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### **Education**

1995/02-2001/03, King Fahd University of Petroleum and Minerals, Saudi Arabia, Ph.D.

1992/01-1995/01, King Fahd University of Petroleum and Minerals, Saudi Arabia, Master.

1985/01-1990/07, NED University of Engineering and Technology, Karachi, Pakistan, Bachelor.

# Work Experience

2019/12 - present, NED University of Engineering & Technology, Faculty of Civil and Petroleum Engineering, Dean

2010/09-2019/11, NED University of Engineering & Technology, Department of Civil Engineering, Professor and Chairman.

2007/04-2010/09, NED University of Engineering & Technology, Department of Civil Engineering, Professor.

2005/02-2007/04, NED University of Engineering & Technology, Department of Civil Engineering, Associate Professor.

2001/10-2005/01, Hamdard institute of Information Technology, Faculty of Engineering Sciences and Technology, Hamdard University, Consultant/Associate Professor.

2001/09-2001/10, Engineering Associates, Senior Structural Engineer.

1995/02-2001/03, KFUPM, Department of Civil Engineering, KFUPM, Dhahran, K.S.A Lecturer-B.

1992/01-1995/01, KFUPM, Department of Civil Engineering, KFUPM, Dhahran, K.S.A Research Assistant.

1991/05-1991/10, AKBAR and ASSOCIATES, Consulting Engineers, Structural Design Engineer.

# **Research Projects**

- 1. Fibre Reinforced Polymers (FRP) for Civil Infrastructure in Pakistan, 2011-2014.
- 2. Behaviour of RC Beams Strengthened in Shear and Flexure Loading regions using Textile Reinforced Mortar.
- 3. Design theory and assessment of recycled concrete structures in earthquake prone regions.
- 4. Behaviour and design of recycled aggregate concrete structures.
- 5. Strengthening & Retrofitting of Reinforced Concrete Structures using Fibre Reinforced Polymer Composites.
- 6. Durability Studies of Pozzolanic Cement Concrete.
- 7. Performance of Recycled Aggregate Concrete in Aggressive Environment.
- 8. Artificial Intelligence based constitutive modelling of Recycled Aggregate Concrete
- Development of Cost-Effective Structural Concrete Formulation using Limestone Calcined Clay-Based LC3
   Cement Blend with Domestic Resources and its Application in a Pilot Project
- Technology Enabled Performance Monitoring and Virtual Digitization of CPEC Infrastructure for Sustainable Maintenance Decision-Making
- 11. Indigenous development of high-performance textiles based composite structural reinforcement system for Civil Infrastructure

- 12. Impact Behaviour of Ultra High Strength Concrete RC Structural Members
- Experimental and Numerical Investigation of Slender Reinforced Concrete Beams subjected to High Mass Low Velocity Impact
- 14. Constitutive Modelling of Ultra High-Performance Concrete

## **Publications**

# **International Journal Papers**

- 1) Hasan, S., Asad, R., Arif, F., and **Khan, A. R.**, "Enhancing structural health monitoring: Conditional GAN-based crack detection in concrete and asphalt surfaces", *Advances in Structural Engineering*, 2025, Vol. 0(0) 1–23.
  - https://doi.org/10.1177/13694332251381215
- 2) Khalid, F., **Khan, A. R.**, and Fareed, S., "Pre-and Post-Peak Stress-Strain Response of Recycled Aggregate Concrete: Experimental and Numerical Investigation", Computers and Concrete, An International Journal, To be published in May 2025.
- 3) Khalid, F., Khan, A. R., and Fareed, S., "Estimation of parameters for constitutive modelling of Recycled Aggregate Concrete using Artificial Neural Networks", To be published in Engineering Computations, April 2025.
  - https://doi.org/10.1108/EC-07-2024-0679
- 4) Hussain, S. M. F., Ayub, T., Jamil, T., Khan, A. R., "Durability Performance of OPC and LC3-50 Concrete Containing Lightweight Aggregates", Iranian Journal of Science and Technology, Transactions of Civil Engineering, March 2025.
  - https://doi.org/10.1007/s40996-025-01784-8
- 5) Ayub, T., Jamil, T., Ayub, A., **Khan, A. R.**, Mehmood, E., Sheikh, M. D. "Effect of Glass Powder on the Compressive Strength and Drying Shrinkage Behavior of OPC- and LC3-50-Based Cementitious Composites of Various Strengths", Advances in Material Science and Engineering, Vol. 2024, pp. 1-24, July 2024. https://doi.org/10.1155/2024/8860083
- 6) Fareed, S., Zahid, B., and Khan, A. R., "Mechanical properties of kevlar and jute fiber reinforced concrete", Journal of Sustainable Construction Materials and Technologies, Vol. 9, Issue 4, pp. 128-137, June 2024. <a href="https://doi.org/10.47481/jscmt.1500347">https://doi.org/10.47481/jscmt.1500347</a>
- Khan, A. R., Fareed, S., and Khalid, F., "Simulation of Reinforced Recycled Aggregate Concrete Frames Subjected to Seismic Loading", Arabian Journal for Science and Engineering, June 2024. https://doi.org/10.1007/s13369-024-09172-6
- 8) Fareed, S., Asad, J., and Khan, A. R., "Simulation of Reinforced Concrete Slabs in Residential Buildings under Internal Gas Blast", Arabian Journal for Science and Engineering, May 2024. https://doi.org/10.1007/s13369-024-09100-8
- 9) Khan, A. R., Ayub, A., Qadir, A., Fareed, S., and "Rutting Performance of Cement Treated Base and Hot Mix Asphalt Layer in Flexible Pavements Containing Recycled Concrete Aggregates", *International Journal of Pavement Engineering*, Vol. 25, No. 1, 1-16, January 2024. <a href="https://doi.org/10.1080/10298436.2023.2297945">https://doi.org/10.1080/10298436.2023.2297945</a>
- 10) Fareed, S., and **Khan, A. R.**, "Behaviour of Reinforced Recycled Aggregate Concrete Beams and Slabs Strengthened in Flexure and Punching with CFRP Composites", *The Journal of Textile Institute, November* 2023.
  - https://doi.org/10.1080/00405000.2023.2281020

11) **Khan, A. R.,** Fareed, S., and Aziz, T., "Residual Mechanical Properties of Concrete with 30% Recycled Concrete Aggregates Exposed to Elevated Temperatures", *Iranian Journal of Science and Technology, Transactions of Civil Engineering, October 2023*. https://doi.org/10.1007/s40996-023-01253-0

12) Fareed, S., Ayub, L., and **Khan, A. R.,** "Simulation of Size Effect and Strength Prediction in Normal to Ultra High Strength Concrete Shear Deficient RC Beams", *Advances in Civil Engineering Materials*, 2023, Vol. 12, No. 1, 251-270.

https://doi:10.1520/ACEM20230001

- 13) Ayub, A., Ayub, T., Jamil, T., **Khan, A. R.**, "Mechanical and Durability Properties of High-Strength Limestone Calcined Clay Cement (LC<sup>3</sup>) Concrete Containing Waste Glass Powder", *Iranian Journal of Science and Technology, Transactions of Civil Engineering, June 2023*. https://doi.org/10.1007/s40996-023-01102-0
- 14) Hussain, S. M. F., Sheikh, M. D., Jamil, T., **Khan, A. R.**, Ayub, T., and Hu, C., "Initial search for low grade clay in Pakistan for producing LC<sup>3</sup> ecofriendly cement", *Low-carbon Materials and Green Construction*, (2023) 1:15.

https://doi.org/10.1007/s44242-023-00016-4

- 15) Sheikh, M. D., Jamil, T., Ayub, T., **Khan, A. R.**, Bilal, S. M., and Hu, C., "Comparative Study on LC<sup>3</sup>-50 with OPC Concrete Using Raw Materials from Pakistan", *Advances in Materials Science and Engineering, Vol. 2023*. https://doi.org/10.1155/2023/5503670
- **16)** Mahmood, W., Ayub, T., and **Khan, A. R.**, "Mechanical properties and corrosion resistance of recycled aggregate concrete exposed to accelerated and natural marine environment", *Journal of Building Engineering*, 66 (2023) 105867.

https://doi.org/10.1016/j.jobe.2023.105867

- 17) Khan, A. R., Nasir, R., and Fareed, S., "Simulation of Reinforced Concrete Columns Strengthened with CFRP Wraps", *International Journal of Civil Engineering*, September 2022. https://doi.org/10.1007/s40999-022-00768-3
- 18) Fareed, S., Ayub, L., and Khan, A. R., "Parametric Investigation on Behaviour of Carbon Fiber Reinforced Polymers Wrapped Reinforced Concrete Columns Under Eccentric Loads", Material Science and Engineering Technology, Materialwissenschaft und Werkstofftechnik, 2022, 53, 918-934. <a href="https://doi.org/10.1002/mawe.202200024">https://doi.org/10.1002/mawe.202200024</a>
- 19) Khan, A. R., Nasir, R., and Fareed, S., "Simulation and Strength Prediction of Reinforced Recycled Aggregate Concrete Short Columns", *Arabian Journal for Science and Engineering*, July 2022. https://doi.org/10.1007/s13369-022-07034-7
- 20) Revilla-Cuesta, V., Ortega-López, V., Skaf, M., Khan, A. R., Manso, J. M., "Deformational behavior of self-compacting concrete containing recycled aggregate, slag cement and green powders under compression and bending: Description and prediction adjustment", *Journal of Building Engineering*, 2022, 54, 104611. https://doi.org/10.1016/j.jobe.2022.104611
- 21) Mahmood, W., **Khan, A. R.,** and Ayub, T., "Carbonation Resistance in Ordinary Portland Cement Concrete with and without Recycled Coarse Aggregate in Natural and Simulated Environment", *Sustainability 2022, 14, 437.*

https://doi.org/10.3390/su14010437

22) Fareed, S., **Khan, A. R.,** and Masood, S., "Dynamic Compressive Strength of Recycled Aggregate Concrete", *International Journal of Materials*, *November 2021*. https://doi.org/10.46300/91018.2021.8.7

- 23) **Khan, A. R.,** Fareed, S., Nasir, R., and Xiao, J., "Behaviour and Strength Prediction of Reinforced Recycled Aggregate Concrete Columns Confined with CFRP Wraps", *Iranian Journal of Science and Technology, Transactions of Civil Engineering, November 2021.*https://doi.org/10.1007/s40996-021-00779-5
- 24) Ayub, T., Mahmood, W., and **Khan, A. R.,** "Durability Performance of SCC and SCGC Containing Recycled Concrete Aggregates: A Comparative Study", Sustainability 2021, 13(15), 8621. (Special Issue on Recycled Construction & Demolition Waste as Concrete Aggregate for Sustainable Construction) <a href="https://doi.org/10.3390/su13158621">https://doi.org/10.3390/su13158621</a>
- 25) Khalid, F., **Khan, A. R.,** and Fareed, S., "Elasto-Damage Constitutive Modelling of Recycled Aggregate Concrete", *Computers and Concrete, An International Journal, Volume 28, No. 1, July 2021, pp. 13-23.* https://doi.org/10.12989/cac.2021.28.1.013
- 26) Mahmood, W., **Khan, A. R.,** and Ayub, T., "Mechanical and Durability Properties of Concrete Containing Recycled Concrete Aggregates", *Iranian Journal of Science and Technology, Transactions of Civil Engineering, June 2021.* 
  - https://doi.org/10.1007/s40996-021-00692-x
- 27) Ayub, T., **Khan, A. R.,** and Mahmood, W., "Effect of Recycled Concrete Aggregates on Compressive Strength and Water Permeability of Concrete", *International Journal of Energy and Environment, December 2020.* https://doi.org/10.46300/91012.2020.14.6
- 28) **Khan, A. R.,** Khalid, F., and Fareed, S., "Elasto-Damage Constitutive Modelling of Recycled Aggregate Concrete", *International Journal of Materials*, *December 2020*. https://doi.org/10.46300/91018.2020.7.16
- 29) **Khan, A. R.,** Fareed, S., and Zahid, B., "Use of High Strength Technical Textiles in Strengthening of Reinforced Concrete Structural Elements", *The Journal of Textile Institute, January 2021*. https://doi.org/10.1080/00405000.2020.1870784
- 30) **Khan, A. R.,** Aziz, T., Fareed, S., and Xiao, J., "Behaviour and Residual Strength Prediction of Recycled Aggregates Concrete Exposed to Elevated Temperatures", *Arabian Journal for Science and Engineering, Vol.* 45, June 2020, pp. 8241 8253. https://doi.org/10.1007/s13369-020-04682-5
- 31) Ding, T., Xiao, J., Chen, Enci, and **Khan, A. R.**, "Experimental study of the seismic performance of concrete beam-column frame joints with DfD connections", *ASCE Journal of Structural Engineering*, Vol. 146 (4), April 2020. https://doi.org/10.1061/(ASCE)ST.1943-541X.0002576
- 32) **Khan, A. R.,** Khan, M.S., Fareed, S., and Xiao, J., "Structural Behaviour and Strength Prediction of Recycled Aggregate Concrete Beams", *Arabian Journal for Science and Engineering, Vol. 45, April 2020, pp. 3611-3622.* https://doi.org/10.1007/s13369-019-04195-w
- 33) Masood, F., and Khan, A. R., "Behaviour of Full Scale Reinforced Concrete Beams Strengthened with Textile Reinforced Mortar (TRM)", *Journal of Mechanics of Continua and Mathematical Sciences, Vol. 14 (3), May-June 2019, pp. 65-82.* https://doi.org/10.26782/jmcms.2019.06.00006
- 34) **Khan, A. R.**, and Zahra, T., "Elasto-damage Modeling of Concrete Subjected to Proportionate and Non-proportionate Multiaxial State of Stress", *Journal of Mechanics of Continua and Mathematical Sciences, Vol.* 14 (2), March-April 2019, pp. 7-26.
  - https://doi.org/10.26782/jmcms.2019.04.00002
- 35) Ding, T., Xiao, J., and **Khan, A. R.**, "Behavior of concrete beam-column frame joints with DfD connections: A simulation study with interface modelling", *Engineering Structures, Vol. 189, June 2019, pp. 347-358*. https://doi.org/10.1016/j.engstruct.2019.03.082

- 36) **Khan, A. R.,** and Ayub, T., "Performance of RC beams strengthened for shear and Flexure using different schemes of u-shaped CFRP anchorages and/or strips" in *Iranian Journal of Science and Technology, Transactions of Civil Engineering, Vol. 39, No. C1, February 2015, pp. 41-51.* (DOI: 10.22099/ijstc.2015.2741)
- 37) **Khan, A. R.**, Al-Gadhib, A. H., and Baluch, M. H., "Experimental and Computational Modeling of Low Cycle Fatigue Damage of CFRP Strengthened Reinforced Concrete Beam", *International Journal of Damage Mechanics, Vol. 20, March 2011, pp. 211-243.* (https://doi.org/10.1177/1056789509344043)
- 38) **Khan, A. R.**, Al-Gadhib, A. H., and Baluch, M. H., "Elasto-damage Model for High Strength Concrete Subjected to Multiaxial Loading", *International Journal of Damage Mechanics*, Vol. 16, Jul. 2007, pp. 361-398.

(https://doi.org/10.1177/1056789506065914)

- 39) Baluch, M. H., Al-Gadhib, A. H., **Khan, A. R.**, and Shaalan, A. "CDM Model for Residual Strength of Concrete under Cyclic Compression", *Cement & Concrete Composites*, *Vol. 25, May July 2003, pp. 503-512*. (https://doi.org/10.1016/S0958-9465(02)00090-2)
- 40) Baluch, M. H., Khan, A. R., and Al-Gadhib, A. H., "Fatigue Performance of Concrete Beams Strengthened with CFRP Plates", (Discussion), ASCE Journal of Composites for Construction, Vol. 4 No. 4, November 2000, pp. 215. (https://doi.org/10.1061/(ASCE)1090-0268(2000)4:4(215))
- 41) Al-Gadhib, A. H., Baluch, M. H., Shaalan, A., and **Khan, A. R.** "Damage Model for Monotonic and Fatigue Response of High Strength Concrete", *International Journal of Damage Mechanics, Vol. 9, Jan. 2000, pp. 57-78.*

(https://doi.org/10.1177/105678950000900105)

- 42) Ashrafuddin, M., Baluch, M. H., Al-Sulaimani, G. J., Sharif, A., Azad, A. K., and **Khan, A. R.**, "Peeling and Diagonal Tension Failures in Steel Plated R/C Beams", *Construction and Building Materials, Vol. 13, 1999, pp. 459-467.* (https://doi.org/10.1016/S0950-0618(99)00044-6)
- 43) Al-Gadhib, A. H., **Asad-ur-Rehman K.**, and Baluch, M. H., "CDM Based Finite Element Code for Concrete in 3-D", *COMPUTERS & STRUCTURES*, Vol. 67, 1998, pp. 451-462. (https://doi.org/10.1016/S0045-7949(98)00044-3)

### **Proceedings of Refereed International Conferences**

- Fareed, S., Khan, A. R., and Ayub, L., "Simulation of Two-Way Slabs Strengthened in Punching with CFRP Strips" in the Proceedings of 7<sup>th</sup> International Conference on Smart Monitoring, Assessment, and Rehabilitation of civil structures (SMAR 2024), held on 4-6 September 2024, Salerno, Italy. <a href="https://doi.org/10.1016/j.prostr.2024.09.400">https://doi.org/10.1016/j.prostr.2024.09.400</a>
- 2) **Khan, A. R.**, and Masood, F., "Behaviour of Full-Scale Shear Critical Beams Strengthened with Textile Reinforced Mortar (TRM)" in the Proceedings of 7th International Conference on Smart Monitoring, Assessment, and Rehabilitation of civil structures (SMAR 2024), held on 4-6 September 2024, Salerno, Italy. <a href="https://doi.org/10.1016/j.prostr.2024.09.402">https://doi.org/10.1016/j.prostr.2024.09.402</a>
- 3) Arif, F., Khan, W. A., and **Khan, A. R.**, "LiDAR-UAV Integrated Digitization of Civil Infrastructure for Visualization of Physical Condition" in the proceedings of International Conference on Technology-Enabled Civil Infrastructure Engineering and Management (TECH-IEM), held on 15-16 December 2023, Karachi, Pakistan. <a href="https://doi.org/10.4028/p-6boxWp">https://doi.org/10.4028/p-6boxWp</a>
- 4) Arif, F., Ayub, L., Khan, F. A, and **Khan, A. R.**, "Conceptual Framework for IoT-Based Structural Health Monitoring of RC Bridges for Maintenance Decision-Making", in the proceedings of International Conference on Technology-Enabled Civil Infrastructure Engineering and Management (TECH-IEM), held on 15-16 December 2023, Karachi, Pakistan.

  <a href="https://doi.org/10.4028/p-q8nkQW">https://doi.org/10.4028/p-q8nkQW</a>

- 5) **Khan, A. R.**, Moretti, M., and Fareed, S., "Numerical Investigation on the Efficacy of CFRP Jackets for Retrofit of Reinforced Concrete Columns with Sparse Stirrups" *in the Proceedings of the fib Symposium 2023, held on 5-7 June 2023, Istanbul, Turkey*. https://doi.org/10.1007/978-3-031-32511-3 44
- 6) **Khan, A. R.**, Fareed, S., and Khalid, F., "Behaviour of Reinforced Recycled Aggregate Concrete Beams Subjected to Torsional Loading" *in the Proceedings of the fib Symposium 2023, held on 5-7 June 2023, Istanbul, Turkey*. https://doi.org/10.1007/978-3-031-32519-9 81
- 7) Hussain, S. M. F., Jamil. T, **Khan, A. R.**, Ayub, T., and Hu, C., "Economic and Environmental Impacts of Cement Industry in Pakistan and use of SCMs" in the Proceedings of the Calcined Clays for Sustainable Concrete 2022, held on 5-7 of July, 2022 Lausanne, Switzerland.
- 8) Fareed, S., and **Khan, A. R.**, "Parametric Investigation on the Performance of RC Slabs Subjected to Accidental Impact Loadings" in the Proceedings of the 7<sup>th</sup> International Conference on Civil Structural and Transportation Engineering (ICCSTE'22), held on 5-7 June 2022, Niagara Falls, Canada. https:// 10.11159/iccste22.146
- 9) Fareed, S., and **Khan, A. R.**, "Strengthening of Recycled Concrete Aggregates Two-Way RC Slabs by Externally Bonded CFRP" in the Proceedings of CICE 2020/2021-10th International Conference on Fibre-Reinforced Polymer (FRP) Composites in Civil Engineering, held on 8-10 December 2021, Istanbul, Turkey. <a href="https://link.springer.com/chapter/10.1007/978-3-030-88166-5">https://link.springer.com/chapter/10.1007/978-3-030-88166-5</a> 140
- 10) **Khan, A. R.**, and Fareed, S., "Behaviour of Recycled Aggregate RC Columns Wrapped with CFRP under Axial Compression" in the Proceedings of CICE 2020/2021-10th International Conference on Fibre-Reinforced Polymer (FRP) Composites in Civil Engineering, held on 8-10 December 2021, Istanbul, Turkey. <a href="https://link.springer.com/chapter/10.1007/978-3-030-88166-5\_46">https://link.springer.com/chapter/10.1007/978-3-030-88166-5\_46</a>
- 11) **Khan, A. R.**, and Aziz, T., "Residual Mechanical Properties of Recycled Aggregate Concrete After Exposure to Elevated Temperatures", in the proceedings of PROTECT 2019: 7th International Colloquium on Performance, Protection and Strengthening of Structures Under Extreme Loading and Events, September 16-17, 2019, Whistler, BC, Canada.
- 12) **Khan, A. R.**, and Fareed, S., "Behaviour of recycled aggregates RC columns strengthened with CFRP under uniaxial compressive loadings", in the proceedings of 10th International Conference Fibre Concrete, September17-20, 2019, Prague, Czech Republic.
- 13) **Khan, A. R.**, Khan, M.S. and Fareed, S., "Use of Recycled Concrete Aggregates in Structural Concrete", in the proceedings of 5th International Conference on Sustainable Construction Materials and Technologies (SCMT5), July 15-17, 2019, London, UK.
- 14) **Khan, A. R.**, Fareed, S., Ali S. M. S, Sajid, H., and Mustafa, M., "Behavior of Recycled Aggregate Reinforced Concrete Columns under Uniaxial Loading", in the proceedings of E2S2-CREATE and AIChE Waste Management Conference, March 11-13, 2019, Singapore.
- 15) **Khan, A. R.**, Khan, M.S. and Fareed, S., "Shear Behavior of Recycled Aggregate Concrete Beams", in the proceedings of 10th International Civil Engineering Conference (ICEC-2019), February 23-24, 2019, Karachi, Pakistan.
- 16) **Khan, A. R.**, and Fareed, S., "Behaviour of CFRP Wrapped Reinforced Concrete Columns under Uniaxial Compression" in the Proceedings of CICE 2018 9th International Conference on Fibre-Reinforced Polymer (FRP) Composites in Civil Engineering, held on 17 19 July 2018, Paris, France.
- 17) **Khan, A. R.**, Fareed, S. and Ayub, T., "Mechanical Properties of Concrete made up from Recycled Coarse Aggregates" in the Proceedings of the 14th Arab Structural Engineering Conference, ASEC14, 12 15 April 2018, Irbid, Jordan.
- 18) Fareed, S. and **Khan, A. R.**, "Parametric investigation on the behaviour of CFRP wrapped concrete columns" in the Proceedings of the Fourth Conference on Smart Monitoring, Assessment and Rehabilitation of Civil Structures, 13 15 September 2017, Zurich, Switzerland.

- 19) **Khan, A. R.**, Fareed, S. and Bhutto, M. A., "Behaviour of Short Rectangular Concrete Columns Confined with CFRP Wraps" in the Proceedings of the 6th Asia-Pacific Conference on FRP in Structures, APFIS2017, 19 21 July 2017, Singapore.
- 20) **Khan, A. R.**, "Performance of Concrete Blended with Pozzolanic Materials in Marine Environment" in the Proceedings of the International Conference on Advances in Sustainable Construction Materials & Civil Engineering Systems (ASCMCES-17), April 18 20, 2017, Sharjah, United Arab Emirates.
- 21) Masood, F., and **Khan, A. R.**, "Strengthening of Reinforced Concrete Beams with Textile Reinforced Mortar (TRM) in Flexure", in the proceedings of 8th International Civil Engineering Congress (ICEC-2016), December 23-24, Karachi, Pakistan.
- 22) **Khan, A. R.**, and Masood, F., "Strengthening of Shear deficient reinforced concrete beams with Textile reinforced mortar (TRM)", in the Proceedings of 8th International Conference on Fiber Reinforced Polymer (FRP) Composites in Civil Engineering (CICE 2016), December 14-16, 2016, Hong Kong, China.
- 23) **Khan, A. R.**, and Masood, F., "Behaviour of reinforced concrete beams strengthened with Textile Reinforced Mortar (TRM)", in the Proceedings of fib Symposium 2016, Performance-based Approaches for Concrete Structures, November 21-23, 2016, Cape Town, South Africa.
- 24) **Khan, A. R.**, and Ahmed, M. S., "Performance of Repair Materials exposed to marine environment" in the Proceedings of fib Symposium 2016, Performance-based Approaches for Concrete Structures, November 21-23, 2016, Cape Town, South Africa.
- 25) **Khan, A. R.**, Anis, M. J. and Ahmed, M. S., "Performance of blended cement concrete exposed to marine environment" in the Proceedings of Second International Conference on Performance-based and Life-cycle Structural Engineering, PLSE 2015, December 9-11, 2015, Brisbane, Australia.
- 26) Moretti, M. L. and **Khan, A. R.**, "Calculation of the compressive strength of concrete columns partially confined with CFRP" in the Proceedings of the Third Conference on Smart Monitoring, Assessment and Rehabilitation of Civil Structures, September 07-09, 2015, Antalya, Turkey.
- 27) **Khan, A. R.**, "Performance of Blended Cements exposed to marine environment" in the proceedings of 7th International Civil Engineering Congress (ICEC-2015), "Sustainable Development through Advancements in Civil Engineering" June 12-13, 2015, Karachi, Pakistan.
- 28) **Khan, A. R.**, and Masood, F., "Load-deflection curve prediction of RC beams strengthened by externally bonded CFRP wraps and strips" in the Proceedings of International Conference on Construction Materials and Structures, ICCMATS 2014, November 24-26, 2014, Johannesburg, South Africa.
- 29) **Khan, A. R.**, and Zahra, T., "Study of properties of steel fiber reinforced concrete for possible applications in Pakistan" in the Proceedings of International Conference on Construction Materials and Structures, ICCMATS 2014, November 24-26, 2014, Johannesburg, South Africa.
- 30) **Khan, A. R.**, and Zahra, T., "Performance of different types of cements in marine environment" in the Proceedings of the Civil Engineering for Sustainability and Resilience International Conference, CESARE '14, Amman, Jordan, 24-27 April 2014.
- 31) **Khan, A. R.**, and Fareed, S., "Behaviour of Reinforced Concrete Beams Strengthened by CFRP Wraps with and without End Anchorages" in the Proceedings of the Fourth International Symposium on Infrastructure Engineering in Developing Countries, IEDC 2013, December 26-28, 2013, Karachi, Pakistan.
- 32) **Khan, A. R.**, and Fareed, S., "Behaviour of concentrically and eccentrically loaded short columns confined with CFRP wraps" in the Proceedings of the Second Conference on Smart Monitoring, Assessment and Rehabilitation of Civil Structures, September 09-11, 2013, Istanbul, Turkey.
- 33) **Khan, A. R.**, and Fareed, S., "Confinement of short concrete columns with CFRP wraps subjected to concentric and eccentric loading" in the Proceedings of the Third International Conference on Concrete Repair, Rehabilitation and Retrofitting, September 02-05, 2012, Cape Town, South Africa.

- 34) **Khan, A. R.**, and Zafar, N. S., "Performance of Blended and Modified Cements Exposed to Aggressive Environments" in the Proceedings of the 12th International Conference on Durability of Building Materials and Components, April 12-15, 2011, Porto, Portugal.
- 35) **Khan, A. R.**, and Zafar, N. S., "Compressive Strength of Concrete Cylinders Confined with CFRP Wraps" in the Proceedings of The 5th International Conference on FRP Composites in Civil Engineering (CICE 2010), September 27-29, 2010 Beijing, China.
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- 37) **Khan, A. R.**, and Fareed, S., "Effect of Aggregates Derived from Marble Industry Waste on Compressive Strength of Concrete" in the Proceedings of International Conference on Future Concrete, 2010, 1-3 November, 2010, Doha, Qatar.
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#### **Honours and Awards**

- Best University Teacher Award 2010.
- Research Productivity Award 2012.

## **Professional memberships**

- Life time member of P.E.C (Pakistan Engineering Council)
- Member of ACI (American Concrete Institute) International
- Secretary/Treasurer Pakistan Chapter ACI
- International Member of ASCE (American Society of Civil Engineers)
- Member of IIFC (International Institute of FRP in Construction)
- Senior Member of RILEM
- E-Affiliate Member of Earthquake Engineering Research Institute

#### **Areas of Interests**

- Repair and Retrofitting of Reinforced Concrete Structures by Externally bonded CFRP and TRM
- Behaviour and design of recycled aggregate concrete structures
- Analysis and Design of Reinforced Concrete and Steel Structures
- Concrete Durability
- Computational Modeling, Software Development and Computer Applications in Structural Engineering
- Material Modeling using Damage Mechanics