



Muhammad Nasir

Lecturer

Personal Data

Nationality | Pakistani

Date of Birth | Dec. 26, 1986

Department | Civil and Construction Engineering

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Language Proficiency

Language	Read	Write	Speak
English	Excellent	Excellent	Excellent
Urdu	Excellent	Excellent	Excellent
Arabic	Intermediate	Intermediate	Beginner
Malay	Intermediate	Intermediate	Beginner

Academic Qualifications

Date	Academic Degree	Place of Issue	Address
Jul. 29, 2021	Ph.D. Civil Engineering (Concrete Technology)	Universiti Sains Malaysia	Nibong Tebal, Malaysia
Jan. 09, 2014	M.S. Civil Engineering (Structural Engineering)	King Fahd University of Petroleum and Minerals	Dhahran, Saudi Arabia
Mar 27, 2010	B.S. Civil Engineering	Sir Syed University of Engineering and Technology	Karachi, Pakistan

PhD, Master or Fellowship Research Title

PhD	Development of alkali-activated binder utilizing silico-manganese fume and blast-furnace slag
Master	Effect of casting temperature and curing regime on mechanical properties and durability of concrete



Professional Record

Job Rank	Place and Address of Work	Date
Lecturer	Imam Abdulrahman Bin Faisal University, Saudi Arabia	Oct. 2014 to date
Junior Engineer	Mott MacDonald Pakistan (Pvt) Ltd., Pakistan	Aug. 2010 to Aug. 2011
Junior Structural Engineer	M/s Arif & Associates Consultants, Pakistan	Feb. 2010 to Jul. 2010

Scientific Achievements

Published Refereed Scientific Research Papers

#	Name of Investigator(s)	Research Title	Journal	Year
1	Nasir, M. , Islam A.B.M.S., Alotaibi, K.S., Al-Kutti, W.	Evolution of Arabic gum-based green mortar towards enhancing the engineering properties - fresh, mechanical, and microstructural investigation	<i>Construction and Building Materials</i>	2023
2	Aziz, M.A., Zubair, M., Alotaibi K.S., Nasir, M. , Manzar, M.S., Hussein, T.N., Alharthi, Y.M.	Development and evaluation of engineered nanocellulose-based mortar synthesized using hydrolysis of strong and weak acids	<i>Arabian J. of Sci. & Eng</i>	2023
3	Islam A.B.M.S., Al-Kutti, W., Kazmi, Z.A., Sodangi, M., Anwar, F., Nasir, M. , Aziz, M.A., Alotaibi, K.S.	Structural performance and SWOT analysis of multi-story buildings of lightweight reinforced concrete comprising local waste materials	<i>Earthquake and Structures</i>	2022
4	Salami, B.A., Ibrahim, M., Al-Ostaa, M.A., Nasir, M. , Ali, M.R., Bahraq, A.A, Wasui, A.	Engineered and Green Natural Pozzolan-Nano Silica-based Alkali-Activated Concrete: Shrinkage Characteristics and Life Cycle Assessment	<i>Environmental Science and Pollution Research</i>	2022
5	Nasir, M. , Adesina, A., Ibrahim, M., Khan M.U., Al-Amoudi, O.S.B., Maslehuddin, M., Ali, S.I., Alotaibi, K.S.	Role of casting and curing conditions on the strength and drying shrinkage of greener concrete	<i>Environmental Science and Pollution Research</i>	2022



6	Nasir, M. , Aziz, M.A., Zubair, M., Ashraf, N., Hussein, T.N., Allubli, M.K., Al-Harathi, M.A.	Engineered cellulose nanocrystals-based cement mortar from office paper waste: Flow, strength, microstructure, and thermal properties	<i>J. Building Engineering</i>	2022
7	Islam, A.B.M.S., Al-Kutti, W., Nasir M. , Kazmi Z.A., Sodangi M.	Potential use of local waste scoria as an aggregate and SWOT analysis for developing constructing structural lightweight concrete	<i>Advances in Materials Research</i>	2022
8	Nasir, M. , Aziz, M.A., Manzar, S., Zubair, M., Ashraf, N., Nuhu, D., Al-Harathi, M.A., Blaisi, N.I., & Al-Kutti. W.	Recent review on synthesis, evaluation, and SWOT analysis of nanostructured cellulose in civil engineering applications.	<i>J. Building Engineering</i>	2022
9	Nasir, M. , Gazder, U., Khan M.U., Rasul, M., Maslehuddin, M., Al-Amoudi, O.S.B.,	Prediction of strength of plain and blended cement concretes cured under hot weather using quadratic regression and ANN tools.	<i>Arabian J. of Sci. & Eng.</i>	2022
10	Zubair, M., Nuhu, D., Nasir, M. , Aziz, M.A., Saleem, M., Al-Harathi, M.A.	Cellulose Nanocrystals from Office Paper Waste for Green Mortar: Process Optimization Modeling, Characterization, and Mechanical Properties.	<i>Arabian J. of Sci. & Eng.</i>	2022
11	Ibrahim M., Nasir M. , Hussaini S.R., Najamuddin S.K.	Performance of structurally viable green concrete derived from natural pozzolan.	<i>Magazine of Civil Engineering.</i>	2021
12	Nasir, M. , Megat Johari, M.A., Adesina, A., Maslehuddin, M., Yusuf, M.O., Mijarsh, M.J.A., Ibrahim, M. & Najamuddin, S.K.	Evolution of room-cured alkali activated silico-manganese fume-based mortar designed using Taguchi method.	<i>Construction and Building Materials</i>	2021
13	Nasir, M. , Al-Kutti, W., Kayed, T.S., Adesina, A., & Chernykh, T.	Synthesis and SWOT analysis of date palm frond ash–Portland cement composites.	<i>Environmental Science and Pollution Research</i>	2021
14	Ibrahim, M., Salami, B.A., Algaifi, H.A., Rahman, M.K., Nasir, M. & Oladapo, E.A.	Assessment of acid resistance of natural pozzolan-based alkali-activated concrete: Experimental and optimization modelling.	<i>Construction and Building Materials</i>	2021
15	Khan, M.U., Nasir, M. , Al-Amoudi,	Influence of in-situ casting temperature and curing regime on the properties of blended cement	<i>Construction and Building Materials</i>	2021



	O.S.B., & Maslehuddin, M.	concretes under hot climatic conditions.		
16	Nasir, M. , Megat Johari, M.A., Maslehuddin, M., & Yusuf, M.O.	Sodium sulfate resistance of alkali/slag activated silico–manganese fume-based composites.	<i>Structural Concrete</i>	2021
17	Nasir, M. , Megat Johari, M.A., Maslehuddin, M., & Yusuf, M.O.	Sulfuric acid resistance of alkali/slag activated silico-manganese fume-based mortars.	<i>Structural Concrete</i>	2021
18	Nasir, M. , Megat Johari, M.A., Maslehuddin, M., & Yusuf, M.O.	Magnesium sulfate resistance of alkali/slag activated silico-manganese fume-based composites.	<i>Construction and Building Materials</i>	2020
19	Nasir, M. , Megat Johari, M.A., Yusuf, M.O., Maslehuddin, M., & Al-Harhi, M.A.	Effect of alkaline activators on the fresh properties and strength of silico-manganese fume-slag activated mortar.	<i>Advances in Concrete Construction</i>	2020
20	Nasir, M. , Megat Johari, M.A., Maslehuddin, M., Yusuf, M.O., & Al-Harhi, M.A.	Influence of heat curing period and temperature on the strength of silico-manganese fume-blast furnace slag-based alkali-activated mortar.	<i>Construction and Building Materials</i>	2020
21	Nasir, M. , Gazder, U., Maslehuddin, M., Al-Amoudi, O.S.B., & Syed, I.A.	Prediction of properties of concrete cured under hot weather using multivariate regression and ANN models.	<i>Arabian Journal for Science and Engineering,</i>	2020
22	Ashraf, N., Nasir, M. , Al-Kutti, W., & Al-Maziad, F.A.	Assessment of thermal and energy performance of masonry blocks prepared with date palm ash.	<i>Materials for Renewable and Sustainable Energy</i>	2020
23	Ibrahim, M., Rahman, M.K., Johari, M.A.M., Nasir, M. , & Oladapo, E.A.	Chloride diffusion and chloride-induced corrosion of steel embedded in natural pozzolan-based alkali activated concrete.	<i>Construction and Building Materials</i>	2020
24	Nasir, M. , Megat Johari, M.A., Yusuf, M.O., Maslehuddin, M., Al-Harhi, M.A., & Dafalla, H.	Impact of slag content and curing methods on the strength of alkaline-activated silico-manganese fume/blast furnace slag mortars.	<i>Arabian Journal for Science and Engineering</i>	2019
25	Nasir, M. , Megat Johari, M.A., Yusuf,	Synthesis of alkali-activated binary blended silico-manganese fume and ground blast furnace slag mortar.	<i>Journal of Advanced</i>	2019



	M.O., Maslehuddin, M., & Al-Harhi, M.A.		<i>Concrete Technology</i>	
26	Al-Kutti, W., Islam, A.B.M.S., & Nasir, M.	Potential use of date palm ash in cement-based materials.	<i>Journal of King Saud University-Engineering Sciences</i>	2019
27	Nasir, M., & Al-Kutti, W.	Performance of date palm ash as a cementitious material by evaluating strength, durability, and characterization.	<i>Buildings</i>	2019
28	Al-Kutti, W., Nasir, M., Megat Johari, M. A., Islam, A. S., Manda, A. A., & Blaisi, N. I.	An overview and experimental study on hybrid binders containing date palm ash, fly ash, OPC and activator composites	<i>Construction and Building Materials</i>	2018
29	Nasir, M., Al-Amoudi, O.S.B., & Maslehuddin, M.	Effect of placement temperature and curing method on plastic shrinkage of plain and pozzolanic cement concretes under hot weather.	<i>Construction and building materials</i>	2017
30	Saleem, M., & Nasir, M.	Bond evaluation of steel bolts for concrete subjected to impact loading.	<i>Materials and Structures</i>	2016
31	Nasir, M., Al-Amoudi, O.S.B., Al-Gahtani, H.J., & Maslehuddin, M.	Effect of casting temperature on strength and density of plain and blended cement concretes prepared and cured under hot weather conditions.	<i>Construction and Building Materials</i>	2016

Contribution to Scientific Conferences and Symposia

#	Name of Investigator(s)	Research Title	Conference and Publication Date
1	Nasir, M., Al-Kutti, W., Islam, A.B.M.S., Alotaibi, K.S., AlEid, A., Algam, Y.K., Alqahtani, A.	Workability, Strength, and SWOT analysis of sustainable mortar utilizing Arabic Gum	<i>International Conference on Advanced Topics in Mechanics of Materials, Structures and Construction, Saudi Arabia, 2023</i>
2	Islam, A.B.M.S., Al-Kutti, W., Nasir, M., Alharbi, F.S., & Alsaidan, N.A.	Development of Lightweight Concrete Using Saudi Scoria Aggregate-Preliminary Study	<i>Smart Cities Symposium, Bahrain, 2018</i>
3	Islam, A.B.M.S., Al-Kutti, W., Alsaidan, N.A., Alharbi, F.S., Nasir, M., & Anwar, F.	Potential of volcanic waste Scoria as an eco-friendly aggregate to produce Lightweight Concrete	<i>Smart Cities Symposium, Bahrain, 2018</i>



Completed Research Projects

#	Name of Investigator(s) (Supported by)	Research Title	Report Date
1	M. Zubair (PI), M. Nasir (Co-I) – DSR	Process optimization of cellulose nanocrystals from office paper waste and its utilization as renewable additive for strong green concrete	2021-2023
2	N. D. Mu'azu (PI), M. Nasir (RA) – DSR	Development and testing of scale and corrosion green inhibitors from natural extracts of sumac, pumpkin, and clove oil for potential industrial applications	2021-2023
3	M. Saleem (PI), M. Nasir (RA) – DSR	Combined use of Ultrasonic Pulse Velocity and the Schmidt Hammer Test to Improve the Accuracy of Non-destructive Pull-out load Carrying Capacity Estimation of Anchor Bolts	2016-2017
4	M. Saleem (PI), M. Nasir (RA) – DSR	A Fundamental Study to Evaluate the Bond of Reinforced Concrete Beams using Non-destructive Testing	2016-2017
5	W. Al-Kutti (PI), M. Nasir (RA) - DSR	Production of green concrete using local date palm ash	2015-2017
6	A.B.M.S. Islam (PI), M. Nasir (RA) - DSR	Sustainability, Eco-Point and Performance of Green Lightweight Concrete using Saudi Local Waste	2015-2017
7	M. Saleem (PI), M. Nasir (RA) – DSR	Study to Understand the Effects of Varying Embedment Length on Non-Destructive Load Carrying Capacity of Concrete Anchors	2015-2016

Membership of Scientific and Professional Societies and Organizations

- Registered Engineer, Pakistan Engineering Council # CIVIL/29805.
- Member, Franklin awarded by London Journal Press ID # NP90829.
- Member, Association of Alkali Activated Cementitious Materials (A3CM), UK

Teaching Activities

Undergraduate

#	Course Title	Code	Extent of Contribution
1	Concrete materials	CONEN 332	Lecture + Labs
2	Strength of materials	ENG 351	Lecture + Labs
3	Engineering materials	ENG 332	Labs
4	Concrete technology	BSTC 412	Labs



5	Analysis and design of RC structures	CONEN 471	Lecture
6	Geology	GEOL 312	Lecture
7	Engineering Drawing	ENG 222	Lecture + Labs
8	Building construction	CONEN 322	Tutorial
9	Senior design project I	CONEN 521	Supervisor / Co-Supervisor
10	Senior design project II	CONEN 522	Supervisor / Co-Supervisor

Personal Key Competencies and Skills

1	Microsoft Office
2	Design Expert
3	Origin
4	ETABS
5	SAFE
6	AutoCAD
7	Life Cycle Assessment
8	SWOT analysis
9	Cement and Concrete Material Characterization
10	Hands-on experience of operating several equipment and apparatus of Civil Engineering labs as per ASTM standards
11	Modern teaching and research methodologies

Last Update

01/06/2023