

## **Rehan Jamil**

Lecturer

#### Personal Data

Nationality	Pakistan
Date of Birth	26-04-1983
Department	Building Engineering
Official IAU Email	rjamil@iau.edu.sa
Office Phone No.	31778

## Language Proficiency

Language	Read	Write	Speak
Arabic	$\checkmark$		
English	$\checkmark$	✓	$\checkmark$
Urdu	$\checkmark$	$\checkmark$	$\checkmark$

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

Date	Academic Degree	Place of Issue	Address
2010	MS – Civil Engineering (Water Resources and Irrigation)	Pakistan	University of Engineering and Technology (UET), Taxila, Pakistan
2005	BE – Civil Engineering	Pakistan	National University of Sciences and Technology (NUST), Islamabad, Pakistan

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

Master	An Investigation of Sediment Patterns at Nausehri Reservoir and its Impact on
	Neelum-Jhelum Hydropower Project



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

Job Rank	Place and Address of Work	Date
Lecturer	Imam Abdulrahman Bin Faisal University,	2013 – To
	Dammam, Saudi Arabia	Date
Plumbing Design	International Hospitals Construction	2012 - 2013
Engineer	Company, Jeddah, Saudi Arabia	
Plumbing Design	National Engineering Services Pakistan,	2005 - 2012
Engineer	Islamabad, Pakistan	

## Scientific Achievements

#### **Granted Patents**

#	Name of Investigator(s)	Patent Title	Patent Office and Date	Patent No.
1	Rehan Jamil	Impact Reducer for Drainage Stacks	United States Patent and Trademark Office, 2021	US 11021858 B2

#### Scientific & Academic Awards

#	Name of Winners	Award Title	Details
1	Fahad Alyami,	TAJ Excellence Award	Awarded by Deanship of Academic
	Rehan Jamil	in University Education	Development, Imam Abdulrahman Bin
		Development	Faisal University
		May 2023	Category: Active Learning Practices
		-	Implemented During 2020-21

#### **Published Refereed Scientific Researches**

(In Chronological Order Beginning with the Most Recent)

#	Name of Investigator(s)	Research Title	Publisher and Date of Publication
1	M. E. Shaawat, S. M. S. Alqahtani, A. Qasem, <b>R. Jamil</b> , A. S. Almohassen, U. M. Bongwirnso	A Performance Quality Index to Assess Professional Conduct of Contractors at Sustainable Construction Projects in Saudi Arabia	Sustainability, 2023
2	S. H. Alyami, A. K. Abd El Aal, A. Alqahtany, N. A.	Developing a Holistic Resilience Framework for Critical Infrastructure	Buildings, 2023



	Aldossary, <b>R. Jamil</b> , A. Almohassen, B. M. Alzenifeer, H. M. Kamh, A. S. Fenais, A. H. Alsalem	Networks of Buildings and Communities in Saudi Arabia	
3	N. A. Aldossary, A. A. Alzahrani, J. K. Alghamdi, A. Alqahtany, <b>R. Jamil</b> , S. H. Alyami	A Procedural Framework to Identify Critical Indicators for the Protection of Environment and Ecosystem during Sustainable Urban Development in South-Western Saudi Arabia	Sustainability, 2023
4	S. H. Alyami, A. Alqahtany, A. A. Ghanim, I. Elkhrachy, T. I. Alrawaf, <b>R. Jamil</b> , N. A. Aldossary	Water Resources Depletion and its Consequences on Agricultural Activities in Najran Valley	Resources, 2022
5	M. N. Naseer, K. Dutta, A. A. Zaidi, M. Asif, A. Alqahtany, N. A. Aldossary, <b>R. Jamil</b> , S. H. Alyami, J. Jaafar	Research Trends in the Use of Polyaniline Membrane for Water Treatment Applications: A Scientometric Analysis	Membranes, 2022
6	M. N. Naseer, J. Jaafar, H. Junoh, A. A. Zaidi, M. Kumar, A. Alqahtany, <b>R.</b> Jamil, S. H. Alyami, N. A. Aldossary	Metal-Organic Frameworks for Wastewater Decontamination: Discovering Intellectual Structure and Research Trends	Materials, 2022
7	A. Alqahtany, <b>R.</b> Jamil	Evaluation of Educational Strategies in the Design Process of Infrastructure for a Healthy Sustainable Housing Community	Ain Shams Engineering Journal, 2022
8	A. Qasem, <b>R. Jamil</b>	GIS-Based Financial Analysis Model for Integrated Maintenance and Rehabilitation of Underground Pipe Networks	Journal of Performance of Constructed Facilities, 2021
9	R. Jamil	GIS-Based Watershed Analysis for Water Storage Facilities in Underdeveloped Areas: Case of a Gravity Hill in Saudi Arabia	Book: Handbook of Research on Driving Transformational Change in the Digital Built Environment, 2021
10	R. Jamil	Hydroelectricity consumption forecast for Pakistan using ARIMA modeling and supply-demand analysis for the year 2030	Renewable Energy, 2020
11	R. Jamil	Frictional Head Loss Relation between Hazen-Williams and Darcy-Weisbach Equations for Various Water Supply Pipe Materials	International Journal of Water, 2019



12	<b>R. Jamil</b> , M. A. Mujeebu	Empirical Relation between Hazen- Williams and Darcy-Weisbach Equations for Cold and Hot Water Flow in Plastic Pipes	Water, 2019
13	R. Jamil	Digital Elevation Modeling Analysis for Investigation of Gravity Hill Phenomena	International Journal of 3- D Information Modeling, 2018
14	R. Jamil	Performance of a New Water Supply Pipe Material UHMWPE against Disinfectant Decay in Water Distribution Networks	Clean Technologies and Environmental Policy, 2018
15	M. E. Shaawat, <b>R.</b> Jamil, M. M. Al- Enezi	Analysis of Challenges in Sustainable Construction Industry by Using Analytic Hierarchy Process (AHP): A Case Study of Jubail Industrial City, Saudi Arabia	International Journal of Sustainable Real Estate and Construction Economics, 2018
16	R. Jamil	Role of a Dome-Less Mosque in Conserving the Religious and Traditional Values of Muslims: An Innovative Architecture of Shah Faisal Mosque, Islamabad	International Journal of Architecture, Engineering and Construction, 2017
17	R. Jamil	Estimation of Sediment Deposition at Nausehri Reservoir by Multiple Linear Regression and Assessment of its Effects on Reservoir Life and Power Generation Capacity	International Journal of Advanced Thermofluid Research, 2015
18	M. E. Shaawat, <b>R.</b> Jamil	A Guide to Environmental Building Rating System for Construction of New Buildings in Saudi Arabia	Emirates Journal for Engineering Research, 2014

#### Scientific Research Papers Presented to Refereed Specialized Scientific Conferences

#	Name of Investigator(s)	Research Title	<b>Conference and Publication Date</b>
1	<b>R. Jamil</b> , A. K. S. Alhusayni	Economic Comparison of Geothermal Heat Pump System and Conventional Water Heaters for Hot Water Supply in Apartment Buildings	2nd Conference on Sustainability in Civil Engineering, 2020
2	R. Jamil	Reduction in Fresh Water Consumption by Grey Water Reuse for Flushing and Irrigation: A Case Study of a Multistorey Hotel Building	1st Conference on Sustainability in Civil Engineering, 2019
3	R. Jamil	Conserving the Religious and Traditional Values of Muslims with a Dome-less Mosque Architecture: A Case Study of Shah Faisal Mosque, Islamabad	The First International Conference on Mosque Architecture, 2016



#### **Current Research Interests**

#	Research Title	Name of Investigator(s)
1	Water Resources and Conservation in Saudi Arabia	Rehan Jamil and team members
2	Water Scarcity and Availability in Saudi Arabia	Rehan Jamil and team members
3	Flood Risk Assessment in Saudi Arabia	Rehan Jamil and team members
4	Sustainable Construction Practices in Saudi Arabia	Rehan Jamil and team members

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

•	Pakistan Engineering Council	2005 – To Date
•	Institute of Engineers Pakistan	2008 – To Date

• Saudi Council of Engineers 2012 – To Date

#### **Teaching Activities**

#### Undergraduate

#	Course/Rotation Title	No./Code	Extent of Contribution (no. of lectures/Tutorials. Or labs, Clinics)
1	Building Services – 2: Plumbing Systems	BSTC-431	Full
2	Advanced Plumbing Systems	BSTC-585	Full
3	Building Systems – 1: Plumbing and Air Conditioning	INAR-321	Partial
4	Environmental Control Systems	ARCH-322	Partial
5	Fire Protection and Life Safety	BSTC-580	Partial
6	Probability and Statistics	BSTC-342	Full
7	Advanced Statistical Analysis	BSTC-550	Full
8	Concept of Structures (Statics)	ARCH-234	Partial
9	Design Studios – 5 to 10	BSTC - 301, 302, 401, 402, 501, 502	Partial



## Postgraduate

#	Course/Rotation Title	No./Code	Extent of Contribution (no. of lectures/Tutorials. Or labs, Clinics)
1	Advanced Statistical Analysis	MAE-603	Partial
2	Applied Statistics and Decision Analysis	MCEM-614	Partial

### **Course Coordination**

#	Course Title and Code	Coordinati on	Co- coordination	Undergr ad.	Postgrad •	From	То
1	Building Services – 2: Plumbing Systems	~		√		2013	Date
2	Advanced Plumbing Systems	$\checkmark$		$\checkmark$		2013	Date
3	Probability and Statistics	✓		$\checkmark$		2013	Date

#### **Student Academic Supervision and Mentoring**

#	Level	Number of Students	From	То
1	Under Graduate	25	2015	2023

## Supervision of Master and/or PhD Thesis

#	<b>Degree Type</b>	Title	Institution	Date
1	Bachelors	Various	Imam Abdulrahman Bin Faisal	Every
			University	Year



#### Administrative Responsibilities, Committee and Community Service (Beginning with the most recent)

#### Administrative Responsibilities

#	From	То	Position	Organization
1	2014	Date	Program	Imam Abdulrahman Bin Faisal
			Accreditation Tasks	University

#### **Committee Membership**

#	From	То	Position	Organization
1	2014	Date	Member	Quality Assurance Committee – BE
				Program
2	2017	Date	Head	Curriculum Area Committee –
				Building Services
3	2017	Date	Member	Curriculum Area Committee – Basic
				Sciences
4	2018	Date	Member	Publicity and Advertising Committee
5	2019	Date	Member	Post Graduate Studies Committee
6	2022	Date	Member	Quality Assurance Committee –
				MCEM Program

#### **Scientific Consultations**

#	From	То	Institute	Full-time or Part-time

# Personal Key Competencies and Skills: (Computer, Information Technology, Technical, etc.)

# Software Ski
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- 1 Design of Water Supply Systems EPANet, WaterCAD, WaterGEMS
- 2 Water Quality Analysis EPANet, WaterGEMS
- 3 Design of Sewer and Storm Drainage Systems EPASWMM, SewerCAD, SewerGEMS
- 4 3D Surface Modeling ArcGIS, Surfer
- 5 Design of Fire Fighting Sprinklers, Hose and Pump Systems
- 6 Statistical Analysis EViews, SPSS

Last Update: Nov 2023