



PhD course on

"WATER DESALINATION: PROCESSES, MATERIALS, AND THE FUTURE"

Duration: 25 hours

Period: April - June 2018 Working language: English

Abstract:

The course provides theoretical and practical aspects of seawater/brackish water desalination technologies.
Fundamental thermodynamic and transport processes which govern the creation of fresh water from seawater and brackish ground water will be discussed. The technologies of existing and future desalination systems will be discussed, with a focus on membrane-based separation and thermal separation: technological, economic, and environmental factors which limit the performance or the affordability of these systems will be highlighted.

Emerging materials and technologies for desalination will be considered. This course is organized within the framework of the CleanWaterCenter, the Interdepartmental Center of Politecnico di Torino devoted to research and innovation of water treatment technologies.

Programme:

- Thermal technology for desalination
- Membrane-based technologies for desalination
- Mass and heat transport in desalination processes
- Energy requirements of desalination
- Environmental issues and future perspectives

Teaching staff:

- Alberto Tiraferri (DIATI, CleanWaterCenter)
- Pietro Asinari (DENERG, CleanWaterCenter)
- Marco Sangermano (DISAT)
- Giancarlo Cicero (DISAT)

Applications are open

Further details on timetable and logistics will be available soon at:

http://www.diati.polito.it/phd-waterdesalination2018

Contact details

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