

## WORKSHOP PROGRAMME

### Wednesday, 26 March 2014

- 08.30 - 09.00 am Registration
- 09.00 - 09.15 am Welcome Speech by Workshop Chairman
- 09.15 - 09.30 am Workshop Opening & Speech by the UTM Deputy Vice Chancellor
- 09.30 - 09.45 am Photography Session
- 09.45 - 10.00 am Refreshment
- 10.00 - 11.00 am Module 1: Building an Environment that Enhances Cities' Sustainable Development  
*By: Implementation Coordination Unit (ICU)*
- 11.00 - 12.00 pm Module 2: Utility and Infrastructure: Cities' Sustainability Through Better Urban Planning  
*By: Town And Country Planning Department(JPBD)*
- 12.00 - 01.00 pm Module 3: Guidelines for Acquiring Underground Utility As-Built Information  
*By: Department of Survey and Mapping Malaysia (JUPEM)*
- 01.00 - 02.15 pm Lunch
- 02.15 - 03.15 pm Module 4: License Surveyor's Role Related to Underground Utility Detection and Mapping Works  
*By: Association of Authorised Land Surveyors Malaysia (PEJUTA)*
- 03.15 - 04.15 pm Module 5: Trenchless Construction Towards Greener Cities and Its Challenges – Horizontal Directional Drilling (HDD)  
*By: Semantra No-Dig Engineering Sdn. Bhd.*
- 04.15 - 04.30 pm Refreshment
- 04.30 - 05.00 pm Demonstration – Pipeline Installation Using Horizontal Directional Drilling (HDD)
- 08.00 - 10.00 pm Buffet Dinner

### Thursday, 27 March 2014

- 09.00 - 09.30 am Breakfast
- 09.30 - 10.30 am Module 6: Technical Lecture  
*By: RDG SUPPLY SDN. BHD. / REDUCT*
- 10.30 - 01.00 pm Practical and Hands-On Session : Electromagnetic Locator (EML), Ground Penetrating Radar (GPR) & Orientation Measurement Unit (OMU)
- 01.00 - 02.30 pm Lunch
- 02.30 - 03.30 pm Data Processing and Analysis
- 03.30 - 03.45 pm Refreshment
- 03.45 - 04.15 pm Q & A Discussion Session
- 04.15 - 04.45 pm Closing Speech by Director of INSTeG & Certificate Presentation
- 04.45 - 05.00 pm Photography Session for Organizing Committee and Invited Industry

## PARTICIPANTS

Who should attend this workshop:

- \* Surveyors
- \* Engineers
- \* Utility Owners
- \* Local Authorities
- \* City Hall
- \* Port Authorities
- \* Urban Planners
- \* Contractors
- \* Geophysicists
- \* Researchers

## ACCOMMODATION

Participants are encouraged to arrange their own accommodation.

### In-House Accommodation

Scholar's Inn, Universiti Teknologi Malaysia  
Tel: +607 553 5197/6695 Fax: +607 553 6619

### Nearest Accommodation

Pulai Spring Resort  
Tel: +607 521 2121 Fax: +607 521 1819

Good Hope Hotel, Skudai  
Tel: +607 557 2828 Fax: +607 556 3888

## FOR INQUIRIES

### Institute of Geospatial Science & Technology (INSTeG)

Block T06, Ground Floor (01-04-12)  
Faculty of Geoinformation and Real Estate  
Universiti Teknologi Malaysia  
81310 Johor Bahru  
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Tel: +607 55 57661 ; Fax: +607 55 57662

### Contact person:

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Sr. Saiful Wazlan (019-2604714)  
Prof. Sr. Dr. Wan Muhd. Aminuddin (012-5202222)



DATE:

26-27 March 2014

VENUE:

Faculty of Geoinformation & Real Estate  
Universiti Teknologi Malaysia,  
Johor Bahru

Organized by :



In collaboration with :





# INTRODUCTION

**R**apid population growth and urbanization has lead to the expansion of urban infrastructure, particularly transportation, utilities, etc. With this regards, utility owner takes the initiative to embed more and more utility features in the underground for supporting the high demand of basic utility infrastructures such as electricity, water, sanitary sewer, gas and telecommunication. As such, the underground space at present is saturated with different types of utility infrastructure where some of these pipes and cables are buried deeper and deeper in the underground, stacking in multiple layers in both vertical and horizontal orientations using horizontal directional drilling (HDD) methods. In this regard, detection and mapping of underground utility has become a challenging task, especially within the urban areas. Although different detection tools such as Ground Penetrating Radar, Electromagnetic Locator, or even the Orientation Measurement Unit (i.e. the latest non-destructive testing technology) have been adopted for acquiring the as-built information of these buried utilities, the issues of mislocation of underground utilities and the damages of third party's utility pipelines due to failed excavation are still persist and become worst. Therefore, immediately after the *SEMINAR PEMETAAN UTILITI KEBANGSAAN 2013*, organized by Department of Survey and Mapping Malaysia, collaboration between Institute of Geospatial Science and Technology (INSTeG), Universiti Teknologi Malaysia, Universiti Sains Malaysia, Department of Survey and Mapping Malaysia and RDG Supply Sdn. Bhd. are materialized in organizing this timely workshop to invite experienced speakers within the industry to share the answers to all below mentioned questions:-

- i. What is the Government Policy for utility infrastructure planning in order to build an environment that enhance cities' sustainable development?
- ii. Why as-built information is important for urban development?
- iii. What are the guidelines for acquiring underground utilities' as-built information?
- iv. What is the role of land surveyor in underground utility detection and mapping?
- v. How can HDD helps in trenchless construction towards greener cities and better underground landscape planning?

## HIGHLIGHTS

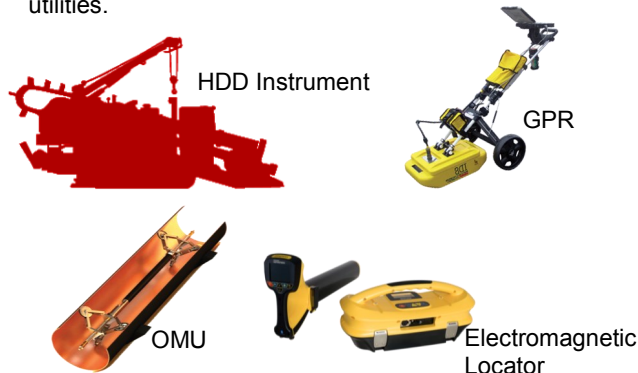
Benefits for joining this workshop are:

- \* **4 CPD points approved by Land Surveyors Board Malaysia**
- \* **Live-demo on pipe installation using HDD & OMU pipeline mapping to obtain accurate GPS coordinates for HDD installed pipeline**
- \* Total solutions for acquiring utility as-built information
- \* Hands-on field experience
- \* Case study experience
- \* Understand the tricks and pitfalls of data interpretation
- \* To be conducted by professional speakers who have years of experience in underground utility mapping

## OBJECTIVES

This workshop is held with special objectives as below:

- 1) To provide participants with a better knowledge on the state-of-the-art of underground utility mapping;
- 2) To provide a "hands-on" training on using the right approaches and technologies for acquiring as-built information of the buried utilities; and
- 3) To promote awareness on the importance of using appropriate skills and safety operation guidelines to be undertake for acquiring as-built information of the buried utilities.



**ENROLL NOW! (Registration Closing Date: 14 March 2014) SEATS ARE LIMITED!** With only **\*\*RM1500**, inspired yourself with "Live-demo on pipe installation using HDD & OMU pipeline mapping" followed by "**Underground Utility Detection Hands-On Practical**". Every enrollment includes lecture materials, field work, lunch, refreshment and Buffet dinner (**excluding accommodation and transportation**). **"Early Bird Registration" ( payment made before 4 Feb. 2014) or "Group Registration" (min. 3 person) is eligible for a 20% discount.**

**\*\*All payment should be made payable to:-**

**"BENDAHARI UNIVERSITI TEKNOLOGI MALAYSIA"**  
**Account CIMB: 0118-000001-05-1**

On receipt of your form and full payment, we will send you confirmation of registration.

NAME: \_\_\_\_\_

NO. IC/PASSPORT: \_\_\_\_\_

CONTACT NO.: \_\_\_\_\_

DESIGNATION: \_\_\_\_\_

ORGANIZATION: \_\_\_\_\_

ADDRESS: \_\_\_\_\_

\_\_\_\_\_

E-MAIL: \_\_\_\_\_

PAYMENT MODE: CASH / CHEQUE / LO TOTAL: RM \_\_\_\_\_

FOOD ALLERGIES: YES / NO (IF YES PLEASE STATE: \_\_\_\_\_)

**Online Registration:**  
<http://gprworkshop.coffeecup.com/forms/GPROnlineRegistration/>

Please send the completed form with proof of payment to:

**Institute of Geospatial Science & Technology (INSTeG)**  
 Block T06, Ground Floor (01-04-12)  
 Faculty of Geoinformation and Real Estate  
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