

DEPARTMENT OF CONTROL AND AUTOMATION

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Head of Department

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I. STAFF

Professors	Prof. Ing. Ladislav Jurišica, PhD., Prof. Ing. Václav Kalaš, DrSc., Prof. Ing. Milan Žalman, PhD.
Associate Professors	Doc. Ing. Mikuláš Huba, PhD., Doc. Ing. Peter Hubinský, PhD., Doc. Ing. Ján Šturcel, PhD., Doc. Ing. Igor Hantuch, PhD.
Assistant Professors	Ing. Richard Balogh, Ing. Pavol Bisták, Ing. Jozef Dorner, Ing. Peter Drahoš, PhD., Ing. Jozef Dúbravský, Ing. Štefan Chamraz, PhD., Ing. Ján Kardoš, PhD., Ing. Ľubica Šimová, PhD., Ing. Miroslav Toman, PhD., Ing. Katarína Žáková, PhD.
Research Workers	Ing. Ivan Gáži, Ing. Peter Fodrek, Ing. Jaroslav Hanzel, Ing. Ivan Ivanov, Ing. Ján Jovankovič, PhD., Ing. Ivan Oravec, Ing. Danica Sovišová
Senior Scientists	Ing. Igor Bélai, PhD., Ing. Jozef Vöröš, PhD.
Technical Staff	Katarína Macková (secretary), Jozef Turčánik, Pavol Gašparovič, Ing. Alžbeta Vajdová
PhD. Students	Ing. Peter Bombjak, Ing. Miroslav Brusil, Ing. Juraj Gabriel, Ing. Boris Georgiev, Ing. Miroslav Halás, Ing. Arpád Jakab, Ing. Martin Kamenský, Ing. Tomáš Lipovský, Ing. Radovan Macko, Ing. Roman Murár, Ing. Tomáš Murgaš, Ing. Martin Ondera, Ing. Peter Ťapák, Ing. Jozef Štefanka, Ing. Miroslav Šimúnek, Ing. Marián Uriček

II. EQUIPMENT

II.1 Teaching and Research Laboratories

- Laboratory of Automation Hardware
- Laboratory of Sensors
- Laboratory of Intelligent Motion Control / ABB
- Laboratory of Robotic Systems
- Laboratory of Electronic Systems
- Laboratory of Nonlinear Control
- Laboratory of Real-Time Software
- Laboratory of Control Systems
- Multimedia Laboratory
- Telematics Developer's Laboratory
- Laboratory of Actuators
- Profibus Laboratory
- Student Project Laboratory
- Electronic and Sensor Hardware Laboratory
- W. Siemens Laboratory
- Common Robotic Laboratory

II.2 Special Measuring Instruments and Computers

- Mechanical Setup Position Control Plant
- Laboratory Models: Inverted Pendulum, Crane, Helicopter Rack, Thermal Plant, Magnetic Levitation Syst., 2x Two - Tank System
- Control System SIMATIC PCS 7 – Compact (Siemens)
- Digital Signal Processor Board for Real-Time Control
- CALYS 5 Digital Meas. and Calibr. Device for Process Measurement of Temperature
- Multitron PS 10 – Motion Control System
- Intelligent Mobile Robot System
- D Spice DS 1104 developing system

III. TEACHING

III.1 Undergraduate Study (Bc.)

Subject, semester, hours per week for lectures and for seminars or practical exercises, name of lecturer

Introduction into Engineering and Technical Documentation	(1st sem., 2-2h)	L.Jurišica, R.Ravas, B. Hučko
Introduction into Creation of Control's Program Systems	(2nd sem., 2-2h)	I. Hantuch
Control Theory 1	(3rd sem., 3-2h)	M.Huba
Systems Theory	(3rd sem., 2-3h)	M.Huba, P.Hubinský
Electronic Systems (pract.exercises)	(4th sem., 3-2h)	I.Gáži, M.Toman J. Dúbravský
Control Systems	(5th sem., 3-2h)	Š.Chamraz
Programming Systems for RT Control	(5th sem., 2-3h)	E.Šimová
Electronics for Control Systems	(5th sem., 2-2h)	M.Toman
Actuators	(6th sem., 3-3h)	M.Žalman
Sensors and Transducers	(6th sem., 3-2h)	J.Šturcel
Nonlinear Systems	(6th sem., 2-3h)	M.Huba
Robotics	(7th sem., 3-2h)	L.Jurišica
Sensor Systems	(7th sem., 2-2h)	M.Toman
Automated Administration	(7th sem., 2-2h)	I.Hantuch
Servodrives	(7th sem., 2-3h)	M.Žalman
Industrial Communications	(8th sem., 2-3h)	I. Bélai
Flexible Manufacturing Systems	(8th sem., 3-2h)	L.Jurišica
Motion Systems	(8th sem., 3-2h)	P.Hubinský
Monolithic Microcomputers	(8th sem., 2-2h)	Š.Chamraz

III.2 Graduate Study (Ing.)

CAD for Programming Contr.Syst.Developing	(1st sem., 2-3h)	I.Hantuch
Smart Sensors Systems	(1st sem., 3-2h)	J.Šturcel

Mechatronics	(1st sem., 3-2h)	L.Jurišica
Mobile Robots	(2nd sem., 3-2h)	M.Varga
Intelligent Servosystems	(2nd sem., 3-2h)	M.Žalman
Synthesis of Nonlinear Control	(2nd sem., 3-2h)	M.Huba
Theory of Automatic Control 3	(1st sem., 3-2h)	M.Huba

III.3 Undergraduate and Graduate Study for Foreign Students (in English Language)

Dynamical Systems	(4th sem., 3h)	M.Huba, K. Žáková
Electromechanical Conversion Systems	(8th sem., 3h)	P. Hubinský, I. Béla

III.4 Undergraduate Study (Bc. Distance Education Method)

Introduction into Engineering	(1st year)	L.Jurišica
Introduction into Engineering and Technical Documentation	(1st year)	M.Huba, P.Šimunek, J.Veselovský
Internet	(1st year)	K.Žáková, L. Jurišica
Algorithmisation and Programming	(1st year)	E. Šimová
Systems Theory	(2nd year)	M.Huba
Microprocessor's Technics	(2nd year)	Š. Chamraz

IV. RESEARCH PROJECTS

- Constrained Systems Design 1/0145/03, (M. Huba)
- Advanced Control of Mechatronic Systems 1/0153/03 - VEGA, (L. Jurišica)
- Modern Methods of Education of FMS KG – 2041 – Jur – SK1, (L. Jurišica)
- Network of Virtual Laboratory for Real Process Control - KEGA project 3 / 3121 / 05, (M.Huba)
- Advanced Technologies and Automation Complexes 2003 SP 26028 OA 05, (L. Jurišica)
- Controlled Rectifier with Active Filter of Harmonic Currents for SMART Frequency Converters. APVT – 99 – 026504 (M. Žalman – cooperation with Wonsch Brezno)
- Machines for Extreme Fast Material's Dividing. APVT – 99 – 022604 (M. Žalman – cooperation with Microstep Bratislava)
- Mechatronics Systems and Progressive Technologies. APVT – 20-020904. (L. Jurišica)

V. COOPERATION

V.1 Cooperation in Slovakia

- ABB Bratislava, Ltd
- ATEC SK, Bratislava, Ltd
- Axess, Ltd. Bratislava
- DATALAN Bratislava, Ltd.
- e-Academia Slovaca, n.o.
- EVPU Nová Dubnica, Inc..
- Emerson, Ltd. Bratislava
- Matador Púchov, Inc.

- Meret, Bratislava, Ltd.
- Microstep MIS Bratislava, Ltd.
- NES, Ltd. Nová Dubnica
- PI VUZ Bratislava, Ltd.
- PPA Energo, Ltd. Bratislava
- ProCS, Ltd. Šaľa.
- PROXY, Nové Mesto n/Váhom
- PZ Bratislava, Ltd.
- Q – EX Trenčín, Inc.
- RMC Nová Dubnica, Ltd.
- SE Inc., Bratislava
- Siemens Bratislava, Inc.
- Slovnaft Bratislava, Inc.
- S&A, Ltd. Banská Bystrica
- TU Košice
- UMB Banská Bystrica
- Volkswagen Bratislava, Ltd
- Vonsch Brezno, Ltd
- ŽU Žilina

V.2 International Cooperation

- Fern Universität - Gesamthochschule in Hagen, Hagen, Germany
- ČVUT Prague, CzR
- TU Brno, CzR
- TU Plovdiv, Uni Gabrovo, Bulgaria
- TU Zagreb, Uni Split, Croatia
- University of Maribor, Slovenia
- TU Vienna, Austria
- TU Graz, Austria
- VŠB – TÚ Ostrava, CzR
- Fachhochschule, Heilbronn, Germany
- Profibus International, Germany

V.3 Membership in International Organizations and Societies

- IEEE The Institute of Electrical and Electronics Engineers, Inc. (L.Jurišica)
- IEE The Institute of Electrical Engineers, Inc. (L.Jurišica, M.Žalman, M.Huba, P.Hubinský)

VI. THESES

VI.1 Masters Theses

Masters theses supervised at the Department of Control and Automation. The names of supervisors are in brackets.

- [1] B. Babjak: Analysis of acquisition's areas for pole assignment controllers with constrained output. (M. Huba)
- [2] A. Balog: Mobile multipurposes control system. (M. Žalman)
- [3] J. Belica: Profibus demo work place control. (P.Drahoš)
- [4] J. Blaschke: Data-processing in intelligent sensor systems. (J. Šturcel)
- [5] J. Bocán: Robust control of thermal system. (M. Huba)
- [6] J. Borecký: Distance measuring sensor system. (J.Dúbravský)
- [7] M. Brúsil: Automatic store. (L. Jurišica)
- [8] R. Búry: AC open velocity servosystem with AM. (M. Žalman)
- [9] M. Dobrodenka: Technological positioner. (J. Dúbravský)

- [10] M. Dobrotka: Control's algorithm design for material dividing cutting tables. (M. Žalman)
- [11] F. Duchoň: Mobile robot path and trajectory planning. (L. Jurišica)
- [12] J. Gajdzík: Control of SMA actuator in matlab. (P. Drahoš)
- [13] M. Gomulec: Control of SMA actuator by microcomputer RISC. (P. Drahoš)
- [14] M. Havlík: Intelligent building control. (P. Drahoš)
- [15] M. Hollý: Animation of pole assignment controllers with constrained output. (M. Huba)
- [16] M. Chrien: Stepping robot. (L. Jurišica)
- [17] J. Chvostál: AC velocity servodriver with AM and four quadrant frequency converter. (M. Žalman)
- [18] A. Jakab: Modelling of robots group behaviour with decentralized control. (I. Hantuch)
- [19] Š. Jančár: System's identification in internet environment. (K. Žáková)
- [20] M. Juriga: Design of methods for pursuing and efectivity of solutions in multiagent system. (J. Dorner)
- [21] P. Kanka: Analysis of exploitation possibilities RATIONAL products for automated control systems of technological processes in real time. (L. Major, I. Hantuch)
- [22] J. Karpíš: Sensor's information for mobile robot operator's stand point. (R. Murár)
- [23] L. Keleši: Smart position servosystems for cutting machines. (M. Žalman)
- [24] M. Klůčik: Mobile robot with combined chassis. (L. Jurišica)
- [25] R. Král: Connecting of matlab with virtual PLC. (I. Béla)
- [26] N. Kučiaková: Automation of administration – structure modelling. (I. Hantuch)
- [27] P. Lovič: Light control in intelligent buildings. (P. Bisták)
- [28] R. Machálek: Visualisation of processes controlled by PLC S7-200 with program control web. (R. Balogh)
- [29] M. Melicher: Time suboptimal control of systems with PWM inputs for transport delay compensation. (D. Sovišová)
- [30] R. Novák: Design of discrete regulators with constrained output and gain programming. (M. Huba)
- [31] J. Rosa: Design of user's boundary by using UML for intelligent building temperature control in internet environment. (P. Bisták)
- [32] M. Rudický: Synthesis of program control systems for system's engineering sphere. (I. Hantuch)
- [33] D. Sabo: Smart sensor for color identification. (R. Balogh)
- [34] M. Strižko: Application of methods for residual oscilations elimination in mechatronic system with double pendulum. (P. Hubinský)
- [35] M. Strmeň: Video in multimedial e-learning presentations. (I. Hantuch)
- [36] M. Šimuněk: Virtual laboratory for real systems control. (P. Bisták)
- [37] P. Varga: Implementation of servosystem with synchro motor. (I. Béla)
- [38] T. Verný: Genetic alghorithm exploitation for SMA actuator's identification. (P. Drahoš)
- [39] P. Volšík: Using of SW agents (SW robots) in internet environment. (I. Hantuch)
- [40] M. Zámečník: Pneumatic system controlled by PLC. (R. Balogh)

VII. OTHER ACTIVITIES

- Conferences organized by Department :
 - 6th Int. Conf. Virtual University Bratislava, SK. Dec. 2005. (M. Huba OC, IPC Chairman, P. Bisták, K. Žáková, A. Vajdová, M. Halás, D. Sovišová, M. Kalinovský, M. Kamenský, M. Ondera, M. Šimuněk, P. Ťapák – OC members)
 - Istrobot: Competition of Mobile Robots, Dep. of Contr. and Autom. April 2005, Bratislava . (R. Balogh)
- Conferences Participation, Membership in Committees :
 - ICETA , Sept. 2005, Košice, SK. (M. Huba – OC Member)
 - International Summer School CEEPUS, Sept. 2005, Brno, CZ. (M. Huba-IPC Member)
 - 8th CASYS Conference, August 2005, Liege Belgium. (M. Huba-Intern. Scient. Committee Member)
 - DIVAI (Distance Education in Applied Informatics), May 2005, UKF Nitra, SK.

- (M. Huba, PC Member)
- 17th Inter. Conf. on Electrical Drives and Power Electronics „EDPE 2005“, (M. Žalman, L. Jurišica - IPC members)
- 6th Int. Symposium Mechatronics 2005, June 2005, Trenčín. (L. Jurišica , M. Žalman IPC members)
- Elosys 2005, Oct. 2005, Trenčín (L. Jurišica, P. Hubinský – PC members, Profibus exposition)
- Projects:
 - Optimization of Control for High Dynamic Complex Mechatronical Systems, especially Robots. DAAD 7/2003 (P. Hubinský)
 - CEEPUS C II – CZ – 0031-01-0506 International Study in Automatic Control.
 - Leonardo: SOMA (Safety of Machinery). (M Huba)
 - Leonardo : Control and Diagnostics of the Technological Processes in Manufacturing Process Based on Application of ICT. (L. Jurišica, J. Šturcel, I. Béla, K. Kováč)
 - ESF Project: Program of Continuing Education in the Area of Industrial Automation and Information Technology. (M. Huba, P. Bisták - local coordinators)
 - ESF Project: Preparation of the System and Program of Lifelong Education of the University Employees. (A. Vajdová – coordinator)
 - ESF Project: Enhanced Preparation of Students of Bachelor and Engineering Study for Their Future Career. (K. Žáková – coordinator)
 - ESF Project: Preparation for E-learning. (M. Huba - coordinator)
 - ESF Project: Human Resource Development for Research and Development in Automation and Control. (M. Huba - coordinator)
- AT&P Journal : L. Jurišica, J. Šturcel, M. Žalman, I. Hantuch – Editorial Board members
- Accreditations Board of SAS (L. Jurišica – member)
- Profibus Slovakia Association (P. Drahoš – chairman)
- International Machine Fair Nitra, May 2005 (Profibus exposition)
- Cooperation with Encyclopedic Institute of Slovak Academy of Sciences on the Slovak Encyclopedia (Lexical Group Cybernetics): M. Huba, P. Hubinský, L. Jurišica, J. Šturcel, M. Žalman.
- Accreditation Board of the Government of Slovakia. (Working Group - L. Jurišica – member)
- Local Centre of Distance Education, (M. Huba-head, A. Vajdová-manager, D. Sovišová-study coordinator, P. Bisták- equipment manager, K. Žáková-international cooperation)
- Computer Viruses Analysis ESET Ltd. Bratislava. (P. Hubinský)
- Administration of Shareware Archive of Slovak Antivirus Centre. (P. Hubinský)
- Slovak Society of Cybernetics and Informatics. (M. Huba – deputy Head)
- Slovak Standards Institute (SUTN) - M. Huba: Working Group TK – 37, Information Technologies, Subgroup on e-learning – Head

VIII. PUBLICATIONS

VIII.1 Journals

- [1] BALOGH, R.: I Am a Robot - Competitor. In: International Journal of Advanced Robotic Systems. - Vol.2, No.2 (2005) - pp. 144-160. (in English)
- [2] BALOGH, R.: The 5th Annual Istrobot Contest Unfailing. In: AT&P Journal. - Vol.12, No.7 (2005) - pp. 68-69. (in Slovak)
- [3] BOMBIÁK, P., JURÍŠICA, L., MURÁR, R.: Automatic Quality Control by Using ART Neural Network and Thermal Fields. In: EE - časopis pre elektrotechniku a energetiku. - Vol.11, Special Issue (2005) - pp. 30-33. (in Slovak)

- [4] BOMBIAK, P., JURIŠICA, L., VITKO, A.: Statistical Approach to Texture Classification Using Histogram and AI, Neural Net ART. In: AT&P Journal Plus. - No.7 (2005) - pp. 50-52. (in Slovak)
- [5] CHAMRAZ, Š.: Central Lock for Personal Cars. In: EE - časopis pre elektrotechniku a energetiku. - Vol.11, Special Issue (2005) - pp. 56-58. (in Slovak)
- [6] DRAHOŠ, P.: Empirical Model of Actuators SMA. In: AT&P Journal Plus. - No.6 (2005) - pp. 45-49. (in Slovak)
- [7] DRAHOŠ, P.: Basis and Application of Industrial Bus Profibus. In: EE - časopis pre elektrotechniku a energetiku. - Vol.11, Special Issue (2005) - pp. 43-47. (in Slovak)
- [8] GABRIEL, J.: Integration of Intelligent Methods in PLC Control Systems. In: AT&P Journal Plus. - No.7 (2005) - pp. 23-28. (in Slovak)
- [9] GEORGIEV, B.: Fieldbus Foundation General Assembly 2005. In: Automa. - Vol.11, No.3 (2005) - p. 73. (in Slovak)
- [10] GEORGIEV, B.: Fieldbus Foundation General Assembly 2005. In: AT&P Journal. - Vol.12, No.4 (2005) - p. 56. (in Slovak)
- [11] GEORGIEV, B., JURIŠICA, L.: Standardization of Field Control Systems II: Functional Blocs. In: Automa. - Vol.11, No.4 (2005) - pp. 36-40. (in Slovak)
- [12] GEORGIEV, B., JURIŠICA, L.: Standardization of Field Control Systems III: Engineering. In: Automa. - Vol.11, No.7 (2005) - pp. 28-31. (in Slovak)
- [13] HANZEL, J., JURIŠICA, L.: Comparison of Ultrasonic Environment Representation Methods for Mobile Robot. In: AT&P Journal Plus. - No.6 (2005) - pp. 58-63. (in Slovak)
- [14] HUBA, M.: P and PD Pole Assignment Controllers for Systems with Input Constraints. In: AT - Automatisierungstechnik. - Vol.53, No.6 (2005) - pp. 273-283. (in German)
- [15] HUBINSKÝ, P.: Shareware Window. In: PC Revue. - Vol.13, No.1 (2005) - p. 102. (in Slovak)
- [16] HUBINSKÝ, P.: Shareware Window. In: PC Revue. - Vol.13, No.2 (2005) - p. 86. (in Slovak)
- [17] HUBINSKÝ, P.: Shareware Window. In: PC Revue. - Vol.13, No.3 (2005) - p. 105. (in Slovak)
- [18] HUBINSKÝ, P.: Shareware Window. In: PC Revue. - Vol.13, No.4 (2005) - p. 112. (in Slovak)
- [19] HUBINSKÝ, P.: Shareware Window. In: PC Revue. - Vol.13, No.5 (2005) - p. 114. (in Slovak)
- [20] HUBINSKÝ, P.: Shareware Window. In: PC Revue. - Vol.13, No.6 (2005) - p. 127. (in Slovak)
- [21] HUBINSKÝ, P.: Shareware Window. In: PC Revue. - Vol.13, No.7 (2005) - p. 103. (in Slovak)
- [22] HUBINSKÝ, P.: Shareware Window. In: PC Revue. - Vol.13, No.8 (2005) - p. 99. (in Slovak)
- [23] HUBINSKÝ, P.: Shareware Window. In: PC Revue. - Vol.13, No.9 (2005) - p. 116, 135. (in Slovak)
- [24] HUBINSKÝ, P.: Shareware Window. In: PC Revue. - Vol.13, No.10 (2005) - p. 113. (in Slovak)

- [25] HUBINSKÝ, P.: Shareware Window. In: PC Revue. - Vol.13, No.12 (2005) - p. 132. (in Slovak)
- [26] HUBINSKÝ, P., JURIŠICA, L., VRANKA, B.: Genetic Algorithm Based Method of Elimination of Residual Oscillation in Mechatronic Systems. In: Kybernetika. - Vol.41, No.5 (2005) - pp. 623-636. (in English)
- [27] HUBINSKÝ, P., ŠTEFANKA, J.: Using of SOMA Algorithm for Residual Oscillation Elimination for Two-Mass System with Flexible Member. In: AT&P Journal Plus. - No.6 (2005) - pp. 104-107. (in Slovak)
- [28] HUBINSKÝ, P., VRANKA, B.: Input Shaping Preventing the Excitation of Oscillation Applied to the Voronoi Diagram Planed Path. In: AT&P Journal Plus. - No.6 (2005) - pp. 108-111. (in English)
- [29] JOVANKOVIČ, J., ŽALMAN, M.: Application of the Recurrent Network Structure in Controls of the Induction Motors. In: AT&P Journal Plus. - No.7 (2005) - pp. 35-40. (in Slovak)
- [30] JANČOVIČ, M., ŽALMAN, M.: Design of Speed Controller Induction Motor through Genetic Algorithm. In: AT&P Journal Plus. - No.7 (2005) - pp. 64-71. (in Slovak)
- [31] JURIŠICA, L., GEORGIEV, B.: Digital Communication in Building Automation Systems. In: TZB Haustechnik. - Vol.13, No.2 (2005) - pp. 10-15. (in Slovak)
- [32] JURIŠICA, L., GEORGIEV, B.: Standardization of Field Control Systems I: Introduction. In: Automa. - Vol.11, No.2 (2005) - pp. 5-9. (in Slovak)
- [33] JURIŠICA, L., HUBINSKÝ, P., KNOT, J.: Object Detection and Observation (1). In: AT&P Journal. - Vol.12, No.6 (2005) - pp. 69-70. (in Slovak)
- [34] JURIŠICA, L., HUBINSKÝ, P., KNOT, J.: Detection and Following the Objects (2). In: AT&P Journal. - Vol.12, No.7 (2005) - pp. 98-99. (in Slovak)
- [35] JURIŠICA, L., LIPOVSKÝ, T.: Stability of Mobile Manipulators. In: AT&P Journal Plus. - No.6 (2005) - pp. 76-78. (in Slovak)
- [36] KAMENSKÝ, M., ONDERA, M., HUBA, M.: Relay Identification of Systems Stabilized by PD-Controller. In: AT&P Journal Plus. - No.6 (2005) - pp. 120-127. (in Slovak)
- [37] Kardoš, J.: The Charactering Elimination in the First-Order Sliding Mode Systems - State of the Art. In: AT&P Journal Plus. - No.6 (2005) - pp. 112-119. (in Slovak)
- [38] KRAJČI, V., JURIŠICA, L.: Robot Dynamics Modelling by Program Mathematica. In: AT&P Journal Plus. - No.6 (2005) - pp. 41-44. (in English)
- [39] MACKO, R., ŽALMAN, M., URIČEK, M.: Programmable Emulator of Mechanical Loads for Motors. In: AT&P Journal. - Vol.12, No.2 (2005) - pp. 92-95. (in Slovak)
- [40] MURÁR, R., JURIŠICA, L.: Mobile Robot System Environment Representation (1). In: AT&P Journal. - Vol.12, No.8 (2005) - pp. 60-61. (in Slovak)
- [41] MURÁR, R., JURIŠICA, L.: Mobile Robot System Environment Representation (2). In: AT&P Journal. - Vol.12, No.9 (2005) - pp. 65-67. (in Slovak)

- [42] MURGAŠ, T., CHVOSTEK, T.: Numerical Servosystem Control via CAN. In: EE - časopis pre elektrotechniku a energetiku. - Vol.11, Special Issue (2005) - pp. 48-52. (in Slovak)
- [43] PAVLOVKIN, J., JURIŠICA, L.: Optimal Trajectory of Mobile Robot. In: AT&P Journal. - Vol.12, No.2 (2005) - pp. 90-91. (in Slovak)
- [44] ŠTURCEL, J., KAMENSKÝ, M.: Autocalibration Methods in Measurement. In: EE - časopis pre elektrotechniku a energetiku. - Vol.11, Special Issue (2005) - pp. 53-58. (in Slovak)
- [45] ŠTURCEL, J., KAMENSKÝ, M.: Utilization of Fuel Cells in Transportation. In: EE - časopis pre elektrotechniku a energetiku. - Vol.11, Special Issue (2005) - pp. 78-81. (in Slovak)
- [46] VITKO, A., ŠAVEL, M., JURIŠICA, L., HUBINSKÝ, P.: Data Fusion and Context Awareness in Autonomous Robotics. In: International Journal of Mechanics and Control. - Vol.5, No.2 (2005) - pp. 29-39. (in English)
- [47] VÖRÖS, J.: Identification of Hammerstein Systems with Time-Varying Piecewise-Linear Characteristics. In: IEEE Trans. on Circuits and Systems. Part II: Express Briefs. - Vol.52, No.12 (2005) - pp. 865-869. (in English)
- [48] VÖRÖS, J.: Mobile Robot Path Planning Using Quadtree-Based Potential Fields. In: AT&P Journal Plus. - No.6 (2005) - pp. 71-75. (in English)
- [49] ŽALMAN, M., ABELOVSKÝ, M.: The Sensorless Servo Drives with IM Using the State Variables Observers. In: AT&P Journal Plus. - No.6 (2005) - pp. 21-32. (in Slovak)
- [50] ŽALMAN, M., JOVANKOVIČ, J.: The Rotor Speed Estimators Based on Artificial Neural Networks. In: AT&P Journal Plus. - No.6 (2005) - pp. 11-20. (in Slovak)
- [51] ŽALMAN, M., JOVANKOVIČ, J., URIČEK, M.: Master-Slave Controlling of the Position Servodrives (1). In: AT&P Journal. - Vol.12, No.2 (2005) - pp. 98-101. (in Slovak)
- [52] ŽALMAN, M., JOVANKOVIČ, J., URIČEK, M.: Master-Slave Controlling of the Position Servodrives (2). In: AT&P Journal. - Vol.12, No.3 (2005) - pp. 89-90. (in Slovak)
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