

# NOON TALK ® DIAT

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

## Mercoledi 18 GENNAIO 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

# "DIATI YOUNG RESEARCHERS: WORKS, STUDIES AND RESULTS CONCERNING THE ENVIRONMENT"

### **Deborah Panepinto**

RTDb presso il DIATI

### **ABSTRACT**

The actual attention to the necessity to improve innovative systems of energy recovery, together with the global increase of wastes, leads to the actual need of systems of waste disposal/treatment that allow a volume reduction and, at the same time, an energy and materials recovery. The incineration is a system that offers both the mentioned opportunities. In this speech we analyze the Turin MSW incineration plant, especially its potential for energy recovery and the consequent environmental effects.

### **BIOGRAFIA**

Deborah Panepinto is an Assistant Professor (since December 2015) in Environmental Engineering at Politecnico di Torino. She received her M.Sc (110 L) and PhD in Environmental Engineering from Politecnico di Torino. Her scientific activity concerned, in particular, the following research fields:
- wastes management (thermal treatment and mechanical - biological treatment);

- energetic recovery and environmental compatibility of biomass plants;
- analysis of the pollutant dispersion derived from thermal treatment plants;
- analysis of wastewater treatment plant.

### Vincenzo Riggio

RTDb presso il DIATI

### **ABSTRACT**

Phytoremediation technologies for wastewater treatment, anaerobic digestion systems operating under batch, fed-batch and continues mode and photobioreactor reactors for massive microalgae cultivation. Three different biological technologies that may seem very different, but can be used together for enhanced energy, environmental and cost recovery in the treatment of wastewater.

In this speech, we discuss about my past, present and future researches on this three fields highlighting the positive and negative results.

### **BIOGRAFIA**

Vincenzo Riggio is an Assistant Professor (since November 2016) in Environmental Engineering at Politecnico di Torino. He received his M.Sc and PhD in Environmental Engineering from Politecnico di Torino. His scientific activity concerned the following research fields:

- wastewater management (biological treatment);
- · anaerobic digestion tests of several type of biomass;
- phytoremediation technologies for treatment and reuse of civil and industrial wastewater;
- environmental monitoring;
- massive microalgae production for several scopes;
- system prototyping and realization.



