INSTITUTE OF CONTROL AND INDUSTRIAL INFORMATICS

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I. STAFF

Professors	Prof. Ing. Ladislav Jurišica, PhD., Prof. Ing. Václav Kalaš, DrSc., Prof. Ing. Ján Murgaš, PhD., Prof. Ing. Vojtech Veselý, DrSc., Prof. Ing. Milan Žalman, PhD.
Associate Professors	Doc. Ing. Igor Hantuch, PhD., Doc. Ing. Ladislav Harsányi, PhD., Doc. Ing. Mikuláš Huba, PhD., Doc. Ing. Peter Hubinský, PhD., Doc. Ing. Zdenka Králová, PhD., Doc. Ing. Eva Miklovičová, PhD., Doc. Ing. Danica Rosinová, PhD., Doc. Ing. Ivan Sekaj, PhD., Doc. Ing. Ján Šturcel, PhD., Doc. Ing. Anton Vitko PhD.
Assistant Professors	Ing. Richard Balogh, Ing. Pavol Bisták, Ing. Jozef Dorner, Ing. Peter Drahoš,PhD., Ing. Mária Dúbravská, Ing. Jozef Dúbravský, Ing. Peter Fodrek, Ing. Štefan Chamraz, PhD., Ing. Slavomír Kajan, PhD., Ing. Ján Kardoš, PhD., Ing. Alena Kozáková, PhD., Ing. Ladislav Körösi, Ing. Leo Mrafko, Ing. Ľubica Šimová, PhD., Ing. Terézia Švantnerová, PhD., Ing. Miroslav Toman, PhD., Ing. Katarína Žáková, PhD.
Research Workers	Ing. Igor Bélai, PhD., PhDr. Marta Brinzová, Ing. Martin Foltín, PhD., Ing. Ľubomír Grman, Ing. Miroslav Halás, PhD., Ing. Jaroslav Hanzel, Ing. Monika Hejdová, Ing. Mária Hypiusová, PhD., . Ing. Ivan Ivanov, PhD., Ing. Ján Jovankovič, PhD., Ing. Marián Mrosko, Ing. Roman Murár, Ing. Ivan Oravec, PhD., Ing. Jana Paulusová, Ing. Danica Sovišová, Ing. Jozef Vörös, PhD.
Technical Staff	Ing. Jozef Babirád, Peter Detvaj, Ing. Radoslav Dibarbora, Pavol Gašparovič,Katarína Horvathová, Katarína Macková (secretary), Jozef Turčánik, Ing. Alžbeta Vajdová, Margita Záchejová

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 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
- Robotic Laboratory
- Laboratory of Information Systems and Communication Technologies
- Laboratory of Optimal Control and Optimization
- Laboratory of Control System Software
- Laboratory of Modelling and Control of Discrete Event Systems
- Laboratory of Continuous Systems Control
- Laboratory of Industrial Information Technologies
- Laboratory of Modelling of Manufactoring Systems
- Laboratory of Computational Intelligence
- Servers for Internet
- Virtual Laboratory for Strategic Experimentation
- Laboratory of Motion Servosystems
- Laboratory of Multio System Control
- Laboratory of Network Technologies
- Laboratory of Industrial Controllers
- Laboratory of Industrial Automation and Control

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
- Two - Tank System
- 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
- Programmable Controllers: MicroLogix, Honeywell, Modicon
- Distributed Control System Yokogawa Centum
- Programmable Controllers: Simatic S7-300, S7-200, UDC Honeywell, Modicon TSX
   Premium, Mocrologix 1000, Allen Bradley
- Allen Bradley Motor Drives, FLEX IIO Modules, Panel View 900
- Production Line Models with: Crane, Conveyors, Manipulators
- Networked control system with CAN Bus & Ether CAT
- Transportation Model, Model for Ball Color Separation, Bouncing Ball Model, Tank Level
   Control Model, Magnetic Levitation Model, Helicopter Model, Railway Transfer Station
   Model
- Software: Matlab, MODES, Witness, LABREG, PROMOTIC, SAP ERP
- Software WinCC
- Programming Software Step7 Professional
- Two DC motor experimental system
- Software Wonderware InTouch
- RsLogix5000, RsLogix500, SoftLogix,
- ControlNet, DeviceNet, EtherNet,
- Emulate500, Emulate5000, LogixArchitect, RsLinx
- RsSQL, RsTune, RSView Supervisory Edition
- HW: ControlLogix PLC, CompactLogix, HMI

III. TEACHING

III.1 Undergraduate Study (Bc.)

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

Introduction into Engineering	(1st sem., 2-2h)	L.Jurišica,
Computer Architecture	(2nd sem., 3-2h)	R.Ravas, Š.Chamraz
Automatic Control Theory 1	(3rd sem., 3-2h)	M.Huba
Modelling and Simulation	(3rd sem., 3-2h)	A.Kozáková
Programming Systems for RT Control	(3rd sem., 3-2h)	Ľ.Šimová, I.Hantuch
Automatic Control Theory 1	(3rd sem., 2-3h)	M.Huba,
Applied Computational Intelligence	(4th sem., 2-2h)	I.Sekaj
Control System Software 1	(4th sem., 2-2h)	I. Hantuch, Ľ.Šimová
Automatic Control Theory 2	(4th sem., 3-2h)	J.Murgaš
Cybernitics	(4th sem., 2-2h)	J.Murgaš
Design of Web Applications 1	(4th sem., 2-2h)	K.Žáková
Modelling and Simulation	(4th sem., 2-2h)	M.Foltín
Electronics for Control Systems	(4th sem., 2-2h)	M.Toman, J.Šturcel
Instrumentation of Control Systems	(4th sem., 3-2h)	J.Šturcel
Actuators	(5th sem., 2-3h)	M.Žalman
Softwer for Control system	(5th sem., 2-3h)	I.Hantuch
Industrial Comunication bus	(5th sem., 2-2h)	P.Drahoš, J.Šturcel
Control methods and algorthm	(5th sem., 2-2h)	J.Kardoš,P.Hubinský
Automatic Contrl Theory 1	(5th sem., 3-2h)	J.Murgaš
Optimization	(5th sem., 2-2h)	D.Rosinová
Industrial Comunication Systems	(6th sem., 2-3h)	M.Žalman, I.Belai
Robotics	(6th sem., 3-2h)	P.Hubinský
Continuous Proces	(6th sem., 3-2h)	E.Miklovičová
Nonlinear systems	(6th sem., 3-2h)	M.Huba
Sensors and Transducers	(7th sem.)	J.Šturcel
Automated Administration	(7th sem., 2-2h)	I.Hantuch
Databases in Control Systems	(7th sem., 2-2h)	Z.Králová
Process Dynamics	(7th sem., 3-2h)	E.Miklovičová
Sensor Systems	(7th sem., 2-2h)	M.Toman
Servodrives	(7th sem., 2-3h)	M.Žalman
Continuous Process Control	(8th sem., 3-2h)	V.Veselý

Flexible Manufacturing Systems	(8th sem., 3-2h)	L.Jurišica
Industrial Communications	(8th sem., 2-3h)	I.Bélai
Monolithic Microcomputers	(8th sem., 2-2h)	Š.Chamraz

III.2 Graduate Study (Ing.)

CAD for Programming Contr.Syst.Developing 1	(1st sem., 3-2h)	I.Hantuch
Databases of Control Systems	(1st sem., 2-2h)	Z.Králová
Industrial Information Systems Design	(1st sem., 2-2h)	B.Hrúz
Multimedia in Control	(1st sem., 3-2h)	M.Huba, P.Bisták
Optimal Control	(1st sem., 2-2h)	A.Kozáková
Servosystems	(1st sem., 3-2h)	M.Žalman
Smart Sensors Systems	(1st sem., 3-2h)	J.Šturcel
Theory of Automatic Control 3	(1st sem., 3-2h)	M.Huba
Adaptive Control	(2nd sem., 3-2h)	J.Murgaš
Event Systems	(2nd sem., 3-2h)	B.Hrúz
Intelligent Servosystems	(4th sem., 3-2h)	M.Žalman
Fuzzy and Neural Controllers	(2nd sem., 2-2h)	I.Sekaj
Multivariable System Control	(2nd sem., 3-2h)	V.Veselý
Sensor Systems in CIM	(2nd sem., 3-2h)	J.Šturcel
Intelligent Systems	(2nd sem., 3-2h)	Š.Kozák
System Identification	(2nd sem., 3-2h)	T.Švantnerová
Telematics and Control	(4th sem., 3-2h)	M.Huba, P.Bisták
Theory of Large Scale Systems	(2nd sem., 3-2h)	D.Rosinová
CAD for Programming Contr.Syst.Developing 2	(3rd sem., 3-2h)	I.Hantuch
Power System Control	(3rd sem., 3-2h)	L.Harsányi
Production Systems Modelling and Management	(3rd sem., 3-2h)	Z.Králová
Modelling and Robots Control	(3rd sem., 3-2h)	A.Vitko
Network Technologies	(3rd sem., 2-3h)	J.Murgaš, M.Foltin
Network Control Algorithm	(1st sem., 3-2h)	D.Rosinová
Mobile Robotics Systems	(3rd sem., 3-2h	L.Jurisica
Intelligent Servosystems	(3rd sem., 3-2h	M.Žalman
Flexible Manufacturing Systems	(1st sem., 3-2h)	L.Jurišica

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

Automatic Control Theory	(3rd sem., 1h consul.)	M.Huba
Software of Control Systems	(4th sem, 1h consul.)	I.Hantuch

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

Algorithmisation and Programming	(1st sem.)	Ľ.Šimová
Introduction into Engineering	(1st sem.)	L.Jurišica
Internet	(1st sem.)	K.Žáková, L.Jurišica
Computer Architecture	(3rd sem.)	Š.Chamraz
Programming Systems for RT Control	(5th sem.)	Ľ.Šimová
Automatic Control Theory 1	(5th sem)	M.Huba
Automatic Control Theory 2	(6th sem.)	J.Murgaš
Control System Software 1	(6th sem.)	Ľ.Šimová,, I.Hantuch
Instrumentation of Control Systems	(6th sem)	J.Šturcel
Modelling and Simulation	(6th sem.)	M.Foltín
Electronics for Control Systems	(6th sem.)	M.Toman ,J.Šturcel
Software of Control Systems	(7th sem,)	I.Hantuch
Actuators	(7th sem)	J.Jovankovič, M.Žalman
Sensors and Transducers	(7th sem.)	J.Šturcel
Optimization	(7th sem.)	D.Rosinová
Industrial Comunication Systems	(8th sem.)	M.Žalman, I.Belai
Robotics	(8th sem)	L.Jurišica
Control System Software 2	(8th sem.)	I.Hantuch
Process Dynamics	(8th sem.)	E.Miklovičová
Nonlinear systems	(8th sem.)	M.Huba
Servodrives	(9th sem.)	J.Jovankovič
Flexible Manufacturing Systems	(10th sem.)	L.Jurišica
Monolithic Microcomputers	(10th sem.)	Š.Chamraz
Continuous Process Control	(10th sem.)	V.Veselý

IV. RESEARCH PROJECTS

- Development and Integration of the Theory of Nonlinear Control Systems. VEGA 1/3089/06 (M.Huba)
- Algebraic Methods in Control of Nonlinear Systems and Their Application in Solving the Autorotation problem. APVV LPP-0127-06 (M.Huba, M. Halás)
- Advanced Control of Mechatronic Systems 1/ 0153 / 03 - VEGA, (L. Jurišica)
- Network of Virtual Laboratories for Real Process Control - KEGA project 3 / 3121 / 05, (M.Huba)
- Modern Network Control System for Complex Industrial Technologies. APVV-20-045805 (P.Hubinský)
- 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)

- Research and Development of New Generation of New Electric Linear Drives with
  High Resolution of Position, APVV-99-031205 (M.Žalman - cooperation with EVPU
  Nová Dubnica)
- Mechatronics Systems and Progressive Technologies. APVT – 20-020904. (L. Jurišica)
- Advanced Control Methods, G 1/0158/03, V.Veselý
- Intelligent Control Systems, G 1/0155/03, I.Sekaj
- Application of Artificial Intelligent Methods in Modelling and Control of Critical Processes in
  Power Industry, APVT - 20-031404, Š.Kozák
- Application of the Advanced Simulation Program Systems in Courses of the Study Program
  Production Technologies, KEGA 3/2411/04, Z. Králová
- Designing of Virtual Laboratories and Educational Programs, KEGA 3/3075/05, J. Murgaš
- Design and implementation of a new interdisciplinar intelligent buildings KEGA 5179-
  I. Hantuch

V. COOPERATION

V.1 Cooperation in Slovakia

- ABB Bratislava, Ltd.
- Alfa Base Ltd., Bratislava
- ATEC Ltd., Bratislava
- AXESS Ltd., Bratislava
- Business for Excellence Ltd., Bratislava
- Comenius University, Bratislava, Faculty of Natural Sciences
- ControlTech Industrial Automation Ltd., Trnava
- DATALAN Bratislava, Ltd.
- E-Academia Slovaca, n.o., Bratislava
- Eltis Ltd., Banská Bystrica
- Emerson Ltd., Bratislava
- ESAB Ltd., Bratislava
- EVPU Nová Dubnica, Inc.
- First Welding Company, Bratislava
- Gratex International Ltd., Bratislava
- HMH Ltd., Bratislava
- Honeywell Ltd., Bratislava
- Institute of Informatics, Slovak Academy of Sciences, Bratislava
- Johnson Controls Ltd., Bratislava
- KFB Control Ltd., Bernolákovo
- Kybernetika Ltd., Košice
- Legrand Slovakia
- Matador Púchov, Inc.
- Meret Ltd., Bratislava
- MicroStep Ltd., Bratislava
- Microstep MIS Ltd., Bratislava
- MicroStepHDO Ltd., Bratislava
- NES Ltd., Nová Dubnica
- PosAm Ltd., Bratislava
- PPA Energo Ltd., Bratislava
- ProCS Ltd., Šaľa
- PROXY, Nové Mesto n/Váhom

- PZ Bratislava, Inc.
- Q – EX Trenčín, Inc.
- Regotrans – Rittmeyer, Ltd.
- RMC Nová Dubnica, Ltd.
- S&A Ltd., Banská Bystrica
- SAP Slovakia, Ltd.
- SE Inc., Bratislava
- Schneider Electric Slovakia, Ltd.
- Siemens Ltd., Bratislava
- Slovak Electricity Transmission System Ltd., Bratislava
- Slovakodata, Inc., Bratislava
- Slovnaft Bratislava, Inc.
- SPP – Slovtransgaz Inc., Nitra
- Start Automation Ltd., Malacky
- SWH – Siemens Business Service, Bratislava
- Tecton Ltd., Bratislava
- Technical University of Košice
- Telegyr Systems (Slovakia) Ltd., Bratislava
- Termoreg Ltd., Bratislava
- TTC Ltd., Nitra
- UMB Banská Bystrica
- UNIT Ltd., Bratislava
- University of Agriculture, Nitra
- University of Economics, Bratislava
- University of Žilina
- Volkswagen Slovakia Inc., Bratislava
- Vonsch Brezno, Ltd.
- VOP Inc., Trenčín
- VUJE Inc., Trnava

V.2 International Cooperation

- Budapest University of Technology and Economics, Budapest, Hungary
- Czech Technical University of Prague, CzR
- Democritos University of Thrace, Xanthi, Greece
- Eidhoven University, The Netherlands
- Faculty of Industrial Organisation and Management, Silesian Technical University
  Gliwice, Poland
- Fern Universität - Gesamthochschule in Hagen, Hagen, Germany
- Ghent University, Belgium
- Hochschule, Heilbronn, Germany
- Humusoft Ltd., Praha, CzR
- Hungarian Fuzzy Association, Hungary
- HTL Spengergasse, Vienna, Austria
- IIASA Laxenburg, Austria
- Inno C.at, Austria
- Institute for Machine and Process Automation, University of Technology, Vienna, Austria
- Institute for Problems of Mechanical Engineering, St.Petersburg, Russia
- Institute of Information Theory and Automation, Academy of Sciences of the Czech Republic,
  Prague, CzR
- IRCyN, Ecole Centrale de Nantes, France
- MES – DEA, Ltd. , Switzerland
- Moscow Power Institute, Moscow, Russia
- Profibus International, Germany
- Schneider Electric, Germany

- SOMMER, GmbH, Austria
- Strasbourg University, BETA, Strasbourg, France
- Technical University of Brno, CzR
- Technical University of Liberec, CzR
- Technical University of Ostrava, CzR
- Technical University of Tomas Bata in Zlín, CzR
- Technical University of Ancona, Italy
- Technical University of Graz, Austria
- Technical University of Chemnitz, Germany
- Technical University of Plovdiv, Uni Gabrovo, Bulgaria
- Technical University of Vienna, Austria
- Technical University of Zagreb, Uni Split, Croatia
- University of Maribor, Slovenia
- University of Bochum, Germany
- University of Bremen, Germany
- University of Defence, CzR
- University of Technology, Pilsen, CzR
- University of West Bohemia in Pilsen, CzR
- University of Zagreb, Croatia
- University of Wisconsin - Whitewater, USA
- VŠB Technical University of Ostrava, CzR

V.3 Membership in International Organizations and Societies

- IEEE The Institute of Electrical and Electronics Engineers, Inc. (L.Jurišica, M. Žalman)
- IEE The Institute of Electrical Engineers, Inc. (L.Jurišica, M.Žalman, M.Huba, P.Hubinský)
- IFAC TC Nonlinear Control (M.Huba)
- IFAC, member of the Technical Committee on Adaptive and Learning Systems (J.Murgaš)
- IFAC, member of the Technical Committee on Robust Control (V.Veselý)
- Members of IEEE / Institute of Electrical and Electronics Engineers (L. Jurišica, J.Murgaš, V.Veselý)
- Member of the American Mathematical Society (J.Murgaš)
- Publishing House Pergamon Press (M.Huba - editor)
- Profibus International (URPI, FEI STU)

VI. THESES

VI.1 Masters Theses

Masters theses supervised at the Institute of Control and Industrial Informatics. The names of supervisors are in brackets.

[1] T. Belko: Vizualization and control of the cooling process in the TPP Vojany - EVO1 (Š. Kozák)
[2] Z. Dideková: Intelligent control methods of nonlinear systems (Š. Kozák)
[3] P. Fázik: Information portal for department of the institute (K. Žáková)
[4] D. Forgáč: Control of heat purification processes (Š. Kozák)
[5] P. Gablas: Control of technological process using industrial network (T. Chvostek)
[6] R. Gašparík: Optimal control of a manipulator (A. Kozáková)
[7] J. Gašperan: Automatic identification of a 3-tank system (M. Halás)
[8] M. Hasprunová: Robust stability of systems with parametric uncertainties (M. Hypiusová)
[9] J. Hudoba: Design of e-Learning System Using Object Oriented Programming (P. Bisták)
[10] M. Humaj: Model of plasma cutter (M. Foltin)
[11] M. Chmelko: GPC modifications (E. Miklovičová)
[12] M. Janík: Predictive control of nonlinear systems (E. Miklovičová)

[13] P. Kelemen: Predictive control methods of SISO and MIMO systems (Š. Kozák)

[14] M. Koneracký: Predictive PID controllers (Š. Kozák)

[15] A.Krátky: Industrial network modeling (T. Chvostek)

[16] M. Kušnirik: Controller design for thermal plant (M. Huba)

[17] O. Kvasnica: Internet portal for accounting studies (Z. Králová)

[18] Lukáč: Control of inverted pendulum (K. Žáková)

[19] M. Markech: Discrete-time robust controller design for MIMO system (D. Rosinová)

[20] M. Materný: Helicopter model control (M. Huba)

[21] M. Matoušek: Performance analysis of decentralized control systems in the frequency domain (A. Kozáková)

[22] J. Mesiarkin: Optimal control of complex system steady-state (D. Rosinová)

[23] M. Mikovíny: Educational system for the course Modeling and control of production systems (Z. Králová)

[24] M. Minca: Design of robust controllers for SISO systems (M. Dúbravská)

[25] Ľ. Odráška: Online system for student knowledge assessment (K. Žáková)

[26] T. Paulovič: Adaptive control of synchronous generator (J. Murgaš)

[27] J. Randár: Data visualization system (M. Mrosko)

[28] M. Repčík: Remote control design for inverted pendulum (K. Žáková)

[29] P. Revallo: Flywheel pendulum control (M. Halás)

[30] Rokyta: Adaptive control of technological process using RTAI real-time operating system (T. Murgaš)

[31] F. Rovenský: Comparing control algorithms for constrained systems (M. Huba)

[32] M. Sedlák Remote control of magnetic levitation (K. Žáková)

[33] D. Serina: Analysis and synthesis of nonlinear control systems in algebraic system Maple (M. Halás)

[34] M. Sklár: Design, implementation and comparison of the control methods of the school hydraulic plant (M. Kamenský)

[35] J. Slávik: Design, implementation and comparison of the control methods of the school thermal plant (M. Kamenský)

[36] A.Šille: Robust decentralized PID controller design (A. Kozáková)

[37] M. Šolek: Adaptive design of fuzzy controller tuned by genetic algorithms (J. Paulusová)

[38] J. Števek: Toolbox PID (Š. Kozák)

[39] J. Tarnovský: GPC of SISO and MIMO systems (Š. Kozák)

[40] T. Turček: Control system of laboratory synchronous generator (J. Murgaš)

[41] M.Vařák: Online conference system (K. Žáková)

[42] J. Vyskočil: Fuzzy-neural and genetic predictive control (Š. Kozák)

[43] V. Žilka: Nonlinear control algorithms for a fluid tank system (M. Halás)

[44] P. Herchl: Control of paralel cinematic structure robot - supervisor for distance operator (I. Hantuch)

[45] M. Kaduc: Transport system modeling - subsystem of railway (I. Hantuch)

[46] T.Vasilik: Control of paralel cinematic structure robot - network for distance operator

[47] P. Viselka: Utilization of ultrasonic and infrared sensors data for environment representation (J. Hanzel)

[48] V. Pastirčák: Application of fuzzy logic in industrial control systems (I. Sekaj)

[49] J. Kochan: The use of genetic programming in problem solving in the process control area (I. Sekaj)

[50] M.Oravec: Evolutionary computation methods (I. Sekaj)

[51] M. Šúlek: Control of a crossroads using the PLC in InTouch environment.(J. Kardoš)

[52] J. Greguš: Metal cutting CNC's standard GUI (P. Fodrek)

[53] V. Chren: Modular driver structure for network control system (P. Fodrek)

[54] V. Ďurica: Desing of an environment and methods for information exchange in multiagent sytem (J. Dorner)

[55] J. Hanus: The proposal of communication between server and the WEB client for data

transfer from technological process and adjusting their parameters (J. Dorner)

[56] A. Karvai: Image sampling and processing for agent oriented system (J. Dorner)

[57] M. Leporis: The proposal of technological process visualization for the WEB client and administration of users (J. Dorner)

[58] J. Mičura: Design for communication between the server and WEB client in technology process (J. Dorner)

[59] M. Moravčík: Design and visualization of graphic objects of technological process and transfer data for the WEB client (J. Dorner)

[60] P. Kollárik: Proposal of progammatic moduls using artificial neural network in multiagent`s system

[61] P. Uchaľ: User interface for specification, control and simulation of manufacturing transportation systems (L. Mrafko)

[62] A. Orešanský: Modeling and identification of a system for optimal control of alternative heat sources and heat accumulation in a building (L. Mrafko)

[63] V. Palec: Optimal control of alternative heat sources and heat accumulation in building (L. Mrafko)

[64] P. Plášek: Modification of model of flexible manufacturing system in lab C026 and design of model control in RsLogix 500 (L. Mrafko)

[65] K. Cisár: Control of stepper motors using PLC Simatic S7-300 (Mrafko)

[66] M. Kurák: Control of discrete event system model and visualisation of the system on the web (L. Mrafko)

[67] Cs. Nagy: Control of laboratory model of production line and its visualisation (L. Mrafko)

[68] P. Sedmák: Programming languages of PLC Simatic S7 (L. Mrafko)

[69] P. Herchl: Control of paralel cinematic structure robot - supervisor for distance operator (I. Hantuch)

[70] M. Kaduc: Transport system modeling - subsystem of railway (I. Hantuch)

[71] T. Vasilik: Control of paralel cinematic structure robot - network for distance (I. Hantuch)

VII. OTHER ACTIVITIES

- Conferences organized by institute:
  Istrobot: Competition of Mobile Robots, Dep. of Contr. and Autom. Bratislava, SK. April 2007 (R. Balogh)
- Conferences Participation, Membership in Committees:
  Elosys 2007, Trenčín. SK. October 2007 (L.Jurišica, P.Hubinský, I.Sekaj – PC members, Profibus exposition)
- Projects:
  - Visual servoing of a robot arm on a mobile platform. DAAD 7/2005 (P. Hubinský)
  - CEEPUS C II – CZ – 0031-01-0506 International Study in Automatic Control (M.Huba, K.Žáková)
  - Leonardo: SOMA (Safety of Machinery) (M. Huba)
  - 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)
  - ESF Project: Preparation of university teachers for ICT in education (K.Žáková-coordinator)

- AT&P Journal (L.Jurišica, J.Šturcel, M.Žalman, I.Hantuch, J. Murgaš, V. Veselý – Editorial Board members)
- Selected Topics in Modelling and Control (L. Jurišica – Editorial Board members)
- Accreditations Board of SAS (L.Jurišica – member)
- Profibus Slovakia Association (P.Drahoš – chairman)
- International Machine Fair Nitra, May 2006 (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, J. Murgaš – 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
- SSKI (Slovak Society for Cybernetics and Informatics): V. Veselý, Journal "Cybernetics and Informatics": L. Körösi, A. Kozáková, V. Král, E. Miklovičová, - Editors. D. Rosinová - Managing Editor. J. Murgaš, V. Veselý - members of International Editorial Board
- AT&P Journal: J. Murgaš V. Veselý - members of Editorial Board
- Journal of Electrical Engineering: V. Veselý - member of Editorial Board
- Journal "Selected Topics in Modelling and Control": V. Veselý - Editor, Š. Kozák, J. Murgaš - members of Editorial Board
- Š. Kozák: guarantor for the scientific branch Mechatronics
- Project Management Association of Slovakia: Z. Králová - member
- Slovak Society for Operations Research: Z.Králová - council member
- MacPlanet: M.Foltin – editor internet journal www.macplanet.sk
- Education & Propagation of Robotics - Istrobot (R. Balogh)
- Researchers Night - popular exhibition. 28 Sept. 2007 (R. Balogh)
- Days of mobile robotics – exhibition as apart of Elosys Trenčín 16. – 19 Oct. 2007 (R. Balogh)

VIII. PUBLICATIONS

VIII.1 Journals

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