TNO DIANA
A TNO Company

Course Announcement

Analysis of Dams with DIANA

29 September-2 October 2008
Delft, The Netherlands

Topics

Pre-/Post-processing

- Concepts of 2D and 3D modeling
- CAD interfacing
- Analysis set-up

Concrete Gravity and Arch Dams

- Construction phases
- Young hardening concrete
- Staggered groundwater flow-stress analysis
- Staggered temperature-stress
- Cracking
- Linear and non-linear static and dynamic analysis

Concrete Faced Rockfill Dams

- Modelling rockfill and concrete slab
- Construction phases
- Staggered groundwater flow-stress analysis
- Linear and non-linear static and dynamic analysis

Earthfill Dams

- Staggered and fully coupled groundwater flow-stress analysis
- Slope Stability
- Liquefaction analysis

Who should attend

The course is aimed for dam engineers who are familiar with numerical non-linear analysis. Participants to the course will learn about the functionality of DIANA for analysis of dams.

Format

The course will be a mixture of theoretical lectures, and dedicated tutorials and exercises.
After the course, all participants will receive a temporary full DIANA license.

Fee

The course is free of charge for invitees.

Venue

The course will be held at the TNO DIANA offices in Schoemakerstraat 97, Delft.

How to reach Delft

Delft is situated centrally between The Hague and Rotterdam. Delft can be easily reached by train from Schiphol, Rotterdam and Eindhoven airports. Detailed information on train time tables can be found on the website of the Dutch railways, also available in English (www.ns.nl).

Accommodation

Delft offers a wide and attractive range of accommodation options in every price class. You can find a list of hotels on http://www.delfthotels.nl.

For more information on this course please contact:
Dr. Giovanna Lilliu
Tel: +31 15 2763268
Email: courses@tnodiana.com

www.tnodiana.com

DIANA Finite Element Program for Analysis of Dams

About DIANA

DIANA is an acronym for Displacement Analyzer. Development of DIANA started in 1973 at the Department of Computational Mechanics of TNO (Dutch Organization for Applied Research).

In the 1980s DIANA was made commercially available and since then is distributed worldwide among universities, research institutions and engineering consultancy companies.

In 2003 the department of computational mechanics of TNO became a wholly owned subsidiary of TNO, with the name TNO DIANA BV.

Services

Core activity of TNO DIANA BV is the development, marketing and sales of DIANA and related activities such as technical support to customers and training.

Other activities include consultancy projects on behalf of customers, and customized development.

Users

Among the key customers of DIANA are: Stucky S.A. (CH), Federal Waterways Engineering and Research Institute (DE), Rose School and CESI Ricerca S.p.A. (IT), Laboratório Nacional de Engenharia Civil (PT), International Institute of Earthquake Engineering & Seismology (IR), Shimizu Corporation, Taisei Corporation, Public Works Research Institute, Tokyo Electric Power Company (JP), Shell, Dutch Directorate for Public Works and Water Management (NL), Dolsar Engineering (TR), British Energy Generation and Halcrow (UK).

Many of the most prestigious universities use DIANA for research and teaching: University of Cambridge and Imperial College (UK), Chalmers University of Technology (SE), Delft University of Technology (NL), Ecole Polytechnique Fédérale de Lausanne (CH) , Politecnico di Milano and Politecnico diTorino (IT), Yildiz University and Middle East Technical (TR) University of Tokyo (JP), University of California Davis, University of California Berkeley and Stanford University (USA).

For registering to the course complete the registration form and fax back to +31 15 27 63 019.

Full Name	……………………………….	Affiliation	………………………………………
Postal Address	……………………………….	Country	………………………………………
Phone	……………………………….	Fax	………………………………………
Email	……………………………….	Special needs (dietary, vegetarian)	………………………………………