNabeelJarrah,MukarramZubair,MohammadMohammadSaoodManzar,TayeSaheedKazeem,AleemQureshi,ShamsuddeenAHaladu,NawafBlaisi,MohammadHEssa,Al-Harthi	Sept 2020	24(10) 715-732	<u>https://doi.org/10.</u> <u>1016/j.jscs.2020.0</u> <u>8.001</u>
11	Systematic Modeling of Municipal Wastewater Activated Sludge Process and Treatment Plant Capacity Analysis Using GPS-X	Sustainability	<u>Nuhu Dalhat</u> <u>Mu'azu </u> Omar Alagha, Ismail Anil	Sept 2020	12 (19); 8182 1-26	https://doi.org/10. 3390/su12198182
12	Process Optimization and Modeling of Phenol Adsorption onto Sludge- Based Activated Carbon Intercalated MgAlFe Ternary Layered Double Hydroxide Composite	Molecules	<u>Nuhu Dalhat</u> <u>Mu'azu</u> , M Zubair, I Ihasanullah	May 2021	26 (14) ; 4266 1-19	<u>https://doi.org/10.</u> <u>3390/molecules26</u> <u>144266</u>

# جامعة الإمام عبد الرحمن بن فيصل IMAM ABDULRAHMAN BIN FAISAL UNIVERSITY



	Malanda andrea de la Record		<u>Nuhu Dalhat</u>			
13	Volcanic ashes and its NaOH modified adsorbent for superb cationic dye uptake from water: statistical evaluation, optimization, and mechanistic studies Aspects	Colloids and Surfaces A: Physicochemical and Engineering	<u>Mu'azu</u> Mohammad Saood Manzar, Mukarram Zubair, Eman Ghari, Alhajri, Mohammed H.Essa, Lucas Meili	Nov 2021	634 (2022), 127879	https://doi.org/10. 1016/j.colsurfa.20 21.127879
14	Food waste management current practices and sustainable future approaches: a Saudi Arabian perspective	. Journal of Material Cycles and Waste Management	NuhuDalhatMu'azuNawafBlaisi,AmmarNaji,IsamMohammedAbdelMagid,AliAlQahtany	Nov 2018	21, 678–690	<u>https://doi.org/10.</u> <u>1007/s10163-018-</u> <u>0808-4</u>
15	Evaluation of novel MgAlNi-BaFe ternary layered hydroxide uptake of methyl orange dye from water	Korean Journal of Chemical Engineering	NuhuDalhatMu'azu,NabeelJarrah,MukarramZubairandSaudManzar,TayeSaheedKazeemandMamdouhAl-Harthi	Dec 2019	36, pages 2008– 2022	<u>http://dx.doi.org/1</u> 0.1007/s11814- 019-0384-x
16	Household attitudes toward wastewater recycling in Saudi Arabia	Utilities Policy	Rimi Abubakar, <u>Nuhu Dalhat</u> Mu'azu	March 2022	76 <i>,</i> 101372	https://doi.org/10. 1016/j.jup.2022.10 1372
17	Inhibition of mild steel corrosion in 1 M H2SO4 by a Gemini surfactant 1,6-hexyldiyl-bis- dimethyldodecylammonium bromide): ANN, RSM predictive modeling, quantum chemical and MD simulation studies	Journal of Molecular Liquids	Shamsuddeen A. Haladu; <u>Nuhu</u> <u>Dalhat Mu'azu</u> , Shaikh A. Ali, Asma M. Elsh//arif, Nurudeen A. Odewunmi, Hany M. Abd El-Lateef	Jan 2022	350, 118533	<u>https://doi.org/10.</u> <u>1016/j.molliq.2022</u> <u>.118533</u>
18	Utilization of Oil Sludge as Rejuvenator in Hot-Mix-Asphalt Containing Reclaimed Asphalt Concrete	Construction and Building Materials	Muhammad Dalhat, Sami Alkhair, <u>Nuhu</u> <u>Dalhat Mu'azu</u> and Omer AlAgha	May 2022	338 127483	https://doi.org/10. 1016/j.conbuildma t.2022.127483
19	Production of magnetic biochar- steel dust composites for enhanced phosphate adsorption	Journal of Water Process Engineering	Mukarram Zubair, Mohammad Saood Manzar, Mohammed Awwal Suleiman, Daniel Pinto Fernandes, Lucas Meili, Waad Al Bin Essa, Hawra Adam, Jwaher M. AlGhamdi, <u>Nuhu</u> <u>Dalhat Mu'azu</u> , Shamsuddeen A. Haladu	April 2022	47, 102793	<u>https://doi.org/10.</u> <u>1016/j.jwpe.2022.</u> <u>102793</u>

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20	Comparative Adsorption of Eriochrome black T onto recyclable steel dust wastes: Isotherm, Kinetics and Thermodynamic Studies.	Colloids and Surfaces A: Physicochemical and Engineering Aspects	Mohammad Saood Manzar, Muntathir Alshabib, Umair Alam, Muhammad Nawaz, Mukarram Zubair, Anamália Ferreira Silva, <u>Nuhu</u> <u>Dalhat Mu'azu</u> Lucas Meili, Emre Çevik, Hissah A Alqahtani	March 2022	645, 128828	<u>https://doi.org/10.</u> <u>1016/j.colsurfa.20</u> <u>22.128828</u>
21	Recent review on synthesis, evaluation, and SWOT analysis of nanostructured cellulose in construction applications	Journal of Building Engineering	Muhammad Nasir, Muhammad Arif Aziz, Mukarram Zubair Mohammad Saood Manzar Noman Ashraf, <u>Nuhu Dalhat</u> <u>Mu'azu</u> , Mamdouh A.Al-Harthi	Nov 2021	46 103747	<u>https://doi.org/10.</u> <u>1016/j.jobe.2021.1</u> <u>03747</u>
22	Generalized decay and artificial neural network models for fixed- Bed phenolic compounds adsorption onto activated date palm biochar.	Journal of Environmental Chemical Engineering	Muhammad A. Dalhat, <u>Nuhu</u> <u>Dalhat Mu'azu</u> , Mohammad H. Essa	Nov 2020	9(1) 104711	<u>https://doi.org/10.</u> <u>1016/j.jece.2020.1</u> <u>04711</u>
23	Synthesis and characterization of a series of cross-linked polyamines for removal of Erichrome Black T from aqueous	Chinese Journal of Chemical Engineering	Mohammad Saood Manzar, Shamsuddeen A. Halad, Othman Sadeq othman Al Hamouz Mukarram Zubair, <u>Nuhu</u> Dalhat Mu'azu, Aleem Qureshi, Nawaf Blaisi,	Nov 2020	32, 341- 352	<u>https://doi.org/10.</u> <u>1016/j.cjche.2020.</u> <u>09.052</u>
24	Microwave Foaming of Materials: An Emerging Field	Polymers	Mukarram Zubair, Rebecca Ferrari,Omar Alagh, <u>Nuhu Dalhat</u> <u>Mu'azu</u> , Nawaf I. Blaisi, Manzar Mohammad Saood Ijlal Shahrukh Ateeq	Oct 2020	12(11) 2477	https://doi.org/10. 3390/polym12112 477
25	Functionalized MgAl-layered hydroxide intercalated date-palm biochar for Enhanced Uptake of Cationic dye: Kinetics, isotherm and thermodynamic).studies	Applied Clay Science	Mukarram Zubair, Mohammad Saood Manzar, <u>Nuhu</u> Dalhat Mu'azu, Ismail Anil, Nawaf I. Blaisi, Mamdouh A. Al-Harthi	April 2020	190 105587	<u>https://doi.org/10.</u> <u>1016/j.clay.2020.1</u> <u>05587</u>
26	Suitability of SBR for wastewater treatment and reuse: Pilot-scale reactor operated at different anoxic conditions	International Journal of Environmental	Omer Alagha, Ahmed Mohammed Khalafall Allazem,	March 2020	17 (5) , 1617	https://doi.org/10. 3390/ijerph170516 <u>17</u>



		Research and Public Health	Alaadin A. Bukhari, Ismail Anil, <u>Nuhu</u> <u>Dalhat Mu'azu</u>			
27	Comparative Adsorptive Removal of Phosphate and Nitrate from Wastewater Using Biochar-MgAl LDH Nanocomposites: Coexisting Anions Effect and Mechanistic Studies	Nanomaterials	Omar Alagha, Mohammad Saood Manzar,Mukarram Zubair; Ismail Anil; <u>Nuhu Dalhat</u> <u>Mu'azu</u> and Aleem Qureshi	Feb 2020	10, 336	<u>https://doi.org/10.</u> <u>3390/nano100203</u> <u>36</u>
28	Graphene/ternary layered double hydroxide composites: Efficient removal of anionic dye from aqueous phase	Korean Journal of Chemical Engineering	TS Kazeem, M Zubair, M Daud, <u>Nuhu Dalhat</u> <u>Mu'azu</u> , MA Al- Harthi	June 2019	36 (7), 1057- 1068.	https://doi.org/10. 1007/s11814-019- 0284-0

## Scientific Research Papers Presented to Refereed Specialized Scientific Conferences

#	Name of Investigator(s)	Research Title	Conference and Publication Date
1	<b>Nuhu Dalhat Mu'azu</b> and Mohammad Hussain Essa	"Advanced Solar Tertiary Sewage Effluent Treatment and Reuse for Sustainable Water Management in KSA"	7th International Conference On Energy Research and Development (ICERD) November 19-21, 2019 State of Kuwait
2	Nuhu Dalhat Mu'azu	"A Strategic Hierarchical Food Loss and Waste Management Approach for Transforming KSA into Circular Economy"	SNR_SSWM2019 Conference to be held on 5-6 November 2019, Buraydah, Qassim, KSA
3	Nuhu Dalhat Mu'azu, Mohammad. H. Essa , Omer Aga and Nabeel Jarrah	"Life Cycle Assessment Approach to Sustainable Sewage Sludge Management for Water Pollution Control"	International Conference on Nanomaterials: Science, Engineering & Technology (IConSET 2019) 5-6 <sup>th</sup> August 2019 Penang Malaysia
4	Nuhu Dalhat Mu'azu and Mohammad Hussein Essa	"Advances in Diamond Electrochemistry and its Role in Decontamination of Industrial Wastewater effluents"	WEF-EESS Conference on Advancement in Water and Wastewater Treatment and Reuse, (AWWTR 2019) Singapore, 31st July – 1st August 2019
5	Nuhu Dalhat Mu'azu, Mohammad H Essa, Shamsudeen A Haladu, Shaikh A Ali, N Jarrah, M Zubair and lehab A Mohamed	"Removal zinc ions from contaminated soil using biodegradable polyaspartate via soil washing process"	International Conference on Nanomaterials: Science, Engineering & Technology (IConSET 2019) 5-6 <sup>th</sup> August 2019 Penang Malaysia
6	<b>Nuhu Dalhat Mu'azu</b> , Nabeel Jarrah, Mukarram Zubair and Mohammed Hussein Essa	"Bentonite intercalated doubled layer hydroxides for superb simultaneous uptake of dyes and heavy metals from water	WEF-EESS Conference on Advancement in Water and Wastewater Treatment and Reuse, (AWWTR 2019) Singapore, 31st July – 1st August 2019



7	Nuhu Dalhat Mu'azu	A strategic sustainable water management approach in KSA and GCC countries	6th International Conference on Water, Energy and Environment (ICWEE2019), Sharjah UAE, March 26–28, 2019
8	Nuhu Dalhat Mu'azu , Nabeel Jarrah2 and Mukarram Zubair3	Evaluation of anionic dye removal from water using bentonite-clay intercalated cobalt-aluminum LDH nanocomposites	6th International Conference on Water, Energy and Environment (ICWEE2019), Sharjah UAE, March 26–28, 2019
9	Nuhu Dalhat Mu'azu and Mohammed H.Essa	Oxidation Pathways during Electrochemical Treatment of Phenolic Wastewater using Boron-Doped Diamond Electrodes	International Conference on Water, Energy and Environment (ICWEE 2017) February 28-March 2, 2017, at the American University of Sharjah, Sharjah, UAE
10	<b>Nuhu Dalhat Mu'azu</b> , Nabeel Jarrah, Mohammed H.Essa and Mukarram Zubair	Treatment of Wastewater using Sludge Based Activated Carbon: A Sustainable Sludge Management Strategy in KSA	International Conference on Water, Energy and Environment (ICWEE 2017) February 28 – March 2, 2017, at the American University of Sharjah, Sharjah, UAE
11	Nuhu Dalhat Mu'azu Isam Mohammed Abdel- Magid, Nabeel Al-Jarrah and Nawaf Blaise	Reusing of Treated Mosque Ablution Grey Water: A Sustainable Water Management Strategy Integrated into Mosques Design	1st Saudi The First International Conference on Mosques Architecture, the University of Dammam (UoD) Dammam, 6- 8 December 2016.
12	<b>Nuhu Dalhat Mu'azu</b> , Nabeel Jarrah and Omer Aga, Mohammed Hussain Essa	Optimization of Production of Sludge Based Activated Carbon for Sustainable Water Pollution Control	3rd Zaytoonah Engineering Conference, Amman Jordan (ZEC2016), 16-18 May 2016
13	Nuhu Dalhat Mu'azu and M.H. Essa	Solar Based Technologies for Sustainable Tertiary Effluent Treatment and Reuse	First German-UAE Workshop on Energy and Water in the Gulf Cooperation Council Countries (EWGCC) held in American University of Ras Al Khaimah UAE, on April 12-14, 2016. UAE
14	<b>Nuhu Dalhat Mu'azu</b> M.H. Essa Salihu Lukman	Pilot Scale Removal of Heavy Metals from Sodic-Saline Clay Soil Using Hybrid Electrokinetic-Adsorption Technique	14th International Conference on Environmental Science and Technology (CEST2015) 3-5 September 2015, Rhodes, Greece
15	<b>Nuhu Dalhat Mu'azu</b> , Abdullahi Usman, A. Bukhari and Muhammad Hussain Essa and Salihu Lukman	Electrokinetic Removal of Mixed Heavy Metals from Contaminated Clay Soils Using pulsed electrokinetic process.	14th International Conference on Environmental Science and Technology (CEST2015) 3-5 September 2015, Rhodes, Greece
16	Nuhu Dalhat Mu'azu and Nabil Jarrah	Advances in Diamond Electrochemistry: Applications in Industrial Wastewater Treatment"	Water Arabia, Le Meridian Khobar Saudi Arabia. 17-19 February 2015
17	S. Lukman, M.H. Essa, <b>Nuhu Dalhat Mu'azu</b> , A. Bukhari	Integrated Electrokinetics-Adsorption Remediation for Simultaneous Removal of Heavy Metals and Organics from Saline-Sodic Soil: Effects of Voltage Gradient on the Processing Fluids,"	Proceedings of the 2nd International Conference on Environment, Chemistry and Biology (ICECB 2013), December 13- 14, 2013 Stockholm, Sweden



18	Nuhu Dalhat Mu'azu, Muhammad H. Al- Malack and Omer Aga	Electrochemical Oxidation of Phenol on Boron-Doped Diamond Anodes in Wastewaters Containing Toxic Inorganic Species"	Proceedings of the 16th International Water Technology Conference (IWTC- 2012), Istanbul-Turkey 7-10 May 2012
19	Nabil Jarrah, Omer Aga and <b>Nuhu Dalhat Mu'azu</b>	Production of activated carbon using tire waste: Optimization using Response Surface methodology Jubail	Jubail International Environmental Conference 6th June 2012. Jubail Industrial city, Jubail, Saudi Arabia
20	<b>Nuhu Dalhat Mu'azu</b> , S. Lukman, M.H. Essa and M.S. Al-Suwaiyan	Challenges in the Electrokinetic Remediation of Natural Saudi Arabian Soil for Agriculture: Effect of Salinity and Sodicity	World Environment Day (WED13) Symposium hosted by the Royal Commission for Jubail, Jubail, Saudi Arabia, 5th June.
21	M.H. Essa, <b>Nuhu Dalhat</b> <b>Mu'azu,</b> S. Lukman and A. Bukhari	Integrated Electrokinetics-Adsorption Remediation of Saline-Sodic Soils and Groundwater: Effects of Voltage Gradient and Initial Concentration on Electrical Conductivity	17th International Water Technology Conference (IWTC-2013), Fatih University Istanbul-Turkey 5 - 7 Nov 2013.
22	S. Lukman, M.H. Essa, <b>Nuhu Dalhat Mu'azu</b> , A. Bukhari	Coupled electrokinetics-adsorption technique for simultaneous removal of heavy metals and organics from saline- sodic soil	International Conference on Environmental Science and Technology (ICEST2013), September 5 - 7, 2013, Athens, Greece
23	<b>Nuhu Dalhat Mu'azu</b> , M. H. Al-Malack; Alaadin A. Bukhari	Electrochemical Decontamination of Wastewaters Containing Toxic Substances Using Boron-Doped Diamond Electrode	Jubail International Environmental Conference 6th June 2011, Jubail, Jubail, Saudi Arabia, 5th June.

# Completed Research Projects

#	Name of Investigator(s) (Supported by)	Research Title	Report Date
1	Ömer AĞA , Nuhu Dalhat Mu'azu, Alaadin Bukhari, and Ibrahim Altaisan	Beach Well Filtration as Pre-Treatment for RO Desalination in Eastern province-Saudi Arabi (UoD project#2012190)	2015
2	Nuhu Dalhat Mu'azu, Muhammad Al-Yahya, Ahmad M. Al-Haj-Ali and Isam Mohammed Abdel-Magid	Electro-decontamination of Toxic Phenolic Wastewaters Under Different Direct Current Supply Modes (UoD project #2012158)	2014
3	Nuhu Dalhat Mu'azu, Nabeel Jarrah and Omer Aga	Pulsed-Current Electrokinetic Remediation of Groundwater Contaminated with Heavy Metals"	2014
4	Nabeel Jarrah, Omer Aga and Nuhu Dalhat Mu'azu	Production and characterization of activated carbon from waste tires using factorial design of experiments (UoD project #2012156)	2014
5	Ahmad Al-Haj-Ali, Nabeel A Jarrah and Nuhu Dalhat Mu'azu	Thermodynamics and kinetics of corrosion and corrosion inhibition for aluminum alloys exposed to acidic, chloride-containing environment using green chemical inhibitors( UoD research project#2012162)	2013



6	M.H. Essa, Nuhu Dalhat Mu'azu, and A. Bukhari	Effect of Electrode Materials on Electrokinetic Remediation (EKR) of Mixed-Heavy Metals Contaminated Soil. (KFUPM Project#SB121011)	2013
7	M.H. Essa, Nuhu Dalhat Mu'azu, S. Lukman and A. Bukhari	Remediation of Oil-contaminated Soils Using Hybrid Electrokinetic- Adsorption technique with Locally- Produced Activated Carbon (KFUPM NSTIP 11-Env1669- 04)	2014
8	Nuhu Dalhat Mu'azu and M.H. Al-Malack	Electrochemical Destruction of Phenol in Multi-Pollutant Wastewaters Using Boron-Doped Diamond Electrode (KFUPM KACST project)	2010

#### Current Research Projects

#	Research Title	Name of Investigator(s)
1	Production of Activated Carbon from WWTP Sludge and it Utilization in Industrial Wastewater Treatment: a Life Cycle Assessment Approach (UoD NSTIP Project No. 12-Env2229-46)	Nuhu Dalhat Mu'azu, Nabeel Jarrah and Omer Aga, Mohammed Hussain Essa
2	Development of innovative sustainable tools for infrastructure planning and efficient management of urban wastewater systems in the Kingdom of Saudi Arabia" 2014-2016 NSTIP Project No. 10- WAT1336-46, Co-I (Final Report to be submitted)	Omer Aga, Nuhu Dalhat Mu'azu and Nabeel Jarrah
3	Corrosion inhibition in oil and gas industries using new fine- tunable pH-responsive polymers	Shamsuddeen Abdullahi Haladu , Nuhu Dalhat Mu'azu and Abdullah A. Manda
4	Treatment and Reuse Mosque Ablution Grey Water for Sustainable Water Management in KSA	Nuhu Dalhat Mu'azu, Isam Mohammed Abdel-Magid, Nabeel Al-Jarrah, Nawaf Blaise and Muhammad Saleem

## Contribution to Scientific Conferences and Symposia

#	Conference Title	Place and Date of the Conference	Extent of Contribution
1	WEF-EESS Conference on Advancement in Water and Wastewater Treatment and Reuse, (AWWTR 2019)	Singapore, 31st July – 1st August 2019	Session Co-Chair for Soil. Advanced water and wastewater oral presentation
2	14th International Conference on Environmental Science and Technology (CEST2015)	3-5 September 2015, Rhodes Island, Greece	Session Co-Chair for Soil contamination and Remediation oral presentation

## Membership of Scientific and Professional Societies and Organizations

- Saudi Arabian Water and Environmental Association (SAWEA), KSA
- Water Environmental Federation (WEF), USA
- International Water Association (IWA), USA
- Saudi Council of Engineers, KSA
- Global Network on Environmental Science and Technology, Greece
- World Academy of Environmental Science and technology





## **Teaching Activities**

### Undergraduate

#	Course/Rotation Title	No./Code	Extent of Contribution
			(no. of lectures/Tutorials. Or labs, Clinics)
1	Industrial Waste Management I	ENVEN 564	Whole semester lectures/tutorials/Laboratory
2	Unit operations and Processes	ENVEN 411	и
3	Wastewater Engineering II	ENVEN 531	и
4	Environmental Laws & Regulations	HUMN 512	и
5	Water Supply Engineering	ENVEN 342	и
6	Water Quality	ENVEN 352	и
7	Design of Environmental Projects	ENVEN 501	и
8	Fluid Mechanics	ENG 312	и
9	Hazardous Waste Management and Engineering	ENVEN 574	и
10	Waste Containment Structures	ENVEN 533	и
11	Senior Design Project I	ENVEN 521	и
12	Wastewater Engineering I	ENVEN 422	и
13	Intro to Geotech and Geoenvironmental Eng	ENVEN 452	и
14	Senior Design Project II	ENVEN 522	и
15	Groundwater Engineering and Contamination	ENVEN 573	<i>u</i>
16	Environmental Chemistry	CHEM 311	и
17	Library Skills	HUMN 201	и
18	Engineering Materials/mechanics of materials	ENG 332	и
19	Industrial Wastes	MSSH 316	<i>u</i>
12	Statics	ENG 232	u

# Student Academic Supervision and Mentoring

#	Level	Number of Students	From	to
1	3-5	3-15	2011	2012
2	3-5	3-15	2012	2013
3	3-5	3-15	2013	2013
4	3-5	3-15	2014	2015
5	3-5	3-15	2015	2016
6	3-5	20-25	2016	2017



# Supervision of Master and/or PhD Thesis

#	Degree Type	Title	Institution	Date
1	MSc (Co-supervisor)	Adsorption of Copper and Nickel on Natural Saudi Arabia Bentonite and Clay	King Fahd University of Petroleum and Minerals, Dhahran Saudi Arabia	2015
2	MSc (Co-supervisor)	Pulsed Electrokinetic Removal of Heavy Metals from Contaminated Clay Soil	King Fahd University of Petroleum and Minerals, Dhahran Saudi Arabia	2015
3	PhD (Co-supervisor )	Study on Integrated Electrokinetics- Adsorption Remediation Technique for Simultaneous Removal of Heavy Metals and Organics from Saline-Sodic Soil: Effects of Operating Parameters	King Fahd University of Petroleum and Minerals, Dhahran Saudi Arabia	2013

# BSc Project Supervision

#	Title	Institution	Session
1	Multi-criteria Design of Centralized Medical Waste Incinerator Facility for Dammam Metropolitan Hospitals	Department of Environmental Engineering IAU	2019-2020
2	Multi-criteria Design of Centralized Medical Waste Incinerator Facility for Dammam Metropolitan Hospitals	Department of Environmental Engineering IAU	2019-2020
3	Design of Biological Wastewater Treatment Plant for Population of 200,000 Persons	Department of Environmental Engineering IAU	2018-2019
4	Designing dry fermentation process to generate electricity by using organic waste	Department of Environmental Engineering IAU	2018-2019
5	Multi-criteria locating and designing of sanitary landfill in Dammam Metropolis	Department of Environmental Engineering IAU	2017-2018
6	Design of a waste composting system for sustainable management and Reuse of Food Waste in the Eastern Province of Saudi Arabia	Department of Environmental Engineering IAU	2016-2017
7	Application of Natural Clay Soil as an Adsorbent for Removal of Heavy metals from Contaminated Water	Department of Environmental Engineering UoD	2014/2015
8	Public acceptance of application of domestic wastewater for recycling and reuse in a Muslim society	Department of Environmental Engineering UoD	2014/2015
9	Municipal wastewater treatment plant design & evaluation	Department of Environmental Engineering UoD	2013/2014



10	Dissolved air flotation process for wastewater treatment	Department of Environmental Engineering UoD	2013/2014
11	Treatment of Industrial Wastewater contaminated with Organics Using Electrochemical Technique	Department of Environmental Engineering UoD	2012/2013

#### Administrative Responsibilities, Committee and Community Service

#### Administrative Responsibilities

#	From	То	Position	Organization
	2012	Till date	Member senior design committee	College of Engineering /Department of Environmental Engineering IAU
	2015	Till date	Member students' academic advising	College of Engineering /Department of Environmental Engineering IAU
	2017	ongoing	Professional consultation on solutions for urban development problems	Municipality of Dammam, Dammam
	2016	Till date	Mosque ablution grey water treatment and reuse project	College of Engineering IAU

#### Committee Membership

#	From	То	Position	Organization
1	2017	Date	Coordinator students' academic advising committee	College of Engineering IAU
2	2012	2015	Coordinator Summer training program committee	College of Engineering IAU
3	2012	2016	Coordinator senior design project committee	College of Engineering IAU
4	2016	2016	Member College community service and sustainable development committee	College of Engineering IAU
5	2017	till date	Member Dept higher education committee	College of Engineering IAU
6	2015	Till date	Member dept undergraduate and curriculum committee	College of Engineering IAU

#### Scientific Consultations

#	From	То	Institute	Full-time or Part-time
1	2014	2016	King Fahd University of Petroleum & minerals	Part-time
2	October 2017	-	Dammam Municipality, Dammam	Part-time



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

- 1 Utilization of various environmental modeling softwares
- 2 Statistical data analysis and interpretation, modeling process and optimization and using design of experiments
- **3** Research/projects planning, writing proposals for securing funds, execution, reporting as well as publications
- 4 Analytical capabilities for qualitative/quantitative measurements of organic and inorganic compounds measurements in water and soil

#### Research/Social Media links

1	LinkedIn,	https://sa.linkedin.com/in/dr-nuhu-muazu-dalhat-a273a45b	
2	Scopus	Author ID: 55654869500; https://www.scopus.com/authid/detail.uri?authorId=55654869500	
3	Publon:	ResearcherID: <u>I-2800-2019</u>	
4	Publon:	https://publons.com/researcher/1280826/nuhu-dalhat-muazu/	
5	Web of Science	https://app.webofknowledge.com/author/#/record/29955507?SID=C5fWCsZATPsakWHEryA	
6	ORCID:	<u>0000-0002-1402-544X</u>	
7	Research Gate	https://www.researchgate.net/profile/Nuhu Muazu	