



Workshop on
Stormwater Design Analysis & Flood Modeling
*in Compliance with the Requirement of DID Urban Stormwater Management Manual for
 Malaysia (MSMA)*

Date: 26 & 27 Oct 2010 (Tue & Wed)

Organiser: Lestari Software Enterprise

About the Workshop

This Workshop provides attendees with up-to-date information and techniques for solving and managing Urban & Rural Drainage Design and Analysis projects complying with DID's requirement to control discharge at source, with xpswmm/xpstorm software. The agenda will include discussions on runoff methods, the use of closed conduits and open channels, diversion structure and various storage methods. Instruction will be given on data preparation, model applications such as subdivision design and stormwater system analysis, output interpretation, result preparation and many of the new presentation tools now available. Day 2 training includes simulation of urban flooding using 1D, quasi 2D and integrated 1D/2D modelling with xpswmm and xpstorm. There will be a Question/ Answer session at the end of each day to allow participants to put forward specific queries.

Who Should Attend?

The Workshop will be of interest to consultants and government authorities and to engineers, managers and planners involved in stormwater or urban or rural drainage analysis and design. Participants will advance their modeling skills by applying xpswmm/xpstorm on typical issues such as surface flooding, pond size & level, outlet structures & size, inlet restriction, dual drainage, backwater/tidal boundary conditions, etc.

The Trainer

Dr. Ashis Dey is currently a Principal of XP Software. Dr. Ashis has over 18 years of experience in the area of flooding and mitigation stormwater modeling, integrated urban 1D/2D modeling, computational fluid dynamics. Over the last 5 years Dr. Ashis has been a key person in product development of xp2D. He has also led various flood studies, working with Councils and consultants around Asia Pacific regions. He has published many technical papers in various journal and peer reviewed conferences. This year, Dr. Ashis conducted 1 public workshop in Kuala Lumpur. In 2009, Dr. Ashis conducted 2 stormwater management seminars in IEM Penang & UiTM, Shah Alam respectively, 1 public workshop & 1 in-house training cum model assistance in Malaysia.

Cost per Attendee

Full Payment	By 30 th Sept 2010	After 30 th Sept 2010
26 & 27 Oct 2010	RM 850.00	RM 1,100.00

Registration fees include professional training, 1 set of workshop notes, CD, certificate and complimentary trial version of xpswmm plus refreshment & lunch. Computer will not be provided. **Participants are therefore kindly requested to bring their own laptop to work on the examples during the workshop.**

Venue – Institute of Engineers Malaysia
 IEM Lot 25, 3rd Floor, Block C, Damai Point Commercial Centre, Lorong Damai Point,
 Off Jalan Damai, 88100 Kota Kinabalu, Sabah

How to Register

1. Please complete the form and fax to **03 90104328**
2. Courier the form with payment to Lestari Software Enterprise

Mailing Address

Lestari Software Enterprise

No. 5-2, Jalan Temenggung 5/9, Bdr. Mahkota Cheras, 43200 Cheras, Selangor
 Tel: **03 9010 4368** Fax: **03 9010 4328** Email: syloke@lestarisoftware.com
www.lestarisoftware.com

For More Details Please Contact Ms. SY Loke **012 306 3510**

DAY 1:

xpswmm Interface & Malaysia Template File

Software Localization and Templates
 Viewing MSMA Temporal Patterns (Chapter 13)* in xpswmm
 Rainfall Intensity Estimation (Chapter 13)* & input into xpswmm
 Infiltration (Chapter 14)*
 Creating & Using Templates

Hydrology Analysis Example

Runoff Routing Method Selection - Time Area/Runoff Method
 Add a DTM layer.

Import nodes, links and catchments from dwg/shape files.

Use xpswmm/xpstorm's tools to calculate subcatchment areas.

Connect subcatchments to runoff nodes.

Analysing Multiple Storm events with Global Storms

Hydraulic Analysis Example

Links and node data from the DTM

Outlet Conditions

Storage Options

Design Capabilities

Single & Global conduit design options

Major/Minor Drainage, Overland Relief, Inlet Restrictions

Culvert Inlet Control with Entrance & Exit Losses

Detention Basin Optimization

User-defined Report Generation and Results Export

DAY 2:

1D River Modeling:

Flow Attenuation due to River Storage
 Import cross sections

Generate cross-sections from a Digital Terrain Model
 1D Floodplain Model

Floodplain Mapping Results

Integrated 1D/2D Floodplain Model:

2D Model Components

Linking 1D and 2D Model

2D Job Control

2D Model Troubleshooting

Solving and 2D Results

Q&A (balance of remaining time)

Start at 9am & Finish at 5pm

15 min breaks will be taken at about

10:30 am and 3:30 pm each day

A 1 hour lunch will be taken at about 1pm each day

Name: 1)

HP:

2)

HP:

3)

HP:

Company:

Address:

Tel:

Fax:

E mail:

Cheque no. (Total):

Contact Person:

Please make cheque payable to **Lestari Software Enterprise**