ER EXTREME ROBOTICS 2018

29-th International Information and Technological Conference « EXTREME ROBOTICS»

June 7–8, 2018
RTC, 21, Tikhoretsky Pr.,
Saint-Petersburg

SLOGAN: Conversion Tendencies in Robotics

Subjects of the Conference

Commercialization of Extreme Robotics Technologies

Robotization of Agrarian-Industrial Complex.
Application of Robotic Systems in Open Pit and Road-Building Works.
Industrial Robotics: Robots in Manufacturing.

Artificial Intelligence Technologies in Control Systems

Object Decomposition and Vectorization of Information Field.
Neural Networks and Categorization of Objects.
Intellectualization of Technical Vision Systems.

Robotics in Medicine

Robotic Technologies for Surgery *
Robotic Systems and Robotized Instruments for Surgery.
Operation Navigation and Planning for Robotization of Surgical Procedures.
Sensory Systems for Information Support of Robotized Surgical Procedures.
"Surgeon – Robot" Interaction Interfaces.
Intelligent Control Systems, Machine Learning and Artificial Intelligence in Robotized Surgery.
Modern Medical Technologies for Robotized Surgery.
Experience of Robotic Systems Application in Clinical Practice.

Perfusion Complexes for Transplantation and Resuscitation
Perspective Directions of Development of Perfusion Systems for Transplantation.
New Medical Technologies of Perfusion Systems Application in Organ Donorship.
Application Experience of Perfusion Systems for Perfusion of Isolated Donor Organs.
Modern Technologies of Extracorporal Membrane Oxygenation.
Extracorporal Membrane Oxygenation Hardware.

* Section "Robotic Technologies for Surgery" is planned to be held on the base of Almazov National Medical Research Centre of the Ministry of Health of the Russian Federation in the frames of National Medical Innovation Forum (June 7-9, 2018).

Space Robotics

Orbital Robots for Implementation of Spacecraft Servicing.
Robots and manipulators for maintenance of large-size space structures.
Rovers and Planetary.

Marine Robotics Technologies

Robotics for Underwater Production Systems.
Robotized Systems for Rescue Operations at Sea.
Supporting Technologies (Navigation, Control, Technical Vision Systems, Communications, Hydrolocation, etc.).

Conference Organizer
Russian State Scientific Center for Robotics and Technical Cybernetics

Conference official languages
Russian; English

Financial Conditions
For cost of participation and terms of payment, see er.rtc.ru

Meeting of Technical Committee on Standardization «Robotics» (TC-141)

TC-141 Secretariat Work Statement 2018 (1 quarter).
C-141 Secretariat Information on Work Schedule 2019.
General Discussion on Standardization in Robotics .

Key stages and dates

Submitting registration form and thesis	before April 23, 2018
Submitting paper	before April 23, 2018
Consideration of the application materials of paper by the Program Committee; notification of participants about paper acceptance	before April 30, 2018

Conference Registration
To participate in the Conference it is necessary to be registered on the Conference website: er.rtc and submitting thesis. Submitting paper via e-mail Conference Secretariat: mrspb@rtc.ru

Guidelines to materials

Thesis (up to 1-2 page) should be presented in electronic form as MS Word file. Page format – A5, margins (upper and lower): 1.8cm; margins (left and right): 1.9 cm. Text font: Times New Roman Cyr 10; position of paragraph tabs: 0.8 cm; line spacing: single.

Papers, abstract, keywords (up to 7-8 pages) should be presented in electronic form as MS Word file. Page format – A4, margins (upper and lower): 1.8cm; margins (left and right): 1.9 cm. Text font: Times New Roman Cyr 11; position of paragraph tabs: 0.8 cm; line spacing: single.

Illustrations and diagrams should be inserted in text as objects and have a title. Diagrams should be performed in black and white.

Initials and last names of authors should be presented in center, font: bold italic; then after line spacing in 9 points: paper title in the center, font: upper case, bold; then after line spacing in 9 points: author's organization, city, e-mail, font: italic; then after line spacing in 9 points: main text of paper. References in text should be performed by Arabic numerals in square brackets. The list of references should be presented after main text, line spacing in 6 points, without title and indent.