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Technical Program

Monday, June 20 10:40-11:40

Conference Hall Keynote Lecture 1, Ch. Prof. Ricardo Chicurel

Impact of Strategies for Cooperative Project of R&D
Prof. Arturo Lara-López, Universidad de Guanajuato, México.

Monday, June 20 12:00-13:00

Robotics and Mechatronics I, Ch. Prof. R. Di Gregorio, Room B-1

- A12-264, Under-Actuated Nonholonomic Parallel Wrists, **R. Di Gregorio**, University of Ferrara, Ferrara, Italy. 1
- A12-260 Slip Decrease in Mobile Robots, **T. Zielinska, and A. Chmielniak**, Warsaw University of Technology, Institute of Aeronautics and Applied Mechanics (WUT IAAM), ul. Nowowiejska, Warsaw, Poland. 9
- A12-267, Position Control of a 3R Underactuated Robot Based on Genetic Algorithm, **Q. Xia**, Beijing University of Technology, Beijing Union University, **Y.Q. Yu**, Beijing University of Technology, **and Q. Liu**, Beijing University of Technology, China ASIT Co, Ltd, Beijing, China. 13

Robotics and Mechatronics II, Ch. Prof. N. Imamura, Room A-103

- A12-268, A new-type Torque Limiter with Friction Adjusting Mechanism for Robots, **N. Imamura, A. Yoshida**, Hiroshima International Univ., Hiroshima, Japan, **A. Sato**, TOYOTA Motor Corp., Aichi, Japan, **and K. Nagamura**, Hiroshima Univ., Hiroshima, Japan. 20
- A12-277, On the Design Conditions of Planar Parallel Manipulators in Near-Singular Configurations, **S. Briot**, IRCCyN-CNRS, Nantes, France, **V. Glazunov**, Russian Academy of Sciences, Moscow, Russia, **and V. Arakelian**, INSA, Rennes, France. 26
- A12-286, Bio-Inspired Design and Control of the Waseda Saxophonist Robot, **J. Solis, A. Takanishi**, Waseda University, Tokyo, Japan, **and K. Hashimoto**, Toyota Motor Corporation, Toyota, Japan. 34

Computational Kinematics I, Ch. Prof. B. Ravani, Room A-3

- A7-566, Kinematic Registration Using Contact Sensing, **W. W. Nederbragt**, Lawrence Livermore National Laboratory, Livermore, California, **and B. Ravani**, Department of Mechanical and Aeronautical Engineering, University of California, Davis, Davis, California, USA. 40

- A7-278, Isotropic Design of a 2 dof Parallel Kinematic Machine with a Translational Workpiece Table, **H. A. Moreno**, Technical University of Madrid, Madrid, Spain, **and J. A. Pamanes**, Autonomous University of Coahuila, Torreón, México. 50

- A7-282, Kinematic Analysis of a New Over-constraint Parallel Kinematic Machine, **Y. Jin**, School of Mechanical and Aerospace Engineering, Queen's University Belfast, UK, **Z. Bi**, Department of Engineering, Indiana University Purdue University Fort Wayne, Fort Wayne, USA, **R. Gibson, P. McToal, M. Morgan, C. Mcclory, and C. Higgins**, Northern Ireland Technology Center, Queen's University Belfast, UK. 57

Gearings I, Ch. S. Y. Yeh, Room A-106

- A9-270, An Analytical Approach for Load Sharing Analysis of Planetary Gear Drives, **S. J. Tsai, G. L. Hwang, and S. Y. Yeh**, National Central University, Jhong-Li, Taiwan. 63

- A9-274, Variational and Non-Variational Solution Methods of Flat Engagements Optimization Problem by Friction Power Criterion, **V. P. Prokhorov**, New Russian University, Moscow, Russia. 71

- A9-289, Optimized Polynomial Functions for Inducing Variation to Machine Tool Settings in Manufacturing Hypoid Gears, **V. Simon**, Budapest University of Technology and Economics, Budapest, Hungary. 78

Linkages and Cams I, Ch. Prof. E. Söylemez, Room B-106

- A11-281, Some New Overconstrained Linkages Obtained From Homothetic Jitterbug-Like Linkages, **G. Kiper and E. Söylemez**, Middle East Technical University, Ankara, Turkey. 88

- A11-302, Intersection of Two 5D Submanifolds of the Displacement 6D Lie Group: $X(u)X(v) \cap X(s)X(t)$, **C. C. Lee**, National Kaohsiung University of Applied Sciences, Kaohsiung, Taiwan ROC, **and J. M. Hervé**, Ecole Centrale Paris, Chatenay-Malabry, France. 94

- A12-587 Design of a Mechanism for an eight Link Sculpture, **S. Castañeda Cedeño, J. M. Dorador González, E. Sánchez Medina, H. Mancilla Alonso and A.**

Design Methodology I, Ch. Prof. P. Mitrouchev, Room A-105

Biomechanics I, Ch. Prof. J. P. Merlet, Room B-104

Transportation Machinery I, Ch. Prof. A. Charchalis, Room B-105

Monday, June 20 15:00-16:00

Robotics and Mechatronics III, Ch. Prof. S. Fatikow, Room B-1

- A12-322, Design and Control of a Nanohandling Robot, **S. Fatikow, C. Edeler, C. Diederichs, I. Meyer and D. Jasper**, Division Microrobotics and Control Engineering, Oldenburg University, Oldenburg, Germany. 169
- A12-296, The Reducible Design of 6-DOF Parallel Micro Manipulator Based on Screw Theory, **Y. Yue, F. Gao and H. Ge**, Shanghai Jiao Tong University, Shanghai, China. 177
- A12-332, Design and Simulation of a Binary Actuated Parallel Micro-Manipulator, **G. Carbone, C. Liang, H. Gu, M. Ceccarelli**, University of Cassino, Cassino, Italy, **A. Burisch and A. Raatz**, Technical University of Braunschweig, Braunschweig, Germany. 186

Robotics and Mechatronics IV, Ch. Prof. K. Gotlih, Room A-103

- A12-326, A Reverse Engineering Technique and its Possibilities in Robotics, **K. Gotlih, S. Brezovnik, J. Balic, and M. Brezocnik**, University of Maribor, Maribor, Slovenia. 196
- A12-335, On Adaptive Control of Singularly Perturbed Systems- a Worm-like Locomotion Example, **C. Behn and J. Steigenberger**, Ilmenau University of Technology, Ilmenau, Germany. 202
- A12-342, Haptic Teleoperation of a Manipulator using Virtual Fixtures and Hybrid Position-Velocity Control, **M. R. Wrock and S. B. Nokleby**, University of Ontario Institute of Technology, Oshawa, Canada. 208

Computational Kinematics II, Ch. Prof. K. Wohlhart, Room A-3

- A7-290, Intersection of Vector Spaces The Shuffle Formula, **K. Wohlhart**, Graz University of Technology, Graz Austria. 214
- A7-253, Multi-objective Optimization of Parallel Manipulator Using Global Indices, **F.A. Lara-Molina and J.M. Rosario**, UNICAMP, Campinas-SP, Brazil, **E. A. Portilla-Flores**, CIDETEC-IPN, México, **and D. Dumur**, SUPELEC, Giff sur Yvette-Cedex, France. 223

Gearings II, Ch. Prof. V. Simon, Room A-106

Linkages and Cams II, Ch. Prof. L. P. Laus, Room B-106

Design Methodology II, Ch. Prof. V. Glazunov, Room A-105

Biomechanics II, Ch. Prof. V. Parenti-Castelli, Room B-104

- A22-546, Passive Motion Modeling of the Human Ankle Complex Joint, **B. Baldisserri and V. Parenti-Castelli**, University of Bologna, Bologna, Italy. 298
- A22-602, Kinematical Modeling and Simulation of Quadruped Biomechanism, **I. D. Geonea, A. Margine, N. Dumitru and V. Rosca**, Craiova University, Craiova, Romania. 305
- A22-547, A New Method to Solve Kinematic Consistency Problem Based on Optimization Techniques and Euler Parameters, **J. Ojeda, J. Mayo and J. Martínez-Reina**, University of Seville, Seville, Spain. 311

Micro Electromechanical Systems (MEMS) I, Ch. Prof. A. Buchacz, Room B-105

- A31-580, Analysis of the Mechatronic System with Piezoelectric Actuator Based on the Approximate Method, **A. Buchacz and M. Placzek**, Silesian University of Technology, Gliwice, Poland. 317
- A31-584, Analysis of one Side Fixed Piezoelectric Plate Model, **A. Wróbel**, Silesian University of Technology, Gliwice, Poland. 322
- A31-595, Fabrication of PolySilicon Microstructures using the PolyMEMS INAOE Technology, **D. Diaz-Alonso, F.J. Quiñones-Novelo, C. Zuñiga-Islas, J. Molina, J. Hidalga, M. Linares, P. Rosales, A. Torres-Jacome, C. Reyes and W. Calleja**, Li-MEMS INAOE, Puebla, Mexico. 327

Monday, June 20 16:00-17:00

Robotics and Mechatronics V, Ch. Prof. J. J. Lee, Room B-1

- A12-333, Topological Synthesis of Underactuated Passively Adaptive Finger Mechanisms, **C. W. Chuang and J. J. Lee**, Department of Mechanical Engineering, National Taiwan University, Taipei, Taiwan. 332
- A12-331, On the Design of Workspaces of Serial Mechanisms, **S. Brezovnik, K. Gotlih, J. Balic and M. Brezocnik**, University of Maribor, Maribor, Slovenia. 340
- A12-358, Reduced Elastodynamic Modelling of Parallel Robots for the Computation of their Natural Frequencies, **S. Briot, D. Chablat**, IRCCyN - CNRS, **and A. Pashkevich**, IRCCyN - CNRS / Ecole des Mines de Nantes, Nantes, France. 348

Robotics and Mechatronics VI, Ch. Prof. I. M. Chen, Room A-103

- A12-365, Human-like Walking of Humanoid Robot Based on Biped Kinematics and Captured Motion of Human, **Q. Yuan and I. M. Chen**, School of Mechanical and Aerospace Engineering Nanyang Technological University, Singapore. 356
- A12-360, Failure Recovery for Wrench Capability of WireActuated Parallel Manipulators, **L. Notash**, Queen's University, Kingston, Canada. 364
- A12-364, A Fully-Isotropic Parallel Orientation Mechanism, **C. H. Kuo and J. S. Dai**, King's College London, London, United Kingdom. 374

Computational Kinematics III, Ch. Prof. C. C. Lee, Room A-3

- A7-314, Mobility Constraints and Configurations of 3- and 5-bar AKC Mechanisms, **C. C. Lee, and C. Y. Loe**, National Kaohsiung University of Applied Sciences, Kaohsiung, Taiwan. 381
- A7-361, Forward Kinematics of the Symmetric 5-DOF Parallel Mechanisms (3R2T) Using the Linear Implicitization Algorithm, **M. Tale Masouleh, C. Gosselin**, Laval University, Quebec, Canada, **D. R. Walter, and M. L. Husty**, University of Innsbruck, Innsbruck, Austria. 387
- A7-385, Simulation of Length-Preserving Motions of Flexible One Dimensional Objects using Optimization, **S. Banerjee, M. S. Menon, G. K. Anathasuresh, and A. Ghosal**, Mechanical Engineering, Indian Institute of Science, Bangalore, India. 397

Gearings III, Prof. V. Barzdaitis, Room A-106

- A9-312, Modeling and Simulation of the Gear Power Transmissions in the Diagnostics Medium, **V. Barzdaitis**, Kaunas University of Technology, Kaunas, Lithuania, **P. Mažeika, J. Grigonienė, and R. Didžiokas**, Klaipeda University, Mechatronic Science Institute, Klaipeda, Lithuania. 407
- A9-297 Optimization of Flat Engagements by Zero-Order Criterion Using Euler Variational Method, **V.P. Prokhorov**, Russian New University, Moscow, Russia. 414
- A9-379, Study on Dynamic Characteristics of Gear Transmission System of Wind Turbine, **D. Qin and F. Tang**, Chongqing University, Chongqing, China. 418

Linkages and Cams III, Ch. Prof. J. Angeles, Room B-106

- A11-344, Synthesis of Function-Generating Lingkages with Minimax Design Error: The Linear Case, **F. Angeles**, SSTEC, Mexico, D.F., Mexico, **and J. Angeles**, Centre

Design Methodology III, Ch. Prof. A. Masiulis, Room A-105

Biomechanics III, Ch. Prof. J. Wojnarowski, Room B-104

Monday, June 20 17:20-18:20

Robotics and Mechatronics VII, Ch. Prof. P. Bidaud, Room B-1

- A12-440, Practical Consideration on the Identification of the Kinematic Parameters of the Staubli TX90 Robot, **H. Hage, N. Jardin**, MRI, 2PSR EDF R&D, Chatou, France, **and P. Bidaud**, ISIR, CNRS UMR 7222 Universite Pierre et Marie Curie, Paris, France. 487
- A12-380, Configuration Transformation Theory from a Chain-type Reconfigurable Modular Mechanism-Rubik's Snake, **X. Ding, S. Lv and Y. Yang**, Beihang University, Beijing, China. 495
- A12-382, Spatial Abduction Mechanism for an Anthropomorphic Robotic Hand, **L-A. A. Demers and C. Gosselin**, Département de génie mécanique Université Laval, Québec, Qc, Canada. 504

Robotics and Mechatronics VIII, Ch. Prof. S. M. Wang, Room A-103

- A12-391, A New Method for the Singularity Analysis of Planar Mechanisms with Multi-Degree of Freedom and Experimental Research, **X. Liu, S. M. Wang, R. Yuan**, Northwest Polytechnical University, **and N. Shan**, Engineering College of Armed Police Force, Xi'an, China. 514
- A12-415, A Robust Inverse Dynamics Formulation for Redundantly Actuated PKM, **A. Muller**, Chair of Mechanics and Robotics, University Duisburg-Essen, Germany. 519
- A12-408, Design and Dynamics of a Two-DOF Joint Actuated by One Single Motor, **Y. Y. Luo, F. Y. Zhao and C. R. Li**, Institute of Automation, Chinese Academy of Sciences, Beijing, China. 527

Computational Kinematics IV, Ch. Prof. M. Husty, Room A-3

- A7-388, Kinematic Analysis of the TSAI-3UPU Parallel Manipulator using Algebraic Methods, **D. R. Walter and M. L. Husty**, University of Innsbruck, Innsbruck, Austria. 531
- A7-398, Kineto-static Analysis of a Spatial Closed-loop Mechanism Composed of Elastic Thin Strips, **N. Iwatsuki**, Tokyo Institute of Technology, Tokyo, Japan. 541

Gearings IV, Ch. Prof. V.P. Prokhorov, Room A-106

Linkages and Cams IV, Ch. Prof. M. Dahan, Room B-106

Design Methodology IV, Ch. Prof. M. Nakamura, Room A-105

- A23-437, Optimizing the Design of the 13-Hinge Rectilinear Stage for High Straightness Translation, **F. Cosandier, V. Chatagny and R. Clavel** EPFL - LSRO, Lausanne, Switzerland. 612

Biomechanics IV, Ch. Prof. M. Swietlik, Room B-104

- A22-425, Efficiency of Movable Type of Child Safety Restraint Systems in the Event of Head-on Collisions, **M. Swietlik, C. Rzymkowski and K. Kedzior**, Warsaw University of Technology, Warsaw, Poland. 620
- A22-609, Mechanical Systems of Third Order and Jerk Curves, **M. Popescu and P. Popescu**, University of Craiova, Craiova, Romania. 627

Tuesday, June 21 9:00-10:00

Conference Hall Keynote Lecture 2, Ch. Prof. Alberto Caballero

Micromanufactories: A New Methodology for Sustainable Manufacturing
Prof. Yuichi Okazaki, National Institute of Advanced Industrial Science and Technology, Japan.

Tuesday, June 21 10:00-11:40

Robotics and Mechatronics IX, Ch. Prof. S. Zeghloul, Room B-1

- A12-394, Multi Criteria Optimum Design of 3 dof Translational in Parallel Manipulators (3TPM), **M.A. Laribi, S. Zeghloul**, PPRIME CNRS-Université de Poitiers, ENSMA, France, **A. Mlika and L. Romdhane**, LGM, ENISo Université de Sousse, Tunisia. 633
- A12-407, Development of a Pipe Bender Using a Parallel Mechanism with 3-RPSR Structure with Six Degrees of Freedom, **Y. Takeda, X. Xiao, M. Higuchi S. Inada**, Tokyo Inst. Tech., **K. Hirose, Y. Yoshida and Y. Ishikura**, Kikuchi Seisakusho Co., Ltd., Tokyo Japan. 641
- A12-416, Development and Key Issues of the Ankle Rehabilitation Robots, **P. Sui, L. Yao, H. Wang**, Fuzhou University, Fuzhou, China, **and J. S. Dai**, King's College London, London, UK. 648
- A12-419, Development of Tailor-Made Robots - From Concept to Realization for Small and Medium-Sized Enterprises, **M. Hüsing, M. Riedel, B. Corves and M. Nefzi**, RWTH Aachen University, Aachen, Germany. 656
- A12-420, Workspace of a 3-RRPS Parallel Robot Leg with a Constant Orientation, **X. C. Zhao, C. K. Qi and F. Gao**, Shanghai Jiao Tong University, Shanghai, China. 662

Robotics and Mechatronics X, Ch. Prof. P. Wenger, Room A-103

- A12-429, Singularity Analysis of 5-DOF Parallel Mechanisms 3T2R using Grassmann-Cayley Algebra, **S. Amine, S. Caro, P. Wenger**, IRCCyN, Nantes, France, **M. Tale-Masouleh and C. Gosselin**, Université Laval, Québec, Canada. 670

Computational Kinematics V, Ch. Prof. C. Huang, Room A-3

Gearings V, Ch. Prof. V. I. Goldfarb, Room A-106

Linkages and Cams V, Ch. Prof. I. Visa, Room B-106

Design Methodology V, Ch. Prof. D. Martins, Room A-105

Rotor Dynamics I, Ch. Prof. R. Rządkowski, Room B-104

Dynamics of Machinery I, Ch. Prof. X. Jin, Room B-105

- A24-320, Dynamics Analysis of The Mechanical System of Lunar Sampling, **Z. Dong, S. Yin, H. Yang, H. Wang, H. Cheng, W. Fu**, China University of Mining and Technology, Beijing, China, **and S. Yin**, Beijing Spacecrafts, Beijing, China. 938
- A24-258, Using the Dynamic Compliance Method for Modal Analysis and Steady State Vibrations in the Fluid-Structure Interaction, **F. Malenovsky, F. Pochyly, L. Pohanka and M. Chlud**, BUT, Brno, Czech Republic. 945

Tuesday, June 21 12:00-13:00

Robotics and Mechatronics XI, Ch. Prof. Y. Nakamura, Room B-1

- A12-460, Stabilizing Control of Personal Mobility with a Spherical Wheel Composed of Serial Kinematic Chain, **S. Ok and Y. Nakamura**, University of Tokyo, Tokyo, Japan. 953
- A12-470, A Pseudo-isotropic Three-phalanxe Under-actuated Finger, **G. Dandash, R. Rizk**, Lebanese University Doctoral School, Hadath, Lebanon, **S. Krut and E. Dombre**, Lirmm, Montpellier University-CNRS, 161 rue Ada, Montpellier France. 961
- A12-472, Modelling and Simulation of a Mobile Robot with Self-Locking Speed Reducers, **M. Wojtyra and J. Fraczek**, Institute of Aeronautics and Applied Mechanics Warsaw University of Technology, Warsaw, Poland. 969

Robotics and Mechatronics XII, Ch. Prof. S. K. Saha, Room A-103

- A12-465, Synthesis and Design of a 2-DOF Haptic Device for Simulating Epidural Injection, **M. H. Koul, S. K. Saha**, Dept. of Mechanical Engg IIT Delhi, Hauz Khas, New Delhi, India, **D. Rabinowitz**, Dept. of M.E.M.S., Rice University, Houston, Texas USA. **and M. Manivannan**, Dept. of App. Mechanics IIT Madras, Chennai, India. 977
- A12-479, A Mechanical Calibration Approach for Binary Parallel Robots, **D. Schütz, A. Raatz and J. Hesselbach**, Technische Universität Braunschweig, Braunschweig, Germany. 984
- A12-483, Force Capabilities of Kinematically Redundant Planar Parallel Manipulators, **L. Weihmann, L. S. Coelho**, PUCPR, Curitiba, Brazil, **and D. Martins**, UFSC, Florianópolis, Brazil. 991

Computational Kinematics VI, Ch. Prof. A. Müller, Room A-3

Gearings VI, Ch. Prof. W. B. Shieh, Room A-106

Linkages and Cams VI, Ch. Prof. G. Moroz, Room B-106

Design Methodology VI, Ch. Prof. N. M. Thanh, Room A-105

Rotor Dynamics II, Ch. Prof. S. Braut, Room B-104

Dynamics of Machinery II, Ch. Prof. T. Thuemmel, Room B-105

- A24-495, Dynamics of Stress Wave Propagation during Percussive Drilling Process, **E. K. Keskinen, T. Karvinen, J. Montonen**, Tampere University of Technology, Tampere, Finland, **and M. Heinonen**, Robit Rocktools, Lempäälä, Finland. 1139

Tuesday, June 21 15:00-16:00

Robotics and Mechatronics XIII, Ch. Prof. S. B. Nokleby, Room B-1

- A12-477, An Operator-Focused Algorithm for Tele-Operating Mobile Manipulators, **M. Frejek and S. B. Nokleby**, University of Ontario Institute of Technology, Oshawa, Ontario, Canada. 1144
- A12-486, Consequences of the Use of Decentralized Controllers for Redundantly Actuated Parallel Manipulators, **T. Hufnagel**, Heilbronn University, Heilbronn, Germany **and D. Schramm**, University Duisburg-Essen, Chair of Mechatronics, Duisburg, Germany. 1152
- A12-490, Inverse Dynamics of a 5-DOF Reconfigurable Parallel Robot, **N. Plitea, D. Pisla, C. Vaida, B. Prodan, R. Dadarlat**, Technical University of Cluj-Napoca, Memorandumului, Cluj-Napoca, Romania, **J. Hesselbach and A. Raatz**, Technical University of Braunschweig, Langer Kamp, Braunschweig, Germany. 1160

Robotics and Mechatronics XIV, Ch. Prof. L. Baron, Room A-103

- A12-488, Planar 3 Degree-of-Freedom Parallel Manipulator with an Articulated Platform Featuring a Planetary Gearbox, **Y. Vermette and L. Baron**, École Polytechnique, Montreal, Canada. 1167
- A12-509, Trajectory-tracking Control of a Planar 3-RRR Parallel Manipulator with Singularity Avoidance, **C. Nasa and S. Bandyopadhyay**, Department of Engineering Design Indian Institute of Technology Madras, Chennai, India. 1174
- A12-500, Modified Wren Platforms, **G. Kiper and E. Söylemez**, Middle East Technical University, Ankara, Turkey. 1183

Computational Kinematics VII, Ch. Prof. D. Pisla, Room A-3

- A7-543, Kinematics of New Parallel Structures with 3 and 4 DOF Using Planar Parallel Modules, **D. Pisla, N. Plitea, C. Vaida, A. Vidrean, M. Glogoveanu, D. Lese, and B. Konya**, Technical University of Cluj-Napoca, Memorandumului, Cluj-Napoca, Romania. 1188

Gearings VII, Ch. Prof. M. Pleguezuelos, Room A-106

Linkages and Cams VII, Ch. Prof. B. Corves, Room B-106

Design Methodology VII, Ch. Prof. S. Żółkiewski, Room A-105

- A23-545, Buckling as a New Perspective on Static Balancing of Mechanisms, **J. A. Gallego and J. L. Herder**, Dept. of BioMechanical Engineering, Delft University of Technology, Delft, The Netherlands. 1284

Rotor Dynamics III, Ch. Prof. J. C. Gómez-Mancilla, Room B-104

- A17-601, Preliminary Analysis for Worn Out Gas Turbine Blade-Vane Components Related to Resonant Mode Frequencies and Fatigue Life Consumption, **J. C. Gómez-Mancilla**, Instituto Politénico Nacional, México D. F., **L. M. Palacios-Pineda, Y. López-Grijalba, and O. Gutiérrez-Suárez**, Instituto Tecnológico de Pachuca, Pachuca, Hidalgo, México. N/A

- A17-600, Evolution of Rotor Dynamics in 20th Century, **J. S. Rao**, Altair Engineering India, Bangalore, India N/A

- A17-602, Stability Analysis of Hydrodynamic Bearings with a Central Circumferential Feeding Groove, **M. Chouchane, S. Naïmi**, University of Monastir, Monastir, Tunisia, and **J. L. Ligier**, RENAULT S.A, Rueil Malmaison, France. N/A

Dynamics of Machinery III, Ch. Prof. T. Majewski, Room B-105

- A24-453, Resultant Dynamic Force of Automatic Balancing of a Disk with Elastic Shaft, **T. Majewski**, Departament of Mechanical Engineering, Universidad de las Américas, **and M. A. Meraz Melo**, Departament of Mechanical Engineering, Instituto Tecnológico de Puebla, Puebla, México. 1291

- A24-476, Dynamics of the Vibration Driven Tool at Its Interaction with the Processing Material, **S.F. Jatsun, I.V. Lupehina, L. Yu. Volkova**, South-West State University, Kursk, Russia, **G. J. Panovko and A. A. Blagonravov**, Mechanical Engineering Institute RAS, Moscow, Russia. 1299

- A24-593, Dynamic Answer Optimization and Experimental Research Concerning the Mechanisms of Farming Machine, **I. D. Geonea, A. Margine, N. Dumitru**, Craiova University, **and C. Micu**, G.S.I. Transporturi, Craiova, Romania. 1304

Tuesday, June 21 16:00-17:00

Robotics and Mechatronics XV, Ch. Prof. A. Raatz, Room B-1

- A12-499, Advantages of Task-adapted Parallel Robot Systems Featuring Modularity and Reconfigurability, **G. Borchert, A. Burisch and A. Raatz**, Technische Universität Carolo-Wilhelmina, Braunschweig, Germany. 1314
- A12-462, Kinetostatic Analysis of the New Parallel Manipulator with Cylindrical Joints, **Zh. Baigunchekov, B. Nurakhmetov, K. Sartaev, M. Izmambetov and Zh. Myrzageldieva**, Kazakh-British Technical University, Almaty, Kazakhstan. 1322
- A12-513, Semi-Autonomous Collaborative Mobile Robot System for Material Handling, **V. J. Gonzalez-Villela, A. Angeles-Garcia and D. Lima-Robleda**, Department of Mechatronics Engineering UNAM, CU, Mexico, D.F., Mexico. 1329

Robotics and Mechatronics XVI, Ch. Prof. L. Notash, Room A-103

- A12-491, Investigation of Force Capability in Wire-Actuated Parallel Manipulators for Wire Failure, **M. Agahi and L. Notash**, Queen's University, Kingston, Canada. 1335
- A12-503, Implementation of the Slide-O-Cam mechanism in the Design of a Robot Gripper, **A. Silva-Caballero, M. González-Palacios, L. A. Aguilera-Cortés**, Universidad de Guanajuato, Salamanca, M/éxico. 1345
- A12-523, Shaking Force Balancing of a Redundant Planar 4-RRR Parallel Manipulator by Linear Momentum with the Loop Equations Included, **V. van der Wijk, J. L. Herder**, University of Twente, Enschede, The Netherlands, **S. Krut and F. Pierrot**, LIRMM, Montpellier, France. 1353

Computational Kinematics VIII, Ch. Prof. J. Yu, Room A-3

- A7-367, The Reciprocity of a Pair of Line Spaces, **J. Yu**, Beihang University, Beijing, China, **X. Kong**, Heriot-Watt University, Edinburgh, United Kingdom, **J. B. Hopkins, M. L. Culpepper**, Massachusetts Institute of Technology, Cambridge, USA. **and J. S. Dai**, King's College, Univ. of London, London, UK. 1362
- A7-261, Analysis of Mechanism Structure Using Zero Transformation Parameters, **K. Sholanov**, Kazakh National Technical University, Republic of Kazakhstan. 1372
- A7-570, Serial Kinematic Chains with Unilateral External Force Constraints, **D. Zlatanov**, University of Genoa, Genoa, Italy. 1380

Gearings VIII, Ch. Prof. D. Su, Room A-106

Linkages and Cams VIII, Ch. Prof. J. L. Herder, Room B-106

Design Methodology VIII, Ch. Prof. C. López-Cajún, Room A-105

Rotor Dynamics IV, Ch. Prof. A. Grządziela, Room B-104

- A17-255. Diagnosing Of Rotor Systems Of Marine Gas Turbine Engines In Nonstationary States, **A. Grządziela**, Polish Naval Academy, Gdynia, Poland. 1454
- A17-572, Modal Analysis in Identification and Diagnostics of Rotating Machinery, **J. Bednarz, T. Barszcz, T. Uhl, and P.Kurowski**, AGH Univeristy Of Science and Technology, Kraków, Poland. 1460

Dynamics of Machinery IV, Ch. Prof. J. M. Dorador, Room B-105

- A24-455, Physical Explanation on Rotational Vibration Via Distorted Force Field of Multicyclic Symmetric Systems, **D. L. Chen, S. Y. Wang, J. P. Liu** School of Mechanical Engineering, Tianjin University, Tianjin, China, **and J. Xiu**, School of Electrical Engineering and Automation, Tianjin University, Tianjin, China. 1470
- A24-269, Vector Cyclegram of Machine-Automaton, **A. Jomartov, G. Ualiyev**, Institute of Mechanics and Mechanical Engineering, Almaty, Republic Kazakhstan. 1477
- A24-413, Kinematical Dynamic Characteristics of a Planetary Differential Mechanism, **V. Merticaru and E. Merticaru**, Technical University "Gh. Asachi", Iasi, Romania. 1484

Tuesday, June 21 17:20-18:20

Robotics and Mechatronics XVII, Ch. Prof. Y. Nakamura, Room B-1

- A12-534, Mechanism and Control of Knee Power Augmenting Device with Backdrivable Electro-Hydrostatic Actuator, **H. Kaminaga, H. Tanaka and Y. Nakamura**, The University of Tokyo, Tokyo, Japan. 1488
- A12-516, Optimal Continuous Trajectory in Parallel Manipulators with Minimum Energy, **A. Rojas Salgado and R. Terrazas Mallea**, UNAM, DF, Mexico. 1498
- A12-542, Quasi-Static Simulation of a Wheeled Mobile Robot Having a Passive Variable Camber, **V. Eathakota, G. Aditya and M. Krishna**, RRC, IIIT-H, Hyderabad, India. 1508

Robotics and Mechatronics XVIII, Ch. Prof. I. A. Tabără Room A-103

Computational Kinematics IX, Ch. Prof. A. Veg, Room A-3

Linkages and Cams IX, Ch. Prof. C. Nelson, Room B-106

Multibody Dynamics I, Ch. Prof. A. Kecskemethy, Room A-105

History of Mechanism and Machine Science I, Ch. Prof. H. Kerle, Room B-105

Wednesday, June 22 9:00-10:00

Conference Hall Keynote Lecture 3, Ch. Prof. José M. Rico

The Task Selection Problem in the Kinematic Synthesis of Linkages
Prof. Michael McCarthy, University of California-Irvine, USA.

Wednesday, June 22 10:00-11:40

Robotics and Mechatronics XIX, Ch. Prof. M. Hiller, Room B-1

- A12-538, Optimization of the Wire Length for a Skid Actuated Wire Based Parallel Robot, **C. Sturm, T. Bruckmann, D. Schramm and M. Hiller**, University Duisburg-Essen, Duisburg, Germany. 1632
- A12-552, Thermoelectric Energy Harvester for a Smart Bearing Concept, **T. J. Uhl and M. L. Lubieniecki**, University of Science and Technology, Cracow, Poland. 1636
- A12-562, Simulation and Experimentation of Walking of the Bioloid Humanoid Robot, **V. Nuñez, L. I. Olvera and J. A. Pamanes**, División de Estudios de Posgrado e Investigación, Instituto Tecnológico de la Laguna, Torreón, Coah. México. 1644
- A12-573, 3D Objects Grasps Synthesis: A Survey, **S. El-Khoury**, Scuola Superiore SantÁnna, Percro - Pisa, Italy, **A. Sahbani and P. Bidaud**, Pierre & Marie Curie University, Paris, ISIR-CNRS, France. 1651
- A12-259, Stabilizing Role of Feet in Walking Machines, **T. Zielinska**, Warsaw University of Technology, Institute of Aeronautics and Applied Mechanics (WUTIAAM), ul. Nowowiejska, 24, 00-665 Warsaw, Poland. 1661

Robotics and Mechatronics XX, Ch. Prof. I. Ion, Room A-103

- A12-563, Elastic Systems for Static Balancing of Robot Arms, **I. Simionescu, L. Ciupitu, Luciana Ionita, I. Ion**, Politehnica University, Bucharest, Romania, **and M. Ene**, University of Quebec, Quebec, Canada. 1666
- A12-347, An Approach for Stiffness Modelling of Lower Mobility Parallel Manipulators using the Generalized Jacobian, **H. T. Liu, T. Huang**, Tianjin University, Tianjin, China, **Y. G. Li**, Tianjin University of Technology and Education, Tianjin, China,**and D. G. Chetwynd**, The University of Warwick, Coventry, UK. 1671

Multibody Dynamics II, Ch. Prof. J. Ambrósio, Room B-106

History of Mechanism and Machine Science II, Ch. Prof. H. S. Yan, Room B-105

Tribology I, Ch. Prof. E. Ciulli, Room A-3

Education I, Ch. Prof. P. Fanghella, Room A-106

Sustainable Energy Systems I, Ch. Prof. R. Balan, Room A-105

Reliability of Machines and Mechanisms I, Ch. Prof. S. H. Chang, Room B-104

Wednesday, June 22 12:00-13:00

Robotics and Mechatronics XXI, Ch. Prof. K. J. Waldron, Room B-1

- A12-454, Resolving the Paradox of Asymmetry in the Gallop Gait, **K. J. Waldron**, University of Technology, Sydney, Australia, **and S. P. N. Singh**, Australian Centre for Field Robotics, Sydney, Australia. 1906
- A12-611, The Problems of Electronic Cam Applications, **M. Václavík and P. Jirásko**, VÚTS, a.s., Liberec, The Czech Republic. 1912
- A12-403, A New 3-DoF Planar Parallel Manipulator with Unlimited Rotation Capability, **V. Arakelian**, INSA, Rennes, France, **S. Briot**, IRCCyN-CNRS, Nantes, France, **S. Yatsun and A. Yatsun**, South-West State University, Kursk, Russia. 1920

Robotics and Mechatronics XXII, Ch. Prof O. Altuzarra, Room A-103

- A12-480, Discontinuity Analysis of Position Error due to Clearances in Parallel Manipulators, **O. Altuzarra, Ch. Pinto**, Univ. of the Basque Country, Bilbao, Spain, **J. Aginaga and X. Iriarte**, Public University of Navarra, Pamplona, Spain. 1928
- A12-450, Locally Dynamic Isotropy of Modified Symmetric Gough-Stewart Parallel Micromanipulators, **Z. Tong, J. He, H. Jiang and Gu Duan**, Harbin Institute of Technology, Harbin, China. 1937
- A12-466, Structural Synthesis, Dynamic Modeling and Analysis of a 3-DOF Asymmetric Parallel Mechanism, **R. Z. H. Almeida and T. A. Hess-Coelho**, University of São Paulo, São Paulo, Brazil. 1945

Multibody Dynamics III, Ch. Prof. E. C. Lovasz, Room B-106

- A8-423, Simulation Models for Compliant Mechanisms with Integrated Actuators, **N. Modler, K. H. Modler, W. Hufenbach**, Technische Universität Dresden, Dresden, Germany, **D. Mărgineanu, E. C. Lovasz and D. Perju** Universitatea Politehnica Timişoara, Timişoara, Romania. 1954
- A8-310, Multibody Method for Dynamic Calculation of Kinematic Chains Movement with Clearances in Pin Joints, **J. C. Grigore and N. D. Stănescu**, University of Piteşti, Piteşti, Romania. 1961

- A14-316, On the Dynamics of Multibody Systems with Springs, **N.-D. Stănescu and S. Mihalcea**, University of Piteşti, Piteşti, Romania. 1966

History of Mechanism and Machine Science III, Ch. Prof. T. Koetsier, Room B-105

- A21-272, A Note on Stephenson's Valve Gear and its Analysis in the 1850s, **G. Klijn, and T. Koetsier**, VU University, Amsterdam, Netherlands. 1972
- A21-287, On the Attendees of 2004-2007 Activities of IFToMM Permanent Commission for History of Machines and Mechanisms Science, **H. S. Yan**, National Cheng Kung University, Tainan, Taiwan. 1981
- A21-451, Straight-line Mechanisms in the Collection of Bauman Moscow State Technical University, **D. Klyukin, M. Shchedrin and V. Tarabarin**, BMSTU, Moscow, Russia. 1987

Sustainable Energy Systems II, Ch. Prof. R. Chicurel, Room A-105

- A29-600, Rotary Expander for Operation with Waste or Solar Derived Heat, **A. González, R. Chicurel, M. I. Rodríguez**, Instituto de Ingeniería, Universidad Nacional Autónoma de México, México, Distrito Federal, **and E. Terrazas**, Electroindustrias Delta, México, Distrito Federal. 1993
- A29-596, Energy Comparison of PV Systems with Mono- and Bi-axial Pseudo-equatorial Tracking Mechanisms, **B. G. Burduhos, M. M. Vătăşescu, R. G. Săulescu and I. Tatu**, Renewable Energy Systems and Recycling Research Centre, Transilvania University of Brasov, Brasov, România. 1998
- A29-605, Micro Hydropower Plant with Rotor's Pintle and Hydrodynamic Profile of Blades, **I. Bostan, V. Dulgheru, and V. Bostan**, Technical University of Moldova, Chishinau, Republic of Moldova. 2008

Human-Machine Systems I, Ch. Prof. K. Kedzior, Room A-106

- A10-436, Experimental and Numerical Investigations on Pilot-Glider-Environment System during the Impact against a Deformable Barrier, **L. Lindstedt, C. Rzymkowski and K. Kedzior**, Warsaw University of Technology, Warsaw, Poland. 2012
- A10-304, Human Machine Interface Based on ZigBee Technique for Monitoring Vibration of Dynamic Object, **B. Borowik**, University of Bielsko-Biala, Bielsko-Biala, Poland, **and J. Wojnarowski**, Silesian Polytechnic, Gliwice, Poland. 2020

Vibrations I, Ch. Prof. N. Vrankovic, Room B-104

Standardization of Terminology, Mechanical Transmissions and Nonlinear Vibrations I, Ch. Prof. T. Brix, Room A-3

Wednesday, June 22 15:00-16:00

Robotics and Mechatronics XXIII, Ch. Prof. C. Crane, Room B-1

- A12-481, Development of Single Degree of Freedom Open-loop Chains to Move a Body Through a Series of Poses, **J. Bari, C. Crane**, University of Florida, Gainesville, FL, USA, **and D. Dooner**, Univ. of Puerto Rico-Mayagüez, Mayagüez, Puerto Rico. 2067
- A12-474, Matrix Exponentials and Differential Principles in the Dynamics of Robots, **I. Negrean, C. Schonstein, K. Kacso and A. Duca**, Technical University of Cluj-Napoca, Cluj-Napoca, Romania. 2077
- A12-567, Kinematic Analysis of the 3-RPC-T Fully Translational Mechanism, **E. A. Rodríguez-Velazco and E. Rodriguez-Leal**, Dept. of Mechatronics and Automation, Tecnológico de Monterrey, Monterrey, Mexico. 2087

Robotics and Mechatronics XXIV, Ch. Prof. J. A. Carretero, Room A-103

- A12-577, Taking Measurements In and Around a Cluttered Static Environment with a Kinematically Redundant Serial Manipulator, **J. A. Carretero, B. C. Woody**, University of New Brunswick, Fredericton, NB, Canada, **and J. Slipp**, PAWS, Cape Breton University, Sydney, NS, Canada. 2093
- A12-576, Dynamic Balancing of a 2-DOF 2RR Planar Parallel Manipulator by Optimization, **A. Buganza and M. Acevedo**, Escuela de Ingeniería, Universidad Panamericana, Mexico City, Mexico. 2101
- A12-514, *MERO* Modular Robots, Solution for Displacing Technological Equipments on Irregular Terrains, **I. Ion, I. Simionescu, A. Curaj and A. Vasile**, Politehnica University, Bucharest, Romania. 2107

History of Mechanism and Machine Science IV, Ch. Prof. U. Meneghetti, Room B-105

- A21-574, Antique Applications of Cam Mechanisms, **U. Meneghetti and A. Maggiore**, University of Bologna, Bologna, Italy. 2115
- A21-560, Coriolis' Theory of Machines and Mechanisms, **A. R. E. Oliveira**, Polytechnic School, Department of Mechanics and Structures, Federal University of Rio de Janeiro, Brazil. 2123

Linkages and Cams X, Ch. Prof. I. Torres, Room B-106

Vibrations II, Ch. Prof. Ch. Pinto, Room B-104

Wednesday, June 22 16:00-17:00

Robotics and Mechatronics XXV, Ch. Prof. M. Acevedo, Room B-1

- A12-525, Kinematic Robot Tracking Using Uncalibrated Cameras, **J. Munnae and H. Lipkin**, Mechanical Engineering Georgia Tech., Atlanta, GA. 2183
- A12-366, Joint Flexibility Versus Link Flexibility for Flexible-link Flexible-joint Manipulators, **M. Vakil, R. Fotouhi and P. N. Nikiforuk**, University of Saskatchewan, Saskatoon, Canada. 2189
- A12-588, Adaptive Drive of Manipulator, **K. Ivanov, Z. Ualiev and B. Tultaev**, Almatinsky University of Power Engineering and Telecommunications, Institute of Mechanics and Theoretical Engineering of Kazakh National Academy, Almaty, Kazakhstan. 2198

Robotics and Mechatronics XXVI, Ch. Prof. M. González Palacios, Room A-103

- A12-578, Some mechatronic solutions towards a surveillance of mechanical systems, **K. J. Kalinski, M. Galewski, M. Mazur and M. Chodnicki**, Gdansk University of Technology, Gdansk, Poland. 2205
- A12-273, Passive Compliant Mechanisms for Robotic (Micro)Devices, **Š. Havlík**, Institute of Informatics, Slovak Academy of Sciences, Banská Bystrica, Slovakia. 2215
- A12-522, Direct and Inverse Kinematics of Stewart Platform Applied to Offshore Cargo Transfer Simulation, **H. Gonzalez, O. Lengerke**, University Autonomous of Bucaramanga, Bucaramanga, Colombia, **M. S. Dutra and O. Lengerke**, University Federal of Rio de Janeiro, Rio de Janeiro, Brasil. 2222

Robotics and Mechatronics XXVII, Ch. Prof. A. Rojas Salgado, Room A-3

- A12-381, Stiffness Analysis of 6-RSS Parallel Manipulator, **G. D. L. Soares Júnior, J. C. M. Carvalho and R. S. Gonçalves**, Federal University of Uberlândia, Uberlândia, Brazil. 2229

Additional Papers