

Short Course on

SEISMIC DESIGN OF CONCRETE GRAVITY DAMS

To be conducted at IIT Kanpur during 3-6 March 2009

Course Objectives

The aim of the course is to provide the participants an overview on seismic analysis and design of concrete gravity dams. At the end of the course, the participants are expected to:

- Have an overall understanding of the seismic behaviour, analysis and design for gravity dams in order to enable them to plan and direct the construction activity appropriately.
- Understand the methodology of seismic analysis and design.
- Have a clear appreciation of how seismic design methodology for concrete gravity dams has evolved in the recent years.

Participants

The course is designed for

- Engineers engaged in planning, design, or construction of dams.
- Senior professionals responsible for directing these activities.

Course Contents

- Geological and Seismological Investigations
- Basics of Earthquake Analysis of Structures
- Traditional & Modern Methods of Analysis and Design, including Effects of Dam Geometry, Water and Foundation Interactions, and Damping
- Simplified Analysis and Design Procedure
- Computer Programs such as EAGD-84 and EAGD-SLIDE
- Risk-based Approach and Failure Mode Analysis
- Seismic Evaluation and Remediation Strategies and Case Studies

Venue

The course will be conducted at IIT Kanpur.

Course Faculty

The course will be conducted by:

- Professor Anil K Chopra, University of California, Berkeley, USA and
- Mr Larry Nuss, US Bureau of Reclamation, Colorado, USA

Together they will cover essential aspects of seismic design of concrete gravity dams from theory to practice.

Certificate

Participants who successfully complete the course will be awarded a certificate.

Registration

The course fee is Rs. 12000/- (Rupees Twelve Thousand Only) per participant. It includes course material, lunch, and tea breaks. The fee is payable in advance by a crossed draft in favour of *Course on Seismic Design, IIT Kanpur*. Full-time faculty and post-graduate students of Structural Engineering may avail 50% discount towards the course fees.

Limited twin-sharing accommodation is available on first-come first-served basis at IITK Guest House on payment. It may also be possible to accommodate some of the participants in the student hostels. Interested persons should send the enclosed Registration Form to:

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