

Education**Ph.D.: Civil and Environmental Engineering – Hanyang University, Seoul – South Korea**

Mar 2016 to Feb 2019 – 3.88/4.0 CGPA,

Research: Ph.D. research was focused on “Development of blockchain-based Platform for Smart Mines and Underground Structures in Industry 4.0 Revolution”**MS: Civil and Environmental Engineering, Geotech (Underground Structures) – Hanyang University, – Seoul, South Korea, Mar 2014 to Feb 2016 – 3.88/4.0 CGPA,****Research:** research was focused on “Development of blockchain-based platform for smart mines and underground structures in Industry 4.0 Revolution”**MS: Mining Engineering, – University of Engineering and Technology, – Lahore, Pakistan**

Mar 2009 to Feb 2015 – 66%,

Research: research was focused on “Up-gradation of Coal Particles from Carbonaceous Shale (Parathi) by Physical Cleaning Methods”**BS: Mining Engineering, – University of Engineering and Technology, – Lahore, Pakistan**

Sep 2005 to Aug 2009 – 82%,

Research: Suggestions for Improvement in Blasting Practices at BestWay, Cement Factory, Chakwal**Professional Appointments**

1. Assistant Professor – PAF-IAST Technology [Mar 2022 – Present]
2. Assistant Professor – National University of Sciences and Technology [November 2021 – March 2022]
3. Assistant Professor – The University of Lahore [March 2019 – November 2020]
4. Assistant Resident Engineer/Junior Engineer – Nelum Jhelum Hydropower Project, AJK Pak. [Jan 2011 – Jan 2014]
5. Trainee Engineer – BestWay Cement Factory, Chakwal, Pakistan. [August 2010 – January 2011]
6. Lecturer/ Lab Engineer – University of Engineering and Technology, Lahore, Pakistan. [August 2009 – May 2010]
7. Mining Engineer (Internship) – BestWay Cement Factory, Chakwal. [June 2008 – July 2008]

Publications**Peer-reviewed Journal Papers (Impact factor)**

1. Xu, Y., Khan, N. M., Rehman, H., Hussain, S., Khan, R. M. A., Emad, M. Z., ... & Li, X. (2022). Research on Leakage Detection at the Joints of Diaphragm Walls of Foundation Pits Based on Ground Penetrating Radar. *Sustainability*, 15(1), 506.
2. Cui, R., Cao, K., Li, X., Khan, R. M. A., Khan, N. M., Liu, W., ... & Alarifi, S. S. (2022). The Infrared Radiation Characteristics of Sandstone Fracture Seepage under Coupled Stress-Hydro Effect. *Sustainability*, 14(24), 16454.
3. Jo, B. W., Khan, R. M. A., & Lee, Y. S. (2018). Hybrid blockchain and internet-of-things network for underground structure health monitoring. *Sensors*, 18(12), 4268. (IF = 3.847, Citations = 85)
4. Jo, B. W., Khan, R. M. A., & Javaid, O. (2019). Arduino-based intelligent gases monitoring and information sharing Internet-of-Things system for underground coal mines. *Journal of Ambient Intelligence and Smart Environments*, 11(2), 183-194. (IF = 2.759, Citations = 12)
5. Jo, J., Jo, B., Khan, R. M. A., & Kim, J. (2019). A cloud computing-based damage prevention system for marine structures during berthing. *Ocean Engineering*, 180, 23-28. (IF = 4.372, Citations = 7)
6. Jo, B. W., Lee, Y. S., Khan, R. M. A., Kim, J. H., & Kim, D. K. (2019). Robust Construction Safety System (RCSS) for collision accidents prevention on construction sites. *Sensors*, 19(4), 932. (IF = 3.847, Citations = 13)

7. Sikandar, M. A., Jo, B. W., Baloch, Z., & **Khan, R. M. A.** (2019). Properties of chemically synthesized nano-geopolymer cement based self-compacting geopolymer concrete (SCGC). *Journal of Wuhan University of Technology-Mater. Sci. Ed.*, 34(1), 98-106. (*IF* = 1.271, *Citations* = 3)
8. Jo, B. W., **Khan, R. M. A.**, Lee, Y. S., Jo, J. H., & Saleem, N. (2018). A fiber Bragg grating-based condition monitoring and early damage detection system for the structural safety of underground coal mines using the Internet of things. *Journal of Sensors*, 2018. (*IF* = 2.336, *Citations* = 22)
9. Jo, B., & **Khan, R. M. A.** (2018). An internet of things system for underground mine air quality pollutant prediction based on azure machine learning. *Sensors*, 18(4), 930. (*IF* = 3.847, *Citations* = 56)
10. Jo, B. W., Jo, J. H., **Khan, R. M. A.**, Kim, J. H., & Lee, Y. S. (2018). Development of a cloud computing-based pier type port structure stability evaluation platform using fiber Bragg grating sensors. *Sensors*, 18(6), 1681. (*IF* = 3.847, *Citations* = 32)
11. Jo, B. W., Lee, Y. S., Jo, J. H., & **Khan, R. M. A.** (2018). Computer vision-based bridge displacement measurements using rotation-invariant image processing technique. *Sustainability*, 10(6), 1785. (*IF* = 3.889, *Citations* = 22)
12. Jo, B. W., Lee, Y. S., Kim, J. H., & **Khan, R. M. A.** (2017). Trend analysis of construction industrial accidents in Korea from 2011 to 2015. *Sustainability*, 9(8), 1297. (*IF* = 3.889, *Citations* = 51)
13. Jo, B. W., & **Khan, R. M. A.** (2017). An event reporting and early-warning safety system based on the internet of things for underground coal mines: A case study. *Applied Sciences*, 7(9), 925. (*IF* = 2.838, *Citations* = 32)
14. Jo, B. W., Ali Sikandar, M., Baloch, Z., & **Khan, R. M. A.** (2015). Effect of incorporation of self-healing admixture (SHA) on physical and mechanical properties of mortars. *J. Ceram. Process. Res.*, 16, s138-s143. (*IF* = 0.69, *Citations* = 16)

Peer-reviewed Journal Papers (Local)

1. Design of Cold-form Beams Using Effective Width Method and Direct Strength Method: A Comparative Study, *PJSIR*, 2023 (accepted)

Conference Papers

1. Feroze, T., **Khan, R. M. A.**, & Shams, H. A. (2021, March). AIR QUALITY MONITORING-AN ARDUINO BASED REAL TIME APPROACH. In *BOOK OF ABSTRACTS* (p. 264).
2. **Khan, R. M. A.**, Zaka Emad, and ByungWan Jo. "Tunnel portal construction using sequential excavation method: a case study." *MATEC Web of Conferences*. Vol. 138. EDP Sciences, 2017.
3. "A Web 2.0 based Integrated Information Sharing Framework for Structural Health Monitoring of Road Tunnels" *MATEC Web of Conferences*. 2017.
4. Jo, B., **Asad, R. M.**, Zafar, B., Sikanda, M. A., & Heon, K. (2014). Tunnels Construction Planning and Suggestions to Speed up Tunnel Excavation Progress. *대한토목학회 학술대회*, 591-592.
5. Jo, B. W., Sikandar, M. A., Chakraborty, S., & **Asad, R. M.** (2014). Evaluation of Properties of Concrete Using Aggregates Obtained from Demolished Concrete Structures. *대한토목학회논문집 (국문)* (2014): 431-432.

Research Fundings

1. Development of a mining automatic shearer for low coal seams in Pakistan estimated cost 20 million PKR as CO-PI recommended by Pakistan Scientific Foundation (PSF) (**Awarded**)

Updated on 13th May 2023
