



UNIVERSITÉ DE GENÈVE

**CENTRE UNIVERSITAIRE D'ÉTUDE
DES PROBLÈMES DE L'ÉNERGIE**

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CYCLE DE FORMATION 2004/2005

et

SÉMINAIRE "ÉNERGIE ET ENVIRONNEMENT"

Javier UCHE

Centro de Investigación de Recursos y Consumos Energeticos (CIRCE),
University of Zaragoza, Spain

**Desalination as the New Source for Avoiding Water Scarcity:
A General Review**

jeudi 3 février 2005 à 17h.15

Auditoire D 185 - Bâtiment D - Battelle
7, route de Drize
1227 Carouge

SÉMINAIRES DU SEMESTRE D'ÉTÉ 2005 :

Dès le jeudi 10 mars 2005 à 17h.15

The Speaker

Javier Uche is Assistant Professor at the University of Zaragoza and Ph.D. Industrial Engineer since 2000. He joined the CIRCE Foundation in 1995. Since then, he has worked in the R&D Centre of Enagás (Spanish natural gas supplier), in the Teruel coal fired Power Plant Station (1.050 MW) and he has collaborated in the optimization of dual purpose power and desalination plants (Abu Dhabi). He published more than 25 papers in scientific journals as well as several communications in international Conferences (30). He is currently Director of the CIRCE Thermoeconomic Division and leads the research line of water and energy interaction.

The Conference

This lecture will present the potential function of desalination as a new and non-finite source of fresh water that plays an important role in solving the problem of fresh water scarcity in some oil-rich regions and in the Middle East, as well as in many other arid and semiarid countries.

The most widespread desalination technologies, the economic costs of desalted water and the uses derived from those costs will be reviewed carefully in this lecture, as well as the environmental charges of desalination and the corrective measures to be undertaken. Finally, and linked to the energy consumption of desalination plants, the integration of both desalination and power technologies, their economic and environmental advantages will also be briefly commented.

Tram 13, environ 20 minutes depuis la Gare, ou tram 12 depuis le centre ville, arrêt Rondeau de Carouge.