

## **GIS-IDEAS 2016 Training Workshop Program for 12<sup>th</sup> November 2016**

As a part of GIS-IDEAS 2016, the following training workshops are scheduled to be conducted at lecture halls at the conference venue shown below. Upon successful completion of the Workshop, the participants will be awarded certificates awarded by the Japan-Vietnam Geoinformatics Consortium. All the workshops will be in lecture styles with the trainers providing explanation and demos. The participants will be provided with hands on material software and sample datasets for self-paced learning after attending the workshops.

**Venue:** Hanoi University of Mining and Geology (HUMG)

18 Vien street, Duc Thang ward, Bac Tu Liem District, Hanoi, S.R. Vietnam

**Fee:** 300,000 VND (15USD)/workshop

500,000 VND (25USD)/2 workshops

*(Fee can be paid at the Registration Desk in US dollars or equivalent amount in Vietnamese Dong at 8:00-9:00 12<sup>th</sup> November 2016)*

Participants wishing to attend the training should register in advance by sending by e-mail to the GIS-IDEAS Secretariat at **gisideas.secretary@gmail.com**. Please indicate “Registration for GIS-IDEAS 2014 Training Workshop” in the subject of your e-mail and include following details

- Name and Affiliation (Name of Institution/Company and Position)
- Name of Training workshop you wish to register

Training will be on first-come-first-serve basis and registration will close on 4<sup>th</sup> November 2016 (Friday). All workshops will be conducted in English with some instructions in Vietnamese when necessary.

### **Workshop 1: Remote Sensing Using Open Source GIS and Open Data**

**Date:** 12/11/2016, 9:00-12:00

Open Source GRASS GIS is an effective tool for analyzing Remote Sensing Data for various applications. This training workshop is a part of the capacity building initiative of JVGC, Japan. This workshop will provide training on analysis of Remote Sensing Open Data (Landsat-8, ASTER etc.) using GRASS GIS. The participants will be taught about ways to access free data, import data, perform analysis and export data in commonly used GIS formats. Further, techniques for mapping environmental parameters such as vegetation, land cover etc. will also be demonstrated. The participants will be provided with all software and test data for self-practice sessions after completion of the course. The participants will gain knowledge to access various kind of free satellite data and extract environmental information for their own areas of interest and specialization.

**Lecturers:** Le Phuong, Ho Dinh Duan and Go Yonezawa, Venkatesh Raghavan

**Participants:** Maximum 30

**Language:** English

### **Workshop 2: Introduction to Quantum GIS**

**Date:** 12/11/2016, 9:00-12:00

Quantum GIS (QGIS) is an open-source desktop GIS tool that helps you manage, edit, visualize, analyze, and compose maps with geographic data. The workshop will provide introduction to QGIS features and functions. Participants will also be provided with a full working version of the latest QGIS release (qgis.osgeo.org) and hand-on exposure for installing/using QGIS on MS-Windows Operating system.

**Lecturers:** Pham Thi Mai Thy and Do Thi Hang

**Participants:** Maximum 30

**Language:** English/Vietnamese

**Workshop 3:** *Deploying Web applications for Monitoring and Evaluation using Open Source Software*

**field Date:** 12/11/2016: 14:00-17:00

Integrating Web GIS technologies with mobile applications offers a powerful platform for Monitoring and Evaluation (M&E) for a wide variety of needs. Basic concept of M&E is to make it easy to get field data into GIS and taking GIS data to field survey. The workshop will provide training on deploying a M&E framework by combining mobile applications for field data collection with Web-GIS and build tailored application for field data collection and subsequent spatial analysis and visualization on the Web. All the software packages provide in the training will be Free and Open Source and the participants will be able to deploy their own M&E framework using the knowhow and tools provided.

**Lecturers:** Niroschan Bandara, Venkatesh Raghavan and Ho Dinh Duan

**Participants:** Maximum 30

**Language:** English

**Workshop 4:** *Geospatial programming using Python*

**Date:** 12/11/2016: 14:00-17:00

Python is a powerful programming language and has a rich collection of libraries for geospatial analysis. It has come to be a preferred choice for geospatial programming with several Desktop and Web Application tools providing Python environment. The workshop will give an introduction to Python programming using the QGIS desktop. The participants would be able to run their own Python scripts for spatial analysis and will also be given an introduction on developing plugins for enhancing QGIS with new functionality for specific needs.

**Lecturers:** Truong Xuan Quang and Do Thi Hang

**Participants:** Maximum 30

**Language:** English