IFAC INTERNATIONAL FEDERATION OF AUTOMATIC CONTROL

Joint Conference | 8th IFAC Symposium on **Mechatronic Systems** | 11th IFAC Symposium on **Nonlinear Control Systems**

IFAC vienna 2019 NOLCOS MECHATRONICS

September 4–6, 2019
Vienna, Austria

TU WIEN TECHNISCHE UNIVERSITÄT WIEN

ACIN AUTOMATION & CONTROL INSTITUTE

1st Call for Papers

The 8th IFAC Symposium on Mechatronic Systems (MECHATRONICS 2019) and the 11th IFAC Symposium on Nonlinear Control Systems (NOLCOS 2019) are held jointly in Vienna, Austria, September 4-6, 2019. The idea behind this joint conference is bringing together experts with a more theoretical background in nonlinear systems theory and control with more application-oriented experts in mechatronics.

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Types of Contributions

- **Full contribution**: 6 pages paper & oral presentation, full paper peer review, paper published in the IFAC-PapersOnLine proceedings series (open access, ISSN and individual DOI assigned, indexed in SCOPUS, Web of Science, Google Scholar, and other databases), oral presentation (20 min)
- **Short contribution**: 2 pages paper & poster or 2 pages paper & oral presentation, short paper peer review, paper published in digital short-paper conference volume, authors can indicate a preference for poster (size DIN A0, portrait, 841 x 1189 mm) or oral presentation (20 min), intended for student and industry contributions

Deadlines

December 16, 2018	Submission of invited session proposals
January 13, 2019	Submission of draft papers
May 5, 2019	Notification of acceptance
June 1, 2019	Submission of final papers
June 1, 2019	Early registration

MECHATRONICS 2019

Scope

- Modelling and design
- System integration
- System analysis and optimization
- Identification and control
- Software tools
- Hardware-in-the-loop simulation
- Human-machine interfaces
- Fault detection and diagnostics
- Education for mechatronic systems

Fields of Applications

- Sensors and actuators
- Pneumatic and hydraulic systems
- Micro-/nanosystems
- Robotics and machine tools
- Aeronautics and aerospace
- Marine applications
- Automotive systems
- Power systems and energy
- Medical devices
- Manufacturing
- Precision systems
- Optomechatronic systems
- Smart structures

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NOLCOS 2019

Scope

- Modelling and identification
- Model order reduction and simulation
- System analysis and optimization
- Stability and stabilization
- System complexity and networking
- Hybrid systems
- System observation and observers
- Feedback and feedforward design methods
- Optimal control
- Condition monitoring
- Fault detection and isolation

Fields of Applications

- Mechatronic systems
- Sensors and actuators
- Pneumatic and hydraulic systems
- Micro-/nanosystems
- Robotics and machine tools
- Aeronautics and aerospace
- Marine applications
- Automotive systems
- Power systems and energy
- Medical devices
- Manufacturing
- Power electronics and drives
- Biological & biomedical systems
- Process industry
- Mining, mineral and metals industry

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Submission of Contribution

The language of the symposium and all contributions is English. All contributions must be submitted as PDF files complying with the IFAC style rules through the PaperPlaza System https://ifac.papercept.net. Templates for papers are available at http://www.mechatronicsnolcos2019.org.

Registration Fees

	early *)	normal
Standard	€ 650	€ 850
Student	€ 375	€ 450
Accompanying person	€ 200	€ 250

*) before June 1, 2019

The participants will have access to both MECHATRONICS 2019 and NOLCOS 2019 with just 1 registration fee. The standard registration includes the submission of up to 2 contributions. The student registration allows the submission of 1 contribution. For each registration, up to 2 additional papers (a € 200 additional fee is charged for each additional paper) can be submitted. The registration fee includes access to the following social events: Banquet Dinner, Welcome Reception, Evening Lecture, Coffee Breaks, and Closing Ceremony.

Sponsoring Organizations

IFAC, International Federation of Automatic Control, TC 4.2 Mechatronic Systems and TC 2.3 Non-Linear Control Systems, Main sponsoring organizations

Automation & Control Institute, TU Wien, Hosting organization

OVE - Austrian Electrotechnical Association, Co-sponsoring organization

GMAR - Gesellschaft für Mess-, Automatisierungs- und Robotertechnik, Austria, Co-sponsoring organization

VDI/VDE Society Measurement and Automatic Control (VDI/VDE-GMA), Germany, Co-sponsoring organization

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Venue

MECHATRONICS 2019 and NOLCOS 2019 take place in Vienna, a unique metropolis in the heart of Europe. The city offers international atmosphere, outstanding infrastructure, affordable prices, and easy accessibility from all over the world. It is famous for its splendid sightseeing locations, imperial tradition, musical and cultural wealth, contemporary creativity, sincere friendliness, 1st-class hospitality, and culinary delights. TU Wien hosts the scientific program of the conference. The venue can be reached within 30 min from Vienna International Airport and is within a short walk to the city center and numerous hotels.

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