

## GOLDEN SPONSOR



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## STUDENT PROGRAMME SPONSOR



## EXHIBITORS



DE GRUYTER



MemBrain

Precision  
FLUID CONTROLS



SIEMENS



Springer



## SPECIAL EVENT PARTNERS



Organized by **AIDIC**  
The Italian Association of Chemical Engineering

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15th - 19th September 2019  
Florence Italy

12th European Congress  
of Chemical Engineering

ECCE 12

5th European Congress  
of Applied Biotechnology

ECAB 5

# BRIDGING SCIENCE WITH TECHNOLOGY

A Renaissance  
in Chemical Engineering

[www.ecce12-ecab5.org](http://www.ecce12-ecab5.org)

# REGULAR TOPICS SESSIONS MAIN TOPICS

## ECCE 12

Sustainable processes

Particle technology

Production properties and technology of new materials

Nanotechnology

Separation technology and heat & mass transfer

Thermodynamics and interfacial phenomena

Fluid mechanics and transport phenomena

Multiphase systems

Membrane Engineering: Energy from salinity gradients Hybrid artificial organs

Industrial electrochemistry

Process system engineering

Chemical reaction engineering

Biomass

Food engineering

Energy and chemical engineering

Environment safety & quality

Quality assurance control & management systems

Knowledge education & training

## ECAB 5

Advanced and innovative technology in industrial bio-production, bio-separation and bio-detection (biosensors)

Bioenergy biofuel & renewables bioresources biorefinery and biomaterials (bio-active compounds biofuels fine chemicals)

Biocatalysis (future microbes and enzymes)

Novel processing (e.g. microbial fuel cells) downstream processing

From small to large (nano-biotechnology scale-up/scale down large-scale production)

Systems biotechnology and metabolic engineering

Protein and enzyme stability

Environmental biotechnology

Biofilms in industry and biomedicine

Chemical product design and bioproducts bioeconomy

Bioreactor performance

Downstream processing

Food bioprocessing

Microalgal bioengineering

Modelling monitoring measurement & control

Regenerative medicine manufacturing

## ABSTRACT SUBMISSION FOR POSTER PRESENTATIONS ONLY



### CONGRESS VENUE

Congress Center **Firenze Fiera**  
Piazza Adua 1, Florence - Italy

The conference center is hosted in **Fortezza da Basso**, a Fortress masterpiece of Renaissance Architecture designed by Antonio Sangallo and built in 1534-1536 for Alessandro de' Medici.



### REGISTRATION DESK OPENING TIMES

**Sunday 15th** from 5:00 pm to 7:30 pm

**Monday 16th** from 8:00 am to 5:30 pm

**Tuesday 17th** from 8:30 am to 12:30 pm

**Wednesday 18th** from 8:30 am to 12:30 pm

**Thursday 19th** from 8:30 am to 12:30 pm



### PROGRAMME HIGHLIGHTS

ECCE12 & ECAB5 joint events are **four days** congresses with **parallel sessions, plenary lectures** and **poster sessions**.

<b>SUNDAY</b> September 15 <sup>TH</sup>	<b>WELCOME RECEPTION</b>	from 6:30 pm
<b>MONDAY</b> September 16 <sup>TH</sup>	<b>OPENING</b>	8:30 am
	<b>PLENARY</b>	♣ Scott Fogler and Flavio Manenti
<b>TUESDAY</b> September 17 <sup>TH</sup>	<b>PLENARY</b>	♣ Klavs F. Jensen and Juergen Pleiss
<b>WEDNESDAY</b> September 18 <sup>TH</sup>	<b>GALA DINNER</b>	8:30 pm
	<b>PLENARY</b>	♣ Marinke Wijngaard and Inmaculada Ortiz
<b>THURSDAY</b> September 19 <sup>TH</sup>	<b>VISIT TO THE BHGE FLORENCE SHOP</b>	3:00 pm



### PLENARY SPEAKERS



**SCOTT FOGLER**  
USA

*Applications of Chemical Engineering to Upstream Engineering*



**JURGEN PLEISS**  
GERMANY

*Biocatalysis/Protein Enzyme Stability*



**FLAVIO MANENTI**  
ITALY

*Perspectives for CO<sub>2</sub> Utilization*



**MARINKE WIJNGAARD**  
NETHERLANDS

*Chemical recycling of complex plastics*



**INMACULADA ORTIZ**  
SPAIN

*Separation challenges in the quest for sustainability*



**KLAVS F. JENSEN**  
USA

*Advancing Chemical Development through Process Intensification, Automation, and Machine Learning*