

Preface

The present book gathers up-to-date contributions in the field of mechanisms, mechanical transmissions, robotics and mechatronics. The topics developed within this volume are as follows: analysis and synthesis of mechanisms, dynamics of mechanisms and machines, mechanical transmissions, biomechanics, precision mechanics, mechatronics, micromechanisms and microactuators, computational and experimental methods, CAD in mechanism and machine design, mechanical design of robot architecture, parallel robots, mobile robots, micro- and nanorobots, sensors and actuators in robotics, intelligent control systems, biomedical engineering, teleoperation, haptics and virtual reality.

The results reported in the papers were discussed at MTM & Robotics 2016—The Joint International Conference of the XII International Conference on Mechanisms and Mechanical Transmissions (MTM) and the XXIII International Conference on Robotics (Robotics), held in Aachen, Germany, on 26 October–27 October 2016. All 58 submitted contributions were carefully reviewed and selected for the presentation and publication by independent reviewers and the members of the International Scientific Committee. As a result of the two-stage review process, 49 contributions were selected for the presentation at the conference and publication in this book.

The previous editions of the two conferences were held in Romania, beginning in 1972, every four years until 2012, when the joint international conference was organized outside Romania for the first time at Institute Pascal, Clermont-Ferrand, France.

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