

## BON-GANG (BG) HWANG (Dr)

*PhD(UT Austin, USA), MSE(UT Austin, USA), BSc(Hanyang Univ, Seoul, South Korea), MASCE, MCIB, MSPM*



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### ACADEMIC QUALIFICATIONS:

- Ph.D., Construction Engineering & Project Management, Civil, Architectural & Environmental Engineering, The University of Texas at Austin, Austin, Texas, USA (Jan. 2004 – Dec. 2006)
- M.S.E., Construction Engineering & Project Management, Civil, Architectural & Environmental Engineering, The University of Texas at Austin, Austin, Texas, USA (Aug. 2002 – Dec. 2003)
- Architectural Engineering, Hanyang University, Seoul, South Korea (Mar. 1993 –Feb. 2000; 1995 – 1997 National Service)

### EMPLOYMENT & ADMISTRATIVE LEADERSHIP RECORDS:

- Professor (Jan.2021 – Present), Associate Professor (with tenure; Jan.2014 –Dec.2020) & Assistant Professor (tenure track; Apr.2008 – Dec.2013), Department of the Built Environment, College of Design and Engineering, National University of Singapore
- Strategic Hiring Committee, College of Design and Engineering, National University of Singapore (2022 – Present)
- Faculty Promotion & Tenure Committee (FPTC), College of Design and Engineering, National University of Singapore (2022 – Present)
- Research Award Standing Committee, College of Design and Engineering, National University of Singapore (2022 – Present)
- Dean's Chair, College of Design and Engineering, National University of Singapore (May.2020 – Dec.2020)
- Deputy Head (Research), Department of the Built Environment, College of Design and Engineering, National University of Singapore (Jul.2019 – Present)
- Director, Centre for Project Management & Construction Law (CPMCL), Department of the Built Environment, College of Design and Engineering, National University of Singapore (Aug.2017 – Jun.2019)
- Department Faculty Search Committee Chair (2019 – Present) & Member, Department of the Built Environment, College of Design and Engineering, National University of Singapore (2017 – 2019)
- Programme Director, BSc (Project & Facilities Management), Department of the Built Environment, College of Design and Engineering, National University of Singapore (Jul.2013 – Jul.2016)
- Programme Director, B.Sc. (Minor in Project Management), National University of Singapore (Jul.2013 – Jul.2016)
- Post-Doctoral Research Fellow (Jan.2007 – Mar.2008) & Research Assistant (Aug.2003 – Dec.2006), Construction Industry Institute (CII), Austin, Texas, USA
- Project Engineer, Samsung Construction and Technology Corporation, Korea (Dec.1999 – Jul.2002)

## TEACHING AREAS:

- Project Management - Feasibility, Scope, Design, Schedule, Execution, Control, Risk & Decision

## RESEARCH AREAS:

- Project & Technology Management
- Project/Enterprise Management Strategies and Innovations for Green Building & Infrastructure Projects
- Project/Enterprise Performance Analytics and Innovations
- Project/Enterprise Risk Management and Decision Making

## MAJOR AWARDS AND HONOURS (SELECTED)

- **World's Top 2% Scientists 2022, 2021 & 2020**, Identified by Stanford University, both Career-Long and Single Year Categories, 2020, 2021 & 2022
- **Outstanding Project Manager Award 2020 & 2022** (biennial), Outstanding Publication on Project Management- Merit, Society of Project Managers Singapore, Mar 2021 & Oct 2022
- **Highly Cited Paper**, "Green building project management: obstacles and solutions for sustainable development" Sustainable Development (SSCI, Q1, IF: 8.562), 335, 335-349, recognised by the Essential Science Indicators, Clarivate Analytics, March 2022
- **Peer Review Award**, Top 1% of peer reviewers in Cross-Field, Publons Peer Review Awards 2019, Publons, Web of Science Group, September 2019.
- **1st Top-Ranked Active Contributor**, Green Building Project Management Research (2005 – 2018), contributing to NUS to be the 1st Top Contributing Institution in the world, Bibliometric Analysis from Building and Environment Journal (SCIE, Q1, IF: 7.093), April 2019)
- **Best Paper Award**, "Developing a Knowledge-based Decision Support System for Prefabricated Prefinished Volumetric Construction", 4th International Conference on Research Methodology for Built Environment & Engineering, Chulalongkorn University, Bangkok, Thailand, April 2019.
- **Highly Cited Paper**, "Key constraints and mitigation strategies for prefabricated prefinished volumetric construction." Journal of Cleaner Production (SCIE, Q1, Impact Factor: 11.016), 183, 183-193, recognised by the Essential Science Indicators, Clarivate Analytics, March 2019.
- **Research Excellence Award**, jointly presented by Productivity Council of Singapore, Singapore Chemical Industry Council, and Association of Process Industry of Singapore, Singapore, September 2018
- **Highly Commended Paper Award**, "Assessment of Green Retrofit of Existing Mature Residential Estates in Singapore." The 7th World Construction Symposium, Colombo, Sri Lanka, July, 2018.
- **Highly Cited Paper**, "A fuzzy synthetic evaluation approach for risk assessment: A case of Singapore's green projects", Journal of Cleaner Production (SCIE, Q1, Impact Factor: 11.016), recognised by the Essential Science Indicators, Clarivate Analytics, July 2018.
- **Highly Cited Paper**, "Investigating residents' perceptions of green retrofit program in mature residential estates: The case of Singapore", Habitat International (SSCI, Q1, IF: 5.205), recognised by the Essential Science Indicators, Clarivate Analytics, May 2018.
- **Most Cited International Journal of Project Management Articles**, three journal papers published to International Journal of Project Management (SSCI; Q1, IF: 9.037), have been recorded as "Most Cited Articles (published since 2013; extracted from Scopus)", January 2018.
- **Peer Review Award**, 2017 Publons Peer Review Award, Publons, January 2018.
- **Outstanding Reviewer Award**, Energy & Buildings (SCIE, Q1, IF: 7.201), April 2018.
- **Outstanding Reviewer Award**, Sustainable Cities and Society (SCIE; Q1; IF: 10.696), January 2018.
- **Outstanding Reviewer Award**, Automation in Construction (SCIE; Q1; IF: 10.517), Aug 2017
- **Outstanding Reviewer Award**, Journal of Cleaner Production (SCIE; Q1; IF: 11.016), Aug 2017
- **Outstanding Reviewer Award**, International Journal of Project Management (SSCI; Q1, IF: 9.037), Nov 2016
- **Distinguished Lecturer**, Department of Civil and Construction Engineering, National Taiwan University of Science and Technology, October 2016.

- **Teaching Excellence Award**, School of Design and Environment, National University of Singapore, February 2016.
- **Best Paper Award**, “A Preliminary Study on Identifying Risk Factors Causing Damages on Bridges by Analyzing Safety Inspection and Precise Safety Diagnosis Reports Based on Text-mining Techniques” 2016 KICEM Conference, Incheon, Korea, 2016
- **Excellent Paper Award**, the International Symposium on the Advancement of Construction Management and Real Estate, organized jointly by the Chinese Research Institute of Construction Management (CRIOCM) and Chongqing University, Chongqing, China, November 2014
- **NUS Research Highlight of the Month**, the journal paper “Project management knowledge and skills for green construction: Overcoming challenges” by Office of Deputy President (Research & Technology), National University of Singapore, 2013
- **Outstanding Reviewer Award**, American Society of Civil Engineers (ASCE) Awards 2012 for “ASCE Journal of Construction Engineering and Management”, ASCE, 2012
- **Innovative Paper Award**, International Construction Business and Management Symposium (ICBMS2011) in conjunction with the Joint Meeting of the CIB TG82 “Marketing in Construction” and CIB W112 “Culture in Construction”, KL, Malaysia, 2012
- **Outstanding Reviewer Award**, Emerald Literati Network Awards for Excellence 2012 for the journal “Engineering, Construction, and Architectural Management”, Emerald Group Publishing Limited, 2012
- **Best Paper Award**, Emerald and Research Institution of Chartered Surveyors (RICS), 2009 RICS COBRA Conference, Cape Town, South Africa, 2009
- **Top 20 Most Cited Journal Articles**, “Measuring the Impact of Rework on Construction Cost Performance”, American Society of Civil Engineering (ASCE) Journal of Construction Engineering and Management, various months and years from 2008 to 2016
- **FIATECH CETI (Celebration of Engineering & Technology Innovation) Award** - Honourable Mention, Austin, Texas, USA, 2008 (Co-Work w/Construction Industry Institute, Austin, Texas, USA)

## RESEARCH ACHIEVEMENTS

- Over \$7,000,000 Research Projects Performed as PI, Co-PI & Collaborators
- Over 130 International Refereed Journal Papers
- Over 75 International Refereed Conference Papers (Conference Proceedings)
- Over 50 Media and Academic Short Articles / Interviews / Academic Reports

## PROFESSIONAL ACTIVITIES (SELECTED)

- External R&D Project Review Panel: National Science Foundation, USA, Korea Agency for Infrastructure Technology Advancement (KAIA), the National Science Centre, Poland, Research Grants Council (RGC) of Hong Kong
- Advisory Board Member for Government Agencies/Industry Associations: Economic Development Board(EDB), Singapore Chemical Industry Council(SCIC), Association of Process Industry(ASPRI), Productivity Council(PC), Process Construction and Maintenance Management Committee(PCMMC), Korea Agency for Infrastructure Technology Advancement(KAIA), Ministry of Land, Infrastructure and Transportation of Korea(MOLIT), Korea Institute of Construction Technology(KICT), Korea Institute of Construction Engineering and Management(KICEM)
- PhD External Committee Member/Examiner: Seoul National University(South Korea), Yonsei University(South Korea), National Institute of Technology(India), Indian Institute of Technology Madras(India), University of New South Wales(Australia), RMIT University(Australia), University of Pretoria(South Africa), Hong Kong Polytechnic University(Hong Kong), University of The Witwatersrand (South Africa), SIIT, Thammasat University(Thailand), Singapore University of Social Sciences (Singapore)
- Advisory Board Member/External Reviewer for Academic Programs & Promotion: Kuwait Foundation for the Advancement of Sciences, Seoul National University, Central Queensland University, Aalto University, Finland
- Consultant for Private Companies: GS Engineering & Construction, DaeHan Steel, CH2M HILL, Worley Parsons, Bechtel, Merck, Zurich Insurance, Aberdeen, Shimizu, Hanmi Global, Samsung Electronics
- Invited/Keynote Speakers: Over 130 International Seminars/Conferences
- Editorial Board Member: Over 10 International Refereed Journals

- Reviewer: Over 60 International Refereed Journals, Over 12 Journal Special Issues & Book/Book Chapter Proposals
- Technical/Scientific Committee Members: Over 60 International Conferences
- Session Chair/Panellist: Over 13 International Conferences

**PUBLICATIONS:**

- [Google Scholar](#)
- [Scopus](#)

**FULL CV AVAILABLE UPON REQUEST**