



Organisers & Sponsors



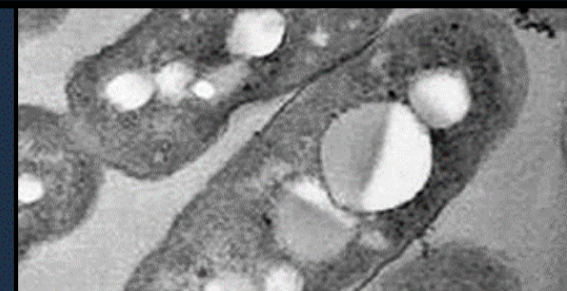
BIOPOLIS S.L.



Consejo Superior de Investigaciones Científicas



SYNPOL EU FP7 Project



SYNPOL

"Biopolymers from Syngas Fermentation"

Course objectives

The aim of this course is to provide individuals with an introduction to fermentation concepts in industrial settings and their successful implementation for bioproductions at industrial scale. The course will be lecture-based with visual aids to help the attendees to understand the fermentation principles discussed.

The course will be structured into sections based upon the topics presented. The first section ("Industrial Fermentation Basics") will address topics on bioreactor design including aspects such as ratios, agitator design, sparger design and sterilization of equipment and media. The second section ("Successful Industrial Scale-up Stories") will deal with actual operational issues of industrial fermentation processes that also covers issues involved in scale-up to production size bioreactors.

Discussions about microorganisms employed, culture media, foam control strategies, shear, mixing, aeration, feeds and different types of fermentations and the controls involved will be also addressed.

presents

SYNPOL 1st Annual Course on
"Industrial Fermentation Processes: Basics and Successful Industrial Scale-up Stories"

Parc Científic Universitat de València, Valencia (Spain)
8th November 2013



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www.synpol.org



ABENGOA RESEARCH

Venue

Auditorio Marie Curie (Main Building)
 Parc Científic Universitat de València
 C/ Catedrático Agustín Escardino nº 9
 46980 Paterna (Valencia), Spain

Registration

Registration contact before course:
drzyzga@cib.csic.es
 Attention: No course fee, but limited access!
 08:30 on-course Registration Opening

Course management

Chairman: Prof. José Luis García
 (SYNPOL Project Coordinator; CIB-CSIC, Spain)
 Moderator: Dr. Oliver Drzyzga
 (SYNPOL Project Manager; CIB-CSIC, Spain)

Refreshment Breaks

11:15 Coffee Break (sponsored by
 BIOPOLIS S.L.)
 13:15 Lunch (only free for speakers)



Morning session: "Fermentation Basics"

- 09:00 Opening Announcements
 Prof. Dr. José Luis García
 (SYNPOL Project Coordinator;
 CIB-CSIC, Spain)
- 09:15 Introduction to Bacterial Fermentation: Aerobic & Anaerobic Mode
 Prof. Dr. Peter Dürre
 (University of Ulm, Germany)
- 09:55 Microbial Growth & Biotechnological Productions in Bioreactors
 Dr. Federico Cerrone
 (University College Dublin, Ireland)
- 10:35 Bioreactor Design
 Dipl.-Ing. Daniel Egger
 (INFORS AG, Switzerland)
- 11:45 Basic Operations with Bioreactors – Process Control
 Prof. Dr. Manfred Zinn
 (HES-SO, Switzerland)
- 12:30 Bioreactor Mass & Energy Balances; Scaling Strategies & Benefits
 Dipl.-Ing. Patrick Sagmeister
 (TU Vienna, Austria)

Afternoon session: "Successful Industrial Scale-up Stories"

- 14:30 Biopolymer Composites Processing Technology and Applications – A View from BIOPLASTECH
 Dr. Ramesh Babu
 (Bioplastech Ltd., Ireland)
- 15:00 Recombinant Protein Production Technology at BIOPOLIS
 Dr. Marta Tortajada
 (Biopolis S.L., Spain)
- 15:30 The OWS Bioreactor Technology for Anaerobic Digestion of Different Waste Streams into Biogas
 Bruno de Wilde
 (Organic Waste Systems N.V., Belgium)
- 16:00 Probiotics Production Technology with *Bifidobacterium longum* Designed for People with Celiac Disease
 Prof. Dr. Daniel Ramón
 (Biopolis S.L., Spain)
- 16:30 Course Evaluation & Learning Outcomes Survey
 Prof. Dr. José Luis García
 (SYNPOL Project Coordinator;
 CIB-CSIC, Spain)
- 16:45 Closing of the course