

# NOON TALK ® DIATI

# Please bring your own mug. Coffee and tea will be provided

# **LUNEDì 5 GIUGNO 2017** ore 13.00

Politecnico di Torino Sala Riunioni 1° Piano DIATI - ingresso 3



### POLITECNICO DI TORINO

Dipartimento di Ingegneria dell'Ambiente, del Territorio e delle Infrastrutture

On the occasion of the World Environment Day, NoonTalk@DIATI presents:

## "MANAGING WASTE AND WASTEWATER AS A SOCIETAL CHALLENGE", moderated by Prof. Silvia Fiore

### Carmen Teodosiu

Full professor at "Gheorghe Asachi" Technical University of Iasi, Romania

"Environmental assessments of municipal wastewater systems"

### **ABSTRACT**

Water resources management and the wastewater sector, in particular, faces multiple challenges in relation to its sustainability. This lecture addresses few of these challenges in a systematic way, especially focusing on emerging topics and our research contributions.

This presentation disscusses the development and implementation of three environmental assessment methods to evaluate the performance of municipal wastewater systems and to identify and quantify the local impacts of wastewater discharges: life cycle assessment, an environmental impact assessment index and the water footprint.

### **BIOGRAPHY**

Carmen Teodosiu is full professor (since 2002) at "Gheorghe Asachi" Technical University of Iasi (TUIASI), Romania. She graduated Chemical Engineering (1981), MSc with distinction in Environmental Technology (1994-1996) at UNESCO-IHE Delft, Netherlands and Ph.D. in Chemistry (TUIASI, 1998). Her research interests focus on: Advanced wastewater treatment processes, Environmental assessments of industrial processes and water use cycle.

Prof. Teodosiu's scientific activity: 163 articles in ISI journals& proceedings, 22 books, 7 patents, 865 citations (Hindex=16). She acted as director/PI in 118 international&national grants. She is PhD supervisor in the domains Chemical Engineering and Environmental Engineering. In 2011, she received Doctor honoris causa award from Pannonia University, Hungary. Prof. Teodosiu is president of International Conference on Environmental Engineering and Management (ICEEM).

### Brindusa Mihaela Sluser

Associate Professor at "Cheorghe Asachi" Technical University of Iasi, Romania

"Post-closure influence of emissions resulted from municipal waste deposits: a case study of the North-East region of Romania"

### **ABSTRACT**

The goal of this study was to evaluate the level of pollution considering 5 closed municipal waste deposits from North-East region of Romania over the period 2013-2015, considering the possibility of methane emissions valorization from biogas. The results showed that the impact on environmental quality was very high for 2 counties, due to pollution migration from North to South, and from one environmental component to another (from soil to ground water). The overall impact was quantified by two conventional assessment methods.

### **BIOGRAPHY**

Brindusa Mihaela Sluser is Associate Professor (2013) at "Cheorghe Asachi" Technical University of Iasi. She graduated Environmental Engineer, MSc in Environmental Management and Ph.D. in Chemical Engineering (2005). She published 13 books, 72 scientific papers (49 ISI/BDI), and participated in 59 projects (6 international). Her scientific results are 259 times cited (H=10). She is in two international Editorial boards, and in the American Industrial Hygiene Association (RMS), USA.

### Daniela Fighir

Assistant Professor at "Gheorghe Asachi" Technical University of Iasi, Romania

"Advanced oxidation processes for removal of priority organic pollutants from wastewater"

### **ABSTRACT**

Advanced oxidation processes are recognized as highly efficient in removing organic pollutants from wastewater. Pillared clays heterogeneous catalysts present very good catalytic activity and stability against iron leaching. This study considered the characterisation of newly synthesized materials by Mössbauer and DR-UV-vis spectroscopies that suggested the presence of two iron species: low-nuclearity ferric oxides and well-ordered hematite-like nanoparticles. Catalytic tests with 4-chlorophenol in aqueous conditions were performed, the dependence of the removal efficiencies on the operational parameters being also studied.

### **BIOGRAPHY**

Daniela Fighir is Assistant professor at "Cheorghe Asachi" Technical University of Iasi. She graduated Environmental Engineer, MSc in Environmental Management and Ph.D. in Chemical Engineering (2011). Her research activities are: advanced oxidation processes and environmental performance assessment. Her scientific activity comprises 7 published papers in ISI ranked journals, 2 books, 15 research projects.

Save the date for our next speaker-event, on July 05 2017, at 13.00





