# Muhammad Bilal Waris, Ph.D.

Associate Professor, Department of Civil and Architectural Engineering, Sultan Qaboos University, Muscat 123, Oman. Office: +968 2414 2589 Fax No.: +968-2414-1331 E-mail: waris@squ.edu.om; bilal.waris@gmail.com Scopus: https://www.scopus.com/authid/detail.uri?authorId=56868397500 Google Scholar: https://scholar.google.com/citations?hl=en&user=2zTWAEsAAAAJ Researchgate: https://www.researchgate.net/profile/Muhammad-Bilal-Waris

# **PROFESSIONAL MEMBERSHIPS**

- 1. Member, American Society of Civil Engineers
- 2. Member, Society of Building Science Educators
- 3. Member, Pakistan Engineering Council
- 4. Member, Oman Society of Engineers

# EDUCATION AND EMPLOYMENT

#### **EDUCATION**

- 2010 Ph.D. in Civil Engineering (The University of Tokyo, Japan)
- 2007 M.Sc. in Civil Engineering (The University of Tokyo, Japan)

2004 B.Sc. in Civil Engineering (University of Engineering & Technology, Lahore, Pakistan)

# **EMPLOYMENT HISTORY**

#### May 2024 – to date

Associate Professor, Department of Civil and Architectural Engineering, Sultan Qaboos University, Sultanate of Oman

#### Sep 2011 – May 2024

Assistant Professor, Department of Civil and Architectural Engineering, Sultan Qaboos University, Sultanate of Oman

#### Oct 2010 – Aug 2011

Lecturer, Department of Civil Engineering, University of Engineering and Technology, Lahore, Pakistan.

# Oct 2005 –Sept 2010

Lecturer (On Study Leave), Department of Civil Engineering, University of Engineering and Technology, Lahore, Pakistan.

# Apr 2004 –Sept 2005

Lecturer, Department of Civil Engineering, University of Engineering and Technology, Lahore, Pakistan.

# Awards and Recognition

- 1. Excellent Performance Award (Ejada), College of Engineering, Sultan Qaboos University, 2023.
- 2. Distinguished Academician Award, College of Engineering, Sultan Qaboos University, 2021.
- 3. Japanese Ministry of Education and Cultural Exchange (MEXT) scholarship for Ph.D., 2007 2010.
- 4. Japanese Ministry of Education and Cultural Exchange (MEXT) scholarship for M.Sc., 2005–2007.

# TEACHING

# UNDERGRADUATE LEVEL

# At the University of Engineering and Technology, Lahore, Pakistan (2004-2005, 2010-2011)

- 1. Basic Mechanics (Once)
- 2. Engineering Drawing (Once)
- 3. Building Construction and Materials (2 times)
- 4. Structures-I (Once)
- 5. Plain and Reinforced Concrete-I (3 times)
- 6. Plain and Reinforced Concrete-II (2 times)
- 7. Design of Structures (2 times)

# At Sultan Qaboos University, Muscat, Oman (2011 - Onwards)

- 1. Statics (2 times)
- 2. Basic Mechanics (7 times)
- 3. Probability and Statistics for Engineers (3-times)
- 4. Steelwork Design (20 times)
- 5. Architectural Engineering Graduation Project-II (1-time)

# **POSTGRADUATE LEVEL**

# At the University of Engineering and Technology, Lahore, Pakistan (2010-2011)

- 1. Advanced Concrete Design (Once).
- 2. Earthquake Engineering (Once).

# At Sultan Qaboos University, Muscat, Oman (2011 - Onwards)

- 1. Advanced Concrete Design (Once)
- 2. Bridge Structures (4 times)
- 3. Finite Element Methods (13 times)

- 4. Structural Dynamics (2-times)
- 5. Advanced Engineering Mathematics (Once)
- 6. Seismic Design of Buildings (2 times)

# SCHOLARLY WORK

# RESEARCH GRANTS

# As principal investigator

- 1. Use of Ferrochrome Slag and Spent Catalyst for 3D-Printing of Geopolymer (3DPG), Sep 2024 Jun 2025. **800 OMR** (College of Engineering, IR4-Project)
- 2. Developing 3D printing capabilities using indigenous local materials for the construction sector in Oman, Sep 2023 Aug 2026. **58,000 OMR** (His Majesty's Trust Fund)
- 3. Use of Recycled Tires in Non-Structural Concrete, Jan 2023 Dec 2024. **5,800 OMR** (SQU-Internal Grant)
- 4. A Green Cement-based Mortar for 3D Printing using Ferro-Chrome Slag (FCS) and Ground Tire Rubber (GTR), Sep 2022 Jun 2023. **800 OMR** (College of Engineering, IR4-Project)
- 5. Application of Wavelet Analysis for Damage Detection in Structures, Jan Dec 2013. **3,000 OMR** (SQU-Internal Grant)

# CONSULTANCIES

# As investigator

1. Technical Review of Pre-fabricated Structural Systems from Peikko Company, Jan - Feb 2024. **3,000 OMR** (Peikko Gulf LLC).

# PUBLISHED REFEREED JOURNAL PAPERS

- 1. Waris M.B., Al-Jabri K., Al-Rawahi U., and Al-Nuaimi A. **2023**. Comparison of Seismic and Wind Actions on Medium to High-Rise Buildings in Muscat, Oman. The Journal of Engineering Research [TJER], 20(2), 149–160. DOI: 10.53540/tjer.vol20iss2pp149-160
- Sohel K.M.A., Al-Jabri K.S., Abdulqader Z.H.A., and Waris M.B. 2023. Effect of Post High-Temperature Exposure on the Behaviour of Composite Column with Ferrochrome Slag as a Fine Aggregate, *Fire Technology*. DOI: 10.1007/s10694-023-01505-5
- Al-Jabri K.S., Hago A.W., Tavakoli D., Waris M.B., Hassan H.F., & Mohamedzein Y. 2022 Investigating Thermal Cracking in Mass Concrete of a Bridge Abutment: Field Measurements and Numerical Modelling, Australian Journal of Civil Engineering, DOI: 10.1080/14488353.2022.2145031.
- 4. Waris M.B., Al-Jabri K.S. and Hussain I. 2022. Comparison of Oman Seismic Code with International Counterparts based on Regional Seismic Hazard, *The Journal of Engineering Research (TJER)*, **19(1)**: 1-12.
- 5. Waris M.B., Najwani H., Al-Jabri K.S. and Al-Saidy A. *2018*. Use of Recycled Tyre Rubber in Non-structural Concrete. *MATEC Web of Conferences*, **203**, 06001.
- 6. Al-Rawahi Z. and **Waris M.B. 2017.** Use of Recycled Tires in Non-structural Concrete. *MATEC Web* of Conferences, **120**, 03002.

- 7. Waris M.B., Ali N. and Al-Jabri K.S. *2016*. Use of Recycled Tire in Concrete for Partial Aggregate Replacement, IJSCER **5(4)**: 273-276.
- 8. Al-Saidy A.H., Saadatmanesh H., El-Gamal S., Al-Jabri K.S. and **Waris M.B. 2016**. Structural Behavior of Corroded RC Beams with/without Stirrups Repaired with CFRP Sheets. *Materials and Structures*, **49(9)**: 3733-3747, DOI: 10.1617/s11527-015-0751-y.
- 9. Al-Jabri K.S., Pillay P., **Waris M.B.** and Pervez T. **2016**. Modeling of Composite Beam-Column Flexible Endplate Joints at Elevated Temperature. *Composite Structures*, **143**:180–188.
- Al-Jabri K.S., Waris M.B. and Al-Saidy A.H. 2016. Effect of Aggregate and Water to Cement ratio on Concrete Properties at Elevated Temperatures, *Fire and Materials*, 40: 913-925, DOI: 10.1002/fam.2351.
- 11. Waris M.B. and Ishihara T. 2012. Dynamic Response Analysis of Floating Offshore Wind Turbine with Different Types of Heave Plates and Mooring Systems by using a Fully Nonlinear Model. *Coupled Systems Mechanics*, 1(3): 247-268.

# CONFERENCE PROCEEDINGS AND BOOK OF ABSTRACTS

- 1. Al-Jabri K., Pervez T., Alalouch C. and **Waris M.B.** (Eds.) **2018**. Proceedings of 28<sup>th</sup> Arab Engineering Conference, Muscat, Oman. 11-13 December 2018 (ISBN: 978-99969-1-962-6).
- 2. Alalouch C. and **Waris M.B.** (Eds.) **2018**. Book of Abstracts: 1<sup>st</sup> National Conference on Civil and Architectural Engineering, 25-28 March 2018, Muscat, Oman (ISBN: 978-99969-3-060-7).
- 3. Sana A., Hewawasam L. and **Waris M.B.** (Eds.) **2015**. Book of Abstracts: Fifth International Conference on Estuaries and Coasts, November 2-4, 2015, Muscat, Oman (ISBN: 978-99969-0-595-7).
- 4. Sana A., Hewawasam L. and **Waris M.B.** (Eds.) **2015**. Proceedings of the Fifth International Conference on Estuaries and Coasts, November 2-4, 2015, Muscat, Oman (USB Flash Disk).

# **BOOK CHAPTERS**

- 1. Waris M.B., Al-Jabri K., Bhuta W.H., and El-Hussain I. **2022.** Incremental Dynamic Analysis of a Hospital Building in Oman. In: *Current Perspectives and New Directions in Mechanics, Modeling, and Design of Structural Systems– Zingoni (ed.)*: 128-131. DOI: 10.1201/9781003348443-20.
- Waris M.B., Al-Hadi H., and Al-Nuaimi A. 2022. Influence of Infill Walls on Lateral Load Carrying Capacity of Buildings. In: *Current Perspectives and New Directions in Mechanics, Modeling, and Design of Structural Systems– Zingoni (ed.):* 203-207. DOI: 10.1201/9781003348443-32.

# **CONFERENCE PROCEEDINGS**

- Waris M.B., Al-Jabri K., Al-Salmiyah M., and Sohel K.M.A. Experimental Study on the Behaviour of Bolted Steel Angle Connections Under Tension. In: *Proceeding of the 10<sup>th</sup> International Conference on Steel and Aluminium Structures (ICSAS2024), Rio de Janeiro, Brazil,* 5 - 7 June 2024.
- 2. Al-Alawi M., Ekyalimpa R., **Waris M.B.**, Al-Jabri K. An Advanced Neutral Network (ANN) Model for Predicting the Behaviour of Angle Joints with More Than one Bolt Rows Under Axial Tensile

Actions. In: Proceeding of the 10<sup>th</sup> International Conference on Steel and Aluminium Structures (ICSAS2024), Rio de Janeiro, Brazil, 5 - 7 June **2024**.

- Al-Abri A., Waris M.B., Al-Jabri K. and Sohel K.M.A. Use of Ground Tire Rubber in Concrete A Review and Way Forward. In: Proceeding of the 2<sup>nd</sup> International Conference on Sustainable Development and Innovation (ICSDI2024), Riyadh, Saudi Arabia, 18 - 24 February 2024.
- Sohel K.M.A., Al-Jabri K., Abdulqader Z.H.A., and Waris M.B. Effect of Post High-Temperature Exposure on the Behavior of Composite Column with Ferrochrome Slag as a Fine Aggregate. In: Proceedings of the 12<sup>th</sup> International Conference on Structures in Fire (SiF2022), Hong Kong, China, 30 Nov - 2 Dec 2022.
- Waris M.B., Al-Jabri K., Bhuta W.H. and El-Hussain I. Incremental Dynamic Analysis of a Hospital Building in Oman. In: Proceedings of 8<sup>th</sup> International Conference on Structural Engineering, Mechanics, and Computation (SEMC2022), Cape Town, South Africa, 5-7 September 2022.
- Waris M.B., Al-Hadi H. and Al-Nuaimi A. Influence of Infill Walls on Lateral Load Carrying Capacity of Buildings. In: Proceedings of 8<sup>th</sup> International Conference on Structural Engineering, Mechanics, and Computation (SEMC 2022), Cape Town, South Africa, 5-7 September, 2022.
- Waris M.B., Ibrahim H., Sohel K.M.A. and El-Gelil M. Damage Detection in Structures using Response Signal Decomposition through Wavelets. In: *Proceedings of 17<sup>th</sup> World Conference on Earthquake Engineering, Sendai, Japan*, 27 September to 2 October, 2021.
- 8. Al-Harthy A., **Waris M.B.**, and Sana A., Assessments of the Civil Engineering Program using the New ABET Accreditation Criteria. In: *Proceedings of EDULEARN19, Palma, Spain*, 1-3 July, **2019**.
- 9. Waris M.B., Al-Harthy A. and Al-Jabri K. Incorporating the Human Dimension of Student Learning in Design Course through Group Projects. In: *Proceedings of 28<sup>th</sup> Arab Engineering Conference, Muscat, Oman.* 11-13 December, **2018**.
- 10. Pervez T., Al-Kindi M., Qamar S.Z., Al-Jabri K., and **Waris M.B.**, A Need to Establish an Arab Accreditation Council for Engineering & Technology Education. In: *Proceedings of 28<sup>th</sup> Arab Engineering Conference, Muscat, Oman.* 11-13 December **2018**.
- 11. Al-Saidy A., El-Gamal S., Al-Jabri K., and **Waris M.B.**, Behavior of Corroded RC Beams Without Stirrups Repaired With CFRP Sheet. In: *Proceedings of the Ninth International Structural Engineering and Construction Conference, Valencia, Spain*. July 24-July 29, **2017**.
- 12. Waris M.B., Saeed H., Al-Jabri K., and Hussain I., Comparison of Oman Seismic Code for Buildings with International Counterparts. In: *Proceedings of the 16<sup>th</sup> World Conference on Earthquake (16WCEE), Santiago, Chile*. 09 13 January **2017**.
- 13. Waris M.B. and Ishihara T. Influence of Floater Response on Wind Turbine tower moments in Floating Wind Turbine System. In: *Proceedings of the 5<sup>th</sup> ECCOMAS Thematic Conference on Computational Methods in Structural Dynamics and Earthquake Engineering (COMDYN2015), Crete Island, Greece*. 25-27 May, **2015**.
- 14. Al-Jabri K.S., Pillay P., **Waris M.B.** and Pervez T. 3D Finite Element Modeling of Beam-Column Flexible Endplate Composite Connections at Elevated Temperatures. In: *Proceedings of 8<sup>th</sup> International Conference on Structures in Fire, Beijing, China*. 14-16 June, **2014**.
- 15. Ishihara T., **Waris M.B.** and Kagaya K.. Dynamic Response Prediction of Floating Offshore Wind Turbine System using Fully Nonlinear Model, In: *Proceedings of EWEA Offshore 2011, Amsterdam, Netherlands.* 29 November 1 December, **2011**.
- Maan Z.M., Rehman H.U., Ali U., and Waris M.B. Generation of Flows for Proposed Shogo-Sin Hydropower Project using Regional Analysis and Site Observed Data. In: Proceedings of International Conference on Water Resources Engineering and Management (ISBN: 978-969-546-020-7, pp.231-236), Lahore, Pakistan. March 7-8, 2011.

- 17. Waris M.B. and Ishihara T. Influence of Mooring Force Estimation on Dynamic Response of Floating Offshore Wind Turbine System, In: *Proceedings of Renewable Energy Conference 2010, Yokohama, Japan.* 27 June 02 July **2010**.
- 18. Ishihara T., **Waris M.B.** and Sukegawa H. A Study on Influence of Heave Plate on Dynamic Response of Floating Offshore Wind Turbine System. In: *Proceedings of European Offshore Wind Conference and Exhibition (EOW2009), Stockholm, Sweden*. September 14–16, **2009**.
- 19. 石原 孟, Waris M.B., 助川 博之, ヒーブプレートと非静水圧の効果を考慮した浮体動揺予測モデルの開発. In: Proceedings of 31st National Symposium on Wind Energy, Tokyo, Japan. 2009. (In Japanese).
- Waris M.B., Ishihara T., Sarwar M.W., and Fujino Y.. Galloping Response Prediction of Ice-Accreted Transmission Lines. In: *Proceedings of 4th International Conference on Advances in Wind and Structures (AWAS'08), Jeju, Korea*. 29-31 May 2008.
- 21. Waris M.B., Ishihara T., Sarwar M.W., and Fujino Y. Numerical Study of Aerodynamic Forces on Trains in Crosswind using LES Turbulence Model. In: *Proceedings of the 12<sup>th</sup> International Conference on Wind Engineering (ICWE12), Crains, Australia*. 1-6 July **2007**.

# CONFERENCE ABSTRACTS

- 1. **Waris M.B.**, Al-Jabri K., Al-Qusarwah H. and Abu Sohel K.M. Structural Irregularities and Seismic Performance of Buildings as Per Omani Seismic Code. In: 12<sup>th</sup> Gulf Seismic Forum, Kuwait. 18-20 November **2024**.
- 2. **Waris M.B.**, Al-Rawahi U., Al-Jabri K. and Hussain I. Comparison of Seismic and Wind Loads for Buildings in Oman. In: 11<sup>th</sup> Gulf Seismic Forum, Doha, Qatar. 16-18 February **2020**.
- Waris M.B. and Al-Sayed M. Seismic Analysis of Residential Buildings in Oman. In: 1<sup>st</sup> National Conference on Civil and Architectural Engineering, Muscat, Oman. 26-28 March 2018, ISBN: 978-99969-3-060-7.
- 4. Al-Rawahi U., **Waris M.B.**, Al-Jabri K., and Alnuaimi A. Comparison of Seismic and Wind Actions on Buildings in Oman. In: 1<sup>st</sup> National Conference on Civil and Architectural Engineering, Muscat, Oman. 26-28 March **2018**, ISBN: 978-99969-3-060-7.
- 5. **Waris M.B.**, Saeed H., Al-Jabri K. and Hussain I. Comparison of Oman Seismic Code for Buildings with International Counterparts based on Seismic Hazard. In: *10<sup>th</sup> Gulf Seismic Forum, Muscat, Oman.* 19-22 March **2018**.
- 6. Al-Jabri K.S., Pillay P., **Waris M.B.** and Pervez T. Modelling of Beam-Column Composite Joints at Elevated Temperature. In: 18<sup>th</sup> International Conference on Composite Structures, Lisbon, Portugal. June 15-18, **2015.**
- Waris M.B., Ali N., and Al-Jabri, K.S. Use of Recycled Tire in Concrete for Partial Aggregate Replacement. In: 3<sup>rd</sup> International Conference on Civil Engineering, Mauritius. 29-30 November 2014.

# **CONFERENCE POSTERS**

# International

 Waris M.B., Ibrahim, H., Abu-Sohel K.M. and El-Gelil. M. 2020. Damage Detection in Structures using Response Signal Decomposition through Wavelets. In: 17<sup>th</sup> World Conference on Earthquake Engineering, Sendai, Japan, September 27 to October 2, 2021.

- Waris M.B. and Ishihara T. Influence of Mooring Force Estimation on Dynamic Response of Floating Offshore Wind Turbine System. *Renewable Energy Conference 2010, Yokohama, Japan.* 27 June - 02 July 2010.
- 3. Ishihara T., **Waris M.B.** and Sukegawa H. A Study on Influence of Heave Plate on Dynamic Response of Floating Offshore Wind Turbine System. *European Offshore Wind Conference and Exhibition (EOW2009), Stockholm, Sweden*. September 14–16, 2009.

#### National

- 4. Al-Hinai M. and **Waris M.B.**, Use Of Recycled Tire Rubber And Ferrochrome Slag In Cement Mortar for 3D-Printing. In: *12<sup>th</sup> National Symposium of Engineering Final Year Projects*, Nizwa, Oman. 12 May 2023.
- 5. Al-Mamari M. and **Waris M.B.**, Seismic Capacity Analysis of Existing Residential Buildings in Oman. In: 9<sup>th</sup> National Symposium of Engineering Final Year Projects, Nizwa, Oman. 1 May 2019.
- 6. Al-Khaursi Y. and **Waris M.B.** Seismic Design of Residential Units in Oman. In: 1<sup>st</sup> National Conference on Civil and Architectural Engineering, Muscat, Oman. 26-28 March 2018.
- 7. Al-Tabi I. and **Waris M.B.** Seismic Analysis of Petroleum Storage Tanks. In: 1<sup>st</sup> National Conference on Civil and Architectural Engineering, Muscat, Oman. 26-28 March 2018.
- 8. 石原 孟, Waris M.B., 助川 博之, ヒーブプレートと非静水圧の効果を考慮した浮体動揺予測 モデルの開発. In: 31<sup>st</sup> National Symposium on Wind Energy, Tokyo, Japan 2009. (In Japanese)

# **RESEARCH SUPERVISION**

# Undergraduate

At Sultan Qaboos University, Muscat, Oman (2011 - Onwards)

- 1. Mohammed Al-Hinai, Use of Recycled Tire Rubber and Ferrochrome Slag in Cement Mortar for 3D Printing. (2022-23).
- 2. Hamed Al-Hadi, Influence of Infill Walls on the Seismic Capacity of Buildings (2020-21).
- 3. Falah Al-Alawi, Seismic Capacity of a School Building in Oman (2019-20).
- 4. Mazin Al-Mamari, Seismic Capacity of Residential Buildings in Oman (2018-19).
- 5. Idrees Al-Tabi, Seismic Analysis of Petroleum Storage Tanks (2017-18).
- 6. Yousaf Al-Khaursi, Seismic Design of Residential Units in Oman (2017-18).
- 7. Mumin Al-Salmi, Use of Recycled Tire Rubber in Making Concrete Hollow Blocks (2016-17).
- 8. Motasem Al-Sayed, Seismic Analysis of Residential Units in Oman (2016-17).
- 9. Sanaa Al-Hadabi, Seismic Analysis of Petroleum Storage Tanks (2015-16).
- 10. Zamzam Al-Rawahi, Use of Recycled Tires in Concrete (2015-16).
- 11. Hussain Najwani, Use of Recycled Tires in Concrete for Fine Aggregate Replacement (2014-15).
- 12. Sulaiman Al-Mahroqi, Seismic Analysis of Petroleum Storage Tanks (2014-15).
- 13. Safaa Al-Harrasi, Use of oil-contaminated water in concrete (2014-15).
- 14. Nehal Ali, Use of Recycled Tires in Concrete as an Aggregate Replacement (2013-14).
- 15. Badar Al-Mammari, Comparison of Omani Seismic Code with International Codes (2012-13).

# Postgraduate

#### Master

At Sultan Qaboos University, Muscat, Oman (2011 - Onwards)

- 1. Lamya Al-Jahwari, Development of Sustainable Concrete Utilizing Construction waste (Ongoing) -Co-Supervisor
- 2. Amina Al-Yahmadi, Development of Indigenous mortar mixes for use in 3D printing (Ongoing) -Supervisor
- 3. Shurooq Al-Sulaimi, Development of geopolymer using Indigenous materials for use in 3D printing(Ongoing) -Co-Supervisor
- 4. Arwa Al-Abri, Performance and Durability of Hollow blocks and paving tiles with Ground Tire Rubber (GTR) (Ongoing) -Supervisor.
- 5. Issa Al-Harthi, Mechanical Performance and Durability of Non-structural Concrete with Ground Tire Rubber (GTR) (**2024**) -Supervisor.
- 6. Mohamed Boniamin, Seismic Vulnerability Analysis of a Typical School Building in Oman (**2024**) -Supervisor.
- 7. Mohammed Bilal Sulaiman, Modeling of Reinforced Concrete Buildings under Fire using OpenSees (**2023**) -Supervisor.
- 8. Maryam Al-Salmiyah, Experimental and Numerical Study on the Behaviour of Angle Connections under Tension (**2023**) -Supervisor.
- 9. Khawla Al-Habsi, Performance of Axially Loaded Steel Column under Lateral Car Impact (**2023**) -Co-Supervisor.
- 10. Anas Al-Khabasi, Numerical modeling on the behavior of concrete-filled steel tube (CFST) with ferrochrome slag as an aggregate at elevated temperatures (**2023**) -Co-Supervisor.
- 11. Husam Al-Qusarwah, Effect of Irregularities on Structural Behavior (2023) Supervisor.
- 12. Zainab Al-Bahrani, Modeling of 3D-Frame System with Composite Beam under Thermal Loading (2021) Supervisor.
- 13. Zaher Abdulqader, Effect of High Temperature on the Behavior of Composite Columns Made with Ferrochrome Slag as a Fine Aggregate Replacement (**2020**) -Co-Supervisor.
- 14. Abir Al-Hinai, Effect of Structural and Non-structural Walls on Seismic Behavior of Reinforced Concrete Buildings (**2019**) Supervisor.
- 15. Hussain Ibrahim, Damage Detection in Structural Systems using Wavelet Decomposition (2019) -Supervisor.
- 16. Abdullah Al-Abri, Protection of Columns Against Impact Load (**2018**) -Co-Supervisor.
- 17. Wajahat Bhutta, Seismic Fragility Analysis of SQU Hospital Building (**2018**) Supervisor.
- 18. Uhoud Al-Rawahi, Comparison of Wind and Seismic Actions on Buildings in Oman (2017) -Supervisor.
- 19. Othman Al-Shareedah, Performance Evaluation of Concrete Column Reinforced with FRP bars (2016) -Co-Supervisor.
- 20. Hasan Saeed, Comparison of Omani Seismic Code with International Counterparts (2015) -Supervisor.
- 21. Proshob Pillay, FEM Modeling of Connections Under Fire (**2013**) -Co-Supervisor.
- 22. Hussain Al-Lawati, Investigating Fixed Floating Breakwater Response to Waves Action Using a Simplified Analytical Model (**2012**) -Co-Supervisor.

#### At the University of Engineering and Technology, Lahore, Pakistan (2010-2011)

23. Usman Hashmi, Contribution of Floater Displacement Modes to Wind Turbine Loads in Floating Offshore Wind Turbine Systems (**2011**) - Supervisor.

# RECOGNITION

1. Best Poster Award in the 31<sup>st</sup> National Symposium on Wind Energy, Tokyo, Japan 2009.

# SERVICES

# NATIONAL LEVEL

# **Active Services**

- 1. External Program Reviewer, Oman Authority of Academic Accreditation and Quality Assurance (OAAAQA), June 2023 onwards.
- 2. Member, National Committee for the Omani Building Code, 2022 onwards.

# UNIVERSITY ADMINISTRATION AND COMMITTEES (SQU)

#### Active Services

- 3. Member, OAAAQA Committee, Department of Civil and Architectural Engineering, **2024 onwards**.
- 4. Member, Undergraduate Curriculum Committee, Civil Engineering Program, Department of Civil and Architectural Engineering, **2022 onwards**.
- 5. Coordinator, Quality Assurance and Academic Accreditation Committee for Civil Engineering Program, Department of Civil and Architectural Engineering, **2020 onwards**.

# Past Services

- 6. Member and Focal Person, Curriculum Modernization Committee, Department of Civil and Architectural Engineering, 2022-2024.
- 7. Member, Strategic Planning Committee, Department of Civil and Architectural Engineering, 2020-23.
- 8. Associate Coordinator, Accreditation Committee for Civil Engineering Program, Department of Civil and Architectural Engineering, 2017-2020.
- 9. Member, Civil Engineering Program Accreditation Committee, Department of Civil and Architectural Engineering, 2014-2017.
- 10. Member, Postgraduate Committee, Department of Civil and Architectural Engineering, 2014-2015, 2017-2018.
- 11. Department Representative, Adhoc Information Screen Committee, College of Engineering, 2013-2014.
- 12. Chair, Adhoc Committee for Department and Postgraduate Studies Leaflets, Department of Civil and Architecture Engineering, 2013.
- 13. Department Representative, Web and Publication Committee, College of Engineering, 2012-2014, 2015-2017.
- 14. Department Representative, Industrial Training Committee, College of Engineering, 2011-2012.

# **PROFESSIONAL SERVICE**

# Invited Lectures

1. Introduction to the Omani Seismic Design Code for Buildings and its Application to Residential Units, Royal Court Affairs, 11 April 2018.

# Short Courses

- 1. Seismic Analysis, Design, and Detailing of RC Buildings, Sultan Qaboos University, 21-24 January 2024.
- 2. Dynamics of Machine Foundations, PDO Center for Teaching and Learning, 20-22 January 2019.

Event Title	Responsibility
2nd International Conference on Unmanned Vehicle Systems-Oman, 2024	Member, Technical Program Committee
Comfort at the Extremes, 2021 (CATE'21)	Member, Organizing Committee
23 <sup>rd</sup> Gulf Engineering Forum, 2020 (Canceled)	Member, Scientific Committee
28 <sup>th</sup> Arab Engineering Conference, 2018	Member, Scientific Committee Editor, Proceedings
The First National Conference on Civil and Architectural Engineering, 2018	Member, Organizing Committee Editor, Book of Abstracts
International Conference on Advances in Sustainable Construction Materials & Civil Engineering Systems, 2017	Member, Scientific Committee
5 <sup>th</sup> International Conference on Estuaries and Coasts, 2015.	Member, Organizing Committee Editor, Proceedings
8 <sup>th</sup> Gulf Seismic Forum, Muscat, Sultanate of Oman, 2013.	Member, Scientific Committee
International Conference on Water Resource Engineering and Management, Lahore, Pakistan, 2011.	Member, Organizing Committee Finance Secretary
International Conference on Geotechnical Engineering, Lahore, Pakistan, 2010.	Member, Organizing Committee

# **OTHER ACTIVITIES**

# Professional development

# Workshops Attended

- 1. Workshop on Empowering Minds: AI in Teaching and Research (07 Sep, 24 12 Sep, 24). organized by CETL, SQU
- 2. Workshop on Customizing Your Teaching to Outcome-based Learning, Assessment, and Active Learning (25 Apr, 24) organized by CETL, SQU
- 3. Short Course on Learning from Within: Peer Review's Role in Teacher Professional Development (27 Feb, 24 10 Mar, 24). organized by CPS & CETL, SQU
- 4. Workshop on Capacity Building for Oman Qualification Framework (OQF) Listing and Alignment Panels (29 Jan, 24 31 Jan, 24). organized by DGOQF, OAAAQA, MOHERI.
- 5. Workshop on Awareness about the Strategies Used for Implementing SQU Teaching Philosophy and Teaching and Learning Methodologies (09 Nov, 23) organized by CETL, SQU
- 6. Workshop on Case Study as Teaching Strategy (Part 1) (02 Oct, 23) organized by CETL, SQU
- 7. Workshop on Program Standards Assessment (PSA) External Reviewers Training (06 Jun, 23 07 Jun, 23). organized by OAAAQA, MoHERI.
- 8. Workshop on E-Portfolio (04 May, 23) organized by CETL, SQU
- 9. Workshop on Course Projects: Practical, Comprehensive and Fair (15 Mar, 23) organized by CETL, SQU
- 10. Workshop on Peer Assessment (23 Feb, 23) organized by CETL, SQU
- 11. Workshop on Scholarship in Teaching and Learning (09 Feb, 23) organized by CETL, SQU
- 12. Workshop on Improving Students' Higher Order Thinking Skills through Debate (24 Nov, 22) organized by CETL, SQU
- Workshop on Alignment of Course Objectives with Teaching Strategies and Assessment (11 Oct, 22) organized by CETL, SQU
- 14. Workshop on Enabling Online Collaboration and Peer Assessment (10 Mar, 22) organized by CET, SQU
- 15. Workshop on Active learning the key to student learning (23 Sep, 21) organized by CETL, SQU
- 16. Workshop on The positive impact of virtual learning on teaching spaces (31 Mar, 21) organized by CETL, SQU
- 17. Workshop on Developing your Teaching Philosophy Statement (11 Mar, 21) organized by CETL, SQU
- 18. Workshop on Aligning Course Objectives with Online Teaching Strategies (10 Feb, 21) organized by CETL, SQU
- 19. Workshop on Principles from Cognitive Science for Teaching Online (27 Jan, 21) organized by CETL, SQU
- 20. Workshop on Engaging Students in Active Significant Learning Experiences (10 Sep, 18) organized by CETL, SQU
- 21. Workshop on Creating Significant Learning through Integrated Course Design (09 Sep, 18) organized by CETL, SQU
- 22. Workshop on Immediate Feedback Assessment Technique (IF-AT) (14 May, 18) organized by CETL, SQU
- 23. Workshop on Use of Technology in Teaching (25 Apr, 18 26 Apr, 18). organized by SQU
- 24. Workshop on Research Based Teaching (27 Feb, 18) organized by CETL & RMO, SQU
- 25. Workshop on Using Interactive Technology to Engage Students in Deeper Learning (26 Dec, 17) organized by CETL, SQU

- 26. Workshop on Introduction to COMSOL (14 Dec, 17) organized by COMSOL
- 27. Workshop on Alternative Teaching Stretegies (18 May, 17) organized by SQU
- 28. Workshop on Critical Thinking Skills for the 21st Century (17 May, 17) organized by SQU
- 29. Workshop on Tall buildings and economical housing (12 Mar, 17) organized by SQU
- 30. Workshop on Designing Courses for Significant Learning (13 Feb, 17) organized by SQU
- 31. Workshop on Effective Teaching and Learning in Engineering (05 Dec, 16) organized by SQU
- 32. Workshop on Introduction to CDIO Initiative (17 May, 16 19 May, 16). organized by SQU
- 33. Workshop on Problematic Soils (28 Feb, 16 29 Feb, 16). organized by SQU
- 34. Workshop on Introduction to COMSOL (12 May, 15) organized by COMSOL
- 35. Workshop on Nano Technology Workshop (12 Feb, 15) organized by SQU
- 36. Workshop on Scientific Writing (18 Dec, 14) organized by SQU
- 37. Workshop on End Note (10 Dec, 14) organized by SQU
- 38. Workshop on Bentley Integrated Structural Modeling Seminar (28 May, 14) organized by Bentley Inc.
- 39. Workshop on Building Course Adding Activities: Lesson Module (01 Jan, 14) organized by SQU
- 40. Workshop on Using Turnitin (01 Jan, 14) organized by SQU
- 41. Workshop on Moodle Assessment Tool: Rubrics (01 Jan, 14) organized by SQU
- 42. Workshop on Critical Inquiry and Research Design (01 Jan, 14) organized by SQU
- 43. Workshop on Utilizing Sticky Sorter Tool for Brainstorming Sessions (01 Jan, 13) organized by SQU
- 44. Workshop on Instructional Images (01 Jan, 13) organized by SQU
- 45. Workshop on Creating engaging presentations with Prezi (01 Jan, 13) organized by SQU
- 46. Workshop on Learning Designs (01 Jan, 13) organized by SQU
- 47. Workshop on Using DeepZoom Tool for Creating Engaging VLE Resources (01 Jan, 13) organized by SQU
- 48. Workshop on Using Wikis for Projects (01 Jan, 13) organized by SQU
- 49. Workshop on Designing Discussions (01 Jan, 13) organized by SQU
- 50. Workshop on Authors Workshop (01 Jan, 13) organized by Springer Inc.
- 51. Workshop on Using Moodle (01 Jan, 12) organized by SQU
- 52. Workshop on Using Google Collaborative Tools (01 Jan, 12) organized by SQU
- 53. Workshop on Numerical Methods for PDE (01 Jan, 12) organized by SQU

# **Courses, Lectures and Seminars Attended**

- 1. Short Course on Learning from Within: Peer Review's Role in Teacher Professional Development (27 Feb, 24 10 Mar, 24) organized by CPS & CETL, SQU.
- 2. Short Course on Pedagogical Techniques and Assessment Methods (26 Nov, 23 31 Dec, 23) organized by CETL, SQU.
- 3. Short Course on Assistive Technologies for Students with Disabilities (28 May, 23 08 Jun, 23) organized by CETL and CPS, SQU
- 4. Short Course on Course Design (01 Feb, 23 31 Mar, 23) organized by CETL, SQU
- 5. Short Course on Class Assessment Techniques and Rubrics (01 Feb, 23 31 Mar, 23). organized by CETL, SQU
- 6. Short Course on Introduction to CHETL and Teaching Philosophy (01 Oct, 22 30 Nov, 22). organized by CETL, SQU
- 7. Short Course on Outcome Based Course Learning Objectives (01 Oct, 22 30 Nov, 22). organized by CETL, SQU
- 8. Short Course on Teaching Critical Thinking (01 Oct, 22 30 Nov, 22). organized by CETL, SQU

- 9. Short Course on Integrated Course Design through Active Learning (30 Jan, 22 17 Feb, 22). organized by CETL, SQU
- 10. Seminar on SCALE-UP Teaching Approach (13 Feb, 20) organized by CETL, SQU
- 11. Lecture on Teaching and Learning at Cambridge: Student, Academic & Administrative Perspectives (08 Apr, 19) organized by CETL, SQU
- 12. Training on Create Infographics for Learning (13 Nov, 18) organized by CETL & RMO, SQU
- 13. Training on How to use twitter for education (12 Nov, 18) organized by CETL & RMO, SQU
- 14. Seminar on Highlighting Change: Teaching and Learning at SQU (11 Nov, 18 13 Nov, 18). organized by CETL & RMO, SQU
- 15. Seminar on Towards Institutional Accreditation (03 Jan, 18) organized by SQU
- 16. Seminar on Advising for Students Success (09 Nov, 17) organized by COE, SQU
- 17. Training on Introduction to ANSYS Mechanical and Fluent (21 Feb, 16 25 Feb, 16). organized by SQU
- 18. Training on Use of Omani Seismic Code (02 Jan, 16 02 May, 16). organized by SQU