Università degli Studi di Cagliari Dipartimento di Ingegneria Chimica e Materiali

## Fuel cells: principles and recent development in the PEM type cells technology

giovedì 12/6/2008 ore 10 - Facoltà di Ingegneria - Aula DICM

## **Prof. Karel Bouzek**

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**Prof. Ing. Karel Bouzek (1968)** has obtained his MSc and PhD from the Institute of Chemical Technology Prague (ICTP) in the years 1991 and 1997 respectively. The subject of his study was in both cases the electrochemical synthesis of Ferrate(VI). From the year 1997 he is with ICTP. At 2001 he finished his habilitation and at 2005 was appointed as a full professor of Inorganic Technology at ICTP. Beside the primary topic his scientific focus has turned also to the problematic of application of electrochemical methods in the environmental protection, to the development and characterisation of new types of functionalised polymeric membranes, to the low temperature fuel cells and to the electrochemical engineering, including mathematical modelling of the electrochemical systems. In the year 1991 he has visited for 3 months Technical University Darmstadt, Germany, in the year 1993 he stayed for 5 months at NTNU Trondheim, Norway, during the period 1998-99 he was awarded by the 12 months Alexander von Humboldt research fellowship and stayed for this time at the Karl-Winnacker-Institute, DECHEMA e.V., Germany. In the year 1999 he was awarded by the Carl Wagner Medal of Excellence (European Federation of Chemical Engineers. Since the year 2002 he is a head of Department of Inorganic Technology and since 2006 vice-dean of the Faculty of Chemical Technology, ICTP.

## Scientific interest

Electrochemical engineering (mathematical modelling of electrochemical systems, mass transfer), water treatment, ion selective membranes, PEM type fuel cells.