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Florin Duma -- Mechatronic System with Applications in Medical Robotics, by Nicolae Dumitru, Violeta Cristina Dumitru -- Low-Speed Actuator Used in Solar Tracking Systems, by Codruta Jaliu, Mircea Neagoe, Radu Sulescu, Edith-Bianca Dobre -- WiSeIn - Wireless Sensor Network Used for Data Acquisition from Indoor Locations, by Marius Luculescu, Sorin Zamfira, Luciana Cristea -- WiSeManS - Wireless Sensor Network Data Management System for Indoor Climatic Control, by Marius Luculescu, Sorin Zamfira, Luciana Cristea -- Four Bar Linkages With Linear Actuators Used For Solar Trackers with Large Angular Diurnal Strokes, by Macedon Dumitru Moldovan, Ion Visa, Radu Sulescu, Mihai Comsit.- Study of the Contact Between Toothed Chains and Guides, by Radu Papuc, Radu Velicu, Mihai Lates -- Study of the Curved Plate Spring behavior for small displacements, by Hariton Poparad -- Study of the motion of random axes using the coupling with curved plate springs, by Hariton Poparad -- Scanners with Risley Prisms: Modelling with Mechanical Design Programs, by Alexandru Schitea, I. Kaposta, Marius Tuef, S.C. Jurca, Virgil-Florin Duma -- Applications of the Ackerman Steering and Electronic Differential in Modern Electric Drive Automotive Systems, by Andrei Szilagyi, Valentin Ciupe, Inocentiu Maniu -- Geometric Modeling of Power Joints from Bush Chain Drives, by Alina Todi-Eftimie, Radu Velicu, Radu Saulescu, Codruta Jaliu -- 1-DOF Mechanisms for Dual Axis Solar Tracking, by Ion Visa, Monica Vatasescu, Mircea Neagoe, Bogdan Gabriel Burduhos -- Findings on Italian historical Developments of Machine Technology in 19th Century Towards Industrial Revolution, by Yibing Fang, Marco Ceccarelli, Baichun Zhang -- Considerations Regarding the Process of Integration the Mechanisms in the Structure of the Mechatronic Systems, by Vistrian Maties, Olimpiu Hancu, Ciprian Rad, Liliana Dache -- Dedicated Gripper for Books Handling in a Library, by Niels Modler, Andrei Comsa, Inocentiu Maniu, Erwin-Christian Lovasz, Valentin Ciupe -- Review on Mechanisms Used as Handbrake in Carriages and Locomotives, by Paun Antonescu, Ionut Geonea, Ovidiu Antonescu -- Using Mathematica Program in Teaching Mechanisms, by Madalina Rus, Silvia Veresiu, Elena Mereuta -- Using Computer Aided Design In Teaching Mechanisms, by Silvia Veresiu, Madalina Rus, Elena Mereuta.

Sommario/riassunto

The general topic of the symposium follows mechanisms development through all stages of conception, modeling, analysis, synthesis and control to advanced product design. This volume brings together the latest results in the field and celebrates a series of conferences that has been running for 40 years. The contributors and the editor are world leaders in their field.