Tayyab Ahmad BSc (UET), MS (NUST), PhD (UniMelb)

Department of Civil and Architectural Engineering

Qatar University

Qatar University, Doha, Qatar E: tayyab@qu.edu.qa

ORCID ID: https://orcid.org/0000-0002-9024-3369

LinkedIn: https://www.linkedin.com/in/tayyab-ahmad-0027baa2/ ResearchGate: https://www.researchgate.net/profile/Tayyab Ahmad

Google Scholar: https://scholar.google.com.au/citations?user=7M8rQ 4AAAAJ&hl=en

Synopsis

I am an Architectural Engineer and I have expertise in sustainable built environment. In specific terms, I have conducted research in project success frameworks, decision-making frameworks, Building Information Modelling, sustainability, life cycle assessment, and energy efficiency. My research is aimed at improving the practice in Architecture, Engineering, and Construction industry. I am highly motivated to conduct impactful research in built environment area. I am regularly invited to peer review research in top journals of the built environment.

Expertise

Built environment, project success frameworks, decision-making frameworks, Building Information Modelling, sustainable development, life cycle assessment, Green Building development, construction management, project planning

Employment History

Aug 2022 – Assistant Professor

Department of Civil and Architectural Engineering, Qatar University, Qatar In this position I provide my services in teaching and conducting research at the Department of Civil and Architectural Engineering.

Dec 2021 – Postdoctoral Fellow

July 2022 Hong Kong Polytechnic University, Hong Kong

In this position I provided my services in conducting research at the Department

of Building and Real Estate.

Feb 2018 – Sessional tutor and Research Assistant

June 2022 University of Melbourne, Australia

In this position I act as a tutor for undergraduate and master's-level courses of architecture, construction, and property management. I also provide my services in conducting research activities outsourced to me.

June 2020 – Sessional tutor

Oct 2021 Deakin University, Australia

In this position I act as a tutor for undergraduate and master's-level courses of

construction management.

May 2017 – Design Standards Assistant (Internee role)

Nov 2017 University of Melbourne, Australia

I worked as a Design Standards Assistant with the Administration and Finance division of University of Melbourne. I helped develop building design standards which met the sustainability aspirations of the institute.

Employment History

May 2015 – Project Coordinator

May 2016 Amad Anwar and Partners-Lahore, Pakistan

In this role I provided my services in design development of a number of low-rise and mid-rise building projects in Lahore. My role also included the coordination of design effort across Mechanical, Electrical, Plumbing,

Architectural, and Structural disciplines.

Publications

My research contributions have received 400+ citations so far. My h-index is 9 and my i10-index is 9 (Google Scholar, Aug 2022).

My research contributions include:

8 journal papers in top ranked international journals and in all of these I am the lead author; 10 conference papers; 2 book chapters; and 1 lay-audience article.

My research has been read 32,000+ times (ResearchGate, Aug 2022)

A full list of my publications is provided in this CV

Education

June 2016 – May 2020 Doctor of Philosophy - Architecture, Building, and Planning

Degree awarded: Discipline: Building Construction Management and Project Planning

5 October 2020 University of Melbourne, Australia

Thesis: An inquiry of conditions and criteria associated with Green

Building project success

Sep 2013 – June 2015

Degree awarded:

1 June 2015

Master of Science in Construction Engineering & Management

National University of Sciences and Technology, Islamabad

Thesis: An Integrated Decision-Making Framework for Sustainable

Residential Building Design using BIM

Aug 2009 – Aug 2013 Bachelor of Science in Architectural Engineering
Degree awarded: University of Engineering and Technology, Lahore

26 March 2014 Capstone project: Sustainable design of a marine observatory

Scholarships and awards

2021

	Scholarships awarded by University of Melbourne during PhD candidature
2016	Melbourne research scholarship
2017	Riady Scholarship
2017	Faculty of Architecture, Building and Planning Travel Scholarship
2019	Faculty of Architecture, Building and Planning Fieldwork Grant
2019	M. A. Bartlett Research Scholarship
2020	Dean's Prize for Published Postgraduate Research
	Scholarships awarded by Hong Kong Polytechnic University
2014	Travel grant to attend Summer School at Hong Kong Polytechnic University
2019	Grant for attending Hong Kong Polytechnic University as a research attachment student

Postdoctoral Fellowship at Hong Kong Polytechnic University

List of Publications

Journal Publications

Ahmad, T., & Thaheem, M. J. (2022). "LCIA Parameters and the Role of BIM towards Sustainability: Regional and Temporal Trends." Buildings 12.5 (2022): 700. DOI: 10.3390/buildings12050700

Ahmad, T., A.A. Aibinu, and A. Stephan (2020), "Green Building Success criteria: interpretive qualitative approach." *Journal of Architectural Engineering*. 2020. 27(1), 04020045. DOI: 10.1061/(ASCE)AE.1943-5568.0000448

Ahmad, T., A.A. Aibinu, and A. Stephan (2019), "Managing green building development – A review of current state of research and future directions." *Building and Environment*, 2019. 155: p. 83-104. DOI: 10.1016/j.buildenv.2019.03.034

Ahmad, T., Aibinu, A. A., Stephan, A., & Chan, A. P. (2019). "Investigating associations among performance criteria in Green Building projects." *Journal of Cleaner Production*, 2019. 232: 1348-1370. DOI: 10.1016/j.jclepro.2019.06.013

Ahmad, T., & Thaheem, M. J. (2018). "Economic Sustainability Assessment of Residential Buildings: A dedicated assessment framework and implications for BIM" *Sustainable Cities and Society*, 2018: (38) 476-491. DOI: 10.1016/j.scs.2018.01.035

Ahmad, T., & Thaheem, M. J. (2017). "Developing a residential building-related social sustainability assessment framework and its implications for BIM." *Sustainable Cities and Society*, 2017: (28) 1-15. DOI: 10.1016/j.scs.2016.08.002

Ahmad, T., & Aibinu, A. A. (2017). "Project delivery attributes influencing green building project outcomes: A review and future research directions." *Built Environment Project and Asset Management*, 7(5), 471-489. DOI: 10.1108/Bepam-11-2016-0066

Ahmad, T., Thaheem, M. J., & Anwar, A. (2015). "Developing a green-building design approach by selective use of systems and techniques." *Architectural Engineering and Design Management Journal*, 2015: 1-22. DOI: 10.1080/17452007.2015.1095709

Conference Publications

Ahmad, T. (2020, August). "Explaining success in Green Building projects using Transformation-Flow-Value-Generation theory". Proceedings of the 2nd Conference on Sustainability in Civil Engineering - (CSCE'20) 2020

Ahmad, T., Aibinu, A. A., & Stephan, A. (2018, December). "Green buildings in Australia: explaining the difference of drivers in commercial and residential sector". In *Smart and Sustainable Built Environments - SASBE2018 Conference 2018*

Ahmad, T., Aibinu, A. A., & Stephan, A. (2017, September). Green building projects: process innovation leading to project innovation. In *Proceeding of the 33rd Annual ARCOM Conference* (Vol. 4, p. 6).

Ahmad, T., Thaheem, M. J., Anwar, A., & Uddin, Z. (2016). "Buildings and their Integration in Communities: Case study of a Parking Plaza." *Proceedings of the International Conference on Sustainable Design, Engineering and Construction 2016 (ICSDEC 2016), ICSDEC 2016*

Ahmad, T., Thaheem, M. J., Anwar, A., & Uddin, Z. (2016). "Implications of stereotype mosque architecture on sustainability." *Proceedings of the International Conference on Sustainable Design, Engineering and Construction 2016 (ICSDEC 2016), ICSDEC 2016*

Ahmad, T., Aibinu, A., Thaheem, M. J. (2016). "BIM-based iterative tool for sustainable building design: a conceptual framework." *Proceedings of the International High- Performance Built Environment Conference — A Sustainable Built Environment Conference 2016 Series (SBE16), iHBE 2016*

Curriculum Vitae (Tayyab Ahmad)

Ahmad, T., Aibinu, A., Thaheem, M. J. (2016). "The effects of high-rise residential construction on sustainability of housing systems." *Proceedings of the International High- Performance Built Environment Conference — A Sustainable Built Environment Conference 2016 Series (SBE16), iHBE 2016*

Ahmad, T., Thaheem, M. J., & Azhar, S. (2015). "A Decision-Making Model Synthesis for Sustainable Building Development." *Proceedings of the Eighth International Conference on Construction in the 21st Century (CITC-8)*. CITC-8 2015. 733-741. ISBN: 978-0-9894623-7-2

Ahmad, T., Thaheem, M. J., & Azhar, S. (2015). "Turning BIM into a holistic sustainability assessment tool." *Proceedings of the Eighth International Conference on Construction in the 21st Century (CITC-8)*. CITC-8 2015. 790-797. ISBN: 978-09894623-7-2

Ahmad, T., Riaz, A., Thaheem, M. J. (2015). "Building Sustainability Assessment Based on Comparison." *National Multidisciplinary Engineering Conference* 2015 (NMEC-15)

Book Chapter

Ahmad T., Aibinu A.A., Stephan A. (2020) Green Buildings in Australia: Explaining the Difference of Drivers in Commercial and Residential Sector. In: Roggema R., Roggema A. (eds) *Smart and Sustainable Cities and Buildings*. Springer, Cham. DOI: 10.1007/978-3-030-37635-2

Book Chapter (Co-authored)

Aibinu, A. A., Evelyn, T. A. L., Rojas-Quintero, J. S., Hosseini, M. R., Dey, C., Taban, R., & Ahmad, T. (2021). 19 Using gamification and competitions to enhance BIM learning experience. *BIM Teaching and Learning Handbook: Implementation for Students and Educators*, 228.

Non-scientific Publications

Aibinu, A. A., & Ahmad, T. (2017). "High-rise housing and sustainable development: are we doing it right?" *Atrium* (Vol. 33, p. 14-15).