

Titolo del corso:

Assessment of long term management options for municipal solid waste landfills
(18 hours)

Docenti:

Roberto Raga

Programma:*Introduction*

Thousands of closed landfills are present in each Country worldwide. Although they are closed, aftercare measures have to be considered to control emissions and prevent environmental pollution in the long term. Currently, no standard procedures are available to define the end of the aftercare phase, which is likely of last centuries and to cause unpredictable costs to municipalities.

Contents

Landfill long term emissions and their control by means of different aftercare measures.
Use of lab-scale reactors for simulating natural and enhanced in situ processes for the enhancement of landfill management in the aftercare phase:

- Lab-scale plant design and management
- Analytical methods and constraints
- Data analysis and elaboration
- Issues related to process scale up

The course will comprise frontal lectures and actual analysis and elaboration of data from laboratory experiments.

Testi di riferimento:

R. Cossu, R. Stegmann, 2019. Solid Waste Landfilling. Concepts, Processes, Technologies. Elsevier Inc. ISBN 978-0-12-818336-6