

Capacity building NGO in the Environmental Field to be an Enabler to Malaysian Professional's Growth

BERITA ENSEARCH

JULY - SEPTEMBER 2015 / 3rd QUARTER

e-Bulletin at www.ensearch.org/resources/beritaensearch



BRIEF HISTORY OF ENSEARCH

ENSEARCH was formed in 1984 by a pioneer group of local professionals and academics from multidisciplinary backgrounds. Its first President (1984-2000) was Ir. K. Kumarasivam and its first Hon. Secretary General was Dato' Dr. Abu Bakar Jaafar. Today, ENSEARCH has more than 300 members consisting of corporate, individual and life members.

It is acknowledged that enhanced awareness and capacity building of organizations and individuals through education and training is essential to achieve the objectives of Malaysian Environmental Quality Act, 1974.

Therefore ENSEARCH began formulating and

implementing training programs to enhance the capacity for environmental management in Malaysia.

In addition, ENSEARCH organizes Tea Talks and Public Lectures to enhance awareness on pertinent and comprehensive issues on the environment.

ENSEARCH has also been actively involved in dialogue sessions with relevant authorities in development of legislative and regulatory frameworks that are supportive of good environmental management practices.

In recognition of ENSEARCH's objectives, it has been given tax-exempt status whereby the donations to ENSEARCH are exempted by from tax.

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"A nation that destroys its soils destroys itself. Forests are the lungs of our land, purifying the air and giving fresh strength to our people."

- Franklin D. Roosevelt -



EDITOR'S NOTE

ENSEARCH

is a non-profit association of organizations, professionals, students and people with interest in learning and promoting effective ways to manage the impact of human activities on the environment. We at ENSEARCH believe that everyone is responsible for managing and mitigating the impacts of their corporate, professional and daily living activities on the environment. ENSEARCH is also involved in indigenous fruit tree species conservation and poverty eradication through its project Cyber Plant Conservation Network www.cpcnet.atbioversity.net

Hi members!

Welcome to our second edition of the BERITA for 2015. We 've had some changes in the personnel lately and I am pleased to say that we now return with a solid team backing the ENSEARCH Secretariat, with the appointment of Sharon and Benedeth as the Senior Projects Officer and Project Officer respectively.

ENSEARCH has been busy in the half of 2015 with many activities, such as trainings, forum and technical visits. Among the major events to date were the K. Kumarasivam Endowment Fund (KKEF) Memorial Public Lecture Young Environmentalist Award 2014 held in January, as well as the ENSEARCH Annual General Meeting (AGM) which took place in May. At the AGM, there were no major changes in those at the helm of ENSEARCH as most of the office bearers were either re-elected or were still serving their two-year term.

Looking ahead, there are many exciting programmes ahead for this year with several trainings and seminars in the pipeline. There is plenty in store for all of you members out there, and we look forward to another productive second half of 2015 from ENSEARCH.

KHOO BOON KEAT Chairperson, Website & Publication

OUR VISION

"Malaysians are environmentally aware and are committed to taking personal responsibility to manage and mitigate the impacts of their corporate, professional and daily living activities on the environment"

OUR MISSION

"To promote excellence in environmental management among organizations, professionals and interested persons."



This edition of the Berita ENSEARCH features Dr. Foo Say Moo, who is presently one of the two Vice Presidents of ENSEARCH, and who also is the Chairman of the Education and Training Committee. He has been serving as a council member since 2013.

Dr. Foo was born in 1953, in Tumpat, Kelantan. He graduated from Salford University with a B.Sc. (Hons) Applied Chemistry with an elective in Chemical Processing. He has spent the greater part of his professional career with Petronas where worked for more than 30 years. Working with Petronas has given him experiences in various technical, research and technology in both upstream and downstream of oil and gas industry. He was the Head of Group Sustainable Development Department in the Petronas Group HSE Division before his retirement. He is currently the Technical Advisor to Golden Ecosystem Sdn Bhd, an environmental consulting company.

During his time with Petronas, Dr. Foo pursued his postgraduate studies, first in M.Sc. Analytical Chemistry at Salford University, and later for a Ph.D in Atmospheric Corrosion and Pollution at UMIST (Manchester).

Dr. Foo had initially planned to pursue a career as a civil or structural engineer to join his father who was a housing developer at the time, but now has no regrets in his choice of studies and career in the end, which he described as being very satisfying.

Dr. Foo's first involvement with ENSEARCH was in 2010 when he was the Head of Environmental Management in Petronas, where he always made an effort to attend ENSEARCH's Waste Management Conferences. After his retirement, he was looking to be involved in the environment field and also to continually keep abreast of the latest developments in environment management and technology. Subsequently, he contacted En. Abdul Aziz Long who was the then ENSEARCH President to express his interest and volunteer his services, and was subsequently co-opted as a council member.

Been a volunteer at a non-profit organization like ENSEARCH, Dr Foo admits the challenges he faces in terms of putting in time, effort and commitment in his role in ensuring ENSEARCH continues to serve its members as best it can. As a chairman of the Education and Training Committee, Dr Foo find it is very rewarding when ENSEARCH Training courses are well received by participants, judging by the feedback received. He continues to strive to ensure that the content of the courses is practical to improve their skills as professionals in the environmental field.

Dr. Foo is blessed with three children and two lovely granddaughters. His favourite pastimes include watching live football matches, reading, traveling and taking care of his Arowana fishes.

Dr. Foo 's personal philosophy is be happy, do your best in all undertakings and be a good listener. His message is "Come and join ENSEARCH, be part of us, and together we can make difference in championing environmental professionalism in Malaysia" to encourage more people out there to join or engage NGOs like ENSEARCH.



PROFILE OF COUNCIL MEMBER Dr Foo Say Moo



Dr. Foo (second right) at work



Dr. Foo's arowana fish



Dr. Foo and his son



Dr. Foo and his granddaughter



FEATURE

Geospatial Technologies for Environmental Management - open

doors with open-source

Dr. Tuong-Thuy Vu

OSGEO Lab, School of Geography, University of Nottingham, Malaysia campus

25th September 2015

1 INTRODUCTION

Today, using geospatial technologies become a vital part of our daily life. Handling the collection, management, analysis and visualisation of (geo) location information, geospatial technologies are obviously helpful in environmental monitoring and management. The environmental experts have been using remote sensing images, collecting water/soil samples with a Global Positioning System (GPS) handheld receivers, employing Geographic Information System (GIS) for data management, analysis, modelling and visualisation, especially for what-if scenarios. The current technologies are shifting the way of geoinformation uses via producing much more variety of better data, and providing better platforms for information management, dissemination, and communication. We are dealing with big data in an open collaborative and connected world. This paper is to review the current trend of geospatial technology development, highlight the important of open-source approach, and discuss how environmental experts should be ready to keep pace with the changes.

2 GEOSPATIAL TECHNOLOGIES: LATEST DEVELOPMENT

Today, Satellite remote sensing, since its early date in 70s, has gradually changed the practice of geo-location data collection [15, 16, 13]. Map updating becomes much faster and cheaper. Instead of relying on expensive airborne capture, which cannot be carried out annually, timely satellite images can be exploited. Satellite images can cover hundreds squared kilometers at once and the spatial resolution is getting better and better enabling the update of various map scales. Today, we are able to easily acquire from 250m resolution MODIS image, 30m resolution Landsat image to sub-meter resolution images like Quickbird (0.6m) or Worldview-2 (0.5m). Different configurations of satellite sensors provides required information in different cases according to user requirement [1]. Lower spatial resolution image shall be sufficient to monitor an incident like flooding casting over a large area whereas very high spatial resolution image is suitable for safe airport management, harbour, dockyard activities monitoring, road traffic jam monitoring [14], damage assessment [17] or crop type identification, monitoring, pest controlling, harvest prediction [4].

The lower spatial resolution images covering a bigger area and hence are acquired at a shorter interval. For instance, MODIS images can be received daily whereas Landsat image of the same area expected to be acquired 17 days later. Forest re monitoring or crop monitoring require shorter like daily observation whereas urban expansions monitoring or climate monitoring requires a much longer time interval. Time series image comparison is effective for continuous environmental monitoring [2].

New generation of satellite sensor not only improves spatial resolution but also temporal resolution (acquisition interval) and spectral resolution (number and bandwidth of spectral bands). Sub-meter resolution images can be acquired within 2-3 days, either by tilting sensor look angle or combining data from tandem satellites, e.g. two or more satellite fly exact on the same orbit one after another. Figure 1 illustrates the orbit of 5 RapidEye satellites in tandem mission, which helps to shorten the revisit to 1 day with 6.5m spatial resolution image. The latest development of CubeSat, a very small low-cost satellite, constellation of 20s satellites even improve drastically the temporal resolution. Planet Labs (www.planet.com) provides 3-5m resolution images or Skybox Imaging (www.skyboximaging.com) captures 90sec video (30 frames/sec) multiple times a day, which can help to monitor on-demand environmental incidents

effectively.

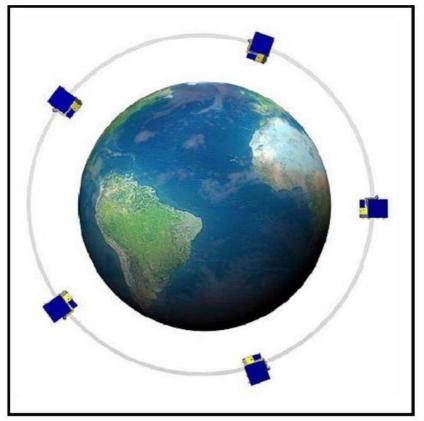


Figure 1: RapidEye constellation in one orbital plane (image credit: Black-Bridge)

Figure 2 presents the improvement of the spectral bands from earlier Quick-bird to the latest Worldview-2 satellite sensors. Better resolutions enables invasive species mapping, city services mapping, bathymetric measures, forest health monitoring at very high spatial resolution among many others expanding the remote sensing applications. Today, satellite remote sensing systems contribute significantly to acquire timely spatial information required in environmental monitoring and management. Huge and complex data sets are captured and produced daily, which requires different data management and analysis approaches.

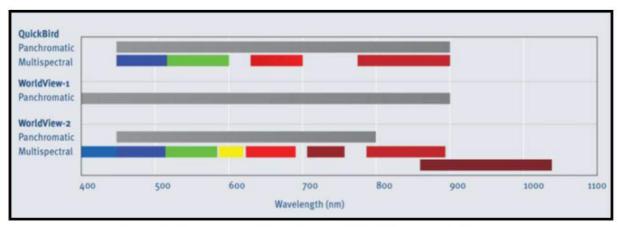


Figure 2: Comparison of Quickbird and Worldview spectral bands (Fabio Pacici and Kumar Navulur, DigitalGlobe, Inc.)

In addition to advances in geospatial technologies, we are experiencing the great development in web, telecommunications and wiki-based collaboration technologies. The Web is no longer a data portal and repository but enables user-generated contents, collaborative works on the web, and it is coined as Web 2.0 [11]. Now everyone can contribute and share geoinformation, numerous examples of public participation geoinformation or volunteered geoinformation system [6] can be found like collaborative mapping OpenStreetMap (openstreetmap.org) or contributing to emergency responses [8]. Conventionally, data collection for environmental monitoring would be very costly as we need expensive equipment, trained experts, and the coverage to obtain sufficient samples. Nowadays, advanced technologies enables citizen-sensor [5, 12]. Maisonneuve et al. [10] developed a participative noise pollution monitoring network in which personal GPS-equipped cellphone became a noise sensor. Likewise, smartphone could be an air quality sensor [3]. Such systems help to greatly increase the population and density of collected samples and reduce the cost of data collection. Crowd-sourced data collection whistle expands the coverage of data collection, its quality needs be carefully taken into consideration. The professional equipment handled by trained expert is still required to validate the crowd-sourced data but it can be reduced to optimal locations and hence, overall cost reduction.

Environmental issues have no boundary. Due to previous limitation of our data collection approach, we had to narrow down the coverage of investigation to an affordable level and accept some reasonable uncertainty. Today, big data set collected daily at various scales and ready for environmental specialists and consultants to use accordingly. The data cannot be "closed" due to its huge volume and the nature of "open" and "collaborative" collection approach. Moreover, an "open" platform needs to be in place to facilitate data analysis, management, modelling and visualisation.

3 THE OPEN-SOURCE

Open-source is referred as a development model that promotes a universal access to a product's design, redistribution and subsequent improvements to it by anyone via a free license [9]. Open-source software projects flourish along the development of Internet. Open-source geospatial (OSGEO) software projects started in early 80s, the most typical package GRASS GIS was introduced. Since then, OSGEO software and tools have been growing in quantity and quality. In Malaysia, we have been working more with GRASS GIS and Quantum-GIS. The list of available sources can be found on OSGEO foundation website (www.osgeo.org). As stated, "OSGeo was created to support the collaborative development of open source geospatial software, and promote its widespread use" (www.osgeo.org). In parallel with other powerful "closed" software, OS-GEO software has well assisted the works of environmentalists.

Open-source is not just limited to tools and software. The effort like open-streetmap among many others implements the open-data concept. Provided via a free license, data are created and modifed by anyone. Growing in open-source data collection and sharing projects places open-data in an equivalent position with authoritative ones. Some recent researches are looking into how those crowd-sourced (open-source) data could be used in line with authoritative data [7]. Governments take open-data seriously as it is the way to keep pace with technology development, i.e. latest policy development from UK (https://data.gov.uk/) and US (https://www.data.gov/). In the global scale, we can access freely Landsat archive data (glovis.usgs.gov), 30m Digital Elevation Model (http://earthexplorer.usgs.gov/), and 30m landcover database (www.globallandcover.com) to name a few. On another development, the Open Geospatial Consortium (OGC) is committed to making quality open standards for the global geospatial community. Open standards become critical in this connected and collaborative world.

In last decades, open-source software have been used but not so popular in education and training due to earlier immature and so the steep learning curves of the OSGEO packages. Today, the picture changes dramatically. In late 2011, an MoU signed between OSGEO foundation and International Cartographic Association (ICA) initiated "Geo For All" (geoforall.org) with "the aim of developing on a global basis collaboration opportunities for academia, industry and government organizations in open source GIS software and data". Today, over 100 established OSGEO Labs in universities and organisations worldwide have joined the networks. In Malaysia, University of Nottingham, Universiti Teknologi Malaysia (UTM) and Universiti Sains Malaysia (USM) are among the members of GeoForAll. A meeting in July 2012 at UTM, Johor Bahru kicked off the initial step to unite the open-source forces and further expand the activities in Malaysia (Figure 3). We look forward to seeing more and more trained geospatial and/or environmental experts who truly understand the value of "open source" and practically apply in their works.



Figure 3: First meeting of OSGEO Malaysia chapter, July 2012, Johor Bahru

4 SUMMARY

Advances in technologies leaps to the "big data" era and the open-source approach introduces lots of opportunities for a better way of solving environmental issues. Huge data sets of various aspects of environment (DATA), cloud-computing platform and machine learning algorithms (INFRASTRUCTURE), and most importantly, the collaborative networks (APPROACH), all are ready. How we exploit them? Understanding open-source concept is the must to start with. Handling data is not constrained by a single software, the interconnected open-source source ecosystem allow us to choose the most suitable and effective tools accordingly. Open-source software nowadays become much friendlier for the users. In line with on-going crowd-sourced mapping activities, we should start practicing collaborative data collection and community sharing. Basic GIS training remains the must for those need to work with geospatial data. However, further training and practice on web environment should be paid more attention. In the years to come, GIS is moving away server-based or desktop-based system, it is referred as "services" which is offered on the cloud-platform. Universities and relevant organisation like ENSEARCH would be an ideal platform to provide necessary skill training for environmental experts to keep pace with the changes in geospatial technologies.

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TRAINING



Date: 22nd & 23rd October 2015 (Thursday & Friday) Time: 8:30 am - 05:00 pm

Venue: ENSEARCH Training Centre (Map enclosed), 30-3, Jalan PJU 5/16, Dataran Sunway, Kota Damansara, 47810 Petaling Jaya.

Overview

This two (2) days training session is organized by ENSEARCH; in association with a registered socio-economic impact assessment (SEIA) practitioner for those who are interested, especially the planners, project managers, engineers and other related professionals.

The first day training session will among others reveal the concepts, principles, method and SEIA process to the participants. Case studies and SEIA experiences will be shared to the participants, and a training activity will be conducted on the second day in the form of 'Role Play'. This exciting session will be evolving in participants playing roles in a public participation

In addition, to encourage the participants to adopt the SEIA into their future development proposals, the training session aims to ensure all participants to have basic understanding of SEIA, method and activities in preparing the SEIA.

Objectives

- 1. To outline the importance of Socio-Economic Impact Assessment in the Socio-Economy - EIA project management and planning permissions, and the roles and responsibilities of those who conduct it.
- 2. To guide and develop the basic understanding of:
 - > The role and scope of SEIA in relation to the EIA process;
 - > The types of socio-economic impacts that can result from development proposals; and
 - > The principles, procedure, methods and good practices that are used to assess and mitigate social impacts.

Who Should Attend?

- Planners, Project Managers, Engineers and other related professionals
- Project Proponent private developers and government agencies, e.g. Department of Irrigation and Drainage, Highway Planning Unit, and etc.
- 3. State and Local Authorities

Training Fee

- ◆ RM 900.00 (ENSEARCH Member)
- * Register 3 or more participants from the same organization to enjoy 10% discount
- ◆ RM 300.00 (ENSEARCH Student Member)
- ◆RM 1000.00 (Non-ENSEARCH Member) ◆RM 350.00 (Student Non-ENSEARCH Member)
 - * To qualify for the student price, please submit a copy of your Student ID as

DOE - EIMAS



Will be granted

To Registered Certified Environmental Professionals

Trainer

Mdm. Herlina Ab. Aziz

- > Executive Director of PEERS Consult (M) Sdn. Bhd., a planning and research company and the Director of Enviro Enhance Sdn. Bhd., a Ministry of Finance EIA registered company.
- Has been in the professional field for more than 25 years, with experience working both in private and public sectors prior to setting up her own firm.
- > A registered Socio-Economic Impact and Land Use Assessment Subject Consultant with the Department of Environment, Malaysia
- > Invited frequently as speaker and trainer for SEIA and sustainability assessment trainings.
- > Involved in various large scale, politically sensitive and technically complex projects throughout Malaysia
- > Recognized for bringing critical exemplary skill to highly specialised fields concerning Socio-economic Impacts Studies.

Contact Us

Environmental Management & Research Association of Malaysia (ENSEARCH)

30-2, Jalan PJU 5/16, Dataran Sunway, Kota Damansara, 47810 Petaling Jaya, Selangor.

Contact Person: Ms. Benedeth Phone: 03-6156 9807 / 08 Fax: 03-6156 9803 E-mail: po@ensearch.org Visit us on the web at http://enseurch.org

Disclaimer: ENSEARCH reserves the right to postpone/cancel the said Training due to unforeseen circumstances. ENSEARCH will keep participants updated on the status 3 working days in advance by e-mail.



Trainer's Biodata

Mdm. Herlina is the Executive Director of PEERS Consult (M) Sdn. Bhd. a planning and research company and the Director of Enviro Enhance Sdn. Bhd., an EIA company registered with the Ministry of Finance

She is a corporate town planner with the Board of Town Planners Malaysia and has been in the professional field for more than 25 years. She is well known as a versatile lady town planner and researcher in planning and development field.

She has experienced working both in private and public sectors prior to setting up her own firms. Since she established PEERS Consult (M) Sdn. Bhd., the firm has been involved in national reputable projects with her own hands-on contribution to the strategic planning of the country. This includes her involvement in the National Physical Plan, The Study on the Central Forest Spine, The Review of National Ecotourism Plan and other large scale, politically sensitive and technically complex projects throughout Malaysia. Her socio-economic impacts assessment projects includes the SEIA for the airports, dams, mixed development projects, plantations and infrastructure projects such as the

sanitary landfills and sewage treatment plants.

In defiance of her strong interest on recent developments in Science and Technology, Mdm. Herlina is also recognized for bringing critical and exemplary skill to highly specialized fields concerning Socio Economic Impact Studies, Sustainability Assessment, Urban and Regional Planning.

With her registration as a Social Impact and Land Use Assessment Subject Consultant to the Department of Environment, Ministry of Natural Resources and Environment, she has been frequently invited as the impact assessment consultants by the developers and the decision makers. Mdm. Herlina is also a frequent speaker, giving hands on training to environmental professionals and public sectors officials on social economic impact assessments and sustainability assessments. She has been recognized as a very committed person in all her endeavours, hence never fail her clients in delivering high standards output in all her projects involvement.

Training Programme

Day 1		Day 2	
Time	Description Description	Time	Description
8:30 – 9:00 am	Registration of participants	8:30 – 9:00 am	Registration of participants
9:00 – 10:20 am	Session 1: Introduction: SEIA in the Context of EIA and Project Development	9:00 – 10:00 am	Session 4: SEIA Case Studies and Experiences in EIA and Planning
10:20 – 10:30 am	Q & A Session	W. J. J. S.	Permissions
10:30 – 11:00 am	Morning Break	10:00 – 10:10 am	Q & A Session
	Session 2: What, When, Where & Why	10:10 – 10:40 am	Morning Break
11:00 – 12:00 pm	Social Impact Assessment?	10:40 – 12:30 pm	Session 5: Activity—Role Play
12:00 – 12:10 am	Q & A Session		(Workshop)
12:10 – 2:00 pm	Lunch Break	12:30 – 2:00 pm	Lunch Break
2:00 – 3:00 pm	Session 3: Methodologies for SEIA.	2:00 – 3:30 pm	Session 6: Group to Present & Feedback
3.00 – 3:30 pm	Afternoon Break	3,30 – 4:00 pm	Afternoon Break
3.00 – 3.30 pm		4:00 – 4:10 pm	Collection of Feedback Form
3:30 - 4:50 pm	Session 3: Methodologies for SEIA Assessment (cont.)	4:10 pm	End of Training
4:50 – 5:00 pm	Q & A Session End of Day 1		
		-	





TRAINING

AIR POLLUTION ASSESSMENT (LEVEL 1 - BEGINNER)

Date: 12th & 13th November 2015 (Thur & Fri)
Time: 8:30 am — 05:00 pm
Venue: ENSEARCH Training Centre (Map enclosed),

30-3, Jalan PJU 5/16, Dataran Sunway, Kota Damansara, 47810 Petaling Jaya, Selangor.

Overview

The Air Pollution Assessment (Level 1 - Beginner) training session aims to introduce the subject of Air Quality Assessment in the Environmental Impact Assessment process, particularly in Malaysia, to relevant target groups. The training session course will be divided into two main parts, namely; Theory of Air Quality Assessment and Air Quality Models. Participants will be introduced to specific USEPA models such as SCREEN3 (Screening Model) and ISCST3 (Refined Model), Australian AUSPLUME, AERSCREEN (Screening Model) and AERMOD (Refined Model).

Objectives

- Introduction of air quality assessment in the Environmental Impact Assessment (EIA) process, particularly tailored for Malaysia.
- Introduction of various screening and refining Air Quality Models used in EIA study.

Who Should Attend?

The target groups are Environmental Consultant & Assistant Consultant, Subject Consultant and Environmental Professional/Practitioner who are practicing Air Quality Management in his line of work.

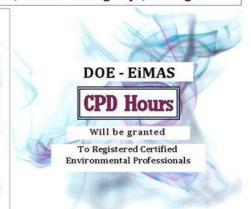
Trainer

Mr. Lim Sze Fook

- > Has 31 years of experience in the field of meteorology and atmospheric environment.
- > Has served as an expert for the World Meteorological Organization in matters related to the environment and participated in a number of atmospheric research projects during his service in the Malaysian Meteorological Department (MMD), Ministry of Science, Technology and Innovation.

Mr. Tan Poh Aun

- > Currently is the Principal Consultant for SOx NOx Asia Sdn Bhd (since July 2009).
- > Registered Environmental Impact Assessment Consultant with the Department of Environment Malaysia
- > Has extensive experience in the use of established air pollution computer models such as CALPUFF, AERMOD, ISCST3, AUSPLUME, SCREEN3 and AERCREEN.



Training Fee

- ♦ RM 900.00 (ENSEARCH Member)
- * RM 1000.00 (Non-ENSEARCH Member)
- * Register 3 or more participants from the same organization to enjoy 10% discount
- ♦ RM 300.00 (ENSEARCH Student Member)
- ◆ RM 350.00 (Student Non-ENSEARCH Member)
- * To qualify for the student price, please submit a copy of your **Student ID** as proof

Contact Us

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Visit us on the web at http://ensearch.org

Disclaimer: ENSEARCH reserves the right to <u>postpone/cancel</u> the said Training due to unforeseen circumstances.

ENSEARCH will keep participants updated on the status <u>3 working days</u> in advance by <u>e-mail</u>.



Trainer's Biodata

Mr. Lim Sze Fook

Mr. Lim Sze Fook graduated from University of Malaya (UM), in 1977 with a Bachelor of Science (Honours) in Physics. He is a Registered Environmental Impact Assessment (EIA) Consultant in Air Quality and Meteorology. His first "acquaintance" with the field of meteorology in general and weather-forecasting in particular, came when he was sent for initial professional training as a meteorologist at the India Meteorological Department, India in 1979. During his service in the Malaysian Meteorological Department (MMD), he has served as an expert for the World Meteorological Organization in matters related to the environment and participated in a number of atmospheric research projects. Currently, his specialization is in air quality, including air quality modelling and environment. Mr. Lim has written and presented a number of papers in the field of meteorology and environment. He had been appointed as a resource person to Institut Alam Sekitar Malaysia (EiMAS), Kampus Universiti Kebangsaan Malaysia, Bangi, Selangor (2004—2009) and also to Hospital Universiti Kebangsaan Malaysia (HUKM), Cheras, Selangor (2009—2015) both in Air Pollution Modelling.

Mr. Tan Poh Aun

Mr Tan Poh Aun graduated from University of Malaya (UM), in 1997 with a Bachelor of Science Degree (Chemistry) and has completed his Master of Technology (Environmental Management) from UM in 2002. He has attended the AERMOD, ISC-Prime and ISCST3 Air Dispersion Modelling with Risk Assessment at USA in 2005. In May 2013, he had completed a 3-day Course on CALPUFF Air Dispersion Modelling in Las Vegas, Nevada, USA. He is a registered EIA Consultant with the Department of Environment Malaysia. In Air Quality Management, Mr Tan has extensive experience in the use of established air pollution computer models such as CALPUFF, AERMOD, ISCST3, AUSPLUME, SCREEN3 and AERSCREEN. As one of the recognised air dispersion modellers in Malaysia, he has trained officers from Malaysian Department of Environment and corporate entity such as PETRONAS in air pollution modelling assessments. In 2009, he has conducted a two-weeks internship programme on Air Pollution Management and Air Quality Modelling organised by ENSEARCH for officers of Department of Environment, Bangladesh. In June 2012, he had conducted an Odour Modelling and Assessment Workshop for Malaysian Rubber Board and in November last year, he had conducted a Half-Day Odour Sampling, Modelling and Assessment Training Workshop for Faculty of Health Science, UiTM Kampus Puncak Alam. Since 2008 to date, Mr Tan has conducted numerous trainings which are mostly on Air Quality Management.

Training Programme

Day 1 (Trainer: Mr. Lim Sze Fook)		
Time	Description	
8:30 – 9:00 am	Registration of participants	
9:00 – 10:30 am	Session 1: Introduction to Air Pollution - Elements of Air Pollution - Scales of Air Pollution	
10:30 – 10:45 am	Morning Break	
10:45 – 12:45 pm	Session 2: Introduction to Meteorology of Air Pollution	
12:45 – 2:00 pm	Lunch Break	
2:00 – 3:30 pm	Session 3: Introduction to Air Quality Modeling - Concepts of Air Quality Modeling	
3:30 - 3:45 pm	Afternoon Break	
3:45-5:00 pm	Session 4: Introduction to Air Quality Assessment	
5:00 pm	End of Day 1	

Time	Description
8:30 – 8:45 am	Registration of participants
:45 – 10:30 am	Session 5: Introduction to USEPA SCREEN3 Model
0:30 – 10:45 am	Morning Break
0: 45 – 12:15 pm	Session 6: Introduction to the USEPA ISCST3 Model
2: 15 – 2: 15 pm	Lunch Break
2:15 – 3:30 pm	Session 7: Introduction to Australian AUSPLUME Model
.30 – 3:45 pm	Afternoon Break
3:45 – 5:15 pm	Session 8: Introduction to USEPA AERSCREEN & AERMOD Model
5:15 pm	Collection of Feedback Form End of Training





TRAINING

Open channel flow modelling using the HEC RAS (Hydraulic Engineering Centre, River Analysis Software) Package Training

Date: 24th & 25th November 2015 (Tue & Wed)

Time: 8:30 am — 05:00 pm

Venue: ENSEARCH Training Centre (Map enclosed),

30-3, Jalan PJU 5/16, Dataran Sunway, Kota Damansara, 47810 Petaling Jaya, Selangor.

Overview

The modelling of flows in rivers using computer simulation packages is primarily undertaken to determine where and when floods will occur. They also offer a means to quickly run scenarios to determine the impact of such factors as future landuse encroachment on the floodplain, channel design (such as that undertaken in river restoration schemes), the introduction of structures such as bridges and culverts and changes in flow regime associated with, for example, climate change.

Such flow simulation tools are fundamental to river management and are employed by many engineering firms (for example Halcrow, Atkins, Mott MacDonald) along with government sector organisations (for example the Environment Agency in the UK, and the Department of Irrigation and Drainage in Malaysia). The ability to run and interpret the outputs from flow models is therefore an important skill to have when seeking employment in the river management sector.

The model under consideration in this workshop is the US Army Corps of Engineers, Hydraulic Engineering Centre, River Analysis Software (HEC RAS), a powerful 1D model that is widely used in practice owing to the fact that it is a freeware which can be downloaded from the internet.

The two day course will cover the main aspects of running this model, including building a river network, entering flow data, running the model for a range of anticipated scenarios and model calibration. An initial background session will also be included in order that participants understand the fundamental open channel flow theory that drives the computational procedures within the model software.

The trainer has considerable experience in using this model and can therefore offer insights into its extensive functionality beyond the basics to be taught, which will be discussed during Q&A sessions.

Objectives

- 1. To understand the principles of open channel flow calculation.
- To learn to create and run simple flow models using the HEC RAS modelling software.
- To interpret the outputs from the model in the context of channel design and flood management.

Contact Us

Environmental Management & Research Association of Malaysia (ENSEARCH)

30-2, Jalan PJU 5/16, Dataran Sunway, Kota Damansara, 47810 Petaling Jaya, Selangor.

Contact Person: Ms. Benedeth

Phone: 03-6156 9807 / 08 Fax: 03-6156 9803 E-mail: po@ensearch.org

Visit us on the web at http://ensearch.org

Trainer

Dr. Nicholas Wallerstein

Associated Professor working in both Department of Geography and Department of Civil Engineering of University of Nottingham Malaysia Campus

Who Should Attend?

Individuals who are interested in learning the basics of river flow simulation using computer models

Training Fee

- ◆RM 900.00 (ENSEARCH Member)
- ◆ RM 1000.00 (Non-ENSEARCH Member)
- * Register 3 or more participants from the same organization to enjoy 10% discount
- ◆ RM 300.00 (ENSEARCH Student Member)
- ◆ RM 350.00 (Student Non-ENSEARCH Member)
- * To qualify for the student price, please submit a copy of your **Student ID** as proof



Disclaimer: ENSEARCH reserves the right to postpone/cancel the said Training due to unforeseen circumstances. ENSEARCH will keep participants updated on the status 3 working days in advance by <a href="mailto:e-mailto:-e-mailt



Trainer's Biodata

Dr Wallerstein graduated with a degree in geography from the University of Nottingham (UK) in 1993.

He subsequently undertook a PhD, studying open channel flow hydraulics and sediment transport, in Mississippi (USA). This research was sponsored by both the US Army Corps of Engineers (USACE) and the US Department of Agriculture (USDA) Agricultural Research Service.

After completing his PhD Dr Wallerstein obtained a position as a river analyst with an engineering firm in Boston, USA where he gained skills in the use of flow modelling packages such as HEC RAS, the software that is to form the focus of this training workshop.

More recently he held a position as a Post Doctoral Research Associated in the Department of Civil Engineering at Heriot-Watt University in the UK. The research is this position was directed towards predicting and modelling the potential for blockage and flooding at structures such as culverts and bridges.

He is currently employed at the University of Nottingham Malaysia Campus as an Associated Proffesor, working in both the Department of Geography and Department of Civil Engineering.

Training Programme

Day 1		Day 2	
Time	Description	Time	Description
8:30 – 9:00 am	Registration of participants	8:30 - 9:00 am	Registration of participants
9:00 - 10:45 am	Session 1: Fundamental theory of open channel flow	9:00 – 11:00 am	Session 5: Including structures in a river model
10:45 – 11:00 am	Morning Break	11:00 – 11:15 am	Morning Break
11:00 – 12:00 pm	Session 2: Background to the HEC RAS flow modeling software	11:15 – 1:00 pm	Session 6: Entering unsteady flow data and running a simulation
	Q & A Session	1:00 – 2:00 pm	Lunch Break
12:00 – 1:00 pm	Lunch Break	2:00 – 3:00 pm	Session 7: Interpretation of unsteady
1:00 pm – 3:00pm	Session 3: Practical session part 1: Creat-	2.00 – 3.00 pm	flow simulations
G	ing basic river geometry	3.00 – 3:15 pm	Afternoon Break
3:00 pm – 3:15 pm	Afternoon Break	000	Session 8: Model calibration and running
3:15 – 5:00 pm	Session 4: Entering steady flow data and running a simulation	3.15 – 5:00 pm	scenarios Q & A Session
5:00 pm	Q & A session End of Day 1	5:00 pm	Collection of Feedback Form End of Training





FORUM 2015

'PAYMENT OF CESS & ENVIRONMENTAL FUND' FORUM

27 October 2015 (Tuesday) 9.00 A.M. - 12.45 P.M. Dewan Presiden, Kelab Golf Negara Subang (KGNS), Petaling Jaya

Overview

Section 36 of the Environment Quality Act (EQA) 1974 (Act 127) (as at 1 April 2013) provides for Payment of Cess and Environmental Fund. The Cess schedule has been amended and thus, the Scheduled Waste Generators and the business of Waste Management in Malaysia will be affected. This forum will bring together the Department of Environment (DOE) and the Waste Management professionals to help understand and plan for their future operations. The Director General of the DOE and the Director of Hazardous Wastes Section amongs others will be here to impart first-hand information on the amendments especially in the legislative requirements for Cess, mechanisms of its collection and its use and the criteria for the Environmental Fund application and selection process.

Who Should Attend?

Target Audience:

- Scheduled Waste Manufacturers
- Personnel from Industries like Rubber, Palm Oil, other Plantations, Plastic, Electronic and Oil & Gas sectors
- Recycling Operators
- ANSWER members
- Consultants
- Government Agencies
- Academia

Participation Fee & Registration

- RM170.00 (ENSEARCH Member/NGO)
- RM220.00 (Non ENSEARCH Member)
- RM300.00 (ENSEARCH Member/NGO- 2 forums: Cess Forum & EIA Order 2015 Forum)
- RM400.00 (Non ENSEARCH Member/NGO- 2 forums: Cess Forum & EIA Order 2015 Forum)
- * Corporates: members & non,-members register 3 or more participants from the same organisation to enjoy a 10% discount. ** Please register by 20 October 2015. Late registrations are subject to availability.

To register, click here (hold CTRL key&click mouse cursor on the link simultaneously: Registration Form-CESS/EIA Order/Both Forums

PROGRAMME

8.30 - 9.00 AM Registration

> Welcome Address by Dato' Halimah Hassan

Director General 9.00 - 9.20 AM

Department of Environment (DOE)

Malaysia

Paper 1:

Legislative Requirements for Cess

Presenter: 9.20 - 10.00 AM

Pn. Norhazni Mat Sari

Director

Hazardous Wastes Section, DOE

Malaysia

10.00 -10.20 AM Tea Break

Paper 2:

Mechanisms of Cess Collection

and Its Use Presenter:

10.20 - 11.00 AM Pn. Fenny Wong Nyuk Yin

Chief Assistant Director Hazardous Wastes Section, DOE

Malaysia

Paper 3:

Is Industry Impacted by Cess

Payments?

11.00 - 11.40 AM Presenter:

Malaysian Rubber Products Manufacturers Association

(MRPMA) Representative (Invited)

11.40 AM-12.40 PM Q & A session

Closing Remarks by 12.40 - 12.45 PM Ir. Ellias Saidin

ENSEARCH President

12.45 - 1.1.45 PM Lunch & End of Programme

Supported By:



Department of Malaysia

DOE - EIMAS

CPD Hours

Will be granted to Registered Certified **Environmental Professionals**

'EIA ORDER 2015 FORUM is on page 2





FORUM 2015

'EIA ORDER 2015' FORUM

27 October 2015 (Tuesday) 1.45 P.M.—4.50 P.M. Dewan Presiden, Kelab Golf Negara Subang (KGNS), PetalingJaya

Overview

EIA Order 2015 is part of the Malaysian Government's preventive strategy in ensuring all development projects will take into account environmental factors in all stages of planning, construction and operations based on Environmental Impact Assessment (EIA) procedures. As stated by the Natural Resources and Environment Minister recently, EIA Order 2015 will replace the Environmental Quality (Prescribed Activities) (Environmental Impact Assessment) Order 1987. Currently at the gazettement stage, find out more about the additional prescribed activities and its guidelines from the Department of Environment Officials themselves. Learn from Gamuda Berhad, its vast EIA and Post EIA experiences as well. Be the first to be informed by participating in this Forum!

Who Should Attend?

Target Audience:

- Environmental Management Professionals
- Developers & Construction sectors
- Government Agencies
- Academia

Participation Fee

- RM170.00 (ENSEARCH Member/NGO)
- RM220.00 (Non ENSEARCH Member)
- RM300.00 (ENSEARCH Member/NGO- 2 forums: Cess Forum & EIA Order 2015 Forum)
- RM400.00 (Non ENSEARCH Member/NGO- 2 forums: Cess Forum & EIA Order 2015 Forum)
- * Corporates: members & non-members, register 3 or more participants from the same organisation to enjoy a 10% discount.

 ** Please register by 20 October 2015. Late registrations are subject to

DOE - EIMAS

CPD Hours

Will be granted to Registered Certified Environmental Professionals

Supported By:



Department of Environment Malaysia

	PROGRAMME
1.00 - 1.30 PM	Registration
12.45 - 1.45 PM	Lunch
1.45 - 1.50 PM	Opening remarks by Ir. Ellias Saidin ENSEARCH President
1.50 - 2.20 PM	Keynote Address of EIA by Dato' Halimah Hassan Director-General Department of Environment, Malaysia
2.20 - 2.50 PM	Paper 1 : EIA Order 2015 Presenter : Pn. Norlin Ja'afar Director, Assessment Section Department of Environment, Malaysia
2.50 - 3.20 PM	Paper 2: Guidelines for EIA Order 2015 Presenter: Pn. Zuhainim Abdul Ghafar Chief Assistant Director, EIA Section Department of Environment, Malaysia
3.20 - 3.50 PM	Paper 3 : Gamuda's Experience in EIA & Post EIA Presenter: Mr. Andy Lee Choon Foh Head of Quality, Safety, Health & Environment (QSHE) Gamuda Berhad
3.50 - 4.30 PM	Panel Discussion
4.30 - 4.35 PM	Closing Remarks
4.35 - 4.50 PM	Tea & End of Programme

Registration

In conjunction with the 'Malaysia Environment Week 2015', ENSEARCH extends a cordial invitation to you to support and participate in these Forums.

To register, click here (hold CTRL key&click mouse cursor on the link simultaneously: Registration Form-CESS/EIA Order/Both Forums

For more details contact Sharon at:

Environmental Management & Research Association of Malaysia (ENSEARCH) 30-3, Jalan PJU 5/16, Dataran Sunway, Kota Damansara,

47810 Petaling Jaya, Selangor. 03-6156 9807 / 08 Fax: 03- 6156 9803

Phone: 03-6156 9807 / 08

E-mail: spo@ensearch.org Website: www.ensearch.org





The ENSEARCH SABAH BRANCH NEWS; where all news and announcements related to our Branch in Sabah will be published.



SABAH BRANCH COMMITTEE 2015/2016

Chairperson : En. Ahmed Tariq Datuk Aripen

Secretary : Mr. Vijay Panickar

Treasurer : Mr. Dean Ying

Committee Members : Ms. Vanessa Jipiu

: Ms. Tania Golingi

: En. Mohd. Iskandar Ali Shah

Executive Secretary : Ms. Syamshidah Awang



Group Photo with the Guest of Honour, Speakers, Committee Members, Members and Guests



SABAH BRANCH COMMITTEE 2015/2016

ENSEARCH Sabah Branch had its 4th AGM on 11 July 2015 at the Sabah Golf and Country Club (SGCC). A Forum titled "Environmental Action in Sabah: Is it a fact or fad?" was held in conjuntion with the AGM. The Forum was officiated by YB Datuk Pang Yuk Ming, the State Assistant Minister of Tourism, Culture and Environment. 25 people attended the event; 9 members and 16 guests. 3 speakers were invited. 3 people however has signed up as new members.

The newly elected Committee Members are as follows:

Chairman: En. Ahmed Tariq Datuk Aripen

Secretary : Mr. Vijay Panicker Treasurer : Mr. Dean Ying

Committee Members: Ms. Tania Golingi, Mohd Iskandar Ali Shah, Vanessa Jipiu

The newly elected Committee Member had its first meeting on 12th August 2015. Trainings and activities planned include:

- Training on Hazardous Waste Management and Compliance Training to be held from 6-7 October 2015. This
 training is in collaboration with ENSEARCH Head Office.
- Membership Drive event in September 2015
- Forum/Seminar on River Rubbish Awareness in December 2015. Funding to be sourced from Warisan Harta Sdn Bhd.
- One outdoor activity in February 2016.
- ◆ Earth Hour Forum in March 2016.

The Committee has also decided to relook at the project at Sugud Recreational Forest near Kota Kinabalu. A courtesy call to the District Office of Penampang will be carried out.

Apart from that the Committee proposed a River Rubbish Awareness campaign to coincide with the planned River Rubbish Awareness Forum/Seminar in December 2015, and plans to join in the 2016 Earth Hour campaign.



Presenting a Momento to the Guest of Honour, YB Datuk Pang Yuk Ming, the State Assistant Minister for Tourism, Culture and Environment during the Branch's 4th AGM 2015



SABAH BRANCH COMMITTEE 2015/2016



The Speakers in action



Participants at the Forum



The AGM in progress

July - Sep 2015 21



ENSEARCH CALENDER

October

SOCIO - ECONOMIC IMPACT ASSESSMENT TRAINING

22nd & 23rd (Thursday & Friday)

PAYMENT OF CESS & ENVIRONMENTAL FUND FORUM
 EIA ORDER 2015 FORUM

27th (Tuesday)

November

AIR POLLUTION ASSESSMENT (LEVEL 1 - BEGINNER) TRAINING

12th & 13th (Thursday & Friday)

OPEN CHANNEL FLOW MODELLING USING THE HEC RAS (HYDRAULIC ENGINEERING CENTRE, RIVER ANALYSIS SOFTWARE) PACKAGE

24th & 25th (Tuesday & Wednesday)

December

Biological Indicators of Water Quality in Freshwater

8th & 9th (Tuesday & Wednesday)

KKEF MEMORIAL PUBLIC LECTURE & YOUNG ENVIRONMENTALIST INTERNSHIP

AWARD 2015

15th (Tuesday) * Proposed Date

July - Sep 2015



SNAP SHOTS (JUL-SEP)



Environmental Compliance for Construction Site Personnel Training (29 & 30 July 2015)

Introduction to Odour Determination, Modeling and Assessment (Level 1) Training (11 & 12 August 2015)







QUAL2K River Water Quality Modeling Training (9 & 10 September 2015)

Environmental Auditing to Enhance Environmental Performance Training (29 & 30 September 2015)







SNAP SHOTS (JUL-SEP)



Organizing Committee of the Prime Minister's Hibiscus Award meeting with the new Minister of Natural Resources and Environment, YB Dato Sri Dr. Haji Wan Junaidi Bin Tuanku Jaafar (21 September 2015)

July - Sep 2015



ENSEARCH COUNCIL 2015/2016

President : Ir. Ellias Saidin

Vice-President | : Mr. K, N. Gobinathan

Vice-President II : Dr. Foo Say Moo

Hon. Sec. General : Ms. Geetha P Kumaran

Asst. Sec. General : Mr. Joel Lawrence

Hon. Treasurer : Ir. Abu Harith bin Shamsuddin

Council Members:

Mr Abdul Aziz bin Long
Mr Mohamed Siraj Abdul Razack
Mr Akashah Hj Majizat
Mr Khoo Boon Keat
Ir Lee Heng Keng
Ms Ismawati Mohd Shah

Co-opted Members:

Mr Philip Reidy Ms Jenny Tan Suat Eam Mr Hari Ramalu

Dr Subramaniam A/L Karuppannan Ms Ruhaidah Md Hassan - (Indah Water Konsortium Snd Bhd Rep) Ms Noor Suhailah Bt Othman (Petronas Rep)

Dr Suzanne McGowan (University of Nottingham Rep) Mr Ahmad Tariq Aripen (ENSEARCH Sabah Rep) Mr Peter Ho Yueh Chuen (CPCN Rep)



ENSEARCH SECRETARIAT 2015

Executive Secretary : Ms. Edna Xavier

Senior Project Officer : Ms. Sharon Woo

Project Officer : Ms. Benedeth Flarine

External Accountant : Ms. Tan Siok Yin

"For a Better Environment"



ENVIRONMENTAL MANAGEMENT & RESEARCH ASSOCIATION OF MALAYSIA (ENSEARCH)

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