#### DISCLAIMER

The Organiser reserves the right to make any amendments and/or to cancel the event if warranted by circumstances beyond its control. Terms and conditions apply.

#### CANCELLATION POLICY

Cancellation of participation should be made 30 days prior to the conference to be eligible for a refund (less 15%). Please note that the speakers and topics are confirmed at the time of printing. However, circumstances beyond the control of the organisers may necessitate substitutions or cancellations of speakers and/or topics. As such Universiti Teknologi Malaysia reserves the rights to substitute or cancel the advertised speakers and /or topics.

#### SUBMISSION PROCEDURE

Vegetarian

Mode Of Payment - .

A. Cheque or Bank Draft

All crossed cheque/ bank draft should be made payable to Account Name: UTMSPACE | Account Number: 0116-0000426-10-7

Bank Name : CIMB Bank Berhad | Branch : UTM Skudai, Johor

Bank/ Branch

B. Local Order (LO/PO)

Reference Number:

Authors are invited to submit electronically an abstract of papers in English not exceeding 300 words for oral or poster presentations to ICWR 2012 secretariat. Include also keywords (up to 4). Accepted papers will be published in the conference proceedings.

Non-vegetarian

# **ICWR 2012**

#### REGISTRATION FEES.

Early Bird (before 31 July 2012) 890.00 1190.00

Normal Fees

1360.00

(Registration fees for the conference include conference materials. lunch, refreshment and certificate of attendance)

990.00

\*Charges for international is based on exchange rate RM 3.40/USD

## REGISTRATION FORM

## To confirm your registration, please complete this form. Organisation Details (for issuance of invoice) Organisation NRIC / Co. Reg. No.3 Address Contact Person Address Telephone Fax No. Please tick (/) in the appropriate box/es below This registration is invalid without a signature. Payment must be made no later than I will attend as participant I will present a paper 7 working days before the conference commences. An undertaking letter may be accepted in cases where payment is delayed. However, all payment must be made before the conference commences. Participants who registered but did not attend will be invoiced accordingly. Co-authors Authorised Designation Organisation's Stamp **Food Preference**

#### FOR FURTHER INFORMATION, PLEASE CONTACT:

ICWR2012 Secretariat School of Professional and Continuing Education (UTMSPACE), Universiti Teknologi Malaysia No. 34-50 Jalan Kebudayaan 1, Taman Universiti 81300 Skudai, JOHOR

> Tel: +607-5218170/59 Fax: +607-5211355

Website: http://seminar.utmspace.edu.my/icwr2012 Email: icwr2012@utmspace.edu.my / icwr2012@gmail.com **CPD POINTS** 14

# 2<sup>nd</sup> INTERNATIONAL CONFERENCE ON WATER RESOURCES

in conjunction with

20th UNESCO-IHP REGIONAL

## STEERING COMMITTEE MEETING FOR SOUTHEAST ASIA AND THE PACIFIC

"Sharing Knowledge of Issues in Water Resources Management to Face the Future"

2012





5 - 9 NOVEMBER 2012

BAYVIEW HOTEL, LANGKAWI, KEDAH

ORGANISED BY:





FACULTY OF CIVIL ENGINEERING WATER RESEARCH ALLIANCE

DEPARTMENT OF IRRIGATION AND DRAINAGE (DID)

WITH THE COLLABORATION OF















SURUHANJAYA UNESCO







LANGKAWI DEVELOPMENT KEMENTERIAN ALAM SEKITAR

## Sharing Knowledge of Issues in WATER RESOURCES MANAGEMENT to Face the Future

Water resources are in great demand today all over the world. Water has become a precious resource on which the well-being and even the survival of future generations critically depends. The resulting problems have given rise to many activities that reflect great concern about the problems and the importance accorded to their sustainable management.

Issues relating to water such as quality, quantity, availability, planning and management will have to be seriously tackled now and in the future. Further, issues on water security that involves protection of vulnerable water systems, sustainable development of water resources, safeguarding access to water functions and services, and protection against water related hazards such as floods and droughts. The steadily increasing strain on natural resources in many regions has already led to a precarious balance between the needs of different water users living in river hasins and coastal zones. As such, managing in river basins and coastal zones. As such, managing water resources for the future is very complicated which requires multi-discipline approaches across various problem solving research tools.

The 2nd International Conference on Water Resources (ICWR-2012) aims to bring together academics, scientists, practitioners from wide range of disciplines involved in water research, leading engineers, researchers from industry and research scholars from Universities to exchange and, share their experiences and research results about all aspects of sustainable water resources management, and discuss practical challenges appropriated and the solutions adopted. This conference encountered and the solutions adopted. This conference also seeks to study and understand the existing water resources management strategies adopted in Malaysia, and sharing the information with those from other countries.

The conference invites physical scientists, biologists, computer scientists, mathematicians, economists, tourism managers, ecologists and social and political scientists working on water sustainability to Share Knowledge to Face a Changing World in Water Resources Management.

# **IMPORTANT**

Deadline for Abstract Submission 30 APRIL 2012

Notification of Abstract Acceptance 31 MAY 2012

Deadline for Full Paper Submission 15 JULY 2012

Notification of Full Paper Acceptance 15 AUGUST 2012

Conference 5-6 NOVEMBER 2012

\*Technical Visit and Island Tour 7 NOVEMBER 2012

20th IHP RSC Meeting 8-9 NOVEMBER 2012

\*\* technical visit for RSC members only

# **ORGANISING**

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Prof. Dato' Ir. Dr. Zaini Uiang Vice-Chancellor, UTM

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**UTMSPACE** 

## **THEME**

#### FLOOD MANAGEMENT

- Socio-economic and environmental impacts of
- Floodplain management and flood risk mapping
- Flood mitigation and innovative control measures
- Dam and reservoirs as flood control structures
- Rainfall modelling and flood forecasting system
- Coping with climate change and adaptive measures
- Management capacity for sustainable infrastructure
- Urban stormwater and rainwater harvesting

#### WATER SUPPLY AND WATER ECONOMICS

- Water security and economic development
- Reservoir management and water supply
- Groundwater management and modelling
- Groundwater for drinking and irrigation
- Water supply and sanitation
- Water management and irrigation system
- Water distribution system and modelling tools
- Sustainability and competitiveness investment
- Conservation and water use efficiency
- Water for food and irrigated agricultural land Economics analysis of water and modelling tools
- Stochastic programming and bargaining theory
- Water and hydropower generation

### WATERSHED MANAGEMENT

- Multiobjective planning and management
- River engineering and sediment transport
- River-reservoir and ecosystem management
- Coping with climate change impact
- International water laws and treaties
- Integrated river basin management
- Forest hydrology and peat soil management
- Information management system
- System analysis in water resources

#### WATER RELATED NATURAL DISASTER

- Tsunami modelling and regional disaster
- Coastal flooding and defence
- Erosion and land stability
- Sea level rise and adaptation strategy
- Reports on the costs of damages and disruption
- Global warming and drought management strategy
- Disaster risk management

#### **ENVIRONMENT AND COASTAL ZONE** MANAGEMENT

- Prevention and mitigation measures of water pollution
- Coastal and ocean climate variation
- Aguatic biodiversity maintenance
- Contamination of Takes, rivers and wetland ecosystems
- Coastal and marine management
- Port structure and navigation channel
- Climate variability and modelling
- Integrated coastal zone management Environmental hydraulics and hydrology
- Water pollution and ecosystem degradation

#### ADAPTIVE SOFT COMPUTING APPLICATIONS

- Adaptive Fuzzy system, Adaptive Neural Networks
- Neuro-Fuzzy, Neuro-Rough System
- **Evolutionary Computing and Artificial Immune**
- Data Mining and Intelligent Information Retrieval
- Forecasting and Optimization using Al

### MATHEMATICS AND ITS APPLICATIONS

- Probability Distribution and Time Series Methods
- Computational Fluid Dynamics
- PDEs, Korteweg-de Vries, Laplace, Poisson
- Navier Stokes, Langrange, Newton, Fourier, Boussinesa
- Taylor, Euler, Runge-Kutta, Spectral, Saint-Venant
- Finite Difference, Finite Element, Hyperbolic
- Gaussian, Bayesian, Copulas, Hidden Markov
- Linear and Non Linear Equations

#### OTHER RELATED DISCIPLINES

- Water and Sustainable Tourism Industry
- Water and Agritourism/Ecotourism
- Water in Islamic Art and Culture
- Water and Renewable Energy
- Water and Green Buildings
- Water in Architecture and Urban Planning
- Photogrammetry and GIS in Water Engineering
- Water Laws and Economic Models

