Yeonuk Kim

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Education

From 2017	MSc Student in Resources, Environment and Sustainability (RES) **University of British Columbia (UBC)**, Canada
2016 B.S.E. *-Cum laude-*	Dept. of Landscape Architecture and Rural Systems Engineering, **Seoul National University (SNU)**, Korea

International Summer School

Aug. 2016	National Cheng Kung University, Taiwan, *Sustainable Development and Management for Lowland Environmental Resilience*
Aug. 2013	BTU Cottbus, Germany & Incheon National University, Korea, *Integrated Urban Environmental Planning: Challenges & Approaches*

Professional Experience

2016	Researcher, National Center for AgroMeteorology (NCAM), Korea
2014 - 2015	Undergraduate Research Assistant, Complex Systems Science Lab, SNU

Research Interests

Ecohydrology, Biosphere-Atmosphere Interactions, Biogeochemical cycle

- Interactions of soil, hydrological cycle, carbon cycle, GHG fluxes, energy flux, and biota
- Impacts of human & climate change on ecohydrological systems and their feedbacks
- Spectrum and Wavelet analysis of time series

Awards & Scholarships

2017	Excellent Degree Thesis Award, College of Agriculture & Life Science, SNU
2015	**Grand Prize,** SNU Undergraduate Research Award, President of SNU
2015	Evergreen Scholarship, SNU Evergreen Scholarship Foundation
2014 - 2015	Agricultural Engineering Scholarship, SNU Alumni Association of Agri. Eng.
2011, 14-15	Merit Based Scholarship (Scholarship of Superior Academic Performance), SNU
2009	National Scholarship for Science and Engineering, Korea Student Aid Foundation

Professional Memberships

Korean Meteorological Society (since 2015)

Research Participations

2016	Constructing the foundation of core technologies for custom-made agricultural & forest meteorological services, Korea Meteorological Administration
2015	SNU undergraduate research program, SNU
2015	Constructing the terrestrial ecosystem carbon database for the Carbon-Tracker-Asia improvement, Korea Meteorological Administration
2014 - 2015	Development of time series database for CO_2 fluxes and investigation of ecosystem carbon dynamics, Korea Meteorological Administration

Publications

1. Peer- reviewed journal articles:

<International Journals>

[1] **Kim, Y.**, Talucder, M. S. A., Kang, M., Shim, K. -M., Kang, N. & Kim, J. 2016. Interannual variations in methane emission from an irrigated rice paddy caused by rainfall during the aeration period. *Agriculture, Ecosystems & Environment.* 223, 67-75.

※ SCI. 2015 IF=3.564, Rank=1/57 (Agriculture, Multidisciplinary). **Time Cited: 3**

<Korean Journals>

[1] Choi, S.W., Kim, H., **Kim, Y.**, Kang, M. & Kim, J. 2016. Estimation and mapping of methane emission from rice paddies in Gyunggi-do using the modified water management scaling factor. *Korean Journal of Agricultural and Forest Meteorology.* In press

In preparation

Kim, Y., Kim, J. Working title: Application of spectrum and wavelet analyses for fields of Agriculture, forestry and ecohydrology

2. Selected presentations & posters:

[2] Choi, S.W., Kang, M., Indrawati, Y.M., Kim, H., **Kim, Y.** & Kim, J. 2016. Carbon footprint estimation using long-term flux measurement in Haenam, Korea: Implication for climate-smart agriculture. *EcoSummit 2016*. Le Corum, Montpellier, France (Poster)

[1] **Kim, Y.**, Talucder, M. S. A., Kang, M., Kang, N., Shim, K. -M. & Kim, J. 2015. Changes in methane emission from rice paddy triggered by rainfall during the mid-season Drainage (in Korean). *The 2015 Korean Meteorological Society Fall Conf*. Jeju, Korea (Oral)

3. Books (Non-refereed):

[1] Group1: Lee, J. et al., Group2: Kim, J. et al., Group3: **Kim, Y.** et al. 2015. World seeing through Rural Systems Engineering (in Korean). *SNU Rural Systems Engineering*. 5

4. Copyright registration (in Korea):

[2] Copyright: NCAM (developer: Kim, J. & **Kim, Y.**), 2016, Computing power spectral density and spectral entropy within specific bands. # C-2016-026366.

[1] Copyright: NCAM (developer: Kim, J. & **Kim, Y.**), 2015, Computing "Scaling factor for water regime (SF_W)" to estimate CH_4 emission from rice paddy (in Korean), # C-2015-028272.

Relevant Skills

1. Experimental facilities

- Eddy covariance system (H_2O, CO_2, CH_4 & Heat fluxes)

  LI-7700/7500(A)/7200 gas analyzers, LI-610 dew point generator (LI-COR), CSAT3 ultrasonic anemometer, AP200 profile system, Dataloggers (Campbell Sci.), Data managing & processing: EddyPro (LI-COR), LoggerNet (Campbell Sci.)

- Meteorological and ecological sensors

  CNR4 net radiometer, CS616 tensiometer, TCAV soil thermometers, Rain gauge, HMP temperature and relative humidity probe, LWS-L leaf wetness sensor, etc.

- Leaf area index: LAI-2200C (LI-COR)

2. Computer skills

Proficient in: MATLAB, MS Office, EndNote, Window 10/9/7/XP
Familiar with: R/R studio, Auto CAD, HEC-HMS, Fluent & Gambit for CFD
Experience in: Python, QGIS, ArcGIS, SigmaPlot, Linux

3. Languages: English & Korean

Certifications, Teaching experiences & Other Activities

2014	Passed the preliminary test, Highest Civil Service Examination in Technical Post (Dept. of Civil Engineering), Korea
2012	Craftsman Environmental, National Qualifications, Korea
2011 - 2013	Civil Engineer (Military service), Republic of Korea Air Force
Jan. 2010	Volunteering for teaching sciences, Korea Foundation for the Advancement of Science and Creativity, http://cafe.naver.com/scienceplay
2009-10, 13-14	Teaching math, Private tutor (e.g., Study IE http://www.studyie.co.kr/)