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IFAC TC Sponsors

TC 6.1 - Chemical Process Control (main sponsor)

TC 8.4 - Biosystems and Bioprocesses (co-sponsor)

TC 2.1 - Control Design (co-sponsor)

IFAC NMO

SBA The Brazilian Society of Automatics

More Information

dycopscab2019.sites.ufsc.br
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DYCOPS 2019 – Second Call for Papers

The Organizing Committee has the pleasure to invite you to participate in the **12th IFAC Symposium on Dynamics and Control of Process Systems, including Biosystems** (DYCOPS 2019) to be held in **Florianópolis, Brazil, April 23-26, 2019**.

Scope and History

DYCOPS is the triennial meeting of IFAC for bringing together specialists active in academic research and industrial development in the broad field of process dynamics, control and optimization applied to bio/chemical systems and biotechnology. The DYCOPS symposia were initiated over 30 years ago under the name DYCORD (Dynamics and Control of Chemical Reactors, Distillation Columns and Batch Reactors), while CAB (Computer Applications in Biotechnology) originates from a series of events that started during the mid-1970s. The merging of the two events into a single symposium was successfully implemented in the last DYCOPS-CAB 2016, held in Trondheim, Norway. It will be maintained in Florianópolis, Brazil in 2019. This will be the first time that the DYCOPS symposium is coming to South America!

Objectives and Topics

The objectives of the DYCOPS 2019 are to provide a forum for professionals, academics, researchers, engineers and students involved in the broad field of process control engineering to integrate and exchange their knowledge, experience, and results. During the symposium, participants will present new ideas in diverse areas of dynamics, optimization and control of process systems and discuss the latest theoretical developments and control applications for the process and biotechnological industries.

The IFAC holds one major process control event every year, and the most recent ones are:

2014 DYCOPS-CAB in Mumbai, India
2015 IFAC World Congress in Cape Town, South Africa
2015 ADCHEM in Whistler, Canada
2016 DYCOPS-CAB in Trondheim, Norway
2017 IFAC World Congress in Toulouse, France
2018 ADCHEM in Shenyang, China

Venue

Florianópolis is the capital of Santa Catarina state in the South region of Brazil. It can be easily reached by direct flights from Rio de Janeiro, São Paulo, Brasilia and Buenos Aires. The sea, hills and over 42 beaches make Florianópolis a major destination for overseas and local tourists. The Symposium will be held at Jurerê Beach Village Hotel that is located around 30km away from Florianópolis downtown, in the heart of Jurerê beach, with calm and transparent sea waters and white sands.

Topics

General areas covered by the DYCOPS symposium include:

- Process control
- Dynamic modelling and simulation for control and operation
- Interaction between design and control
- Modeling and identification
- Batch process modeling and control
- Process and performance monitoring
- Fault detection, diagnosis, supervision, and safety
- Integration between scheduling and control
- Process optimization
- Plantwide control
- Smart manufacturing
- Model predictive control
- Scheduling, coordination and optimization
- Process control education
- Data mining tools
- Sensors and soft sensors
- Process analytical technology (PAT)
- Microbial technology
- Metabolic flux modeling and engineering
- Systems and synthetic biology
- Industrial biotechnology
- Biopharmaceutical processes
- Biocatalysis (enzymatic reactions)
- Food engineering
- Wastewater treatment processes
- Mammalian, insect, and plant cell technology
- Bioenergy production (bioethanol, algae, anaerobic digestion)

Prospective authors are encouraged to make contributions. All submissions must be prepared in accordance with the publication requirements for IFAC meetings and comply with IFAC copyright conditions (see page bottom). Contributions can be made under the following categories:

Regular Papers

The draft of a regular paper is limited to eight double-column pages, and final papers are restricted to six pages. Papers must follow the IFAC guidelines for paper formatting (https://www.ifac-control.org/events/author-guide)

Invited Sessions

Invited sessions consist of up to six regular papers on a specific research subject. If an invited session is not accepted, all corresponding papers will be evaluated individually as regular papers.

Pre-Symposium Workshops

Pre-symposium workshop organizers are invited to prepare proposals, which should provide clear and focused education material covering new and emerging topics within the scope of the symposium.

> Several regular or invited paper submissions with high review scores will be selected as **keynote talks**.

Papers and all other proposals must be submitted electronically, using the IFAC PaperPlaza Conference Manuscript Management System: www.ifac.papercept.net. All papers will be accepted with the understanding that the authors will present them at the symposium. At least one author of every accepted paper will be required to register for the symposium before uploading the final version. Two papers will be allowed per full registration fee and one per student registration fee.

> A Special Issue of the **Journal of Process Control** (an IFAC official journal) will be dedicated to include derivative publications of papers presented at this DYCOPS Symposium.

IMPORTANT DATES	
June 30, 2018	Submission site opens
September 29, 2018 **Extended!**	Deadline for the submission of: - Full draft contributed / invited papers - Invited session proposals - Pre-symposium workshop proposals
December 14, 2018	Notification of acceptance
January 18, 2019	Deadline for the final paper submissions (papers can be uploaded only after the payment of the registration fee)
February 15, 2019	Final programme announcement
April 23, 2019	Pre-symposium workshops
April 23-26, 2019	DYCOPS 2019