



No.A-33038/5/2012-NWA(IT)2131-2310

Dated: 18th May 2012

To:
The Chief Engineer, Dam Safety Organisation
Central Water Commission
Room No. 612 (S)
Sewa Bhawan, R K Puram
New Delhi 110066



Sub:- Training Programme on "Hydroinformatics & Soft Computing" during
06-10 August, 2012

Sir,

The National Water Academy, Pune is organizing a training programme on
"Hydroinformatics & Soft Computing" during 06-10 August, 2012. The
Programme is intended to impart training on different aspects of
Hydroinformatics.

This programme is conceived to impart training on use of different IT and
hydroinformatics applications in water sector. The purpose is not only to create
awareness regarding the use of the technology but also to utilize the latest
technical know-how for the watershed through a series of practical hands-on.
The training module would lay a realistic framework for performing an objective
oriented modelling and simulation and evaluation for clear and justifiable
analysis and conclusions.

It is requested to kindly nominate 1 - 2 suitable officers in the rank of
Director / Superintending Engineer / Deputy Director / Executive Engineer / Asstt
Director/AEE/AE for participation in the above programme latest by 20th July,
2012. The accepted nominations would be posted on our web site
(<http://nwa.mah.nic.in>) under the link "Upcoming Events, by 27th July 2012.

A brochure containing relevant information is enclosed.

Yours faithfully,



Dr R N Sankhwa
Director & Course Coordinator
Tel: 020 24380144

Encl: Brochure

केन्द्रीय जल आयोग
बांध सुरक्षा प्रबोधन निदेशालय

पत्र की एक प्रति (संलग्नक सहित) सूचनार्थ एवं उचित कार्य वाही हेतु प्रेषित है।

निदेशक: यंत्री/सा.प्र./नी.अ.एवं वि.वि.बां.सु.पु.के.ज.आ.

13/12/Trg./DSM/2012 1297-30 दि०

Dated 07/05/2012

(शाहिद हुसैन)
शाखा अधिकारी



भारत सरकार
केन्द्रीय जल आयोग
राष्ट्रीय जल अकादमी

खडकवासला

पुणे - सिंहाड रोड

पुणे - ४११ ०२४

दिना : 18.05.2012

No: A-33038/5/2012-NWA(IT)/

प्रति

सुचि अनुसार

विषय: राष्ट्रीय जल अकादमी, पुणे में "Hydroinformatics & Soft Computing" (०६ - १० August २०१२) विषय पर प्रशिक्षण कार्यक्रम का आयोजन।

महोदय/ महोदया,

राष्ट्रीय जल अकादमी में ०६ - १० August २०१२ के दौरान "Hydroinformatics & Soft Computing" विषय पर प्रशिक्षण कार्यक्रम का आयोजन किया जा रहा है। इस कार्यक्रम संबंधी प्रमुख बिन्दुएँ पृष्ठांकित (overleaf) है। विस्तृत ब्योरा सहित कार्यक्रम विवरणिका (Programme Brochure) भी संलग्न है।

अनुरोध है कि संलग्नक में दिए गए स्तर के अधिकारियों को इस कार्यक्रम से लाभ उठाने हेतु यथा शीघ्र नामित करने का कष्ट करें। केन्द्रीय एवं राज्य सरकारों के विभागों के अधिकारियों के लिए इस प्रशिक्षण कार्यक्रम में भाग लेने हेतु कोई भी प्रोग्राम शुल्क नहीं है।

भवदीय,

संलग्न: यथोपरि

डॉ. आर. एन. सांखुआ

निदेशक एवं कार्यक्रम संयोजक

(06 - 10 August, 2012)

REGISTRATION FORM

Name
(in capitals): _____

Designation _____

Organization: _____

Responsibilities in brief)

Full Postal Address:

Tel Nos.(with STD Code) : _____

Fax No: _____ Mobile : _____ E-mail ID: _____

Payment details of programme fee: D.D No. _____ Date _____
Name of Bank _____

Date _____
(Signature of the participant)

SPONSORING AUTHORITY

Full Postal Address:
Tel Nos.(with STD Code) : _____

Fax No: _____
Mobile : _____

E-mail ID: _____

Date :
(Signature and seal)

Completed Registration Form may be sent by Fax to: 020-24380110

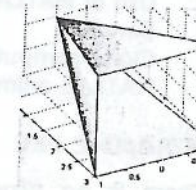
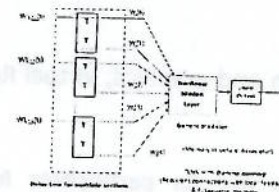
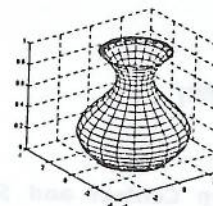
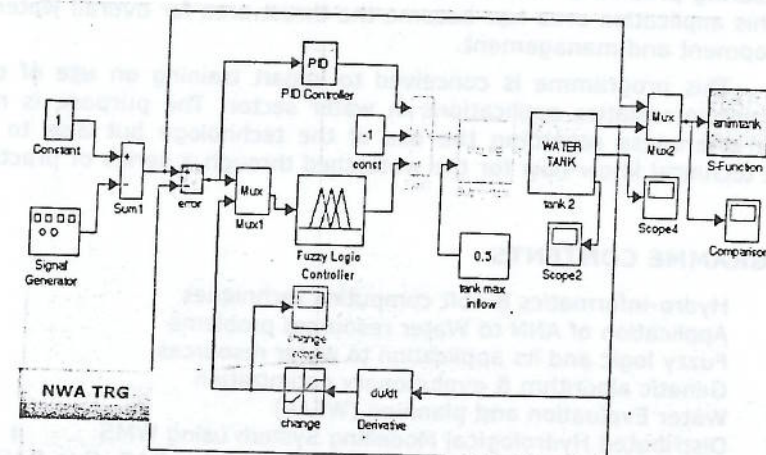


GOVERNMENT OF INDIA
MINISTRY OF WATER RESOURCES
CENTRAL WATER COMMISSION

Training Programme on

"Hydroinformatics & Soft Computing"

(06 – 10 August, 2012)



Organized by
NATIONAL WATER ACADEMY
PUNE

INTRODUCTION AND OBJECTIVES

In the recent years, many advanced technologies have been evolved in hydroinformatics for making use of advanced information, computational technologies to handle information concerning the water resources environment and to make rapid and robust decisions as they address the increasing challenges of ensuring a sustainable water environment and adequate water resources. Hydroinformatics, a cross-disciplinary field of study, combines technological, application of information technology in the widest sense to problems of the aquatic environment and of the water resources management. The advanced techniques, also encompass the distributed hydrological modeling system, river analysis system and also in conjunction with GIS.

The soft computing methods provide powerful tools for water engineers to carry out various numerical simulation studies, where, knowledge driven methods, such as fuzzy logic and data driven methods, like Neural Networks and Evolutionary Computing approaches such as the genetic algorithms, etc. along with the optimization techniques, simulink in MATLAB environment are used. These methods independently, and in hybrid forms, have been successfully applied in the water resources engineering. Solution to most of the water engineering problems, have become easier by application of these technologies and this application area has become the thrust area for overall water resources development and management.

This programme is conceived to impart training on use of different IT and hydroinformatics applications in water sector. The purpose is not only to create awareness regarding the use of the technology but also to utilize the latest technical know-how for the watershed through a series of practical hands-on.

PROGRAMME CONTENTS

- Hydro-informatics & soft computing techniques
- Application of ANN to Water resources problems
- Fuzzy logic and its application to water resources
- Genetic algorithm & evolutionary optimization
- Water Evaluation and planning (WEAP)
- Distributed Hydrological Modelling System using WMS
- Flood visualization, mapping and analysis using RAS, Geo-RAS
- Use of MATLAB
- Simulink
- Cloud computing
- MATLAB animation and graphics, virtual Reality

PROGRAMME FEE

There is **no program fee** for participants from **Central and State Govt. departments**. Charges for participants from other agencies are:

Cate-gory	Description	Fee in Rs. (per participant)
A	Central/State Government/Departments including their autonomous bodies:	Nil
B	PSUs/SPVs of State governments which are <i>Not-for-profit</i> organizations/ authorities/ bodies of state governments, even if they have "Corporation" or "Limited" in their name <i>only if they certify</i> that	Nil

C	Recognized academic institutions, NGOs	1,500/-
D	PSUs of MoWR, Govt of India	5,000/-
E	Central and State PSUs (<i>other than Category B & D</i>)	10,000/-
F	Private Companies, Individuals	15,000/-

Payment may be made by Demand Draft drawn in favour of Deputy Director (A&C), NWA, Pune prior to start of the programme.

DURATION

06-10 August 2012 (One Week)

VENUE

National Water Academy, Khadakwasla, Sinhagad Road, Pune-411 024.
(for more info on NWA, visit <http://nwa.mah.nic.in>)

TARGET GROUP

Graduate Engineers in the ranks of Director/SE, Deputy Director/Executive Engineer, AEE/AD/Asstt. Engineer or professionals working in State/Central agencies with working knowledge of computers.

PARTICIPATION

The nomination of the officers fitting the target profile may be sent to the Programme Coordinator latest by 20th July, 2012. The accepted nominations would be posted on our web site (<http://nwa.mah.nic.in>) under the link "Upcoming Events, by 27th July 2012.

LOCAL HOSPITALITY

NWA has a self-contained residential campus, and all out-station participants would be provided with accommodation in the NWA Hostel. Airport/Railway station pickup/drop will have to be arranged by the participants. The participants may avail the services of prepaid taxi/auto.

WEATHER

During the month of August, it is normally monsoon season and the average temperature of Pune may be around 25°C to 30°C.

CONTACT

For sending nominations or for any information with regard to this Programme, please contact:

Dr. R N Sankhua

Director & Course Coordinator
National Water Academy, CWC,
Khadakwasla, Sinhagad Road,
Pune - 411 024
Tel: 020 - 24380144, Fax: 020-24380110
e-mail: r_sankhua@yahoo.com
Website: <http://nwa.mah.nic.in>