



Nantes 2016  
SETAC Europe

SETAC Europe 26<sup>th</sup> Annual Meeting  
22-26 May 2016 - <http://nantes.setac.eu>

**Contaminants of Emerging Concern in the Environment and their Management**  
Under the theme: EC-Emerging contaminants: fate, effects and environmental risks

**SUBMIT YOUR ABSTRACT TO THE SESSION**

**The deadline for abstract submission is 25 November 2015 !**

For a platform presentation you will be asked to submit an extended abstract of 2 pages.

Various contaminants of emerging concern (CEC) including endocrine disrupting chemicals (EDCs), pharmaceuticals, antibiotic resistant bacteria and resistance genes in effluents, surface and ground waters, sediments, soil, and tissues are impacting wildlife and human health. Wastewater treatment plants (WWTPs), pharmaceutical manufacturing industries, hospitals and biosolids have been shown to be continuous sources of CEC and/or affecting and medicating aquatic life (feminization of male fish), including among others transformation products and metabolites (e.g. of surfactants, steroid hormones, plasticizers, and pharmaceuticals). Three steroidal estrogens, 17 $\alpha$ -ethinylestradiol (EE2), 17 $\beta$ -estradiol (E2) and estrone (E1) and several antibiotics are currently included in the so-called "watch list" of the Water Framework Directive (WFD) and are therefore recommended for monitoring.

This session focuses on:

- Do wastewater treatment designs (e.g. conventional vs. advanced, centralized vs. decentralized) or agricultural Best Management Practices (BMPs) remove such contaminants better than others?
- What is the mass loading of such contaminants in the environment and how do operational or application characteristics (including reuse practices) impact efficiency?
- What are the chemical and biological approaches that can be used to measure reduction or removal of adverse effects of EDCs, pharmaceuticals and antibiotics?
- Is pretreatment of concentrated waste streams (e.g. hospital wastes, landfill leachates) efficient and cost effective for reducing ecological effects, human health effects and loadings to the environment?

Platform presentations will include reports on the fate of CEC within wastewater treatment plants, on-site wastewater systems, biosolids management, landfill wastes, manufacturers waste, receiving waters, etc. We anticipate that the audience for this session will include those who are interested in sources of CEC including toxicologists, engineers and chemists from research, regulatory organizations, and facilities operation.

#### Chairs

**Damia Barcelo** - Institut Català de Recerca de l'Aigua (ICRA), Spain

**Dion Dionysiou** - University of Cincinnati, USA

**Robert Kase** - Swiss Center for Applied Ecotoxicology eawag-EPFL, Switzerland

**Despo Fatta-Kassinos** - Nireas-IWRC, University of Cyprus, Cyprus