



The Laboratory of Hydraulic Turbomachines and the Parallel CFD & Optimization Unit of the National Technical University of Athens invites you in the seminar:

### **Methodologies for the Design and Optimization of Hydraulic Turbines**

The seminar is organised within the framework of "FP7-Cooperation" project:

*Development and laboratory testing of improved action and Matrix hydro turbines designed by advanced analysis and optimization tools-  
HYDROACTION*

#### **Seminar objectives**

- Hydraulic Turbines operation and design.
- Optimization methods & applications. The role of multiprocessor platforms
- Optimum design methodology for Pelton/Turgo/Matrix turbines
- Demonstration of simulation tools and Laboratory testing facilities

#### **Organisational details**

*Date:* 14 June 2011

*Place:* National Technical University of Athens, School of Electrical and Computer Engineering, Room 9  
Heron Polytechniou 9, 15780 Zografou, Greece

*Organiser:* Prof. D. Papantonis, HYDROACTION project coordinator  
Laboratory of Hydraulic Turbomachines of NTUA

*Registration:* The participation is free of charge. The attendees must fill the registration form till 8 of June 2011

#### Contact person for seminar logistics

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HYDROACTION web-site: <http://www.hydroaction.org/>

**Please find attached the complete programme of the Seminar**



## Seminar Programme

### Methodologies for the Design and Optimization of Hydraulic Turbines

14 of June 2011

National Technical University of Athens, School of Electrical and Computer Engineering, Room 9

Heroon Polytechniou 9, 15780 Zografou, Greece

time	Lecture title	Speaker
14:30-15:00	Registration	
15:00-15:15	Welcome – The HYDROACTION Project	D. Papantonis
15:15-16:00	Hydraulic Turbines Operation and Design	D. Papantonis
16:00-16:45	Design Optimization Tools & Applications	K. Giannakoglou
16:45-17:15	- Coffee break -	
17:15-17:45	Flow Analysis and Design Methodology for Action Turbines	I. Anagnostopoulos
17:45-18:15	Simulation Tools for Action Turbine Runners and Hydraulic Components	F. Koukouvinis
18:15-18:45	Design Methodology for Matrix Turbines, Using Multiprocessor Platforms	V. Asouti
18:45-19:30	Demonstration of Laboratory testing facilities	