Curriculum Vitae

Muyeol Jung (PhD)

PERSONAL PROFILE

I am a physical geographer, primarily interested in understanding connections between hydrological, geomorphological, and ecological processes as well as relationships between human and environments during Holocene to address environmental changes. Application of diatom analysis is central to disentangling these connections in my research by using diatom samples obtained on fieldwork or utilising secondary data from relevant institutions for statistical analyses. I have abundant experience of carrying out fieldwork to collect soil and rock samples for application of diatom analysis.

EDUCATION

Oct 2017 – June 2022 PhD at the Department of Geography, Durham University

Durham, the U.K.

- Thesis: Application of Diatom Analysis to Water Quality Assessment, case study: the Nakdong River in the Republic of Korea (Available at <u>Durham Geography</u> e-Theses)
- Supervisors: Professor John Wainwright and Dr Sarah Woodroffe

Sep 2012 - Aug 2015

MA in Physical Geography, Kyungpook National University

Daegu, Korea

- Thesis: Palaeoenvironmental change and Geomorphological development during the Holocene near Susanje artificial bank, Miryang
- Supervisor: Professor Sang-Ill Hwang

Mar 2006 – Feb 2010

BA in Geography, Kyungpook National University

Daegu, Korea

- Thesis: Geomorphological development of Daesan Floodplain in downstream of the Nakdong River
- Supervisor: Professor Sang-Ill Hwang

PROFESSIONAL EXPERIENCE

Oct 2017 – May 2021 Graduate Teaching Assistant, Durham University

Durham, the U.K.

- Modules
 - Introduction to Physical Geography
 - Introduction to Geographical Research
 - Scientific Research
 - o Handling Geographic Information
 - o Spatial and Temporal Dimensions of Hazard

May 2017

Invited Lecturer, the department of Geography, Gyeongsang National University Jinju, Korea

• Delivered three GIS practical sessions to undergraduates in a cartography module

Mar 2017 - Sep 2017

Research Assistant, Gyeongsang National University

Jinju, Korea

• Took part in two projects funded by National Park and National Institute of Ecology

July 2016 – Dec 2016

Research Assistant in various projects

Korea

- The Academy of Korean Studies: Study of place names in Geochang County, Korea
- National Institute of Ecology: Natural Resources Survey: topography (Jeonllanamdo Province)
- Korea National Park Institute: Natural Resources Survey in Mt.Sobaek National Park

Mar 2013 - Dec 2015

Researcher in National Institute of Ecology Seocheon County, Choongnam Province, Korea

• Annual Natural Resources Survey: topography and geologic and geomorphic landscapes

2013 – 2015 Research Assistant in various projects

Korea

- Paleo-topography and land use reconstruction in Gyeongju (Cultural Heritage Administration)
- Paleo-climate reconstruction in East Asia during Quaternary (Korean Meteorological Administration)
- Topography and soil research and classification of topography in long-term monitoring area (National Institute of Ecology)
- Moorland environment in Mt.Jumbong using Diatom analysis (Korea National Arboretum)
- Reconstruction of old paths and topography analysis in Mungyung (Mungyung county)
- Reconstruction of extreme climate events in West and South Sea using microfossils (Ministry of Oceans and Fisheries)
- Natural Resources Survey in Mt. Chiak National Park (Korean National Park Service)

Sep 2012 – Aug 2014

Research Assistant in Ulleugdo Dokdo Research Institute

Daegu, Korea

- Carried out topography monitoring and fieldworks in the Dokdo monitoring project
- Arranged the exhibition about the results of the project
- Provided administrative support

PUBLICATION

- J.Shin, J.Park and **M.Jung**. (2016) Significance and Achievement of Natural Resources Survey of the Institute of Korea National Park Service: focused on the results of geomorphological and geological field of 2015 Mt.Chiak National Park Survey, The Geographical Journal of Korea, 50(4), pp. 401-409.
- S.Hwang, **M.Jung** and S.Yoon. (2016) *Sea Level changes Around the Bank of Susanje Reservoir in Miryang City During the Late Holocene*, Journal of Korean Geomorphological Association, 23(4), pp. 1-15.
- J.Shin, J.Park and **M.Jung**. (2017) *Distribution and Management Plans of Geomorphological and Geological Landscapes in Gyeongju National Park, Korea*, The Geographical Journal of Korea, 51(4), pp. 421-437.
- J.Shin, J.Park and **M.Jung**. (2017) *Distribution and Management Plans of Geomorphological and Geological Landscapes in Dadohaehaesang National Park, Korea: focused on districts on the South Sea*, Journal of the Association of Korean Photo-Geographers, 27(4), pp. 137-155.

SKILLS AND QUALIFICATION

Skills

- GIS analysis : ArcGIS and OGIS (Skilled)
- R (programming language) (Skilled)
- Google Earth Engine (GEE) (Basic)
- OxCal (Basic)
- Diatom analysis for microfossil and contemporary diatoms using a light microscope
- Collecting soil samples in floodplain using an soil sampler
- Map reading and fit for fieldwork

Qualification

• Teacher's Certificate for Secondary School (Grade II) in Geography (Ministry of Education)

EXPERIENCE

- Military Service in Korea Army (Mar, 2010 June, 2012)
 - Commissioned as a Second Lieutenant in Korea Army
 - Served as Captain of Headquarter in the Artillery Battalion
 - Discharged as a First Lieutenant (equivalent of NATO Code OF-1)
- Teaching Assistant in Kyungpook National University (Sep, 2012 Aug, 2015)
 - Providing administrative support

ACADEMIC AWARDS

- Graduate Research Scholarship
 - Granted a year tuition fee (Approximately £3000) from Korean Student Aid Foundation, 2013
 - Scholarship (Approximately £800) from Kyungpook National University for two terms (2nd term, 2012 and 1st term, 2014)
- Research fund

- Postgraduate Conference Fund (£400) granted on 2^{nd} Nov 2017 Ustinov College Travel Award (£100) granted on 23^{rd} Nov 2017 Norman Richardson Postgraduate Research Fund (£500) granted on 6^{th} June 2018 Durham Research Trust Fund (£500) granted on 9^{th} July 2018 Ustinov College Travel Award (£100) granted on 15^{th} Mar 2022