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PROFESSIONAL EXPERIENCES

Director, KOCED Wind Tunnel Center, Chonbuk National University, Korea, 2005~present.

Assistant Professor (2001~2006), Associate Professor (2006~2011), Professor (2011~Present), Department of Civil Engineering, Chonbuk National University, Korea.

Full-time Lecturer, Department of Civil Engineering, Dongyang University, Korea, 1999~2001.

Senior Research Engineer, Korea Highway Corp. (Government Agency), Korea, 1996~1999.

Visiting Scholar, Stanford University, USA, 2011~2013.

Visiting Scholar, University of Illinois at Urbana-Champaign, USA, 2004.

Foreign Graduate Researcher, University of Tokyo, Japan, 1994~1995.

Military Officer, Korean Army, 1990~1991.

EDUCATIONS

Civil Engineering, Seoul National University, Korea, B.S.(1988), M.S.(1990), Ph.D. (1996).

AWARDS and FELLOWSHIPS

Best Conference Paper Award, Korean Solar Energy Society, 2014.

Best Conference Paper Award, Korean Society of Civil Engineers, 2004, 2009, 2010.

Award for Outstanding Scholar, Korean Society of Civil Engineers, 2004.

Award for Prolific Young Researcher (under 40), Korean Society of Civil Engineers, 1998.

Fellowship, Korea Science and Engineering Foundation, 2000.

Fellowship, Association of International Education, Japan, 1994~1995.

SELECTED REFEREED JOURNAL PAPERS (OUT OF TOTAL 69)

- S.H. Lee, S.D. Kwon, J. Yoon, "Reynolds number sensitivity to aerodynamic forces of twin box bridge girder", *J. of Wind Engineering and Industrial Aerodynamics*, 127, 2014.4.
- S.D. Kwon, H.K. Lee, S.H. Lee, J.H. Kim, "Mitigating the effects of wind on suspension Bridge catwalks", *J. of Bridge Engineering*, ASCE, 18(7), 2013.7.
- S.D. Kwon, J.K Park, K.H. Law, "Electromagnetic energy harvester with repulsively stacked multilayer magnets for low frequency vibrations", *Smart Materials and Structures*, 22(5), 2013.5.
- S.D. Kwon, D.H. Kim, S.H Lee, H.S. Song, "Design criteria of wind barriers for traffic. Part 1: Wind

- barrier performance", Wind and Structures, 15(1), 2011.1.
- S.D. Kwon, "Uncertainty analysis of wind energy potential assessment", Applied Energy, 87(3), 2010.3.

SELECTED CONFERENCE PAPERS AND PRESENTATIONS (OUT OF TOTAL 63)

- S.H. Lee, S.D. Kwon, "Interference effects on bridge hangers", 8th Asia Pacific Conference on Wind Engineering, Chennai, India, 2013.12.
- J.K. Park, S.D. Kwon, K.H. Law, "Asynchronous phase shifted electromagnetic energy harvester", SPIE Smart Structures/NDE Conference, San Diego, USA, 2013.3.
- H.S. Song, S.H. Lee, S.D. Kwon, "Wind energy harvesting at elevated bridges", 7th International Colloquium on Bluff Body Aerodynamics & Applications, Shanghai, China, 2012.9.
- S.D. Kwon, S.H. Lee, K.M. Kim, "Energy Harvesting from Aeroelastic Flutter", *Advance in Wind Engineering*, Seoul, Korea, 2012.9.
- S.H. Lee, S.D. Kwon, "Effects of turbulence properties on bridge aerodynamics", 13th International Conference on Wind Engineering, Amsterdam, Netherland, 2011.7.

SELECTED GRANTS AND CONTRACTS (AS PRINCIPAL INVESTIGATOR)

- Hybrid energy harvesting from structural vibration and natural wind, National Research Foundation of Korea, 2013~2016, US\$140,000 (PI).
- Development of Aerodynamic Girders for Ultra Long Span Bridges, Korea Agency for Infrastructure Technology Advancement, 2008~2016, US\$1,500,000 (PI).
- KOCED Wind Tunnel Project, Korea Agency for Infrastructure Technology Advancement, 2004~2009, US\$8,500,000 (PI).

PROFESSIONAL ACTIVITIES AND SERVICES

Member: Korean Society of Civil Engineers; Wind Engineering Institute of Korea; American Society of Civil Engineers; International Association of Bridge and Structures; American Association for Wind Engineering; etc.

Conference Co-Organization: International Scientific committee of 13th International Conference on Wind Engineering, Amsterdam, Netherlands, 2011; International Scientific committee of Computational Wind Engineering, Chapel Hill, USA, 2010; etc.

SELECTED TECHNICAL CONSULTING FOR BRIDGE PROJECTS

- Cao Lanh Cable-stayed Bridge (main span length = 350m), Vietnam, aerodynamic investigation during detailed design, Yooshin Corp., 2011~2012.
- Izmit Bay Suspension Bridge (main span length = 1700m), Turkey, preliminary aerodynamic investigation during design competition, Yooshin Corp., 2010.
- Saechonnyun Suspension Bridge (main span length = 650m+650m), Korea, aerodynamic investigation during detailed design, Envico Consultant, 2009.
- Yi Sun-sin Suspension Bridge (main span length = 1545m), Korea, aerodynamic investigation during preliminary and detailed design, Yooshin Corp and Daelim Industrial Co., 2007~2009.
- Concept design of ultra high performance concrete cable stayed bridge (main span length = 600m), Korea, aerodynamic investigation, Korea Institute of Construction Technology, 2007.