
KYUTAE LEE, Ph.D.

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Experience and Qualifications

Dr. Lee's research interests are in the field of river hydraulics. Specifically, extensive research efforts during the course of his Ph.D. have been dedicated to uncertainty analyses associated with river discharge measurements and unsteady flows (hysteresis in stage-discharge rating curve). He has years of expertise for hydrodynamic measurements using ADCPs, ADVs, PIV, and Pressure transducers, and these activities include experiences in such as instrument calibrations as well as an assessment of standardized uncertainty analysis. Also, he dedicated to develop an analytical tool for solving 1D unsteady flow applicable to streams of all sizes as well as worked on designing and testing index-velocity, slope-area, and numerical methods for accurate estimation of river discharges. Moreover, he worked as a project leader for river cross-section surveys at Iowa Flood Center (IFC) in the state of Iowa. In 2011, he was honored with a prestigious Chateaubriand fellowship from Embassy of France to conduct research in France, where he worked at the Université Claude Bernard Institut National des Sciences Appliquées in Lyon. In 2014, he has been awarded the J.C.Stevens Award for the recognition of excellence in paper from American Society of Civil Engineers. And, he is currently working on hydropower flow measurement project at Oak Ridge National Laboratory in Tennessee.

Education and Military Service

- Ph.D., Civil and Environmental Engineering, The University of Iowa, USA, 2013
- M.C.E., Civil and Environmental Engineering, North Carolina State University, USA, 2007
- B.E., Civil and Environmental Engineering, Chung-Ang University, South Korea, 2005
- Administrative official, Republic of Korea Air force, South Korea, 2001

Positions and Employment

- 2014 Mar-: Postdoctoral Research Associate, Oak Ridge National Laboratory, Tennessee, USA
- 2014 Jan-Mar: Postdoctoral Research Associate, IIHR, The University of Iowa, USA
- 2008-2013: Graduate Research and Teaching Assistant, IIHR, The University of Iowa, USA
- 2010-2013: Graduate Research Assistant, Iowa Flood Center, The University of Iowa, USA
- 2012: Visiting Researcher, Insa De Lyon University, France
- 2005-2007: Graduate Research Assistant, North Carolina State University, USA
- 2005: Post Bachelor Research Assistant, Chung-Ang University, South Korea

Professional Society Membership

- International Association for Hydraulic Research (IAHR), Member
- Korean-American Scientists and Engineers Association (KSEA), Member

Honors and Awards

- J.C.Stevens Award, American Society of Civil Engineers, 2014
- Chateaubriand Fellowship, Embassy of France, 2012
- Graduate Fellowship for short-term study in UK and Netherlands, 2010
- Giaquinta Scholarship, University of Iowa, 2008
- Merit-Based Scholarship, Chung-Ang University, 2002
- Scholarship for Voluntary Service, Chung-Ang University, 1998

Recent Peer-reviewed Publications

- Lee, K., Ho, H-C., Muste, M. and Wu, C-H., 2014, Uncertainty in Open Channel Discharge Measurements Acquired with StreamPro ADCP. *Journal of Hydrology*, 509, 101-114.
- Muste, M. and Lee, K., 2013, Discussion of "Uncertainty Model for In Situ Quality Control of Stationary ADCP Open-Channel Discharge Measurement" by Hening Huang. *Journal of Hydraulic Engineering* 139:1, 102-104 (corresponding author).
- Muste, M., Lee, K. and Bertrand-Krajewski, J.-L., 2012, Standardized uncertainty analysis for hydrometry: a review of relevant approaches and implementation examples. *Hydrological Sciences Journal*, 57 (4), 643-667 (corresponding author)