



SYROM & ROBOTICS 2022

ROBOTICS 2022

The Joint International Conference of the XIII IFToMM International Symposium on Science of Mechanisms and Machines (SYROM)

and the XXV International Conference on Robotics (ROBOTICS)

Iasi, Romania, November 17 - 18, 2022

Organized by

Department of Mechanical Engineering, Mechatronics and Robotics at "Gheorghe Asachi" Technical University of Iasi, Romania (TUIASI)

Under the Patronage of IFTOMM

International Federation for the Promotion of Mechanism and Machine Science

Technical Committee for Linkages and Mechanical Controls

Technical Committee for Robotics and Mechatronics

Conference Chairman

Ioan Doroftei (Romania)

Conference Co-Chairmen

Mircea Nitulescu (Romania) Doina Pisla (Romania) Erwin-Christian Lovasz (Romania)

With the support of

International Federation for Promotion of Mechanism and Machine Science -IFToMM Romanian Association of Mechanism and

Machine Science - ARoTMM Robotics Society of Romania– SRR

International Scientific Committee

Stelian Alaci (Romania) Mircea-Viorel Bara (Romania) Yvan Baudoin (Belgium) Nicu-George Bizdoaca (Romania) Karsten Berns (Germany) Theodor Borangiu (Romania) Stelian Brad (Romania) Adrian Burlacu (Romania) Mehmet Ismet Can Dede (Turkey) Giuseppe Carbone (Italy) Marco Ceccarelli (Italy) Valentin Ciupe (Romania) Dorian Cojocaru (Romania) Daniel Condurache (Romania) Burkhard Corves (Germany) Jean-Christophe Fauroux (France) Carlo Ferraresi (Italy) Alessandro Gasparetto (Italy) Corina Gruescu (Romania) Alfonso Hernandez (Spain) Mathias Hüsing (Germany) Iulian Iordachita (USA) Mircea Ivanescu (Romania) Nicolae Joni (Romania) Gökhan Kiper (Turkey) Chin-Hsing Kuo (Australia) Corneliu Lazar (Romania) Dirk Lefeber (Belgium) XinJun Liu (China) Dan Mandru (Romania) Elena Mereuta (Romania) Calin-Octavian Miclosina (Romania) Niels Modler (Germany)

Andreas Müller (Austria) Mircea Neagoe (Romania) Victor Petuya (Spain) Radu-Emil Precup (Romania) Ionel Staretu (Romania) Iulian Tabara (Romania) Yukio Takeda (Japan) Daniela Tarnita (Romania) Hidetsugu Terada (Japan) Calin Vaida (Romania) Ion Visa (Romania) Luige Vladareanu (Romania)

Organizing Committee

Emil Budescu Florentin Buium Eugen Merticaru Cristina-Magda Cazacu Robert Kristof

Aim

The aim of the joint conference is to bring together researchers, scientists, industry experts and PhD students involved in the general area of mechanisms, mechanical transmissions, robotics and mechatronics, to disseminate their latest research results and exchange views on the future research directions of these fields.

Topics

We are looking for original, high-quality contributions addressing (but not limited to) the following topics:

SYROM: Theoretical and computational kinematics; Mechanism design; Experimental mechanics; Dynamics of machinery; Dynamics of multi-body systems; Mechanisms for biomechanics; Mechanical transmissions; Linkages and mechanical controls; Micromechanisms; History of mechanism science; Industrial and non-industrial applications.

ROBOTICS: Serial and parallel robots; Mobile robots; Collaborative robots; Micro and Nano robots; Sensors and actuators; Advanced control; Artificial intelligence; Medical robots; Teleoperation, haptics, virtual reality.

Submission, presentation and publication

The official language of the joint conference is English. Each paper will be reviewed, and the papers selected by the Scientific Committee will be published by Springer in the series "Mechanisms and Machine Science", indexed in several data bases and monitored by all major abstract media. All submitted papers must be strictly prepared following the publication guidelines. For detailed up-to-date information, please visit the SYROM&ROBOTICS_2022 conference website.

Deadlines

Full paper submission: July 15th, 2022Prov. accept notification: August30th,20222022Final paper submission: September15th,20225inal accept notif.: September 30th, 2022

Registration

Early Registration (before Od	ctober	15 th ,
<u>2022)</u>		
IFToMM/SRR Members	25	0€
Non IFToMM/SRR Members	30	0€
Regular Registration		
IFToMM/SRR Members	30	0€
Non IFToMM/SRR Members	35	0€
Students/Accompanying Perso	ns 15	0€

Venue

The conference will be held at "Gheorghe Asachi" Technical University of Iasi. Iasi is the largest city in eastern Romania, located in the historical region of Moldavia. Iasi has traditionally been one of the leading centres of Romanian social, cultural, academic and artistic life. Known as *The Cultural Capital of Romania*, Iasi is a symbol in Romanian history. It is easily accessible from countries by plane, train or car (see website).

Accommodation

Iasi provides accommodation in several hotels of different categories. A list of hotels will be available on the conference website.

Further Information

This is the first call for papers intended to inform about the aim, topics and important dates of the conference. Detailed information about venue, accommodation, social program and other topics will be published on the website.

Correspondence Address:

Prof. Ioan DOROFTEI Mechanical Engineering, Mechatronics and Robotics Department "Gheorghe Asachi" Technical Univ. of Iasi B-dul D. Mangeron, 43 700050 -Iasi, Romania <u>idorofte@mail.tuiasi.ro</u>

Website

https://syrom-robot.upt.ro

This is the URL for the authors to get first access when they want to submit a new contribution to SYROM&ROBOTICS2022.

https://equinocs.springernature.com/ser vice/SYROMandROBOTICS2022