



# FACULTY FULL NAME: Muhammad SALEEM

POSITION | **Professor**

## Personal Data

Nationality | Pakistani

Date of Birth | March 30<sup>th</sup>, 1983

Department | Mechanical and Energy Engineering (Previously: Basic Engineering)

Official IAU Email | [mssharif@iau.edu.sa](mailto:mssharif@iau.edu.sa); [c.engineeer@hotmail.com](mailto:c.engineeer@hotmail.com)

Office Phone No. | +966 3 3331696

Mobile Phone No. | +966 58 345 9975

Personal Webpage | <https://www.iau.edu.sa/en/colleges/college-of-engineering/faculty/dr-muhammad-saleem>

## Language Proficiency

Language	Read	Write	Speak
Arabic	X		
English	X	X	X
Japanese	X	X	X
Urdu	X	X	X
Punjabi	X	X	X

## Academic Qualifications (Beginning with the most recent)

Date	Academic Degree	Place of Issue	Address
2008-2011	PhD - Department of Civil Engineering on Full Scholarship	Yokohama National University, Yokohama, Japan	Yokohama, Japan
2006-2008	M.Sc. – Engineering Materials on Full Scholarship	University of Engineering and Technology, Lahore, Pakistan	Lahore, Pakistan
2002-2006	B.E. / B.Sc. - Civil Engineering on Partial Scholarship	University of Engineering and Technology, Lahore, Pakistan	Lahore, Pakistan

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

PhD	Fully Funded Scholarship from Japanese Government (MEXT)
Engineering Management	Winner of Competitive Funded Training Program in Engineering Management from Yokohama National University
Master	Fully Funded Scholarship from UET Lahore, Pakistan
College	Fully Funded Scholarship from Govt. College Lahore, Pakistan
High School	Medalist (Distinction Holder) at Highschool Exam

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

Job Rank	Place and Address of Work			Date
Professor	IAU	Department of Mechanical and Energy Engineering	KSA	Oct. 2022-Present
Associate Professor	IAU	Department of Mechanical and Energy Engineering	KSA	Oct. 2016- Oct. 2022
Assistant Professor	IAU	Department of Mechanical and Energy Engineering	KSA	Sep. 2013-Oct. 2016
Assistant Professor	UET	Department of Civil Engineering	Pakistan	Dec. 2011-Sep. 2013
Lecturer	UET	Department of Civil Engineering	Pakistan	Feb. 2006-Dec. 2011
JGC-Descon	JGC Japan	Project Engineer	Pakistan	Dec. 2005-Mar. 2006
Consulting Professional Engineer	UET, IAU	NDT, Material Testing – Freelancing Projects	KSA, Pakistan	Dec. 2005-Till date

### Personal Research and Profile WEBLINKS:

Webpage	Profile Link
University Profile:	<a href="https://www.iau.edu.sa/en/colleges/college-of-engineering/faculty/dr-muhammad-saleem">https://www.iau.edu.sa/en/colleges/college-of-engineering/faculty/dr-muhammad-saleem</a>
Orcid:	<a href="http://orcid.org/0000-0001-5194-5483">http://orcid.org/0000-0001-5194-5483</a>
Web of Science:	<a href="https://www.webofscience.com/wos/author/record/B-1916-2015">https://www.webofscience.com/wos/author/record/B-1916-2015</a>
Scopus:	<a href="https://www.scopus.com/authid/detail.uri?authorId=55836463200">https://www.scopus.com/authid/detail.uri?authorId=55836463200</a>
LinkedIn:	<a href="https://www.linkedin.com/in/dr-muhammad-saleem-b7a01052/">https://www.linkedin.com/in/dr-muhammad-saleem-b7a01052/</a>
Google Scholar:	<a href="https://scholar.google.com/citations?hl=en&amp;user=z7-A41oAAAAJ">https://scholar.google.com/citations?hl=en&amp;user=z7-A41oAAAAJ</a>
Research Gate:	<a href="https://www.researchgate.net/profile/Muhammad_Saleem58/publications">https://www.researchgate.net/profile/Muhammad_Saleem58/publications</a>



### Administrative Positions Held:

Administrative Position	Office	Date
Chairman of Board of Director for Master of Safety Engineering (Fire Behavior Modeling and Progression Simulation, Escape Simulation, Human Factor Engineering)	CoE, IAU	2023 – Till Date
Chairman – Safety and Security Committee, Fire Safety, Simulation, Modeling and Evacuation Planning	CoE, IAU	2015 – Till Date
Deputy Director (Co-PI) for KACARE Funded “Hydrogen generator from enhanced performance HCPV”	CoE, IAU	2022 – Till Date
Advisory Committee in the Directorate of Curriculum and Academic Programs (DCAP) at Vice Presidency for Academic Affairs	CoE, IAU	2018 – Till Date



Advisory Board Member, Mechanical and Energy Engineering Department, College of Engineering	CoE, IAU	2021 – Till Date
Founding Member and Chairman of Center for Advanced Manufacturing the Rapid prototyping (FabHouse)	CoE, IAU	2018 – 2023, 2018– Till Date
Chairman – Student Placement and Summer Training	CoE, IAU	2020 – Till Date
Chairman – Strategic Plan Development for CoE IAU and Risk Management Committee	CoE, IAU	2014 – Till Date
Chairman – Standing Committee for ABET Accreditation and Academic Quality Management	CoE, IAU	2022 – Till Date
Chairman – Website Development	CoE, IAU	2014 – 2023
Secretary –Academic Program Development & Review Committee	CoE, IAU	2016 – Till Date
Chairman – Academic Quality Assurance Unit	CoE, IAU	2013-2014, 2016 – 2018
Member ABET Accreditation Technical Review Committee	CoE, IAU	2014 – 2019
Hiring Announcement, Advertisement and Short-Listing Committee	CoE, IAU	2014 – 2018
Chairman – Community Service & Sustainable Development Unit	CoE, IAU	2016 – 2018
Deputy Director Test Floor Laboratory	UET, Lhr	2006-2008, 2011-2013
Deputy Director Earthquake Engineering Center	UET, Lhr	2011-2013
Deputy Director Strength of Materials Laboratory	UET, Lhr	2011-2013
Member Commercial Testing and On-Site Investigation Team	UET, Lhr	2006-2008, 2011-2013

## Scientific Achievements

### Published Refereed Scientific Research

#	Name of Investigator(s)	Research Title	Publisher and Date of Publication
1	<b>M. Saleem</b>	Internal Damage Detection in Reinforced Concrete Member Using Ultrasonic Pulse Velocity Nondestructive Testing	2024, ASCE Journal of Construction Engineering and Management, Vol. 150, Issue No. 8, pp. 1-14, 04024084. <a href="https://doi.org/10.1061/JCEMD4.COENG-14531">DOI: 10.1061/JCEMD4.COENG-14531</a> <a href="https://ascelibrary.org/doi/full/10.1061/JCEMD4.COENG-14531">https://ascelibrary.org/doi/full/10.1061/JCEMD4.COENG-14531</a> Impact Factor: 5.1 ISSN: 0733-9364, ISSN (online): 1943-7862
2	<b>M. Saleem</b> & Akira Hosoda	Photoluminescent Phase Change Traffic Signs for Improved Road Awareness	2024, <i>Structural Concrete</i> (Submission Pending). Impact Factor: 2.793 ISSN: 1464-4177; Online ISSN:1751-7648
3	M. A. Aziz, Z. Mukarram, <b>M. Saleem</b> , Yasir M. Alharthi, N. Ashraf, K. S. Alotaibi & Omer Aga	Destructive, Nondestructive and Thermal Testing of Biochar-Mortar composite	2023, <i>Biomass Conversion and Biorefinery</i> , pp. 1-14 (Published Online). DOI: <a href="https://doi.org/10.1007/s13399-023-03838-1">https://doi.org/10.1007/s13399-023-03838-1</a> Impact Factor: 4.050

			ISSN: 2190-6815
4	Alshamrani, S. D. O, <b>M. Saleem</b> , Ibrahim Khalil AlYousif & Ayed Alluqmani	Development of a Pre-Qualification and Selection Framework for Construction Projects' Contractors in Saudi Arabi	2023, Journal of Asian Architecture and Building Engineering, VOL. 22, No. 3, 1545–1563. DOI: <a href="https://doi.org/10.1080/13467581.2022.2087657">https://doi.org/10.1080/13467581.2022.2087657</a> Impact Factor = 0.904 ISSN: 1346-7581
5	<b>M. Saleem</b>	Modeling and Optimization of Infill Material Properties of Post-Installed Steel Anchor Bolt Embedded in Concrete Subjected to Impact Loading	2022, <i>Smart Structures and System</i> , Vol. 29, No. 3, pp. 445-455. DOI: <a href="https://doi.org/10.12989/sss.2022.29.3.445">https://doi.org/10.12989/sss.2022.29.3.445</a> Impact Factor = 3.557 ISSN: 1738-1584 (Print); ISSN: 1738-1991 (Online)
6	Akira Hosoda, Adnan Akmal, Yuto Toshida & <b>M. Saleem</b>	Prediction of Maximum Crack width by Machine Learning Using Concrete Construction Data in Yamaguchi System	2022, <i>JSCE Structural Engineering Committee, International Journal of Intelligence, Informatics, and Infrastructure, Data Science Papers</i> , Vol. 3, No. J2, pp. 898-905. DOI: <a href="https://doi.org/10.11532/jsceiii.3.J2_898">https://doi.org/10.11532/jsceiii.3.J2_898</a> ISSN: 2435-9262
7	Akira Hosoda, Adnan, A., <b>M. Saleem</b> & Yuto Yoshida	Improvement of Artificial Neural Network Model for Thermal Crack Width in RC Abutments Using Actual Construction Data	2022, <i>Proceedings of Japanese Concrete Institute - JCI Annual Proceedings</i> , Vol.44, No. 1, pp. 970-975.
8	S. Mahmoud, <b>M. Saleem</b> , A. Hasanain, H. El-Sokkary, M. Elsharawy, M. genidy, A. Abd-Elhamed	Structural Response and Damage Evaluation of a Typical Highrise RC Building in Dubai Under an Earthquake with Single and Multiple Peaks	2022, <i>Journal of Civil Engineering and Management</i> , Vol. 28, Issue 7, pp. 509–522. DOI: <a href="https://doi.org/10.3846/jcem.2022.16957">https://doi.org/10.3846/jcem.2022.16957</a> Impact Factor = 2.338 ISSN: 1392-3730; eISSN 1822-3605
9	Mukarram Zubair, Nuhu Dalhat Muazu, Muhammad Nasir, Mohammad Saood Manzar, Muhammad Arif Aziz, <b>M. Saleem</b> , Mamdouh A.Al-Harhi	Cellulose nanocrystals from office paper waste for green concrete: Process optimization modeling, characterization, and mechanical testing	2022, <i>Arabian Journal for Science and Engineering</i> , Vol. 1, No. 1, pp. 1-17. DOI: <a href="https://doi.org/10.1007/s13369-022-06609-8">https://doi.org/10.1007/s13369-022-06609-8</a> Impact Factor: 2.334 ISSN: 2191-4281; E-ISSN: 1319-8025
10	M. A. Aziz, Z. Mukarram, and <b>M. Saleem</b>	Development and Testing of Cellulose Nanocrystal-based Concrete	2021, <i>Case Studies in Construction Materials</i> , Vol. 15, pp. 1-21 DOI: <a href="https://doi.org/10.1016/j.cscm.2021.e00761">https://doi.org/10.1016/j.cscm.2021.e00761</a> Impact Factor = 6.20 ISSN: 2214-5095
11	Ibrahim Almadani, Ibrahim Osman, Nasir Hariri, <b>M. Saleem</b> , Nagmeldeen Hassanain	Investigating the Effects of Solar Tracking Systems on Thermal Profile of Photovoltaic Modules	2021, <i>International Journal of Renewable Energy Research</i> , Vol.11, No.4, pp. 1561-1569. DOI: <a href="https://www.ijrer.org/ijrer/index.php/ijrer/article/view/12344">https://www.ijrer.org/ijrer/index.php/ijrer/article/view/12344</a> Impact Factor = 5.127 ISSN: 1309-0127
12	<b>M. Saleem</b> & Akira Hosoda	Development and Testing of Glow-in-the-Dark Concrete Based	2021, <i>Journal of Civil Engineering and Management</i> , Vol. 27, No. 5, pp. 278-287.



		Raised Pavement Marker for Improved Traffic Safety	DOI: <a href="https://doi.org/10.3846/jcem.2021.14902">https://doi.org/10.3846/jcem.2021.14902</a> Impact Factor = 2.338 ISSN: 1392-3730
13	<b>M. Saleem</b> & Akira Hosoda	Latin Hypercube Sensitivity Analysis and Non-destructive Test to Evaluate the Pull-out Strength of Steel Anchor Bolts Embedded in Concrete	2021, <i>Construction and Building Materials</i> , Vol. 290, No. 123256. DOI: <a href="https://doi.org/10.1016/j.conbuildmat.2021.123256">https://doi.org/10.1016/j.conbuildmat.2021.123256</a> Impact Factor: 7.693, ISSN: 0950-0618
14	<b>M. Saleem</b> & Hector Gutierrez	Using Artificial Neural Network and Non-destructive Test for Crack Detection in Concrete Surrounding the Embedded Steel Reinforcement	2021, <i>Structural Concrete</i> , Vol. 22, No. 5, pp. 2849-2867. DOI: <a href="https://doi.org/10.1002/suco.202000767">https://doi.org/10.1002/suco.202000767</a> Impact Factor: 2.793 <i>Structural Concrete</i> , ISSN: 1464-4177; Online ISSN:1751-7648
15	Zaher Sulaiman, <b>M. SALEEM</b> , Alshamrani, S. D. O. & M. Sodangi	Complexity Rate Assessment Modeling for Mass Housing Projects in Saudi Arabia	2021, <i>Journal of Civil Engineering and Management</i> , (Under Review). Impact Factor = 2.250 ISSN: 1562-3599
16	Abdulrhman, M., Alqahtani, M., D., Abdulmalik A., <b>M. Saleem</b>	Fundamental Study Related to The Development of Modular Solar Panel for Improved Durability and Repairability	2021, <i>IET Renewable Power Generation (RPG)</i> , Vol. 15, No. 7, pp. 1382-1396. DOI: <a href="https://doi.org/10.1049/rpg2.12079">https://doi.org/10.1049/rpg2.12079</a> Impact Factor = 3.981 ISSN: 1752-1416 (Print); ISSN: 1752-1424
17	<b>M. Saleem</b> & G. A. Fahad	Multi-Attribute Analysis of Micro-defect Detection Techniques Suitable for Automated Production Line of Solar Wafers and Cells	2020, <i>IET Renewable Power Generation (RPG)</i> , Vol. 14, No. 9, pp. 1413-1423. DOI: <a href="https://doi.org/10.1049/iet-rpg.2019.0904">https://doi.org/10.1049/iet-rpg.2019.0904</a> Impact Factor = 3.981 ISSN: 1752-1416 (Print); ISSN: 1752-1424
18	<b>M. Saleem</b> & M. A. Almahayitah	Development of non-destructive testing method to evaluate the bond quality of reinforced concrete beam	2020, <i>Structural Engineering &amp; Mechanics</i> , Vol. 74, No. 3, pp. 313-323, 2020. DOI: <a href="https://doi.org/10.12989/sem.2020.74.3.313">https://doi.org/10.12989/sem.2020.74.3.313</a> Impact Factor: 2.804 ISSN: 1225-4568
19	<b>M. Saleem</b>	Assessing the load carrying capacity of concrete anchor bolts using non-destructive tests and artificial multilayer neural network	2020, <i>Journal of Building Engineering</i> , Vol. 30, No. 101260, pp. 1-13, 2020. DOI: <a href="https://doi.org/10.1016/j.jobe.2020.101260">https://doi.org/10.1016/j.jobe.2020.101260</a> Impact Factor: 2.378 ISSN 2352-7102
20	<b>M. Saleem</b> , Nawaf, I. B., Alshamrani, S. D. O., Abdulaziz, B.	Fundamental investigation of solid waste generation and disposal behavior in higher education institute in the Kingdom of Saudi Arabia	2019, <i>Indoor and Built Environment</i> , Vol. 28, No. 7, pp. 927-937. DOI: <a href="https://doi.org/10.1177/1420326X18804853">https://doi.org/10.1177/1420326X18804853</a> Impact Factor: 1.716 ISSN: 1420-326X
21	<b>M. Saleem</b> & N. Blaisi	Development, testing, and environmental impact assessment of glow-in-the-dark concrete	2019, <i>Structural Concrete</i> , Vol. 20, pp. 1792-1803. DOI: <a href="https://doi.org/10.1002/suco.201800221">https://doi.org/10.1002/suco.201800221</a> Impact Factor: 2.793



			ISSN: 1464-4177; Online ISSN:1751-7648
22	<b>M. Saleem</b>	Multiple crack extension model of steel anchor bolts subjected to impact loading	2018, <i>Construction and Building Materials</i> , Vol. 180, pp. 364-374. DOI: <a href="https://doi.org/10.1016/j.conbuildmat.2018.05.275">https://doi.org/10.1016/j.conbuildmat.2018.05.275</a> . Impact Factor: 4.419, ISSN: 0950-0618
23	<b>M. Saleem</b>	Cyclic shear-lag model of steel bolt for concrete subjected to impact loading	2018, <i>Journal of Materials in Civil Engineering</i> , Vol. 30, No. 3, pp.1-9. DOI: <a href="https://doi.org/10.1061/(ASCE)MT.1943-5533.0002204">https://doi.org/10.1061/(ASCE)MT.1943-5533.0002204</a> , Impact Factor: 1.43, ISSN: 0899-1561
24	<b>M. Saleem</b>	Evaluating the pull-out load capacity of steel bolt using Schmidt hammer and ultrasonic pulse velocity test	2018, <i>Structural Engineering &amp; Mechanics</i> , Vol. 65, No. 5, pp. 601-609, 2018. DOI: <a href="https://doi.org/10.12989/sem.2018.65.5.601">https://doi.org/10.12989/sem.2018.65.5.601</a> . Impact Factor: 2.804 ISSN: 1225-4568
25	M. Sodangi, A. F. Salman, & <b>M. Saleem</b>	Building information modeling: awareness across the subcontracting sector of Saudi Arabian construction industry	2018, <i>Arabian Journal for Science and Engineering</i> , Vol. 43, pp. 1807-1816. DOI: <a href="https://link.springer.com/article/10.1007%2Fs13369-017-2756-z">https://link.springer.com/article/10.1007%2Fs13369-017-2756-z</a> Impact Factor: 2.334 ISSN: 2191-4281; E-ISSN: 1319-8025
26	<b>M. Saleem</b>	Study to detect bond degradation in reinforced concrete beams using ultrasonic pulse velocity test method	2017, <i>Structural Engineering &amp; Mechanics</i> , Vol. 64, No. 4, pp. 427-436. DOI: <a href="https://doi.org/10.12989/sem.2017.64.4.427">https://doi.org/10.12989/sem.2017.64.4.427</a> Impact Factor: 2.804 ISSN: 1225-4568
27	<b>M. Saleem</b> , M. Shami & M. Najjar	Development, testing, and implementation strategy of a translucent concrete-based smart lane separator for increased traffic safety	2017, <i>Journal of Construction Engineering and Management</i> , Vol. 143, No. 5, pp. 1-8. DOI: <a href="https://doi.org/10.1061/(ASCE)CO.1943-7862.0001240">https://doi.org/10.1061/(ASCE)CO.1943-7862.0001240</a> Impact Factor: 5.1 ISSN: 0733-9364, ISSN (online): 1943-7862
28	W. A. Kutti, <b>M. Saleem</b> , N. M. Akhras	Numerical and experimental study on the performance of confined concrete subjected to compressive loading	2017, <i>Engineering Journal of King Abdulaziz University: Engineering Sciences</i> , Vol. 27, No. 2, pp: 35-48. Doi: 10.4197/Eng. 27-2.3. ISSN: 1319-1047
29	<b>M. Saleem</b> & M. Nasir	Bond evaluation of concrete bolts subjected to impact loading	2016, <i>Materials and Structures</i> , Vol. 49, Issue 9 , pp 3635-3646 , DOI: <a href="https://doi.org/10.1617/s11527-015-0745-9">https://doi.org/10.1617/s11527-015-0745-9</a> , Impact Factor 2016 – 2.453.
30	<b>M. Saleem</b> , W. Al-Kutti, N. Al-Akhras & H. Haider	Non-destructive testing method to evaluate the load carrying capacity of concrete anchors	2016, <i>Journal of Construction Engineering and Management</i> , Vol. 142, No. 5.



			DOI: <a href="https://doi.org/10.1061/(ASCE)CO.1943-7862.0001105">https://doi.org/10.1061/(ASCE)CO.1943-7862.0001105</a> <a href="http://ascelibrary.org/doi/full/10.1061/(ASCE)CO.1943-7862.0001105">http://ascelibrary.org/doi/full/10.1061/(ASCE)CO.1943-7862.0001105</a>
31	<b>M. Saleem</b> & M. A. Ameer	Shake table evaluation of low-cost strengthening technique for unreinforced brick masonry columns	2016, <i>Engineering Journal of King Abdulaziz University, KSA</i> , Vol. 26, No. 2.
32	M. Saleem	Investigating the effect of impact loading generated due to moving truck wheel on smart road lane separator	2016, <i>Qassim University Journal of Engineering and Computer Sciences</i> , Vol. 9, No. 2, pp. 85-99.
33	S. A. Osman, <b>M. Saleem</b> , R. M. Sajid, and M. A. Khan	Development of a polymer modified flexible pavement material for sustainable pavement system	2016, <i>Journal of Engineering and Applied Sciences (JEAS) Majmaah University</i> , Vol. 3, No. 1, pp. 26-36.
34	M. Saleem	Cyclic pull-out push-in shear-lag model for post-installed anchor infill assembly	2014, <i>Arabian Journal for Science &amp; Technology</i> , Vol. 39, No. 12, pp. 8537-8547. DOI: <a href="https://doi.org/10.1007/s13369-014-1423-x">https://doi.org/10.1007/s13369-014-1423-x</a> , Impact Factor: 2.334 ISSN: 2191-4281; E-ISSN: 1319-8025
35	<b>M. Saleem</b> , A.U. Qazi, A. Hameed & MA. Bashir	A multi-layer parallel crack extension model for deformational response of post-installed anchor	2013, <i>KSCE Journal of Civil Engineering</i> , Vol. 17, No. 5, pp. 908-920. Impact Factor – 0.359. DOI: <a href="https://doi.org/10.1007/s12205-013-0014-9">https://doi.org/10.1007/s12205-013-0014-9</a>
36	<b>M. Saleem</b>	Non-destructive testing method to evaluate the load carrying capacity of nails	2016, <i>Qassim University Journal of Engineering and Computer Sciences</i> , Vol. 8, No. 1.
37	A. Hameed, <b>M. Saleem</b> , A.U. Qazi, & H. Rizwana	Seismic response evaluation of base isolated buildings	2013, <i>Pakistan Journal of Science</i> , Vol. 65, No. 1, pp. 46-54. ISSN: 0030-9877
38	Z. A. Siddiqi, R. Hameed, <b>M. Saleem</b> , Q. S. Khan & Jawad A. Qazi	Determination of compressive strength and water absorption of styrene butadiene rubber (SBR) later modified concrete	2013, <i>Pakistan Journal of Science</i> , Vol. 65, No. 1, pp. 124-128. ISSN: 0030-9877
39	Z. A. Siddiqi, R. Hameed, <b>M. Saleem</b> , Q. S. Khan & I. Ishaq	Performance study of locally available coarse aggregates of Azad Kashmir	2013, <i>Pakistan Journal of Science</i> , Vol. 65, No. 1, pp. 90-94. ISSN: 0030-9877
40	<b>M. Saleem</b> & T. Tsubaki	Two-Layer model for pull-out behavior of post-installed anchor	2012, <i>Journal of Japanese Society of Civil Engineers, Ser E2 Materials &amp; Concrete Structures</i> , Vol.68, No. 1, Pg. 49-62. Doi: <a href="https://doi.org/10.2208/jscejmcs.68.49">https://doi.org/10.2208/jscejmcs.68.49</a>
41	A. Hameed, <b>M. Saleem</b> , A.U. Qazi, S. Saeed, M. Ilyas & M. Aun Bashir	Mitigation of seismic pounding between adjacent buildings	2012, <i>Pakistan Journal of Science</i> , Vol. 64, No. 4, pp. 326-333. ISSN: 0030-9877
42	A.U. Qazi, <b>M. Saleem</b> , A. Hameed & M. U. Farooq	Response spectra considering recorded ground accelerations in Pakistan	2012, <i>Pakistan Journal of Science</i> , Vol. 64, No. 4, pp. 344-353. ISSN: 0030-9877

## Research Papers Presented to Refereed SCIENTIFIC CONFERENCES

#	Name of Investigator(s)	Research Title	Conference and Publication Date
43	M. Saleem	Best Practice in Disaster Management	2019, <i>Saudi Symposium on Crises &amp; Disaster Management, March 14<sup>th</sup>, Dammam, Saudi Arabia.</i> Organizer: Imam Abdulrahman Bin Faisal University
44	S. D. O. Alshamrani & M. Saleem	Use of unmanned aerial vehicles for surveillance and security of border areas and with-in city	2017, <i>1<sup>st</sup> International Symposium on Land and Maritime Border Security and Safety, October 15-19, Jeddah, Saudi Arabia.</i> Organizer: General Directorate of Saudi Border Guard, Ministry of Interior, Saudi Arabia Doi: <a href="http://www.sbg-symposium.org/Downloads/LMBSS2017_PROC_EN.pdf">http://www.sbg-symposium.org/Downloads/LMBSS2017_PROC_EN.pdf</a>
45	M. Saleem	Pre-construction durability index for reinforced concrete structure	2014, 3 <sup>rd</sup> International Conference on Civil Engineering (ICCEN 2014), Mauritius, Asia-Pacific Chemical, Biological & Environmental Engineering Society (APCBEEES), Hong Kong, pp. 70-77, ISSN: 2212-6708, November 29-30, 2014. <b>BEST PAPER AWARD</b> <a href="http://www.iccen.org/2012-2014.html">http://www.iccen.org/2012-2014.html</a>
46	T. Tsubaki & M. Saleem	Multi-layer shear lag model for post-installed anchor used in retrofit of concrete structures	8 <sup>th</sup> International Conference on Fracture Mechanics of Concrete and Concrete Structures (FraMCoS-8), Toledo Spain, AEDIFICATIO, Germany, pp. 443-449, March 10-14, 2013.
47	M. Saleem & T. Tsubaki	Multi-layer model for pull-out behavior of post-installed anchor	7 <sup>th</sup> International Conference on Fracture Mechanics of Concrete and Concrete Structures (FraMCoS-7), Jeju Korea, AEDIFICATIO, Germany, Vol. II, pp. 823-830, May 23-28, 2010.
48	M. Saleem & T. Tsubaki	Influence of mechanical properties of infilled materials on pull-out behavior of post-installed anchor bar	JSCE 11 <sup>th</sup> International Summer Symposium, Kansai Japan, Japanese Society of Civil Engineers, Japan, pp. 237-240, September 11th, 2009.
49	T. Tsubaki & M. Saleem	Interface properties for optimum pull-out behavior of steel reinforcement	4 <sup>th</sup> International Conference on Construction Materials: Performance, Innovations, and Structural Implications, Nogoya Japan, Japanese Society of Civil Engineers, Japan, pp. 191-196, August 24-26, 2009.
50	A. Kafeel, Z. A. Siddiqui, A. Gaffar & M. Saleem	Bond behavior of twisted steel in high-strength concrete	International Conference on Advances in Cement-based Materials and Applications in Civil Infra-Structure, Lahore Pakistan, ACBM-ACI, Vol. II, pp. 1011-1022, December 11-14, 2007.

## Innovation & U. S. PATENTS

#	Name of Inventor(s)	Research Title	Publisher and Date of Publication
51	M. Saleem	Nano-phase-change-photoluminescent traffic signs for improved nighttime visibility and traffic safety	United States Patent & Trademark Office, Patent Pending.





52	<b>M. Saleem</b>	Flowable Luminescent Coating Composition and use thereof	United States Patent & Trademark Office, Patent Pending US 18/421109, Filed 24-01-2024.
53	<b>M. Saleem</b>	Interlocking Concrete Block Having A Glow Surface	United States Patent & Trademark Office, Patent Pending 552759US, Filed 02-04-2024 as continuation on Case # 547177US titled "Luminescent Concrete Product".
54	Abdulrhman Majdi, Mohammed Alqahtani, Abdulmalik Almakytah, <b>M. Saleem</b>	Method For Making a Modular Solar Panel	United States Patent & Trademark Office, Publication No. US 2024/0048096 A1, Dated: 08-02-2024.
55	<b>M. Saleem</b>	Ultrasonic Pulse Method for Testing Steel Rod Reinforced Concrete Beams	United States Patent & Trademark Office, U.S. Pat. No. US 11,796,512 B2 issue date Oct. 24 <sup>th</sup> , 2023.
56	<b>M. Saleem</b>	Testing Method for Concrete Beam having Steel Reinforcement	United States Patent & Trademark Office, Continuous Patent Application No. 549818US Sep. 26 <sup>th</sup> , 2023 (Continuation of Case # 548005US) Patent Filed 01-11-2023. Publication No. US-2024-0019403-A1 and a publication date of 1/18/2024.
57	<b>M. Saleem</b>	Non-destructive testing method for testing steel-reinforced concrete beam	United States Patent & Trademark Office, Patent Number US 11,686,708, B2 June 27 <sup>th</sup> 2023.
58	<b>M. Saleem</b>	Method for Evaluating Anchor Bolt Embedment in Concrete <a href="https://www.freepatentsonline.com/20220136945.pdf">https://www.freepatentsonline.com/20220136945.pdf</a>	United States Patent & Trademark Office, Patent Number US 11,662,284, B2 May 30 <sup>th</sup> 2023.
59	<b>M. Saleem</b>	Luminescent Concrete Products	United States Patent & Trademark office, Publication Number US 2023 0265020 A1, 08/24/2023, continuation of application for (18/048,466), Patent No. U.S. 11,981,608 B2 issue date May 14, 2024.
60	<b>M. Saleem &amp; N. Blaisi</b>	Luminescent Concrete Slurry	United States Patent & Trademark office, Patent Number US 11,661,381, B2 May 30 <sup>th</sup> 2023.
61	<b>M. Saleem &amp; N. Blaisi</b>	Luminescent Concrete Block	United States Patent & Trademark Office, U.S. Patent No. US 11512027B2, Nov. 29, 2022.
62	<b>M. Saleem &amp; N. Blaisi</b>	Interlocking Concrete Block Having a Glow Surface	United States Patent & Trademark Office, Patent Application Pending US 18/623,346 and a filing date of April 1, 2024 (Continuation Patent).
63	<b>M. Saleem &amp; N. Blaisi</b>	Luminescent Concrete Composites and Products <a href="https://www.freepatentsonline.com/y2020/0109089.html">https://www.freepatentsonline.com/y2020/0109089.html</a>	United States Patent & Trademark Office, Patent Application Pending US-16/151,994, 17/513,223, 18/048,466, 18/121,693 dated 04-19-2023, U.S. Pub. No. US 2020/0109089, Patent Granted US 11186524 B2, Nov 30, 2021.
64	Mukarram, Z, Arif, A, <b>M. Saleem</b>	Cement Composition Comprising Biochar	United States Patent & Trademark Office, Patent Pending, Application No.



			18/339,291 and a filing date of June 22 <sup>nd</sup> , 2023.
65	Abdulrhman Majdi, Mohammed Alqahtani, Abdulmalik Almakytah, <b>M. Saleem</b>	Modular Solar Panel Design for Improved Durability and Repairability (BSc Student Co-Inventors)	United States Patent & Trademark Office, U.S. Patent No. US 11,817,821 B2 and issue date November 14 <sup>th</sup> , 2023.
66	<b>M. Saleem</b>	Non-destructive anchor bolt pullout load capacity testing system <a href="https://www.freepatentsonline.com/20210190654.pdf">https://www.freepatentsonline.com/20210190654.pdf</a>	United States Patent & Trademark Office, Patent Number US 11,293,845, 2022.
67	<b>M. Saleem</b>	Development of Non-Destructive Testing Method to Evaluate Bond Condition of Reinforced Concrete Beam	United States Patent & Trademark Office, US Patent No. US 11,536,698, B2 issued December 27, 2022.
68	<b>M. Saleem</b>	Non-destructive apparatus, system, and method for determining the pull-out capacity of friction nails <a href="https://www.freepatentsonline.com/10247718.html">https://www.freepatentsonline.com/10247718.html</a>	United States Patent & Trademark Office, Patent Number US 10,837,870 B2, 2020.
69	<b>M. Saleem</b>	Combined ultrasonic pulse velocity and Schmidt hammer rebound test for nondestructive evaluation Doi: <a href="https://patentimages.storage.googleapis.com/a6/12/37/b295dde1c96936/US20190178765A1.pdf">https://patentimages.storage.googleapis.com/a6/12/37/b295dde1c96936/US20190178765A1.pdf</a>	United States Patent & Trademark Office, US Patent No. US 10,969,315, B2, 2021.
70	<b>M. Saleem</b>	Non-destructive apparatus, system, and method for determining the pull-out capacity of anchor bolts Doi: <a href="https://patentimages.storage.googleapis.com/19/e8/18/0c1b07c68614e1/US10247718.pdf">https://patentimages.storage.googleapis.com/19/e8/18/0c1b07c68614e1/US10247718.pdf</a>	United States Patent & Trademark Office, Patent Number 10247718, 2019.
71	<b>M. Saleem</b>	Ultrasonic Pulse Velocity Tester Doi: <a href="https://patentimages.storage.googleapis.com/05/37/80/f21aaa7a70c0cc/US10386336.pdf">https://patentimages.storage.googleapis.com/05/37/80/f21aaa7a70c0cc/US10386336.pdf</a>	United States Patent & Trademark Office, Patent Number 10386336, 2019.
72	<b>M. Saleem</b>	Concrete Reinforcement Assembly, Method of Installation, and Method to Determine Cyclic Load Response Doi: <a href="https://patentimages.storage.googleapis.com/f4/49/cc/02d9995e3d7e47/US9857351.pdf">https://patentimages.storage.googleapis.com/f4/49/cc/02d9995e3d7e47/US9857351.pdf</a>	United States Patent & Trademark Office, Patent Number 9857351, 2018.
73	<b>M. Saleem</b>	Reinforced Brick Masonry Column with polyester Thread Reinforcement Strips Doi: <a href="https://patentimages.storage.googleapis.com/6a/7a/fd/490aad2cf7d958/US9797133.pdf">https://patentimages.storage.googleapis.com/6a/7a/fd/490aad2cf7d958/US9797133.pdf</a>	United States Patent & Trademark Office, Patent Number 9797133, 2017.



74	M. Saleem	System, method, and apparatus for providing road separation and traffic safety Doi: <a href="https://patentimages.storage.googleapis.com/36/dd/98/f13fca3c25dfea/US9786168.pdf">https://patentimages.storage.googleapis.com/36/dd/98/f13fca3c25dfea/US9786168.pdf</a>	United States Patent & Trademark Office, Patent Number 9786168, 2017.
75	M. Saleem	Pull-out apparatus and system for testing anchor bolt/bars Doi: <a href="https://patentimages.storage.googleapis.com/1c/2a/fb/03b1ce1d19b139/US9726657.pdf">https://patentimages.storage.googleapis.com/1c/2a/fb/03b1ce1d19b139/US9726657.pdf</a>	United States Patent & Trademark Office, Patent Number 9726657, 2017.

## Published BOOK

#	Author	Title	Publisher
76	<u>M. Saleem</u>	Advancements in Anchor Technology in Civil Engineering: A Guideline for Practicing Engineers	Lap Lambert Publications, Germany, ISBN: 978-3-659-47544-3, EAN: 9783659475443, 2014.

**Purchase Link:**

- <https://www.lap-publishing.com/catalog/details//store/gb/book/978-3-659-47544-3/advancements-in-anchor-technology-in-civil-engineering>.
- <http://www.amazon.com/Advancements-Anchor-Technology-Civil-Engineering/dp/3659475440>

## Peer Review Services WOS & SCOPUS <https://orcid.org/0000-0001-5194-5483>

Peer review (107 reviews for 28 publications/grants)		Sort
>	Review activity for <b>Alexandria Engineering Journal</b> (2)	Everyone
>	Review activity for <b>Applied sciences</b> . (9)	Everyone
>	Review activity for <b>Arabian journal for science and engineering</b> . (1)	Everyone
>	Review activity for <b>Case studies in construction materials</b> . (3)	Everyone
>	Review activity for <b>Construction &amp; building materials</b> . (27)	Everyone
>	Review activity for <b>Energies</b> . (13)	Everyone
>	Review activity for <b>Engineering structures</b> . (8)	Everyone
>	Review activity for <b>Frontiers of Structural and Civil Engineering</b> (2)	Everyone



> Review activity for <b>Heliyon.</b> (2)	Everyone ▾
> Review activity for <b>International journal of civil engineering.</b> (1)	Everyone ▾
> Review activity for <b>International journal of pavement engineering.</b> (1)	Everyone ▾
> Review activity for <b>Journal of adhesion science and technology.</b> (1)	Everyone ▾
> Review activity for <b>Journal of building engineering.</b> (6)	Everyone ▾
> Review activity for <b>Journal of cultural heritage management and sustainable development.</b> (2)	Everyone ▾
> Review activity for <b>Journal of Engineering and Applied Science (Cairo)</b> (1)	Everyone ▾
> Review activity for <b>Journal of transportation engineering.</b> (1)	Everyone ▾
> Review activity for <b>KSCE Journal of Civil Engineering.</b> (1)	Everyone ▾
> Review activity for <b>KSCE Journal of Civil Engineering.</b> (4)	Everyone ▾
> Review activity for <b>Materials.</b> (2)	Everyone ▾
> Review activity for <b>Measurement.</b> (4)	Everyone ▾
> Review activity for <b>Processes.</b> (2)	Everyone ▾
> Review activity for <b>Results in engineering.</b> (1)	Everyone ▾
> Review activity for <b>Sensors.</b> (1)	Everyone ▾
> Review activity for <b>Structural concrete.</b> (4)	Everyone ▾
> Review activity for <b>Structures.</b> (1)	Everyone ▾
> Review activity for <b>Sustainability.</b> (4)	Everyone ▾
> Review activity for <b>Tunnelling and underground space technology.</b> (1)	Everyone ▾
> Review activity for <b>Ultrasonics.</b> (2)	Everyone ▾

## Completed RESEARCH GRANT Projects

#	Name of Investigator(s) (Supported by)	Research Title	Report Date
1	<b>M. Saleem (PI)</b> ARAMCO Traffic Safety Chair	Development of nano-phase-change-photoluminescent traffic signs for improved nighttime visibility and traffic safety	2024-25
2	<b>M. Saleem (CO-PI)</b> K. A. CARE, OT(a)_IAU_PC, SR 3.9 Million	Hydrogen generator from enhanced performance HCPV	2024-25
3	<b>M. Saleem (CO-PI)</b> K. A. CARE, OT(a)_IAU_PC, SR 3.9 Million	Development and testing of PV module smart cleaning robot capable of harnessing reject heat using shape memory alloy	2023
4	<b>M. Saleem (PI)</b> Aramco Traffic Safety Chair-IAU, SR 0.45 Million	Phase Change Luminescent Composite (PCLC) Traffic Signs for Improved Traffic Safety and Accident Prevention	2023
5	<b>M. Saleem (PI)</b> Aramco Traffic Safety Chair-IAU, SR 0.42 Million	Glow in the Dark Lane Markers for Improve Traffic Safety and Accident Prevention	2023
6	Z. Mukarram, <b>M. Saleem (CoPI)</b> , M. A. Aziz, N. Ashraf, K. S. Alotaibi & Omer Aga	Development and Testing of CO <sub>2</sub> Concrete Using Recycled Materials	2022
7	<b>M. Saleem (CoPI)</b> , Akira Hosoda, Adnan Akmal, Yokohama National University, Japan, SR 2 Million	Improving Thermal Crack Control System for RC Abutments Using Artificial Neural Network	2021
8	<b>M. Saleem (PI)</b> DSR-IAU, 2021-024-Eng, SR 0.2 Million	Using Artificial Neural Network and Non-destructive Assessment to Estimate the Strength of Epoxy Anchor Bolts	2021
9	<b>M. Saleem (CO-PI)</b> K. A. CARE, RB(b)_IAU_PC, SR 4 Million	Dual Function Solar Panels Racking and Mounting System	2021
10	<b>M. Saleem (CO-PI)</b> K. A. CARE, OT(b)_IAU_PC, SR 3.9 Million	System for peak performance gain from high concentrating photovoltaic	2021
11	<b>M. Saleem (CO-PI)</b> K. A. CARE, OT(c)_IAU_PC, SR 4 Million	Adaptation of Photovoltaic Module for Harsh Desert-Like Environment	2021
12	<b>M. Saleem (PI)</b> DSR-IAU, 2020-158-Eng, SR 0.2 Million	Evaluating the bond performance of steel reinforcement embedded in concrete using neural network	2020
13	<b>M. Saleem (PI)</b> DSR-IAU, 2019-112-Eng, SR 0.025 Million	Fundamental Investigation Related to The Development of Repair Methodology for Solar Cells	2020
14	<b>M. Saleem (PI)</b> DSR-IAU, 2019-038-Eng, SR 0.2 Million	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	2019
15	<b>M. Saleem (PI)</b> DSR-IAU, 2018-078-Eng, SR 0.2 Million	A Fundamental Study to Evaluate the Bond of Reinforced Concrete Beams Using Non-destructive Testing	2018



16	<b>M. Saleem (PI)</b> & Nawaf Blaisi DSR-IAU, 2017-006-Eng, SR 0.2 Million	Development, Testing, and Environmental Impact Assessment of Glow-in-the-Dark Concrete	2017
17	<b>M. Saleem (PI)</b> DSR-IAU, 2016-244-Eng, SR 0.2 Million	Study to Understand the Effects of Varying Embedment Length on Non-Destructive Load Carrying Capacity of Concrete Anchors	2016
18	<b>M. Saleem (PI)</b> , Mostafa Shami, Najjar M DSR-IAU, 2015-166-Eng, SR 0.2 Million	Development of Translucent Concrete Smart Road Separators	2015
19	Sami Osama Al-Khair, <b>M. SALEEM (CO-PI)</b> DSR-IAU, 2014-251-Eng, SR 0.2 Million	Fundamental Study for Development of a Fiber Reinforced Flexible Pavement Material for Sustainable Pavement System	2014
20	Waleed Al-Kutti, <b>M. SALEEM (CO-PI)</b> , Nabeel Al-Akras DSR-IAU, 2014-175-Eng, SR 0.2 Million	Investigating the Behavior of CFRP/Steel Confined Concrete Subjected to Compressive Stress	2014
21	Mahmoud Sodangi, Ahmed Salman & <b>M. SALEEM (CO-PI)</b> DSR-IAU, 2014-124-Eng, SR 0.2 Million	Development of Building Information Modeling (BIM) Implementation Framework for Improving Construction Subcontracting Performance	2014
22	<b>M. Saleem (PI)</b> DSR-IAU, 2014-043-Eng, SR 0.2 Million	Fundamental Study to Develop a Non-Destructive Technique for Evaluating the Load Carrying Capacity of Concrete Anchor	2014

## Current Research Projects and INTERNATIONAL COLLABORATIONS

#	Research Title	Name of Investigator(s)
1	Hydrogen generator from enhanced performance HCPV	Collaboration With <b>ARZON SOLAR USA</b>
2	Developing a comprehensive model for predicting thermal cracks in large concrete structures using machine learning	<b>M. Saleem (PI)</b> Collaboration project with Yokohama National University, <b>JAPAN – PhD Student Co-Supervision.</b>
3	Macro Energy Management Technique to Lower the Peak Power Supply for Eastern Region of Kingdom of Saudi Arabia.	<b>M. Saleem (PI)</b>
4	Development of a Non-Destructive Testing Method to Estimate the Pull-out Strength of Concrete Anchor Bars and Bolts.	<b>M. Saleem (PI)</b> Collaboration project with Yokohama National University, <b>JAPAN.</b>
5	Development of Glow-in-the-Dark Materials and Devices for Improving Performance and Safety.	<b>M. Saleem (PI)</b> Collaboration project with Yokohama National University, <b>JAPAN.</b>
6	Development of a Non-Destructive Testing Method to Estimate the Soundness of Steel Reinforcement and Concrete.	<b>M. Saleem (PI)</b> Collaboration Project with Florida Institute of Technology, <b>USA.</b>
7	Using Shape Memory Alloys for Improved Plastic Performance of Reinforced Concrete Members.	<b>M. Saleem (PI)</b> Collaboration Project with Florida Institute of Technology, <b>USA.</b>



8	Adopting Shape Memory Alloys for Structural Health Monitoring In Combination with Non-destructive Testing to Evaluate the Performance of Infrastructure Projects.	<b>M. Saleem (PI)</b> Collaboration Project with Florida Institute of Technology, USA.
9	Development of a Non-Destructive Testing Method to Estimate the Pull-out Strength of Epoxy Installed Anchor Bars and Bolts Embedded in Rocks.	<b>M. Saleem (PI)</b> Collaboration project with Yokohama National University, JAPAN.
10	Dual Functioning Solar Mounting and Racking System to Optimize Efficiency in addition to Structural Loading	<b>M. Saleem (Co-PI)</b> Collaboration project with HeatSpring LLC, USA, and GCC labs, KSA.
11	Innovative Design and Development of System for peak performance gain from high concentrating photovoltaic	<b>M. Saleem (Co-PI)</b> Collaboration project with Exeter University, UK, and BSQ Solar, Spain.
12	Innovative Design and Development for Adaptation of Photovoltaic Module for Harsh Desert-Like Environment	<b>M. Saleem (Co-PI)</b> Collaboration project with Shinsung, S., Korea and GCC labs, KSA.
13	Innovative Solar-Powered Actuation Mechanism for Smart-Cleaning of Dust Accumulation for PV Panels Using the Integration of Shape Memory Alloy-Based Micro-Actuators	<b>M. Saleem (Co-PI)</b> Collaboration project with IAU, KSA, and GCC labs, KSA.

## Membership of SCIENTIFIC and PROFESSIONAL SOCIETIES and Organizations

- Professional Approved Consulting Engineer, Pakistan Engineering Council (PEC)
- Member, Pakistan Institute of Engineers (PIE)
- Member Japanese Society of Civil Engineers (JSCE)
- Member Asian Council of Science Editors (ACSE)
- **International Reviewer** for the **Fib Structural Concrete**, WILEY Publications, 2020-Till date.
- **International Reviewer** for the **Journal of Building Engineering**, ELSEVIER Publications, 2019-Till date.
- **International Reviewer** for the **Engineering Structures**, ELSEVIER Publications, 2018-Till date.
- **International Reviewer** for the International Journal **Structures**, ELSEVIER Publications, 2018-Till date.
- **International Reviewer** for International Journal of Civil Engineering, SPRINGER NATURE, 2018-Till date.
- **International Reviewer** for the **Ain Shams Engineering Journal**, ELSEVIER Publications, 2018-Till date.
- **International Reviewer** for the American Society of Civil Engineers' **Journal of Construction Engineering and Management**, 2018-Till date.
- **International Reviewer** for the **Journal of Engineering Research (JER)** By Kuwait University Publication Council/Faculty of Engineering, 2019-Till date.
- **Member Editorial Board** for the **International Journal of Non-Destructive Testing and Evaluation (NDT&E)**, 2020-Till date.
- **Member Review Board** for Promotion Committee for Taibah University, Madinah Munawarah, KSA, 2019.



- **Member Review Board** for Deanship of Scientific Research Project Proposal Review Committee for Taibah University, Madinah Munawarah, KSA, 2018.
- **Member Review Board** for Deanship of Scientific Research Project Proposal Review Committee for Imam Abdulrahman Bin Faisal University, KSA, 2020.
- **International Editorial Board Member and Reviewer** for Civil Engineering and Architecture, Horizon Research Publications USA, 2014-Till Date.  
[http://www.hrpub.org/journals/jour\\_editorialboard.php?id=48](http://www.hrpub.org/journals/jour_editorialboard.php?id=48)
- **International Editorial Board Member** for International Journal of Structural Engineering and Analysis, Research India Publications, 2014-Till Date.  
<http://civil.journalspub.info/index.php?journal=JSEA&page=about&op=editorialTeam>
- **International Editorial Board Member** for International Journal of Concrete Technology, Research India Publications, 2014-Till Date.  
<http://civil.journalspub.info/index.php?journal=IJCT&page=about&op=editorialTeam>
- **International Editorial Board Member** for Journal of Civil and Structural Engineering, Integrated Publication Association USA, 2014-Till Date.  
<http://www.ipublishing.co.in/editorialboard.html>

## TEACHING Activities

### UNDERGRADUATE COURSES TAUGHT

#	Course/Rotation Title	No./Code	Extent of Contribution
1	Statics	ENG232	IAU - Main Instructor
2	Dynamics	ENG311	IAU - Main Instructor
3	Energy and Environment	ENRG412	IAU - Main Instructor
4	Energy and Environmental Policy	ENRG556	IAU - Main Instructor
5	Energy Markets	ENRG506	IAU - Main Instructor
6	Engineering Materials	ENG332	IAU - Main Instructor
7	Strength of Materials	ENG351	IAU - Main Instructor
8	Technical Writing	ENG401	IAU - Main Instructor
9	Machine Design	ENRG410	IAU - Main Instructor
10	Project Management and Scheduling	ENRG505	IAU - Main Instructor
11	Directed Research	ENRG565	IAU - Main Instructor
12	Senior Design Project I & II	ENRG503 & 509	IAU - Main Instructor





13	Energy Efficiency and Sustainable Development	ENRG502	IAU - Main Instructor
14	Plain & Reinforced Concrete Technology I-II	PRC I & II	UET Lahore - Main Instructor
15	Structural Engineering	Str. Engg.	UET Lahore - Main Instructor
16	Transportation Engineering	Transp. Engg.	UET Lahore - Main Instructor
17	Surveying Lab	Sur. Lab	UET Lahore - Lab Instructor
18	Computer Programming	Comp.	UET Lahore - Main Instructor

## MASTER COURSES TAUGHT

#	Course/Rotation Title	No./Code	Extent of Contribution
<b>Master's in safety engineering</b>			
1	Fire & Explosion Engineering	SAFEN 605	CORE - Main Instructor
2	Occupational Health Management	SAFEN 604	CORE - Main Instructor
<b>Master's in construction management</b>			
3	Construction Safety Management	CONEN 616	Main Instructor
4	Construction Productivity and Quality Management	CONEN 614	Main Instructor
5	Advanced Engineering Economics	CONEN 605	Main Instructor
6	Construction Procurement and Contract Administration	CONEN 602	Main -Instructor
7	Methods and Equipment for Construction	CONEN 613	Main -Instructor
<b>Master's in civil engineering</b>			
8	Seismic Retrofitting & Design of Reinforced Concrete Structures	MSc-Str-119	Co-Instructor
9	Earthquake Engineering	MSc-Str-217	Co-Instructor
10	Fracture Mechanics	MSc-Str-288	Co-Instructor
11	Advanced Theory of Concrete Structures	MSc-Str-274	Co-Instructor

## Student Academic SUPERVISION of BSC THESIS

#	Level	Number of Students	From	to
1	Macro Energy Management Technique to Lower the Peak Power Supply for the Eastern Region of the Kingdom of Saudi Arabia	03	2020	2021
2	Use of Shape Memory Alloys for Performance Improvements in Civil Structures	03	2020	2021



3	Fundamental Investigation Related to the Development of Repair Methodology for Solar Cells	03	2019	2020
4	Development, Training, and Validation of Artificial Neural Network for crack prediction in Reinforced Concrete.	01	2019	2020
5	Fundamental Study to Detect Degradation in Steel-Concrete Bond under Increasing Loading Using Ultrasonic Pulse Velocity Test	01	2016	2017
6	Fundamental Study to Evaluate Bond Performance for Concrete Anchors Using Ultrasonic Pulse Velocity Test	02	2015	2016
7	Development of Smart Road System for Increased Traffic Safety	03	2015	2016
8	Fundamental Study to Develop Non-destructive Pull-out Capacity Evaluation Method for Concrete Anchors	02	2014	2015
9	Development of Translucent Concrete in Pakistan	04	2012	2013
10	Fundamental Study Regarding the Use of Energy Dissipation Devices for Seismic Design in Pakistan	04	2011	2012

**NOTE: Student groups have published their research works in Q1 and Q2 journals with US Patents granted for three projects**

## Student Academic SUPERVISION of MASTER'S THESIS

#	Degree Type	Title	Institution	Date
11	MSc in Civil Engineering, Department of Civil Engineering, Yokohama National University, Japan	Engr. Adnan Akmal, Parametric Sensitivity Analysis of JCI Formula for Thermal Crack Prediction, Yokohama National University, JAPAN. Co-Supervision with <b>Prof. Akira Hosoda.</b>	Yokohama National University Japan	2021
12	Master of Building Science, Department of Building Engineering, College of Architecture and Planning	Zaher Zaher Soliman Mohammed, ID: 2170500137, Complexity Rate Assessment Modeling for Housing Projects in Saudi Arabia Supervised by <b>Dr. Muhammad SALEEM</b>	IAU, KSA	2019
13	Master of Building Science, Department of Building Engineering, College of Architecture and Planning	Ibrahim Khalil AlYousif, ID: 2150500004, Contractors Selection Framework for The Government Projects in KSA. Supervised by <b>Dr. Muhammad SALEEM</b>	IAU, KSA	2019
14	Master of Structural Engineering, Department of Civil Engineering	Akif, M., Shake Table Evaluation of Low-Cost Strengthening Technique for Unreinforced Brick Masonry Columns. Supervised by <b>Dr. Muhammad SALEEM</b>	UET Lahore Pakistan	2013
15	Master of Structural Engineering, Department of Civil Engineering	Ahad, J., Development of Seismic Retrofitting techniques for RC structures using low-cost materials.	UET Lahore Pakistan	2013



		Supervised by <b>Dr. Muhammad SALEEM</b>		
16	Master of Structural Engineering, Department of Civil Engineering	Umair, M. Numerical evaluation of failure mechanism & infill material properties of the multi-layer anchor-infill assembly. Supervised by <b>Dr. Muhammad SALEEM</b>	UET Lahore Pakistan	2014
17	Master of Structural Engineering, Department of Civil Engineering	Waqar, A. Testing of Scaled Masonry Model Developed Using Similitude Rules. Supervised by <b>Dr. Muhammad SALEEM</b>	UET Lahore Pakistan	2013
<b>NOTE: All student groups have published their research works in Q1 and Q2 journals</b>				

## Student Academic SUPERVISION of Ph.D. THESIS

#	Degree Type	Title	Institution	Date
18	PhD	<b>A study to control thermal cracking of RC abutments using Machine Learning</b> , Co-Supervision of Engr. Adnan Akmal at the Department of Civil Engineering, <b>Yokohama National University, Japan</b> by Prof. Akira Hosoda and <b>Dr. Muhammad SALEEM</b> .  <i>Fully Funded Scholar by Japanese Government (MEXT) 2020-2025.</i>	Yokohama National University (YNU), JAPAN	2021

## MENTORSHIP of Academic Faculty Members

#	Degree Type	Title	Institution	Date
19	UKPSF Fellowship	Mentoring of Dr. Nasir Ghazi Hariri, Assistant Professor, College of Engineering, Imam Abdulrahman Bin Faisal University, KSA for UK Professional Standards Framework FELLOWSHIP by <b>Dr. Muhammad SALEEM</b>	IAU, KSA	2021

## ENTREPRENEURSHIP – Research-Based Startups

#	Name of Startup	Title	Institution	Date
20	GiDCRETE	Co-Inventor and Patent Owner for the Glow-in-the-dark Concrete Products for Esthetical and Safety Applications by <b>Dr. Muhammad SALEEM</b>	IAU, KSA	2021
21	RoadBuildSAFE	Co-Inventor and Patent Owner for the Concrete Based Safety Products for Road Applications and autonomous cleaning solutions for building and solar panels by Dr. Nasir Ghazi Hariri and <b>Dr. Muhammad SALEEM</b>	IAU, KSA	2021
22	SmartClean	Co-Inventor of smart cleaning technology products for self-cleaning solutions from the Solar industry to architecture applications by Dr. Nasir Ghazi Hariri and <b>Dr. Muhammad SALEEM</b>	IAU, KSA	2021



## Professional Engineering CONSULTANCY

#	Degree Type	Title	Institution	Date
23	Professional Engineering Consultancy	<b>HEAD of Non-destructive and Materials Testing</b> at the University Center for Research and Engineering Consultancy. The consultancy is involved in Govt. and private projects and has completed 02 commercial projects.	IAU, KSA	2019-till date
24	Professional Engineering Consultancy	<b>Deputy Director of Materials Testing, Site Investigation, NDT, Quality Assurance, and Earthquake Engineering Center</b> at the Department of Civil Engineering, University of Engineering and Technology, Lahore Pakistan. The <b>consultancy</b> is involved in Govt. and private projects and has completed <b>30</b> commercial projects.	UET, Lhr, Pakistan	2006-2008, 2011-2013

### Administrative Responsibilities, Committee and Community Service

## Academic QUALITY and Institutional ACCREDITATION (ABET & NCAAA)

#	Degree Type	Title	Institution	Date
25	Academic QUALITY and Institutional ACCREDITATION	<b>Chairman of Academic Quality Assurance and Accreditation Committee at the College of Engineering, IAU.</b> Development of SSR, Coordination, Course Portfolio Assessment and Archiving, Exam Evaluation, PEV Schedule development etc.	IAU, KSA	2019-till date

## College STRATEGIC PLANNING and Implementation

#	Degree Type	Title	Institution	Date
26	College STRATEGIC PLANNING	<b>Chairman of Strategic Plan Development and Implementation Unit at the College of Engineering, IAU.</b>	IAU, KSA	2014-till date

## Administrative Responsibilities

#	From	To	Position	Organization
1	2016	Till Date	Safety and Security Committee	IAU, KSA
2	2020	Till Date	Student Placement and Summer Training Committee	IAU, KSA



3	2021	Till Date	Advisory Board Mechanical and Energy Engineering	IAU, KSA
4	2014	Till Date	Website CoE	IAU, KSA
5	2014	2018	Hiring and Shortlisting of Candidates Unit	IAU, KSA
6	2014	2018	ABET Technical Review Committee, Self-Assessment,	IAU, KSA
	2018	Till Date	and Self-Study Report Development	
7	2014	2018	Quality Assurance Committee	IAU, KSA
	2018	Till Date		
8	2011	2013	Ph.D. Thesis Evaluation Committee	UET, Lhr
9	2006	2008	Deputy Director Test Floor Laboratory	UET, Lhr
10	2011	2013	Deputy Director Strength of Materials Laboratory	UET, Lhr
11	2011	2013	Deputy Director Concrete Testing Laboratory	UET, Lhr

## COMMITTEE Membership

#	From	To	Position	Organization
1	2014	Till Date	Chairman for Strategic Plan Development for CoE IAU and Risk Management Committee	IAU, KSA
2	2016	Till Date	Community Service & Sustainable Development Committee	IAU, KSA
3	2016	Till Date	Committee for Program Initiation & Lab Development	IAU, KSA
4	2018	Till Date	Consultant Academic Program review and development committee at the Vice President Office IAU	IAU, KSA
5	2016	Till Date	Committee for Website Development	IAU, KSA
6	2020	Till Date	Student Placement and Summer Training Committee	IAU, KSA
7	2016	Till Date	Committee for Safety and Security	IAU, KSA
8	2018	Till Date	FABHOUSE Prototyping and Management Committee	IAU, KSA
9	2014	2018	Quality, ABET Accreditation Technical Committee	IAU, KSA
10	2015	2018	Member of the Strategic Plan Development Committee	IAU, KSA
11	2011	2013	External Examiner for Government of Punjab Public Service Commission Exam	Govt. of Punjab, Pakistan
12	2006	2008	Masters Exam Review Committee	UET, Lahore
13	2011	2013	Ph.D. Thesis Evaluation and Review Committee	UET, Lahore
14	2011	2013	Masters Thesis Evaluation and Review Committee	UET, Lahore
15	2011	2013	Quality Assurance Testing and Reporting Unit	UET, Lahore



## VOLUNTEER Work

#	From	To	Type of Volunteer	Organization
1	2016	Till Date	مشروع الاحسان لبيوت الرحمن	IAU, KSA
2	2017	2018	Development of Solid Waste Reduction Management Plan for College of Engineering, IAU.	IAU, KSA
3	2017	2018	Development of Management Action Plan for Reduction of PET bottle waste in College of Engineering, IAU.	IAU, KSA
4	2013	Till Date	All the functions of CoE & UoD	IAU, KSA
5	2014	Till Date	Quality of Life Assurance UoD housing No. 9	IAU, KSA
6	2008	Till Date	<b>Mentoring and Tutoring</b> underprivileged students for <b>Academic Scholarships</b> , entrance exams, etc.	IAU, KSA UET, Lhr, Pakistan
7	2011	Till Date	<b>Financial Support</b> for underprivileged students for <b>Academic Tutoring</b> and higher education exams etc.	Lhr, Pakistan

## AWARDS & Appreciation

#	Description	Year
1	<b>THIRD PLACE WINNER</b> of the Annual Innovation Award at IAU by <b>His Royal Highness Prince Saud Bin Naif Bin Abdulaziz Al Saud, Governor of Eastern Province of Kingdom of Saudi Arabia.</b>	Jan, 2024
2	<b>FIRST Place Winner of the Best Innovation Award</b> at the College of Engineering, IAU.	May, 2024
3	<b>GOLD MEDAL WINNER</b> of the Best Teacher Award at the College of Engineering, IAU.	2022-23
4	<b>SECOND PLACE MEDAL WINNER</b> of the Best Innovation Award at the College of Engineering, IAU.	2022-23
5	<b>GOLD MEDAL WINNER</b> of the Best Community Service Award at the College of Engineering, IAU.	2022-23
6	<b>Excellence Contribution</b> to Excellence in Learning & Teaching by HE Vice President Prof. Dr. Gazi Al-Otaibi, IAU.	2021
7	<b>WINNER</b> of the Best Innovation Award at the College of Engineering, IAU.	2021
8	<b>Highest Commercial US Patent</b> in Imam Abdulrahman Bin Faisal University	2021
9	Included in <b>Who is Who</b> of Concrete Materials Research Forum of USA.	2021
10	<b>Winner of Student Publication Reward</b> for Undergraduate Thesis Publication in Q1 WOS Journal by Deanship of Scientific Research at Imam Abdulrahman Bin Faisal University	2021



11	<b>WINNER</b> of <b>FIRST PRIZE</b> in Engineering (US\$ 10,000) at the Traffic Safety Summit by His Royal Highness Prince Saud Bin Naif Bin Abdulaziz Al Saud, Governor of Eastern Province of Kingdom of Saudi Arabia.	2020
12	Finalist on <b>MONSHAAT – EBTKER ENGINEERING AWARD</b>	2019
13	<b>BEST PERFORMANCE</b> Award	2018/2019
14	<b>FIRST PLACE</b> in Innovation Award	2018/2019
15	<b>BEST</b> Performance and Contribution to <b>ACADEMIC PROGRAM DEVELOPMENT</b>	2017/2018
16	<b>FIRST</b> Place in <b>COMMUNITY SERVICE AWARD</b> – Tarwiyah Project	2017/2018
17	FIRST PLACE with Outstanding <b>RESEARCH</b> Award	2017/2018
18	Outstanding <b>INNOVATION</b> Award	2017/2018
19	FIRST PLACE in <b>COMMUNITY SERVICE</b> Award – Mosque Renovation	2016/2017
20	Best Performance in <b>ABET ACCREDITATION TECHNICAL COMMITTEE</b>	2016/2017
21	Chairman of <b>ACADEMIC QUALITY ASSURANCE UNIT</b>	2016/2017
22	Chairman of <b>SAFETY &amp; SECURITY</b> Committee	2016/2017
23	FIRST PLACE with Outstanding <b>RESEARCH</b> Award	2015/2016
24	<b>THIRD PLACE</b> with Outstanding <b>RESEARCH</b> Award	2014/2015
25	Best <b>TEACHER</b> Award	2014/2015
26	Best <b>PERFORMANCE</b> Award	2014/2015
27	Chairman of <b>WEBSITE DEVELOPMENT UNIT</b>	2014-2018
28	<b>BEST PAPER AWARD</b> at International Conference on Civil Engineering - ICCEN, Mauritius	2014
29	Winner of <b>Engineering Management</b> Program at Yokohama National University, Japan	2009/2010
30	First in Class in Masters	2007/2008
31	Topper in Batch in 1 <sup>st</sup> and 8 <sup>th</sup> Semester of BSc Civil Engineering at UET Lahore	2002-2006

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

1	AutoCAD, Eagle Point, Finite Element Structural Analysis Staad Pro 2000, SAP 2000, PRIMAVERA Project Planning, ATENA, E-TABS, Quick Basic, Visual Basic, Microsoft Office, MS Project.
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## Engineering Consultancy Experience

### Short Summary of KEY PROJECTS

#### Project No. 1:

On-site Investigation, Field Visit – Government & Private Projects (**Over 30 Projects**)

#### **Main Duties:**

- Non-Destructive Testing
- Material Quality Assurance
- Materials Strength Testing
- Design Evaluation
- NDT&E of a multistory plaza in Khobar, KSA (SR 30 Mil)

#### Project No. 2:

Kashmir Centre Lahore, Pakistan. An Eleven Story High-rise Building

#### **Main Duties:**

- Liaison between the Client and Contractor
- Close monitoring of measurements of completed works & Contractor Bill Evaluation
- Recommending Intermediate and Final payments
- Progress Evaluation & Monitoring
- Technical Supervision
- Procurement Management & monitoring cost control of the Projects
- Quality Assurance of work & Issuance of Completion Certificates





**Project No. 3:**

Five-Story Extension of Auditor General Building PIFRA-II Islamabad Pakistan – WORLD BANK FUNDED PROJECT

**Main Duties:**

- Technical Supervision & Project Management
- Communication between Client and Contractor
- Preparation of CPM-Based Construction Schedule.
- Preparation of Progress Reports & detailed analysis of the progress situation
- Procurement schedule evaluation & improvement measures
- Cost Control & Quality Evaluation
- Preparation of Tender document
- Preparation of Bid Evaluation Report
- Preparation of Technical Specification

**Project No. 4:**

Labone World Headquarters in Johar Town Lahore, Pakistan

**Main Duties:**

- Complete Turnkey Project Supervision/Management

**Project No. 5:**

Green View Housing Society, Lahore, Pakistan

**Main Duties:**

- Technical Supervision of Survey and Execution of Natural Drain relocation



- Liaison between the Client and Contractor

#### **Project No. 6:**

Schools, Terminal Buildings, and Plaza in Azad Jammu and Kashmir, Pakistan.

#### **Main Duties:**

- Technical Supervision & Project Management
- Structural Design of Buildings
- Preparation of Construction Schedules
- Preparation of Engineer's Cost Estimate
- Cost Control & Quality Evaluation
- Preparation of Technical Specification
- Overall responsibility of supervision as per contract on behalf of the Consultants

#### **Project No. 7:**

Defense Housing Authority Lahore Phase VIII & Phase VII – Infrastructural Design & Design Evaluation, 2011-2013

#### **Main Duties:**

- Technical Supervision & Project Management
- Structural Design of Buildings
- Road Network Design
- Surface Drain Design
- Technical Evaluation & Line of Action Development
- Design Evaluation of Sewerage System & Corrections

#### **Project No. 8:**

Housing Design and Construction (10+ Project)

#### **Main Duties:**

Complete Turnkey Project Supervision/Management



## DATA ON RECOMMENDERS

### RECOMMENDER NO. 1:

**Prof. Dr. Akira Hosoda**

Chairman

Professor

Department of Civil Engineering, Yokohama National University, Yokohama, Japan

**Address:** 79-5, Tokiwadai, Hodogaya-ku, Yokohama-shi, Kanagawa 240-8501, Japan

**Email:** concrete@ynu.ac.jp

**Phone No.:** 0081-90-85156757

**Fax No.:** 0081-45-331-1707

### RECOMMENDER NO. 2:

**Prof. Dr. Hector Martin Gutierrez**

Professor

**Address:** Department of Mechanical and Civil Engineering, Florida Institute of Technology, 150 West University Boulevard, Melbourne, FL 32901, United States of America

**Email:** hgutier@fit.edu

**Phone No. Office:** (321) 674-7321

**Phone No. Home:** (321) 409-9576

### RECOMMENDER NO. 3:

**Prof. Dr. Tatsuya Tsubaki**

Professor

Department of Civil Engineering, Yokohama National University, Yokohama, Japan

**Address:** 79-5, Tokiwadai, Hodogaya-ku, Yokohama-shi, Kanagawa 240-8501, Japan

**Email:** tsubaki@ynu.ac.jp

**Phone No.:** 0081-90-34500959

**Fax No.:** 0081-45-331-1707



28/05/2024