SYNOPSIS

This course presents an introduction to hyper-concentrated flows affecting fluid properties and bed material transport. Emphasis on the important insights into the fundamental knowledge on the rheological behavior of non-Newtonian fluids, different rheological models and classification will be made. The above will be accompanied by examples of mudflow and debris flow.

Principles of occurrences of sediment-related disasters, actual state of sediment-related disasters and preventive measures will also be shared to compliment the fundamental knowledge of sediment laden flows. Participants will be introduced to debris and mudflow forecasting software on the second day of the training program. Sediment-related disasters is highly associated with sediment-laden flows and their occurrences in watersheds would have some implications to the development and management of water, land and related resources in a watershed. The importance of IWRM and its application to sediment-related disasters will be highlighted for knowledge sharing .

OBJECTIVE

- Provides important insight into the fundamental knowledge on hyper-concentrated (sediment-laden) flow, rheological behavior of non-Newtonian fluids, different rheological models and classifications.
- Provides overview of the principles of occurrences of sediment-related disasters and the preventive measures.
- Introduces new developed software on debris and mudflow.
- Offers understanding on the application of IWRM with respect to sediment-related disasters.

ORGANIZED BY

HTC KL in collaboration with BPMI

United Nations Educational, Scientific and Cultural Organization

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Free Admission
CPD (BEM)

Hyper-Concentrated Flow Training

PART 1

19TH—20TH APRIL 2018

MEETING ROOM, HTC

SPEAKER

Dr. NORLIDA MOHD DOM

The Regional Humid Tropics Hydrology and Water Resources Centre for Southeast Asia and The Pacific, Malaysia.

Dr. Norlida has a vast experience in Flood Disaster in Hydrology and has been involved in disaster and preparedness with Working Group of Hydrology, Typhoon Committee, and World Meteorological Organization from 1995 to 2004. She has been appointed by the Ministry of Science, Technology and Innovation as one of the R, D & C Expert Panel since 2014. She is the first Malaysian who developed the Debris and Mudflow Model for Malaysia since 2000.

SPEAKER

PROF. Dr. ENG SHINJI EGASHIRA

International Centre for Water Hazard and Risk Management (ICHARM), Japan

Professor Egashira is an expert in River Engineering, Hydraulics and sediment Transportation. His recent studies have been focusing on the sediment runoff processes and options for the sediment control structures, sediment sorting and armoring.

PROF. Dr. JUNAIDAH ARIFFIN

Fluvial Geomorphology Research Initiative Group, Faculty of Civil Engineering, UiTM Shah Alam, MALAYSIA.

Professor Junaidah has more than 15 years experiences in teaching and researching in the areas of erosion and sedimentation studies, river morphology and the mechanics of scour around bridge piers. Her recent research was centered on lateral migration and erosion estimates at riverbanks.

SCHEDULE

19 APRIL 2018

8.00-9.00a.m	-	**Registration/Breakfast**
9.00-9.30a.m	-	**Overview :-** **Brief introduction to physical properties of suspensions, rheology of mud suspensions.** (Prof. Dr. Junaidah Bt Ariffin)
9.30-10.00a.m	-	**Commemorative Photo & Coffee Break**
10.00-1.00p.m	-	**Hyper-concentrated flows and its fundamental knowledge:-** **Rheological behavior of non-Newtonian fluids.** (Prof. Dr. Junaidah Bt Ariffin)
1.00-2.00p.m	-	**Lunch and Solat Zuhur**
2.00-4.30p.m	-	**Examples and Exercises on related problems** (Prof. Dr. Junaidah Bt Ariffin)
4.30-5.00p.m	- -	**Coffee Break** **End of Workshop**

20 APRIL 2018

7.30-8.30a.m	-	**Breakfast**
8.30-10.30a.m	- -	**Principles of Occurrence of Sediment-Related Disasters** **Actual State of Sediment-Related Disasters and Preventive Measures** (Prof. Dr. Eng Shinji Egaashira)
10.30-11.00a.m	-	**Coffee Break**
11.00-1.00p.m	-	**Debris and Mud Flow Forecasting Software - Part 2** (Dr. Norlida Bt Mohd Dom)
1.00-2.00p.m	-	**Lunch and Solat Zuhur**
2.00-4.30p.m	-	**IWRM for Small Demonstration Project**
4.30-5.00p.m	- -	**Coffee Break** **End of Workshop**