

Special session: Waste treatment in a sustainable world. State-of-the-art and perspectives

Chair: E. Benfenati. Co-chair: V. Grundmann.

Background

Waste represents an important source of pollution. Plants to treat waste ideally should reduce the problem, but they are often criticised as a source of pollution. Incinerators, landfills, waste water treatment and other related plants are typically refused by the population, and in particular in some European countries the fight against these settlements is high. These plants are accused to release dioxins, nanoparticles, heavy metals, endocrine disruptors, solvents, and a long list of other pollutants.

This special session wants to discuss the technological systems and the procedures which have been developed to minimise the release of pollutants, their efficacy, and the perspectives to improve the contamination of the environment due to waste treatment. The session should attract different sectors of the society, in particular the industrial one showing recent progress in pollutant abatement and waste treatment, regulators, and scientists.

The topic which is indicated in this suggested special session reflects an acute debate on-going in Italy since decades, but it does not refer only to Italy.

Program: Tuesday 17 May 2011, 13:55-16:00

- 13:55 - 14:00 Session intro by the chairs
- 14:00 - 14:30 Nanomaterials as emerging contaminants at global scale (D. Barcelò)
- 14:30 - 15:00 Modelling to assess policy instruments in waste management (T. Ekvall, IVL, Sweden)
- 15:00 - 15:20 A study of WEEE treatment options in Brazil (C. Mahler)
- 15:20 - 15:40 Risk assessment of water effluents in Catalan (NE Spain) waste-water treatment plants based on E-PRTR data (A. Ginebreda)
- 15:40 - 16:00 Development and implementation of new techniques for landfill biogas emission assessment (C. Manzo)