

Regional Workshop on

Wastewater treatment and reuse for Metropolitan Regions and Small Cities in Developing Countries

September 11 – 17, 2016, Recife, Pernambuco, Brazil



Overview

Sustainable water management is essential for the social, economic and environmental growth of developing countries. Many of such countries presented a very high rate of population growth in the last century, resulting in fast urbanization, strengthened by the heavy migration from rural to the cities, either of big or small size. Water supply of good quality and adequate quantity, especially in countries with semi-arid regions, and appropriate sewerage systems and treatment of wastewaters impaired severe constraints for the population. Nevertheless, many alternatives for wastewater treatment were developed with the participation of universities and research institutes, as well as by practitioners. Substantial efforts have been directed towards the search of good alternatives for domestic sewage treatment in metropolitan regions and small cities in development countries, to comply with the particular economic and environmental conditions of them. The use of conventional treatment technology, as well as advanced alternatives for treatment and post-treatment of wastewater, including the questions of plant scale in centralized or decentralized systems and possible reuse of effluents, are aimed for presentation and discussion about theoretical and practical aspects.

Objectives

The workshop main objectives are: to share the experience, knowledge, research between the different partners, to discuss main problems and challenges in the field of wastewater treatment and reuse for Metropolitan Regions and Small Cities in Developing Countries, suitable technologies for domestic sewage treatment, removal of recalcitrant and micro-pollutants from domestic sewage and industrial wastewater and reuse of treated wastewater in urban areas, industry and agriculture. Also, the workshop aims to strengthen the expert network in the EXCEED-SWINDON project.

Topics

- Alternatives for domestic sewage treatment in metropolitan regions and small cities
- anaerobic processes for the treatment of domestic sewage and industrial wastewater
- stabilization ponds
- aerobic granular sludge
- post-treatment
- centralized and decentralized systems
- water reuse

Experts Participation

The workshop will have the participation of international level experts (research, practice and teaching) on wastewater treatment and reuse, with expertise covering the topics listed above. Some of the experts are:

a) TU Braunschweig / Institute of Sanitary and Environmental Engineering (Braunschweig, Germany): Prof. Dr.-Ing. Norbert Dichtl, Prof. Dr.-Ing. Andreas Haarstrick and Prof. Dr.-Ing. Klaus Flicke.

b) Federal University of Pernambuco / Department of Civil and Environmental Engineering and Department of Geology (Recife, Brazil): Prof. Dr. Mario T. Kato, Prof. Dr. Lourdinha Florencio and Prof. Dr. Savia Gavazza.

c) Other Brazilian expert professionals in the field of wastewater treatment and reuse will be invited for the lectures and participation in the discussion in the workshop.

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Structure of the workshop

Date	Time	Activities
09/11/2016 Sunday	All day Evening (19.00 to 21.00 h)	Arrival of the participants to Recife airport and transfer to the hotel Welcome meeting in the hotel in Recife (Hotel to be determined)
09/12/2016 Monday	Morning (08.30 to 12.15 h)	Lectures 1 to 3: invited experts
	Afternoon (14.00 to 18.00 h)	Workshop 1: presentations of the participants (10) and discussion
09/13/2016 Tuesday	Morning (08.30 to 12.15 h)	Lectures 4 to 6: invited experts
	Afternoon (14.00 to 18.00 h)	Workshop 2: presentations of the participants (10) and discussion
09/14/2016 Wednesday	Morning (08.30 to 12.15 h)	Lectures 7 to 9: invited experts
	Afternoon (14.00 to 18.00 h)	Workshop 3: presentations of the participants (10) and discussion
09/15/2016 Thursday	Morning (08.30 to 12.15 h)	Lectures 10 to 12: invited experts
	Afternoon (14.00 to 18.00 h)	Workshop 4: Final discussion
09/16/2016 Friday	Morning (07.00 to 12.00 h)	Departure to visit a wastewater treatment plant (small scale)
	Afternoon (14.30 to 17.30 h)	Lecture 13 to 14: The sewage master plan of Recife and Metropolitan Region. The Program "Cidade Saneada". New technologies for big wastewater treatment plants. COMPESA (Pernambuco Sanitation Company) and Odebrecht Ambiental Workshop 5: Discussion on big wastewater treatment plants. Centralized and decentralized systems Closure
09/17/2016 Saturday	All day	Departure of the participants from Recife

Target Audience/Candidates:

The preferable participants are water engineers and experts, experts from local/regional/national authorities, experts from water utilities and relevant ministries as well as academicians (post-doc) from institutions in the LA network region and partner countries of EXCEED-SWINDON
Number of participants:

The maximum number of participants is limited to 30. Not exclusively, but the first priority will be given to the candidates from the EXCEED SWINDON partner universities. Nevertheless, all candidates will be selected according to the criteria established by the EXCEED SWINDON, as stated by the application item below.

Application:

Please apply online until 30 April, 2016.

<http://la.exceed-swindon.org/apply-for-a-workshop/>

Selection and notification to the applicants until July 1st, 2016.

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Contact Organising Institution:

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Scientific Committee

Prof. Dr. Mario T. Kato (kato@ufpe.br), Prof. Dr. Lourdinha Florencio (flor@ufpe.br) and Prof. Dr. Savia Gavazza (savia@ufpe.br)

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Venue:

Universidade Federal de Pernambuco, Recife, Pernambuco State, Brazil.

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