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Lecture Schedule

Day-I (02 Feb 2016)		Content	Resource Person
	9:00-9:30	Registration	
	Lecture-1 9:30- 11:00	Outline of the training	Prof. Dr. AA CUET
		Water resource modeling –Bangladesh perspective	Eng. A.K.M S. Karim BWDB
	Lecture-2 11:00- 12:40	Potentialities of models in water resource projects	Eng. M. Z. Haque CWASA
	12:40- 13:30	River and estuary morphology	Dr. M. H Sarker CEGIS
	Lecture-3 14:30- 15:00	River and estuary morphology (Cont'd)	Dr. M. H Sarker CEGIS
	15:20- 17:00	Acquiring real time hydrological data from field	Commandar M M. K. Chowdhury, CPA
Day II (03 Feb 2017)	Lecture-4 (9:00- 11:50)	Introduction Application of numerical models	Dr. RAM CUET
	Lecture-5 14:30- 15:40	Working with hydrologic model	Prof. Dr. AA CUET
	Lecture-6 16:00- 17:00	Working with hydraulic model	Prof. Dr. AA CUET
Day III (04 Feb 2017)	Field Visit 9:00- 17:00	Karnafuli Irrigation Project	In association with BWDB
		Certificate giving ceremony	

Important Information

Interested participants are requested to submit the online application form (available at: http://www.cuet.ac.bd/crhlsr) via email to crhlsr@cuet.ac.bd

Application deadline : 31 January 2017
Training fee : 2500 BDT

Fee would cover training kit, refreshment, lunch and field visit during training period. Payment can be made by demand draft in favor of Director, BRTC, Sonali Bank, CUET Branch, Chittagong-4349, Bangladesh or cash in person at the CRHLSR office.

Previous Training Experiences

Integrated River and Harbor Management

This training was successfully accomplished during 04-06 August 2016. The primary objective was to introduce with fluvial and morphological process for taking management decision. The training allowed for a field visit in the 'Capital dredging and bank protection with jetty facilities' in association with the Chittagong Port Authority.



Participants of the training



During the field visit

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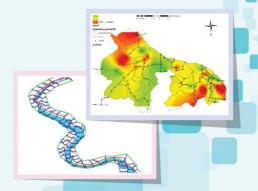
Application of Numerical Modeling in Water Resource Engineering

Date: 02-04 February 2017



Seminar Room

Department of Civil Engineering
Chittagong University of Engineering and Technology (CUET)



Organized by

Center for River, Harbor and Landslide Research (CRHLSR)
Chittagong University of Engineering and Technology (CUET)
Chittagong-4349, Bangladesh.

For any further details contact

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The main goal of this training is to introduce with frequently applied numerical modeling technique while solving the practical problem to handle them efficiently and easily. The participants will be familiarized with basics of river and estuary morphology along with numerical model setup with the help of pre-processed data generated using Arc-GIS. In addition, field visit to the relevant site will allow the participants to experience and visualize with practical examples of the theory offered. Contents for this training are designed through feedbacks from case studies and recommendations from previous training and workshops. Thus, this is envisaged that the training would be more interactive and experience sharing platform for the participants.

For whom?

The training is expected to be useful for practitioners, academician and engineers dealing with numerical modeling in water resources and to take managerial decisions. The prospective participants should have at least a Bachelor degree in Civil Engineering, Water Resources Engineering/studies or other relevant field.

Learning objectives

<u>Upon completion, the participant should be able to:</u>
• Select a preferable model by knowing the

- Select a preferable model by knowing the morphology. And some applications with case studies in Water resource of Bangladesh (Lecture 1, 2 and 3);
- Acquire basic knowledge on how to model the river bank failure. Choosing the way of right modelling under data and resource constraints. The way of working with a hydrological and hydraulic modeling to take the real time decision and policy making of Water Resource Engineering (Lecture 3, 4 and 5);
- Get chance to accrue practical experience on implementing theoretical and computer knowledge in field level project work Field visit on day III).

Training content

In this training the following topics will be discussed:

- Acquiring field data from hydrographic survey for preparing bathymetry of numerical model.
- Introduction with different types of numerical model in Water Resource Engineering.
- How to setup a hydrologic model and hydraulic model?
- Case studies of numerical model for problem identification and prediction.

What's new?

Experiences with numerical models

Experience with different numerical model will provide much dynamic knowledge on flood analysis and flow restoration research to the participants. They can gather knowledge on, how historical data can effectively be analyzed as well as future uncertainty can be generated using different numerical model.

Field Visit (Karnafuli Irrigation Project)



Karnafuli Irrigation Project consists of two sub-projects: The Halda sub-project provide would flood protection to an area of 131,500 acres by means of 70 miles of earth embankments of 9-feet average height. Irrigation, with water pumped from the Karnafuli River and utilizing existing natural channels as distributaries.

Riography of resource person

Prof. Dr. Aysha Akter (AA) working in the Department of Civil Engineering since 2005 and currently holding the Chairman (additional duty) position of the Center for River, Harbor & Landslide Research at CUET. She has achieved a PhD in Civil and Offshore Engineering from Heriot-Watt University, United Kingdom and two MEng degrees from Asian Institute of Technology, Thailand (Water Resource Engineering and Management) and BUET (Civil and Environmental Engineering). Her academic and professional details are available on:http://aakter.weebly.com

Dr. Reaz Akter Mullick (RAM) is an Associate Professor of the Department of Civil Engineering and Head, Department of Civil and Water Resources Engineering (CWRE) in CUET. He has completed a PhD degree in Water Resource Engineering and management from Asian Institute of Technology, Thailand and a MSc Degree from the University of Gent, Belgium.

Eng. Dr. Maminul Haque Sarker presently holding the position of Deputy Executive Director (Development) and Director in Charge (River, Delta & Coastal Morphology Division) in the Center for Environmental & Geographic Information Services (CEGIS). He has completed a PhD degree from University of Nottingham, UK and a MSc in Hydraulic Engineering, IHE, The Netherlands, 1996.

Eng. A.K.M Shamsul Karim presently working as Chief Engineer, South-Eastern Zone, BWDB Chittagong. After completion of his BSc Engg in 1983, he has completed his MEng in water resource management at AIT, Thailand in 1986.

Eng. Muhammed Zohurul Haque serving as the Chief Engineer in Chittagong Water Supply & Sewerage authority(CWASA). After completion of his B.Sc in Civil Engineering from Khulna Engineering College (presently KUET) in 1982, he did PGD in Water Supply and Sanitary Engineering, 1996, Federal Republic of Germany.He has been serving CWASA since 1996.

Commander M Manzur-ul-Karim Chowdhury, (H3), PSC,BN was commissioned in Bangladesh Navy in Executive Branch in 1995. Currently he is holding the office of Chief Hydrogrpher of CPA on deputation.