REGISTRATION DETAILS

The closing date for application is **8 April 2015**. Photostat copies of registration forms are acceptable. No refund of fees will be made but a replacement of participants from the same organisation is allowed.

REGISTRATION FEES

1. **Short Course on Waves and Wave-Structure Interaction** from 13-15 April 2015, **RM 1600** per person.
2. **Workshop on TELEMAC-2D** from 15-17 April 2015, **RM1950** per person.
3. **Short Course on Wave and Wave-Structure Interaction plus Workshop on TELEMAC-2D** from 13-17 April 2015, **RM 3300** per person
   - ❏ The registration fee (per person) covers course and/or workshop materials, lunches, refreshments and a certificate of participation.
   - ❏ All cheques should be made payable to :-

BENDAHARI UNIVERSITI TEKNOLOGI MALAYSIA

and mail to the Secretariat at the following address:-

Centre for Coastal and Ocean Engineering
Universiti Teknologi Malaysia,
Jalan Sultan Yahya Petra (Jalan Semarak),
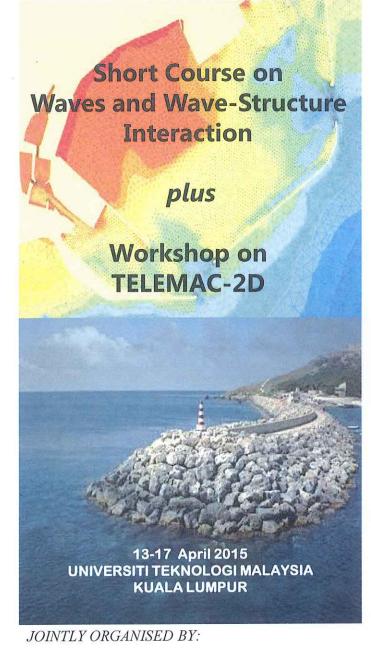*54100 Kuala Lumpur, Malaysia*

ENQUIRIES

» *Daeng Siti Maimunah Ishak (maimunah.kl@utm.my)*
» *Azizah Zaid (azizah.kl@utm.my)*

All enquiries and correspondence should be addressed to :
- ☏ Tel : 03-26154370 (Secreteriat)
- ☏ Tel : 03-26154381 (PM Ir Faridah)
- ☏ Tel : 03-26154442 (Prof Dr Ahmad Khairi)
- 🖷 Fax: 03-26918109

Note : The Organiser reserves the right to make changes where necessary to the programme herein.

REGISTRATION FORM *(Please print or use block letters)*

SHORT COURSE ON WAVES AND WAVE-STRUCTURE INTERACTION plus Workshop on TELEMAC-2D

Please tick ONE of the following :

- Short Course on Waves and Waves-Structure Interaction, 13-15 April 2015, RM 1600 per person
- Workshop on TELEMAC-2D, 15-17 April 2015, RM1950 per person
- Short Course on Wave and Wave-Structure Interaction plus Workshop on TELEMAC-2D, 13-17 April 2015, RM1950 per person

Name :
(1) .... E-mail : .... H/P : ....
(2) .... E-mail : .... H/P : ....
(3) .... E-mail : .... H/P : ....

Organisation: ....

Address : ....

Tel. No : .... Fax No : ....

Type of Payment : Cheque No/L.O No:............ amounting to RM .... as registration fees is enclosed.

Date : ....   Signature : ....

Short Course on Waves and Wave-Structure Interaction

plus

Workshop on TELEMAC-2D

13-17 April 2015
UNIVERSITI TEKNOLOGI MALAYSIA
KUALA LUMPUR

JOINTLY ORGANISED BY:

UTM UNIVERSITI TEKNOLOGI MALAYSIA   COE

HR Wallingford *Working with water*

CENTRE FOR COASTAL & OCEAN ENGINEERING

HR WALLINGFORD UK

INTRODUCTION

The Centre for Coastal & Ocean Engineering (CCOEI), Universiti Teknologi Malaysia (UTM) and HR Wallingford UK will jointly organise the following events in the month of April 2015:
(1) Short Course on Waves and Wave-Structure Interaction
(2) Workshop on TELEMAC-2D

The Short Course will provide a background of water waves and their interactions with structures, wave measurement and analysis, tsunamis, wave agitation and seiching in harbours, and wave loadings on breakwaters, piles and decks. Participants will also be taught on the importance of physical and numerical modelling of wave-structure interaction.

The workshop which follows is a hands-on training programme using Blue Kenue pre- and post-processing software, and TELEMAC-2D model. This workshop on TELEMAC-2D provides a background to the hydrodynamic tools available in the TELEMAC-2D suite.

This course + workshop are delivered by experienced HR Wallingford specialists and numerical modellers who have worked on many diverse projects. They would benefit researchers, scientists and engineers who are particularly interested in waves, wave-structure interaction, physical and numerical modelling, and hydraulic modellers who are new to the TELEMAC suite.

Who should attend?

The course + workshop are aimed at those who are interested in understanding water waves, wave impacts on coastal structures, harbour agitation and seiching, physical and numerical modelling. They are also suitable for project managers, engineers, researchers, consultants and students who are working on riverine, coastal and maritime hydrodynamic modelling projects and are wishing to use/understand the open source TELEMAC-2D software suite.

Learning outcomes

By the end of this course, participants are expected to:
- understand how waves are generated and transformed over complex bathymetries.
- understand how waves are measured and analysed.
- understand tsunami waves.
- be aware of the issues in ports and harbour engineering such as wave agitation and seiching.
- be familiar with wave-structure interaction and principal wave loadings on structures.
- understand and appreciate the importance of physical and numerical modelling in coastal engineering, in particular wave-structure interaction.
- gain the knowledge of numerical modelling.
- be familiar with the applications of TELEMAC-2D.
- be familiar with meshing using Blue Kenue.
- be familiar with pre- and post-processing of TELEMAC files.
- understand how to set up and run a TELEMAC-2D model.

SHORT COURSE PROGRAMME

SHORT COURSE ON WAVES & WAVE-STRUCTURE INTERACTION

DAY 1 : 13 APRIL 2015
Waves Generation and Transformation
This module will cover the following topics:
water waves - definitions and characteristics, wave generation, wave transformation over uneven bathymetries - shoaling, refraction, diffraction, reflection, measurements and analysis of water waves, tsunami waves, harbour agitation and seiching.

DAY 2 : 14 APRIL 2015
Wave-Structure Interaction
This module will focus on wave induced loads on breakwaters, wave loads on piles, wave-in-deck loads and physical modelling of wave-structure interaction.

DAY 3 : 15 APRIL 2015
Introduction to Numerical Modelling
This module will provide a general introduction to numerical modelling, numerical modelling of wave-structure interaction, an overview of the TELEMAC-MASCARET consortium, its websites (www.opentelemac.org, SVN, CIS), its modules and applications.

COURSE TUTOR

Giovanni Cuomo, PhD, CEng is the Research Director at HR Wallingford. He specialises in the dynamics of currents-waves-structures interaction. He has experience in physical model testing and development and application of advanced computational fluid dynamics models and his technical background includes field monitoring, risk assessment and performance design of coastal and hydraulic structures. He specialises in the performance design of coastal structures and numerical modelling of coastal circulation, harbour agitation and three-dimensional two-phase compressible flows.

He has been involved in the design and modelling of coastal and hydraulic structures and harbours in Europe, US, the Middle East and Japan.

WORKSHOP ON TELEMAC-2D

This workshop will start in the afternoon of Wednesday 15 April 2015 at 2.00 pm.

DAY 1 : 15 APRIL 2015
Introduction to Numerical Modelling
This module will provide a general introduction to numerical modelling, numerical modelling of wave-structure interaction, an overview of the TELEMAC-MASCARET consortium, its websites (www.opentelemac.org, SVN, CIS), its modules and applications.

DAY 2 : 16 APRIL 2015
Meshing with Blue Kenue

This module will focus on meshing using Blue Kenue, which is freely available. This hands-on session will highlight the functionality and processes in Blue Kenue that are used in the creation and modification of mesh structures. A tutorial will cover grids, regular meshes and unstructured mesh generation.
This module will also cover pre-processing and post-processing of TELEMAC-2D files using Blue Kenue, setting up a trivial TELEMAC simulation, running it and visualising results.

DAY 3 : 17 APRIL 2015
Telemac - 2D
This module will provide an introduction to the theory of free surface flow hydrodynamics, focussing on tidal currents and global datasets. There will be a hands-on session using TELEMAC-2D, which will provide a powerful insight into hydrodynamic processes.

WORKSHOP INSTRUCTOR

Juliette Parisi is a Marine Engineer and experienced numerical modeller at HR Wallingford. She has experience in deploying and running numerical models, in particular hydrodynamic models in harbours and coastal areas.

Juliette has a precise technical knowledge of free surface flow solvers strengths and restrictions.