



INDIAN WATER RESOURCES SOCIETY (DELHI CENTRE)

02-03-12

Sub: International workshop on "Piano key weir for in-stream storage and dam safety" (PKWISD-2012).

Indian Water Resources Society in association with IIT, Roorkee and University of Petroleum & Energy Study, Dehradun is organizing an International workshop on "Piano key weir for in-stream storage and dam safety (PKWISD-2012)" at India Habitat Centre, Lodhi Road, New Delhi India, during May 30 - June 1, 2012.

Chairman, CWC & President, IWRS desired that CWC officers should contribute papers / presentations in the workshop particularly from dam safety, hydrology and design aspects of the projects perspective. Accordingly, an information brochure of the workshop is attached for kind information please and doing needful please.

Encl: As above

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(A.K. Kharya)

Joint Secretary, IWRS

To,

1. Chief Engineer (HSO) / (DSO), CWC.
2. Chief Engineer, Design (E&NE) / (NW&S) / (N&W), CWC.

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Dy. DSO

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P. S. M.
(DSO)

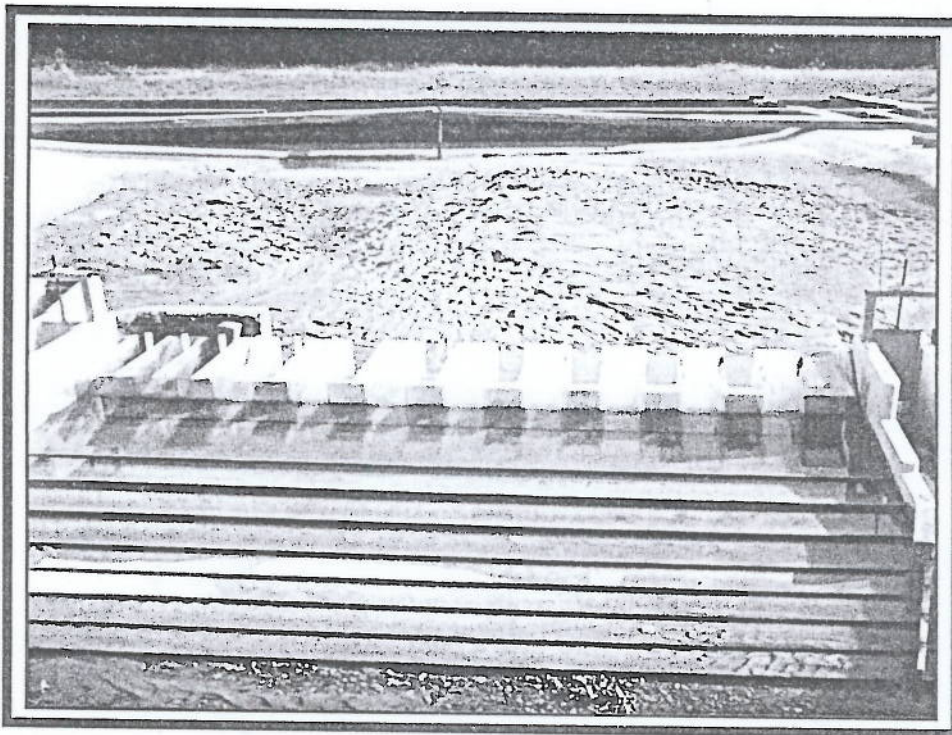
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**INTERNATIONAL WORKSHOP
ON
PIANO KEY WEIR FOR IN-STREAM STORAGE AND DAM SAFETY
(PKWISD-2012)**

India Habitat Centre, Lodi Road, New Delhi, India
May 30 – June 1, 2012



Organized By



Indian Water Resources Society (IWRS)
Roorkee - 247 667, India

&



Department of Water Resources Development and Management
Indian Institute of Technology Roorkee, Roorkee, India

&



Department of Civil Engineering & Environmental Science,
University of Petroleum & Energy Studies, Dehradun, India

Background

In-stream storage is the storage volume of water at a given time in the channel or over the flood plain of the streams in a drainage basin or river reach. River water infiltrates into a hydraulically connected aquifer during a rising flood stage and its reverse motion during a recession period recharges the river. The volume of water so stored and released after flood is referred to as bank storage. It is a significant hydrologic process because it can attenuate the flood wave in a river that has permeable bank materials, and can contribute substantial discharge to rivers during base flow.

There is a tremendous increase in the water consumption due to great increase in population. Moreover, lot of industries and hydropower projects have also come up and expected to come in future also. The standard of living of people is also going high day by day. To meet this water demand, there is a great need to store water in the river. In the present scenario of climate change, we need to create more storage for rising demand of water in rural and urban areas.

Therefore day by day, the need has been felt to bring about further innovation in the conventional barrages so an answer to this is a recent innovative research which is ongoing to develop Piano Key weir. The submergence problem can be envisaged by using emerging concept of In-stream storage systems. Low flow storage can be created in the stream itself without any submergence by using Piano Key Weir. It is relatively cheaper; no submergence is involved and can be implemented quickly. To create the desired volume of in-stream storages, the required number of Piano Key Weirs can be planned in cascades in a river as permitted by the channel topography.

The Piano Key Weir (PKW) is a weir of particular geometry, associating to a labyrinth shape the use of overhangs to reduce the basis length. The Piano Key Weir could thus been directly placed on a dam crest. Together with its important discharge capacity for low heads (several times the one of a Creagerweir), this geometric feature makes the Piano Key Weir an interesting solution for dams rehabilitation as well as new constructions. However, Piano Key Weir stays a new type of weir, firstly designed in 2001 and built for the first time in 2006 by EDF.

With several researches and projects on Piano Key Weir all over the world, this workshop aims at bringing together all the people (engineers, researchers,...) interested in Piano Key Weir to state and summarize the current knowledge on this still non conventional hydraulic structure. Contributions about labyrinth weirs are also welcome. During the workshop, a period of time will also be dedicated to discuss a single nomenclature to name the varied geometric parameters of a Piano Key Weir. The papers selected by the International Scientific Committee and presented during the workshop will be published in a hard cover book after the conference. The workshop environment is willing to be friendly, cooperative and non-competitive.

Workshop Themes

This International workshop will provide a platform to the experienced and related expert professionals for intensive and threadbare deliberations to explore possible solutions to the In-stream storage and dam safety. The focuses of the workshop are as follows:

- ❖ Physical modeling
- ❖ Economic and structural aspects
- ❖ Projects planned/under construction/ in operation
- ❖ Model scale experiments
- ❖ Numerical modeling
- ❖ Parametric studies

After detailed deliberations on the issues listed above, it is proposed to hold an exclusive session which will be devoted to open Discussion and Documentation of Recommendation.

Workshop Sessions

Apart from Inaugural and Valedictory Sessions, the Technical Sessions & One Open discussion and Documentation Session will be arranged. The Key Note and Invited Speakers from abroad and India will present their valuable experience. The delegates will have enough opportunities for interaction

during floor discussion and open discussion. All the accepted papers will be published in the proceedings of the workshop. The workshop papers will be peer reviewed and published in IWRS Journal.

Call for Papers for Special Session

Papers from selected speakers on various themes will be invited from key speakers in India and abroad. Also, abstract of papers of 100 words on the above session themes of the Workshop are invited latest by **March 31, 2012** and the acceptance will be notified by **April 15, 2012**. The full length papers of the accepted abstract will be submitted by **May 1, 2012**. The abstract of the papers can be emailed to the conference organizers at secretaryiwrs@gmail.com / gdsinghal@ddn.upes.ac.in

Registration Fees:

The Registration fee for the Workshop will be ₹ 12000 per Indian delegates and US\$ 300 per foreign delegates. Registration fee for Indian Students will be ₹ 6000 . The fee may be paid either using demand draft in favour of **Secretary IWRS** payable at **Roorkee** .

Sponsorship Opportunities

The conference provides a unique opportunity for sponsoring organizations to promote their products/services to the focused international and national audience besides having an excellent opportunity to interact with engineers/ scientists / academia during entire conference duration.

Golden Sponsor

₹ 3 Lakh

Logo in website, souvenir and proceedings. One page profile in the souvenir. Full page colour advertisement in the souvenir. Free registration for five delegates

Silver Sponsor

₹ 2 Lakh

Logo in website, souvenir and proceedings. Full page black and white advertisement in the souvenir. Free registration for three delegates

Sponsor

₹ 1 Lakh

One page advertisement in Souvenir(B & W). Free registration for two delegates.

Sponsor for Each Lunch

₹ 1 Lakh

Announcement with logo in the invitation card. Free registration for one delegate. Banner display on stage during the lunch.

Advertisement Rates for Souvenir

Page	Indian (₹)
Outside Back Cover	15,000
Inside Cover Pages	12,000
Special Colour Pages	10,000

Exhibition

Limited stalls are being made available where exhibitors can display relevant products at the rate of ₹ 50,000/- per stall. Each exhibitor is entitled to register one delegate free of cost.

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Er. R. C. Jha, President IWRS & Chairman, CWC
Prof. Pradipta Banerji, Director, IIT-Roorkee
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Prof Dr Gopal Das Singhal (India)

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About department of Civil Engineering and Environmental Science

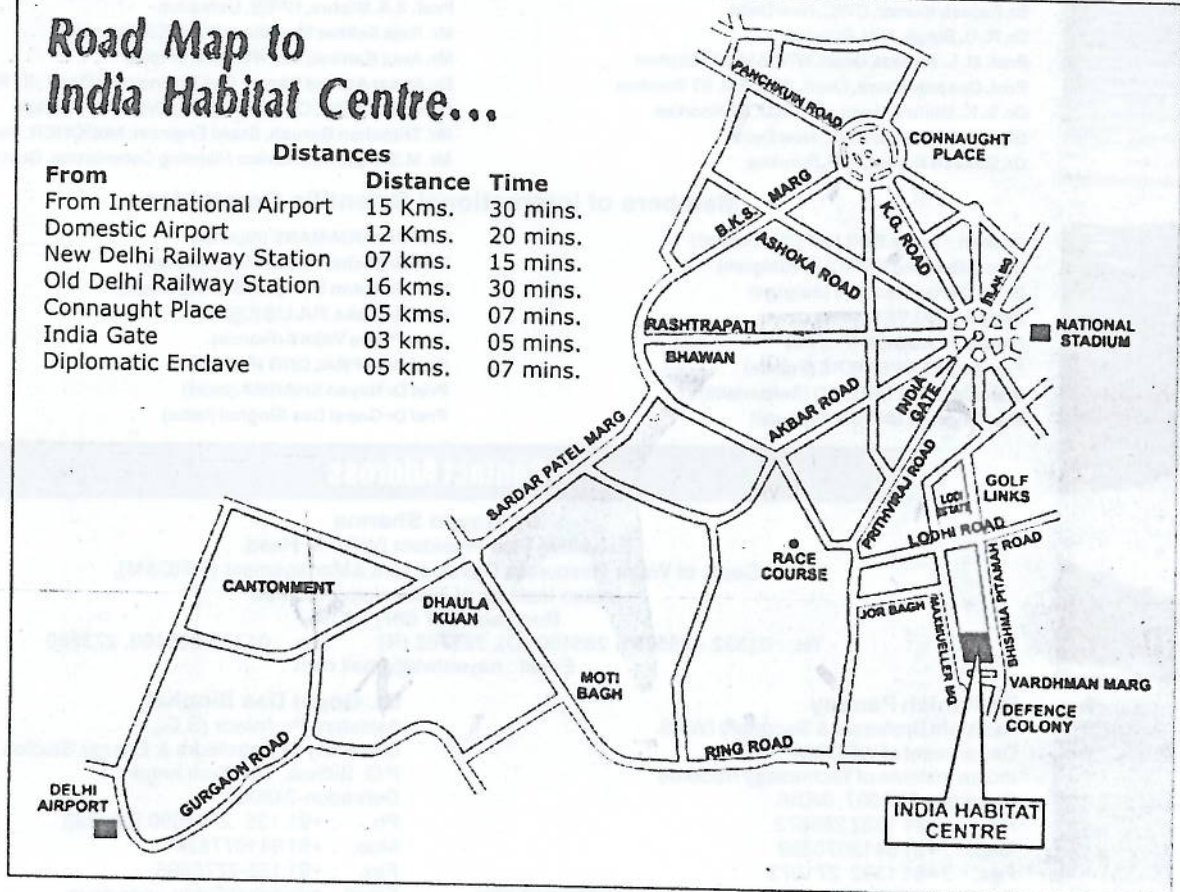
In the arena of worldwide infrastructural escalation, Department of Civil Engineering & Environmental Science at UPES Dehradun has come up to dedicate excellence in engineering education, creation of knowledge, innovation in research and leadership in professional services. The mission of the department is to offer unbounded academic environment in undergraduate and postgraduate teaching, doctoral program, research, and public service. Department of Civil Engineering aims to have an academic space for interaction between all disciplines of engineering related to infrastructural development, namely, Civil, Architecture, Urban Design, Town Planning, Water Resources Engineering and Traffic and Transportation Engineering. With modernisation taking place all around us and brand new flyovers, shopping malls, townships and mega-structures coming up everyday, India has fast emerged as land of opportunities in the infrastructure sector. The department promotes students to engage in extra-curricular activities and research & Consultancy oriented assignments to nurture their organizational skills and innovation.

DATE & CONFERENCE VENUE

The workshop will be held during May 30 – June 1, 2012 in Gulmohar Hall, India Habitat Centre, Lodi Road, New Delhi.

Road Map to India Habitat Centre...

From	Distance	Time
From International Airport	15 Kms.	30 mins.
Domestic Airport	12 Kms.	20 mins.
New Delhi Railway Station	07 kms.	15 mins.
Old Delhi Railway Station	16 kms.	30 mins.
Connaught Place	05 kms.	07 mins.
India Gate	03 kms.	05 mins.
Diplomatic Enclave	05 kms.	07 mins.



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Name of the Participants (Capital Letters)

Highest Qualification :

Designation : Organisation :

Relevant Experience :

Address :

State : Country : Pin/Zip Code :

Fax :

Phone : (R) (O) Mobile :

Email :

Registration Fee Details :

Rs./\$ Draft No. Bank Dt.

Date :

Signature :

Name :

Organised by



