

Information:
<https://www.unipa.it/strutture/aspmico/home/>

The Course

After 25 editions carried out successfully in Perugia in collaboration with the Province of Perugia and with the *Scuola Umbra di Amministrazione Pubblica*, the course this year has a new venue and a new organizational structure. It has been recognized that it had the merit of having contributed much to the spread of knowledge about the problems of dysfunctions of activated sludge plants, in Italy and also abroad. We hope to continue to ensure the quality of previous editions while addressing also new issues connected with the application of new and emerging treatment technologies.

M.Torregrossa and V. Tandoi

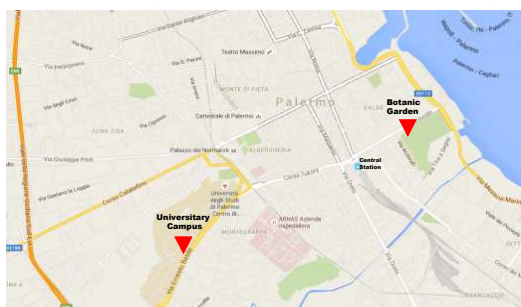


26th International Specialized Course “OPERATION AND CONTROL OF ACTIVATED SLUDGE PROCESSES USING MICROBIOLOGICAL ANALYSIS”



COURSE CONTENTS

Venues: Base Module: Conference Hall, Botanic Garden, Via Lincoln, 2 Palermo
Specialized Module: Building 19, Campus, Viale delle Scienze, Palermo



The Botanic Garden is located about 700 m from the Central railway station, an important node of the system of urban transport (bus lines 107 and 224 from the Central Station)

The University Campus is about 2 km from the Central station (bus lines 109 and 234 from the Central Station – Metro stop: “Orleans”).

**Botanic Garden - Via Lincoln, 2
Building 19 – Viale delle Scienze Palermo
(Italy), 27 June - 1 July 2016**

Monday, June 27 – Botanic Garden, Conference Hall

BASE MODULE

“Study and remedial actions of the technology”

- 8:30 **Registration**
9:00 **Welcome and course objectives**
9:15 **Management of wastewater treatment plants: state of art**
(*Carlo Collivignarelli – University of Brescia, IT*)
10:00 **Discussion**
10:10 **Designing the activated sludge systems and influence of process configuration on microorganism growth**
(*Gaspare Viviani – University of Palermo, IT*)
11:00 **Discussion**
11:10 **Coffee break**
11:30 **The activated sludge community** (*Valter Tandoi – IRSA-CNR, IT*)
12:20 **Discussion**
12:30 **Solid Separation Problems**
(*David Jenkins – Berkeley University, USA*)
13:20 **Discussion**
13:30 **Lunch**
14:30 **The secondary clarifier**
(*Michele Torregrossa – University of Palermo, IT*)
15:20 **Discussion**
15:30 **Biological Foaming** (*David Jenkins – Berkeley University, USA*)
15:15 **Discussion**
16:30 **Protozoa as indicators of activated sludge quality: application of the Sludge Biotic Index**
(*Claudia Davoli – IREN, IT*)
17:15 **Discussion**
17:30 **Closure**

Tuesday, June 28 – Botanic Garden, Conference Hall

BASE MODULE

“The knowledge and the future of the biological processes”

- 9:00 **Troubleshooting of suspended solids separation**
(*David Jenkins – Berkeley University, USA*)
9:45 **Discussion**
10:00 **Filamentous bacteria and relevant microbial populations: morphological and biomolecular identification**
(*Valter Tandoi – IRSA-CNR, IT*)
10:45 **Discussion**
11:00 **Coffee break**
11:15 **Characterization of activated sludge: from the traditional cultivation to the “omic” approach**
(*Simona Rossetti – IRSA- CNR, IT*)
11:45 **Discussion**
12:00 **New wastewater biological treatments** (*Gaetano Di Bella – University of Enna “Kore”, IT*)
12:45 **Discussion**
13:00 **Lunch**
14:00 **New technologies and emerging issues**
(*Michele Torregrossa & Giorgio Mannina, University of Palermo, IT*)
14:30 **Discussion**
14:40 **The problem of odour emissions in activated sludge process**
(*David Jenkins – Berkeley University, USA*)
15:20 **Regulations of odour emissions**
(*Vincenzo Belgiorno – University of Salerno, IT*)
16:10 **Discussion**
16:20 **Case Studies** (*Michele Torregrossa – University of Palermo, IT*)
17:30 **Closure**

SPECIALIZED MODULE - Building 19, University Campus, Viale delle Scienze

“Microscopic identification of filamentous bacteria and floc characteristics by optical and epifluorescence microscopy”

Wednesday – Thursday June 29-30

9:00 - 13:00 // 14:30 – 17:00

Laboratory and Tutorial Session (Course faculty and tutors)
(Lunch and Coffee breaks will be served)

Friday July 1

- 9:00 **Application of epifluorescence microscopy to activated sludge**
(*Marco De Sanctis*)
9:45 **The FISH protocol (Fluorescent in situ hybridization) and molecular probe definition** (*Simona Rossetti*).
11:00 **Microscopic examination of activated sludge**
12:00 **Course summary and presentation of certificates of participation**
13:00 **Close – Lunch**