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Designation	Professor/ Associate Dean			
Department	Civil Engineering			
Research Profile	ORCID ID: Zafar Baloch (0000-0003-1314-3070) (orcid.org)			
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Qualification				
Year	Degree/Certificate	Name of the Institute/ University	Field of study	
2017	PhD	Hanyang University, Seoul, South Korea	Civil Engineering SHM, Smart Infrastructure	
2008	MS/ Mphil	NED University of Engineering & Technology Karachi, Pakistan.	Environmental Engineering	
2003	Graduation	Balochistan University of Engineering & Technology, (BUET), Khuzdar, Pakistan.	Civil Engineering	
1998	BSc	University of Balochistan (UOB), Pakistan	Geography	
1997	DCs	PETROMAN, Sindh Board of Technical Education, Pakistan	C++, ORACAL Data Communication	
1996	FSc (Intermediate Education)	Balochistan Board of Intermediate and Secondary Education (BBISE) Quetta, Pakistan	Math	
1994	Metriculation (Secondary Education)		Science	
1981- 1992	Schooling	Sadiq Public School (SPS), Bahawalpur, Pakistan	General Education	
Publications in HEC Recognized journals				
S. No	Title of Paper	Name of Journal	National/ International	Publication date

1.	Assessment of Flexural Performance of Reinforced Mud Sandwich Panels Experimental and Numerical Modeling Approach	Innovative Infrastructure Solutions	International	2024
2.	Geopolymer Self Compacting Concrete Performance Incorporating Polyethylene Terephthalate	Asian Journal of Environmental Studies (AJES)	National/ International	2023
3.	Comparative study on the performance of photochromic cement, epoxy, and polyester mortars	Journal of Building Engineering	International	2023
4.	Effectiveness of various polysaccharides for controlling properties of alkali-activated manganese-rich slag pastes	European Journal of Environmental and Civil Engineering ISSN (2116-7214, 1964-8189)	International	2021
5.	Removal of Hazardous Materials from Residential and Commercial Liquid Waste Using Solid Sorbents	Journal of Applied and Emerging Sciences ISSN (1814-070X,2415-2633)	National	2021
6.	Indiscriminate Municipal Solid Waste Disposal An Influence on Ethnic and Social Norms of Inhabitants: A Community Based Study Of Ward 32, Quetta	PalArch's Journal of Archaeology of Egypt/ Egyptology ISSN (1567-214X)	International	2021
7.	Dynamic Response Study of a Single Tower Cable Stayed Bridge using Finite Element Method	Journal of Applied and Emerging Sciences ISSN (1814-070X,2415-2633)	National	2020
8.	Assessment of Seismic Performance of Submerged Floating Tunnel Under Multi-Support Seismic Excitations	NED university journal of Research-structural Mechanics ISSN (:2706-5758, 2304-716X)	National	2020
9.	Comparative Analysis of Pressure Regions of Gaseous Benzene Using Ground Activated Carbon Sorbents Under Ambient Conditions	Journal of Applied and Emerging Sciences ISSN (1814-070X,2415-2633)	National	2019
10.	Dynamic Characteristics of submerged floating tunnel under irregular waves	Journal of Applied and Emerging Sciences ISSN (1814-070X, 2415-2633)	National	2019
11.	Effect of Cable Stiffness and Waves Parameters on the Dynamic Responses of Submerged Floating Tunnel	Journal of Applied and Emerging Sciences	National	2019

		ISSN (1814-070X, 2415-2633)		
12.	Assessment of the Dynamic Behaviors of Submerged Floating Tunnel Under a High-Speed Train Loading	Oceanography & Fisheries Open Access Journal (OFOAJ) ISSN (2476-0536)	International	2019
13.	Properties of Chemically Synthesized Nanogeopolymer Cement based Self- Compacting Geopolymer Concrete (SCGC)	Journal Wuhan University of Technology, Materials Science Edition ISSN (1993-0437, 1000-2413)	International	2019
14.	Performance Evaluation of the Fiber-Reinforced Cement Composites Blended with Wheat Straw Ash	Advances in Materials Science and Engineering ISSN (1687-8442,1687-8434)	International	2019
15.	Effect of the confining method on the cyclic undrained behaviors of sand	IOP Series Materials Science and Engineering ISSN (1757-899X)	International	2018
16.	Effect of w/b ratio and binder content on the properties of self-compacting high performance concrete (SCHPC)	Journal of Ceramic Processing Research ISSN (1229-9162)	International	2018
17.	Investigation of corrosion assessment of hydrogen-rich water based cement mortars	Journal of Ceramic Processing Research ISSN (1229-9162)	International	2017
18.	Investigation of the acid and sulfate resistance performances of hydrogen-rich water based mortars	Construction and Building Materials ISSN (0950-0618)	International	2017
19.	Strength and Durability Assessment of Portland Cement Mortars Formulated from Hydrogen-Rich Water	Advances in Materials Science and Engineering ISSN (1687-8442,1687-8434)	International	2017
20.	Effectiveness of sewage sludge ash combined with waste pozzolanic minerals in developing sustainable construction material: An alternative approach for waste management	Journal of Cleaner Production ISSN (0959-6526,1879-1786)	International	2017
21.	Internet of Things-Based Arduino Intelligent Monitoring and Cluster Analysis of Seasonal Variation in Physicochemical Parameters of Jungnangcheon, an Urban Stream	Water (Switzerland) ISSN (2073-4441)	International	2017
22.	Assessment of Utilizing Marble Stone Dust and Wood Saw Dust as Partial Replacement for Cement and Sand in Concrete	Journal of Applied & Emerging Sciences	National	2017

		ISSN (1814-070X, 2415-2633)		
23.	Effect of incorporation of self-healing admixture (SHA) on physical and mechanical properties of mortars.	Journal of Ceramic Processing Research ISSN (1229-9162)	International	2015
Paper Presented				
S. No	Title of Paper	Name of Conference	National/ International	Date
1.	Comparison of Accumulated Stress Based Pore Pressure Model and Plasticity Model in 1D Site Response Analysis.	1 st South Asia Conference on Earthquake Engineering (SACEE 19)	National	21-22 Feb 2019
2.	Assessment of the seismic performance of submerged floating tunnel under multi-support seismic excitations.	1 st South Asia Conference on Earthquake Engineering (SACEE 19)	National	21-22 Feb 2019
3.	Dynamic Response analysis of Submerged Floating Tunnel under waves and Earthquakes	10 th International Civil Engineering Conference (ICEC-2019)	National	23-24 Feb 2019
4.	Development of Mobile Ecosystem for Smart Sharing of Domestic Water Efficient Collection and Supply Management, for Quetta City	1 st International Conference on Advances in Engineering & Technology	International	April 2018
5.	Effect of the Confining Method on the Cyclic Undrained Behaviors of Sand	1 st International Conference on Advances in Engineering & Technology	International	April 2018
6.	A Web 2.0 based Integrated Information Sharing Framework for Structural Health Monitoring of Road Tunnels	6 th International Conference of Euro Asia Civil Engineering Forum Seoul, South Korea	International	June 2017
7.	Internet of Things Based Arduino Efficient Monitoring and Data Analysis of Physicochemical Parameters, An Urban Stream	6 th International Conference of Euro Asia Civil Engineering Forum Seoul, South Korea	International	June 2017
8.	Ecosystem for Drought in Balochistan, Pakistan	Korean Society of Civil Engineers	International	2014
9.	Tunnels Construction Planning and Suggestions to Speed up Tunnel Excavation Progress	Korean Society of Civil Engineers	International	2014
10.	Evaluation of Properties of Concrete Using Aggregates Obtained from Demolished Concrete Structures	Korean Society of Civil Engineers	International	2014

11.	Synthesis of an Alternative Cementitious Material using Pozzolanic Material Infused with Hydrated Alumina	Korean Society of Civil Engineers	International	2014
12.	Mobil Ecosystem Smart Platform for Solid Waste Grade in Developing Countries	Korean Society of Civil Engineers	International	2013
Books Authored/ Edited				
S. No	Name of book		Publisher	ISBN
Work Experience				
S. No	From (year)	To (year)	Name of the Institution/ Organization	Position held
1.	October 2022	Up-to-date	Faculty of Engineering & Architecture (FOE&A), BUIITEMS, Quetta, Pakistan.	Professor/ Associate Dean
2.	July 2017	Up-to-date	Infrastructure and Infrastructure 4.0, Structural Health Monitoring, WASH, Man Made Disaster Management, Sustainable living, Smart Construction Materials, Water Resources Management, Outcome-Based Education (OBE),	Consultant
3.	March 2022	October 2022	Department of Civil Engineering and Chairperson, (FOE&A), BUIITEMS, Quetta, Pakistan.	Professor/ Chairperson
4.	December 2021	Feb 2022	Department of Civil Engineering and Chairperson, Department of Geological Engineering (FOE&A), BUIITEMS, Quetta, Pakistan.	Professor/ Chairperson
5.	August 2017	August 2023	BUIITEMS Civil Works and Developments	Civil Technical Expert
6.	August 2019	December 2021	Department of Civil Engineering and Chairperson, Department of Geological Engineering (FOE&A), BUIITEMS, Quetta, Pakistan.	Associate Professor/ Chairperson
7.	October 2019	September 2022	World Food Program of the United Nations (WFP-UN), Districts of Balochistan i.e. Killa Abdullah, Chaghi, and Washuk	Engineering Team Leader
8.	February 2019	August 2019	Department of Civil Engineering, (FOE&A), BUIITEMS, Quetta, Pakistan.	Associate Professor
9.	January 2015	Feb 2017	Department of Civil & Environmental Engineering, Hanyang University, Seoul Campus, South Korea.	Research Assistant
10.	April 2013	December 2014	Department of Civil & Environmental Engineering, Hanyang University, Seoul Campus, South Korea.	Teacher Assistant
11.	January 2010	February 2019	Department of Civil Engineering, (FOE&A), BUIITEMS, Quetta, Pakistan.	Assistant Professor

12.	February 2005	December 2009	Military Lands & Cantonment Boards, Pakistan	Cantonment Engineer
13.	September 2004	March 2005	Taraqee Foundation Quetta, Pakistan	Field Engineer
14.	September 2003	September 2004	M. Azim Khan Panaza	Site Engineer
15.	November 2002	May 2003	Abdul Malik & Company	Trainee Engineer
Member				
1.	July 2022 to	July 2025	Syndicate Member, BUIITEMS, Quetta	Member
2.	June 2022	Till Date	Board of Studies, Department of Civil Engineering, BUIITEMS	Convener
3.	June 2022	Till Date	Industrial Advisory Board (IAB), Department of Civil Engineering, BUIITEMS	Convener
4.	March 2022	Till Date	Board of Studies, Department of Architecture, BUIITEMS	Member
5.	October 2021	June 2022	Sanate Member, BUIITEMS, Quetta	Member
6.	August 2019	Feb 2022	Board of Studies, Department of Geological Engineering, BUIITEMS	Convener
7.	August 2019	Till Date	Board of Faculty, Faculty of Engineering & Architecture, BUIITEMS	Member
8.	August 2019	Feb 2022	Industrial Advisory Board (IAB), Department of Geological Engineering, BUIITEMS	Convener
Area of specialization			Structural Health Monitoring, Remote Monitoring of Infrastructures, Smart Construction Materials, Multidisciplinary and Holistic Approach, Water Resources Management, Man Made Disaster Management, Mobil Ecosystem Smart Platform of Municipal Corporation Grade, Civil Engineering Projects, Drought Mitigation, Multidisciplinary and Holistic Approach, Outcome-Based Education, Developing Learning Outcomes: Student Center Learning (Course Design: Teaching and Learning),	
Research Interest			Man-Made Disasters, 3D Construction, Structural Health Monitoring, Remote Monitoring of Structures, Smart Construction Materials, Artificial Neural Network, Deep Learning, Internet of Things (IoT), Block- Chain.	
SDGs Goals mapping with worked experience				
Future Research Plans			Smart Infrastructure Grade, Smart Living, One percent Insurance for Ecosystem (Flood, Scarcity and Drought)	

HEC Approved supervisor	Yes
If Yes, provide HEC URL	https://www.hec.gov.pk/english/scholarshipsgrants/ASA/Pages/APS-EPORTAL.aspx
Research grants/ Projects	<ul style="list-style-type: none"> • Development of Mobile Ecosystem for Smart Sharing of Domestic Water Efficient Collection and Supply Management for Quetta City. • Effect of Wheat Straw Fibers on Behavior of Clayey Soil
Additional Information	
Research grants/ Projects (Un-succeeded)	<ul style="list-style-type: none"> • Assessment of Insulating Properties of Building Walls using Pumice Fine Aggregate Powder: A Sensor Based Investigation (BUITEMS ORIC) • Utilization of Additive Manufacturing (3D Printing) In Construction Industry (BUITEMS ORIC Large-scale Competitive Grants) • Assessment and removal of hazardous pollutants species in both air and liquid phase in the industrial zone Hub (Balochistan) using recycle approach) (BUITEMS ORIC Large-scale Competitive Grants) • Evaluating Insulating Properties of Pumice (BUITEMS ORIC) • Intelligent Skip Waste Bin with Effective Trash Bin Site Location in Metropolitan City Quetta (CM, Balochistan) • Smart Domestic Water supply and Efficient Distribution Management for Quetta City (CM, Balochistan) • Development of Miniature 3D construction Prototype (GCF) • Development Prototype of Miniature Smart Domestic Water Supply And Efficient Distribution Vain Neural Network Management. An aqua tube detection for WASA, Quetta (NRPU) • Monitoring and removal of Volatile Organic Compounds (VOCs) from urban areas of Balochistan (NRPU)

<p>MS Thesis Supervised</p>	<ul style="list-style-type: none"> • Solute Transport Modelling Through Porous Media With Fraction Advection Dispersion Equation (Fade) • Simulation Of Tracer Transport Through Porous Media Using Advection Dispersion Equation (Ade) • Development Of Pervious Concrete Pavement Using Polyethylene Terephthalate As Coarse Aggregate • Effect Of Silica Fume And Lime On The Compressibility Of Baleli Soil • Analysis Of The Engineering Properties Of Pumice Block: An Energy Efficient Structural Member • Partial Replacement Of Polypropylene Random Copolymer As Coarse Aggregate In Concrete • GIS Based Solid Waste Collection And Transportation A Case Study Of Quetta City • Indiscriminate Municipal Solid Waste Disposal An Influence On Ethics And Social Norms Of Inhabitants: A Community Based Study Of Ward 32, Quetta • Effect Of Date Seeds As Partial Replacement Of Coarse Aggregates On Properties Of Concrete • Effect Of Pumice On Heat Insulating Properties Of Cement Mortar • Evaluation Of Water Quality Of Nari Gaj River In Balochistan, Pakistan • Performance Evaluation of Self Compacting Geopolymer Concrete by Incorporating Polyethylene Terephthalate
<p>MS External Examiner</p>	<ul style="list-style-type: none"> • Effects of Temperature and Age on Compressive Strength of Cement Mortar Containing Volcanic Pumice and Stone Quarry Dust, Engr. Aneesa, 21MECE44, BUET, Khuzdar, Pakistan
<p>International Journal Reviewer</p>	<ul style="list-style-type: none"> • MDPI, • International Journal of Geo-Information (IJGI) • Remote Sensing • Sensors • Water • Bentham Manuscript Processing System • Water, Air, & Soil Pollution
<p>HEC Research Grant Reviewer</p>	<ul style="list-style-type: none"> • CPEC • Grand Challenge Fund (GCF) • Local Challenge Fund (LCF) • National Research Program for University (NRPU) • PERIDOT Research Program • Pak –Turk Researchers’ Mobility Grant Program

Certificate Trainer:	<ul style="list-style-type: none">• PMP• Water Law (Panjwani-Hisaar Water Institute (PHWI))• Outcome Based Accreditation for Program Evaluators• HEC PhD Supervisors Capacity Building Program• Decentralised Wastewater Treatment Systems (DEWATS)• Professional Competency Enhancement Program for Teachers (PCEPT)• Outcome Based Education System (OBES)
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