

Dr Shamsoon Fareed



Professor

[Department of Civil Engineering](#)

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Research Output	55	29	26
	Publications	Journal	Conference
Secured Research Grants	447,508 USD		

PROFESSIONAL APPOINTMENTS

2025 - Present Professor

Department of Civil Engineering, NED University of Engineering & Technology,
Karachi, Pakistan

2022 - 2025 Associate Professor

Department of Civil Engineering, NED University of Engineering & Technology,
Karachi, Pakistan

2017 - 2022 Assistant Professor

Department of Civil Engineering, NED University of Engineering & Technology,
Karachi, Pakistan

2009 - 2017 Lecturer

Department of Civil Engineering, NED University of Engineering & Technology,
Karachi, Pakistan

2013 - 2014 Independent Distance Learner Tutor

The School of Energy, Geoscience, Infrastructure and Society, Heriot-Watt
University, UK

2011 - 2015 **Teaching Assistant**
The School of Energy, Geoscience, Infrastructure and Society, Heriot-Watt University, UK

2007 - 2009 **Lecturer**
Department of Civil Engineering, Sir Syed University of Engineering & Technology, Karachi, Pakistan

RESEARCH INTERESTS

Subsea Pipes, Reinforced concrete members, Accidental Loading (Impact, Blast), Materials under High Loading Rates, Finite Element modelling, Strengthening /Retrofitting of Structural Members using Fibre Reinforced Polymers, Recycled Aggregate Concrete, Shear Behaviour of Reinforced Concrete Beams, Artificial Intelligence, Structural Health Monitoring

RESEARCH PROJECTS & GRANTS

2023 - Present	Project Title	Indigenous Development of High-Performance Textiles Based Composite Structural Reinforcement System for Civil Infrastructure
	Funding Amount	42000 USD
	Funding Agency	Higher Education Commission, Pakistan
	Role	Co-Principal Investigator

2023 - Present	Project Title	Constitutive Modelling of Ultra High Performance Concrete
	Funding Amount	10500 USD
	Funding Agency	MoST Endowment Fund, NED University of Engineering & Technology
	Role	Co-Principal Investigator

2023 - Present	Project Title	Experimental & Numerical Investigation of Slender Reinforced Concrete Beams Subjected to High Mass Low Velocity Impacts
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	Funding Amount	10500 USD
	Funding Agency	MoST Endowment Fund, NED University of Engineering & Technology
	Role	Co-Principal Investigator
2022 - Present	Project Title	Impact behaviour of Ultra High Strength Concrete RC structural members
	Funding Amount	53060 USD
	Funding Agency	Higher Education Commission, Pakistan
	Role	Principal Investigator
2021 - Present	Project Title	Development of unburnt, ecofriendly, interlocking masonry units incorporating industrial wastes: A way forward to low-cost housing
	Funding Amount	26828 USD
	Funding Agency	Higher Education Commission, Pakistan
	Role	Co-Principal Investigator
2021 - Present	Project Title	Technology Enabled Performance Monitoring and Virtual Digitization of CPEC Infrastructure for Sustainable Maintenance Decision-Making
	Funding Amount	210224 USD
	Funding Agency	Higher Education Commission, Pakistan
	Role	Co-Principal Investigator
2017 - 2020	Project Title	Behaviour and Design of Recycled Aggregate Concrete Structures
	Funding Amount	135000 USD
	Funding Agency	Higher Education Commission, Pakistan
	Role	Co-Principal Investigator

2019 - 2020	Project Title	Strengthening & Retrofitting of Reinforced Concrete Structures using Fibre Reinforced Polymer Composites
	Funding Amount	7150 USD
	Funding Agency	NED University of Engineering & Technology, Pakistan.
	Role	Principal Investigator

2016 - 2019	Project Title	Design Theory and Assessment of Recycled Concrete Structures in Earthquake Prone Regions
	Funding Amount	40,666 USD
	Funding Agency	Pakistan Science Foundation & National Natural Science Foundation of China (NSFC)
	Role	Team Member

RESEARCH STUDENTS

2022 - Present	Ayesha Ayub, Ph.D. Scholar	
	NED University of Engineering & Technology, Karachi, Pakistan	
	Project Title	Development and Modelling of Ultra High Performance Concrete
	Role	Co- Supervisor
	Description	The study focuses on understanding the effects of different types of fibre and SCMs on the mechanical properties of UHPC. The experimental research and constitutive modelling is the main methodology for investigating the mechanical and time dependent properties of UHPC. For numerical investigation the focus is on rigid pavement performance.
		Comparative study of UHPC structures will be helpful in promoting UHPC structures in Pakistan. So, in the final phase of the research, the results will be compared and the

guidelines will be proposed for the application of UHPC in construction industry in Pakistan.

2021 - 2022

Juwairia Asad, Post Graduate Research Assistant

NED University of Engineering & Technology, Karachi, Pakistan

Project Title	Two Way Reinforced Concrete Slabs Under Blast Loading
Role	Supervisor
Description	The study aims to investigate numerically the behaviour of the RC two-way slabs under such abnormal conditions. The blast loading will be modeled as CONWEP loading which allows you to impose pressure loading due to an explosion in air and thus avoid need to model the fluid medium. The loading is defined by the location of the explosion, the time of detonation, and the loading surfaces.

2020 - Present

Samra Masood, Ph.D. Scholar

NED University of Engineering & Technology, Karachi, Pakistan

Project Title	Impact Resistance of Structural Elements
Role	Co-Supervisor
Description	The work will be conducted to investigate both experimentally and numerically the response of the reinforced concrete (RC) structural elements subjected to low-velocity impact loads. Based on the critical review of the experimental studies, a series of impact tests will be conducted on RC structural elements using a drop weight test setup. These test results will then be used to validate the non-linear finite element analysis using the finite element package. Following the validation, a detailed parametric investigation focusing on studying the influence of different parameters on the impact behaviour of the RC structural elements will be conducted. Based on the investigation

conducted detailed design curves will be produced that can present the residual capacity or degree of damage sustained by these structural elements when subjected to certain levels of impact energies generated due to the accidental loadings.

2020 - Present

Laiba Ayub, Post Graduate Research Assistant

Project Title	Mechanical Properties of Ultra-High Strength Concrete
Role	Supervisor
Description	The work will be conducted to investigate the influence of different types of fibres on behavior of ultra-high-strength concrete (UHSC). Initially, the mechanical properties of UHSC will be studied experimentally, which will be followed by the investigation on the use of UHSC in structural elements under different loading conditions.

2019 - 2023

Fatima Khalid, Ph.D. Scholar

Project Title	Artificial Intelligence Based Constitutive Modelling of Recycled Aggregate Concrete
Role	Co-Supervisor
Description	The study will focus on constitutive modelling of RAC within the framework of damage mechanics to predict its behavior under multiaxial states of stress. Different parameters involved in the development of constitutive model will be estimated using the artificial intelligence (AI) techniques. These parameters include compressive and tensile strengths of concrete, Elastic modulus, Poisson's ratio along with parameters, α , β and γ that will be introduced in the effective compliance matrix to take care of essential features of concrete like different behavior in tension and compression, stiffness degradation, strain softening, gain in strength

under confinement and volumetric dilatation. Parameters α, β and γ are function of compressive strength of concrete, Elastic modulus and stress paths. AI techniques will be used to estimate the mechanical properties of RAC, as well as the parameters α, β and γ . Existing natural concrete (NC) models will be modified to incorporate effect of replacement of natural coarse aggregate with recycled coarse aggregate. Constitutive model will be formulated in such a way that it can be easily incorporated in finite element codes.

2018 - 2020

Rida Nasir, Post Graduate Research Assistant

Dissertation Title Behaviour of Recycled Aggregate Concrete Columns

Role Co-Supervisor

Description The study investigated the behaviour of recycled aggregate concrete columns under uniaxial compressive loading experimentally and numerically. Maximum axial load and failure modes of columns were examined experimentally. Numerical modelling was carried out to numerically simulate the response of recycled aggregate concrete columns on ATENA 3D. For this purpose, database of experiments performed in literature were collected and were used to validate the results obtained after the numerical simulations which was followed by detailed numerical investigation.

2017 - 2019

Muhammad Saad Khan, Post Graduate Research Assistant

Project Title Structural Behaviour of Recycled Aggregate Concrete

Role Co-Supervisor

Description An experimental study was carried out on the structural behaviour of RAC beam specimens. RAC beam specimens,

designed to fail in shear and flexure, at four replacement levels of recycled aggregates (30%, 50%, 70% and 100%) were tested under two-point bending. Furthermore, existing formulations for NAC were used to predict strengths of all beam specimens. Compressive, splitting tensile and flexural tensile strengths for RAC mixes were found to be lower than NAC. It was observed that recycled coarse aggregate (RCA) inclusion did not have noticeable difference in strength for flexure critical beam specimens. For shear critical specimens, strength variation was also found to be less significant too except for 100% replacement level which exhibited prominent decline in strength. Ultimate deflections were higher and initial stiffness of all RAC beam specimens were lower than NAC beam specimens. Strength predicting formulations for NAC are found to be adequate for tension-controlled flexure critical and shear critical beams without transverse reinforcement made up of RAC. Lastly, load deflection response of all specimens was studied in ATENA (finite element program) by using material model of NAC to see the applicability on RAC specimens, simulated response was found to be in reasonable agreement with experimental results.

RESEARCH OUTPUT

2025

[Pre-and post-peak stress-strain response of recycled aggregate concrete: Experimental and numerical investigation](#)

Khalid, F., Khan, A.-u. and **Fareed, S.**, *Computers & Concrete*, Volume 35, Number 5, May 2025, pages 483-495 DOI: <https://doi.org/10.12989/cac.2025.35.5.483>

Research output: Journal Article

Estimation of parameters for constitutive modelling of recycled aggregate concrete using artificial neural networks

Khalid, F., Khan, A.-u. and **Fareed, S.**, *Engineering Computations*, Vol. ahead-of-print No. ahead-of-print. <https://doi.org/10.1108/EC-07-2024-0679>

Research output: Journal Article

2024

Mechanical properties of Kevlar and jute fiber reinforced concrete

Fareed, S., Zahid, B., & Khan, A. R. *J Sustain Const Mater Technol*, 9(2), 128–137(2024).
<https://doi.org/10.47481/jscmt.1500347>.

Research output: Journal Article

Simulation of Reinforced Recycled Aggregate Concrete Frames Subjected to Seismic Loading

Khan, AuR., **Fareed, S.** & Khalid, F. *Arabian Journal for Science and Engineering*, (2024).
<https://doi.org/10.1007/s13369-024-09172-6>

Research output: Journal Article

Simulation of Reinforced Concrete Slabs in Residential Buildings Under Internal Gas Blast

Fareed, S., Asad, J. & Khan, AuR. *Arabian Journal for Science and Engineering*, (2024).
<https://doi.org/10.1007/s13369-024-09100-8>

Research output: Journal Article

Parameters Influencing the Behaviour of RC Flat-Slabs Under Column-Loss Scenario

S. Fareed, A. F. Muhammad and A. Alluqmani, *Journal of Al-Azhar University Engineering Sector*, 2024 vol. 19, pp. 514-523, 2024. [DOI:10.21608/aej.2024.257985.1557](https://doi.org/10.21608/aej.2024.257985.1557)

Research output: Journal Article

Rutting performance of cement-treated base and hot mix asphalt layer in flexible pavements containing recycled concrete aggregates

Asad-ur-Rehman Khan, A. Ayub, A. Qadir & S. Fareed *International Journal of Pavement Engineering* (2024), 25:1 <https://doi.org/10.1080/10298436.2023.2297945>

Research output: Journal Article

2023

Behavior of Reinforced Recycled Aggregate Concrete Beams and Slabs Strengthened in Flexure And Punching with CFRP Composites

Fareed, S. & Khan, AuR. *The Journal of the Textile Institute*, (2023). <https://doi.org/10.1080/00405000.2023.2281020>

Research output: Journal Article

Residual Mechanical Properties of Concrete with 30% Recycled Concrete Aggregates Exposed to Elevated Temperatures

Khan, AuR., Fareed, S. & Aziz, T. *Iran J Sci Technol Trans Civ Eng*, (2023). <https://doi.org/10.1007/s40996-023-01253-0>

Research output: Journal Article

Simulation of Size Effect and Strength Prediction in Normal to Ultra High Strength Concrete Shear Deficient RC Beams

Fareed, S., Ayub, L. & Khan, AuR., *Advances in Civil Engineering Materials*, (2023). <https://doi.org/10.1520/ACEM20230001>

Research output: Journal Article

Numerical Investigation on the Efficacy of CFRP Jackets for Retrofit of Reinforced Concrete Columns with Sparse Stirrups.

Khan, AuR., Moretti, M.L., & Fareed, S. *Building for the Future: Durable, Sustainable, Resilient. fib Symposium 2023. Lecture Notes in Civil Engineering*, (2023). https://doi.org/10.1007/978-3-031-32511-3_44

Research output: Conference Proceedings

Behaviour of Reinforced Recycled Aggregate Concrete Beams Subjected to Torsional Loading.

Khan, AuR., Fareed, S. & Khalid, F. *Building for the Future: Durable, Sustainable, Resilient. fib Symposium 2023. Lecture Notes in Civil Engineering*, (2023). https://doi.org/10.1007/978-3-031-32519-9_81

Research output: Conference Proceedings

2022

Simulation of Reinforced Concrete Columns Strengthened with CFRP Wraps.

Khan, AuR., Nasir, R. & Fareed, S. *Int J Civ Eng* (2022). <https://doi.org/10.1007/s40999-022-00768-3>

Research output: Journal Article

Parametric investigation on behaviour of carbon fiber reinforced polymers wrapped reinforced concrete columns under eccentric loads

S. Fareed, L. Ayub, A.R. Khan, *Materialwiss. Werkstofftech.* 2022, 53, 918.
<https://doi.org/10.1002/mawe.202200024>

Research output: Journal Article

Simulation and Strength Prediction of Reinforced Recycled Aggregate Concrete Short Columns

Asad-ur-Rehman Khan, Rida Nasir & Shamsoon Fareed, *Arabian Journal for Science and Engineering*, (2022). <https://doi.org/10.1007/s13369-022-07034-7>

Research output: Journal Article

Parametric Investigation on the Performance of RC Slabs Subjected to Accidental Impact Loadings

Fareed S., Khan AR., Proceedings of the 7th International Conference on Civil Structural and Transportation Engineering (ICCSTE'22) Niagara Falls, Canada – June 05-07, 2022 Paper No. 146
<https://doi.org/10.11159/iccste22.146>

Research output: Article in conference proceedings

Behaviour of Recycled Aggregate RC Columns Wrapped with CFRP Under Axial Compression.

Khan AR., Fareed S., In: Ilki A., Ispir M., Inci P. (eds) 10th International Conference on FRP Composites in Civil Engineering. CICE 2021. Lecture Notes in Civil Engineering, vol 198. Springer, Cham (2022).
https://doi.org/10.1007/978-3-030-88166-5_46

Research output: Article in conference proceedings

Strengthening of Recycled Concrete Aggregates Two-Way RC Slabs by Externally Bonded CFRP

Fareed S., Khan AR., In: Ilki A., Ispir M., Inci P. (eds) 10th International Conference on FRP Composites in Civil Engineering. CICE 2021. Lecture Notes in Civil Engineering, vol 198. Springer, Cham (2022).
https://doi.org/10.1007/978-3-030-88166-5_140

Research output: Article in conference proceedings

2021

Impact Behavior of Bridge RC Columns and Piers under Vehicular Collision.

Shamsoon Fareed, Ali Almonbhi, Wadea Sindi, Ayed Alluqmani, *Journal of Jazan University for Applied Sciences*, 2021, Vol 9, No.1.

Research output: Journal Article

Behaviour and Strength Prediction of Reinforced Recycled Aggregate Concrete Columns Confined with CFRP Wraps

Asad-ur-Rehman Khan, Shamsoon Fareed, Rida Nasir & Jianzhuang Xiao, *Iranian Journal of Science and Technology, Transactions of Civil Engineering*, (2021)
<https://doi.org/10.1007/s40996-021-00779-5>

Research output: Journal Article

Dynamic Compressive Strength of Recycled Aggregate Concrete

Shamsoon Fareed, Asad-ur-Rehman Khan, Samra Masood, *International Journal of Materials*, (2021)
<https://doi.org/10.46300/91018.2021.8.7>

Research output: Journal Article

Bridge Steel Fiber Reinforced Concrete Specimens under High Loading Rates

Shamsoon Fareed, Pegah Behinaein, Ali Almonbhi, Wadea Sindi, Ayed Alluqmani, *Journal of King Saud University - Engineering Sciences*, 2021

<https://doi.org/10.1016/j.jksues.2021.08.011>.

Research output: Journal Article

Elasto-Damage constitutive modelling of recycled aggregate concrete

Fatima Khalid, Asad-ur-Rehman Khan, and Shamsoon Fareed, *COMPUTERS & CONCRETE, AN INTERNATIONAL JOURNAL* (2021)

<https://doi.org/10.12989/cac.2021.28.1.013>

Research output: Journal Article

Elasto-Damage Constitutive Modelling of Recycled Aggregate Concrete

Asad-ur-Rehman Khan, Fatima Khalid and Shamsoon Fareed, *INTERNATIONAL JOURNAL OF MATERIALS*

<https://doi.org/10.46300/91018.2020.7.16>

Research output: Journal Article

Use of high strength technical textiles in strengthening of reinforced concrete structural elements

Asad-ur-Rehman Khan , Shamsoon Fareed & Bilal Zahid, *The Journal of The Textile Institute*, (2021)

<https://doi.org/10.1080/00405000.2020.1870784>

Research output: Journal Article

2020

Parameters affecting the behaviour of steel pipes under impact loading

S.Fareed, D.M.Cotsovos, O.Laghrouche, *International Journal of Pressure Vessels and Piping*, (2020).

<https://doi.org/10.1016/j.ijpvp.2020.104152>

Research output: Journal Article

Behaviour and Residual Strength Prediction of Recycled Aggregates Concrete Exposed to Elevated Temperatures

Khan, AR., Aziz, T., Fareed, S., Xiao J, *Arabian Journal for Science and Engineering*, (2020).

<https://doi.org/10.1007/s13369-020-04682-5>

Research output: Journal Article

2019

Structural Behaviour and Strength Prediction of Recycled Aggregate Concrete Beams

Khan, AR., Khan, M.S., Fareed, S., Xiao J *Arabian Journal for Science and Engineering*, (2019).

<https://doi.org/10.1007/s13369-019-04195-w>

Research output: Journal Article

[Behaviour of recycled aggregates RC columns strengthened with CFRP under uniaxial compressive loadings](#)

Khan A. R and Fareed S. *Proceedings of the 10th International Fiber Concrete Conference 2019*

Research output: Article in conference proceedings

[Use of Recycled Concrete Aggregates in Structural Concrete](#)

Khan A. R, Fareed S. and Khan, M. S, *Proceedings of the Fifth International Conference on Sustainable Construction Materials and Technologies (SCMT5)*

Research output: Article in conference proceedings

[Behavior of Recycled Aggregate Reinforced Concrete Columns under Uniaxial Loading](#)

Khan A. R, Shamsoon Fareed. Hamais Sajid, Maham Mustafa Syed M. Shamaim Ali, *Proceedings of the E2S2-CREATE and AIChE Waste Management Conference*

Research output: Article in conference proceedings

[Shear Behavior of Recycled Aggregate Concrete Beams](#)

Khan A. R, Shamsoon Fareed. Muhammad Saad Khan 2019, *Proceedings of the 10th International Civil Engineering Conference, The Institution of Engineers Pakistan*

Research output: Article in Conference proceedings

2018

[Behaviour of reinforced concrete slabs under accidental impacts](#)

Shamsoon Fareed. 2018, *Proceedings of the Fourth Australasia and South-East Asia Structural Engineering and Construction Conference (ASEA-SEC-04), The International Structural Engineering and Construction Society.*

Research output: Article in Conference proceedings

[Behaviour of CFRP wrapped reinforced concrete columns under uniaxial compression](#)

Asad-ur Rehman khan and Shamsoon Fareed. 2018, *Proceedings of the 9th International conference on Fiber Reinforced Polymer Composites in Civil Engineering CICE2018*, International Institute for FRP in construction.

Research output: Article in Conference proceedings

[Mechanical properties of concrete made up from recycled coarse aggregates](#)

Khan A. R, Fareed S. and Ayub T. 2018, *Proceedings of the 14th ASEC conference*, Jordan University of Science & Technology.

Research output: Article in conference proceedings

2017

[Parametric investigation on the behaviour of CFRP wrapped concrete columns](#)

Shamsoon Fareed and Asad-ur Rehman khan. 2017, *Proceedings of the 4th International Conference on Smart Monitoring, Assessment and Rehabilitation of Civil Structures SMAR2017*. Empa and ITÜ

Research output: Article in conference proceedings

[Behaviour of short rectangular concrete columns confined with CFRP wraps](#)

Asad-ur Rehman khan, Shamsoon Fareed and Muhammad A. Bhutto. 2017, *Proceedings of the 6th International conference on Fiber Reinforced Polymer in Structures APFIS2017*. International Institute for FRP in construction.

Research output: Article in Conference proceedings

2016

[Assessing the behaviour of subsea pipes under impact](#)

Fareed S, Cotsovos D.M, and Lagrouche O. 2016, *Proceedings of the ASME 2016 Pressure Vessels and Piping Conference PVP2016*. The American Society of Mechanical Engineers.

Research output: Article in conference proceedings

2015

[Shear strength of reinforced concrete beams – Relational data base](#)

Shuaib H. Ahmad, S.F.A.Rafeeqi and Shamsoon Fareed. 2015, *Iranian Journal of Science and Technology, Transactions of Civil Engineering*, p. 53-63.

Research output: Journal article

2014

[Shear strength of normal and light weight reinforced concrete slender beams without web reinforcement](#)

Shuaib H. Ahmad, Shamsoon Fareed and S.F.A.Rafeeqi. 2014, *American Journal of Civil Engineering and Architecture*, p. 33-41.

Research output: Journal article

[Impacted Subsea Pipes under Internal Pressure](#)

Fareed S, and May I. M. 2014, *Proceedings of the Infrastructure and Environment Scotland 2nd Postgraduate Conference*. Edinburgh University, United Kingdom.

Research output: Article in conference proceedings

[Response of mild steel pipes under high mass low velocity impacts](#)

Fareed S, and May I. M. 2014, *Proceedings of the ASME 2014 33rd International Conference on Ocean, Offshore and Arctic Engineering, OMAE2014*. The American Society of Mechanical

Engineers.

Research output: Article in conference proceedings

High mass low velocity impacts on steel pipes

Shamsoon Fareed. 2014, *Proceedings of the 16th Young Researchers Conference*. The Institution of Structural Engineers.

Research output: Article in conference proceedings

2013

Shear Predictions of Eurocode EC2

Shuaib H. Ahmad, S.F.A.Rafeeqi and Shamsoon Fareed. 2013, *American Journal of Civil Engineering and Architecture*, p. 43-46.

Research output: Journal article

Behaviour of Reinforced Concrete Beams Strengthened by CFRP Wraps with and without End Anchorages

Asad-ur Rehman khan and Shamsoon Fareed. 2013, *Proceedings of the Fourth International Symposium on Infrastructure Engineering in Developing Countries, IEDC2013*. Department of Urban and Infrastructure Engineering, NED University of Engineering and Technology.

Research output: Article in conference proceedings

Impact strength of steel pipes

Shamsoon Fareed. 2013, *Proceedings of the 15th Young Researchers Conference*. The Institution of Structural Engineers.

Research output: Article in conference proceedings

Transverse Impact on Mild Steel Pipes

Shamsoon Fareed. 2013, *Proceedings of the Infrastructure and Environment Scotland 1st Postgraduate Conference*. Heriot Watt University, United Kingdom.

Research output: Article in conference proceedings

Behaviour of short concrete columns subjected to eccentric loading confined with CFRP

wraps

Asad-ur Rehman khan and [Shamsoon Fareed](#). 2013, *Proceedings of the 2nd International Conference on Smart Monitoring, Assessment and Rehabilitation of Civil Structures SMAR2013*. Empa and ITÜ

Research output: Article in conference proceedings

2012

Size effect on shear strength of high strength- high performance slender reinforced concrete beams

Shuaib H. Ahmad, S.F.A.Rafeeqi and [Shamsoon Fareed](#). 2012, *Proceedings of the 11th International Conference on Concrete Engineering and Technology*. Centre for Innovative Construction Technology (CICT), Dept. of Civil Engineering, Faculty of Engineering, University of Malaya.

Research output: Article in conference proceedings

Shear strength of normal and light weight reinforced concrete deep and short beams without web reinforcement

[Shamsoon Fareed](#), S.F.A.Rafeeqi and Shuaib H. Ahmad. 2012, *Research Journal in Engineering and Applied Sciences*, p. 1-6.

Research output: Journal article

Shear capacity of normal and light weight reinforced concrete deep and short beams without web reinforcement

Shuaib H. Ahmad, S.F.A.Rafeeqi and [Shamsoon Fareed](#). 2012, *International Journal of civil, structural, environmental and infra structure Engineering*, p. 73-81.

Research output: Journal article

Confinement of short concrete columns with CFRP wraps subjected to concentric and eccentric loading

Asad-ur Rehman khan and [Shamsoon Fareed](#). 2012, *Proceedings of the 3rd International conference on Concrete Repair, Rehabilitation and Retrofitting, ICCRRR2012*. RILEM

Research output: Article in conference proceedings

2011

Shear strength of normal and light weight reinforced concrete deep beams without web reinforcement

S.F.A.Rafeeqi Shuaib H. Ahmad and [Shamsoon Fareed](#). 2011, *Journal of Emerging Trends in Engineering and Applied Sciences*, p. 967-971.

Research output: Journal article

Effect of aggregates derived from marble industry waste on compressive strength of concrete

Asad-ur Rehman khan and [Shamsoon Fareed](#). 2012, *Proceedings of the 3rd International Conference on Future Concrete*. Advanced Construction Technology Services.

Research output: Article in conference proceedings

TECHNICAL COMMITTEE

Member Application of Monitoring Technology for Infrastructure Maintenance (TC28)

The Asian Civil Engineering Coordinating Council (ACECC)

RESEARCH STUDENTS

2020 - Present **Samra Masood, Ph.D. Scholar**

NED University of Engineering & Technology, Karachi, Pakistan

Project Title Impact Resistance of Structural Elements

Role Co-Supervisor

2020 - Present **Laiba Ayub, Post Graduate Research Assistant**

Project Title Mechanical Properties of Ultra-High Strength
Concrete

Role Supervisor

2019 - Present **Fatima Khalid, Ph.D. Scholar**

Project Title Artificial Intelligence Based Constitutive Modelling
of Recycled Aggregate Concrete

Role Co-Supervisor

2018 - 2020 **Rida Nasir, Post Graduate Research Assistant**

Dissertation Title Behaviour of Recycled Aggregate Concrete
Columns

Role Co-Supervisor

2017 - 2019

Muhammad Saad Khan, Post Graduate Research Assistant

Project Title Structural Behaviour of Recycled Aggregate
Concrete

Role Co-Supervisor