DEPARTMENT OF ELECTRICAL, MECHATRONIC AND INDUSTRIAL ENGINEERING

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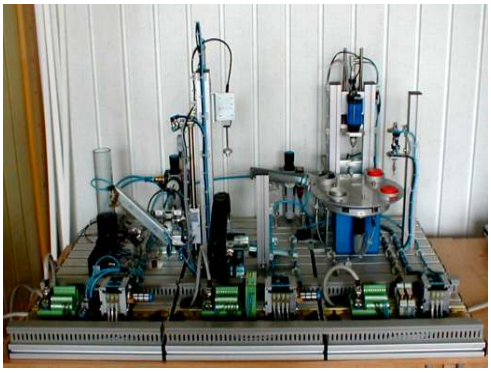
1 DEPARTMENT'S PROFILE

The Department was established in 2005 from the previous units at the faculty: from Department of Electrical Drives and Mechatronics and from Laboratory of Industrial Engineering. The both units fused into the Department of Electrical, Mechatronic and Industrial Engineering.

The Department is responsible for education and research in electrical engineering in fields of power and industrial electronics, electrical machines and apparatuses, electromechanical systems, esp. in controlled drives, industrial and automotive mechatronic systems and in the area of effective production planning and control, quality management, and continuous improvement of products and services. The Department offers all types of university courses (bachelor in 4 branches, two master courses and the Ph.D. course in Electrical Engineering).



2 STAFF

Professors:
prof. Ing. Jaroslav Dudrik, PhD.
prof. Ing. Pavol Fedor, PhD.
prof. Ing. Irena Kováčová, PhD.
prof. Ing. Jaroslav Timko, CSc.
prof. Ing. Pavel Záskalický, PhD.

Associate Professors:
doc. Ing. Viliam Fedák, PhD.
doc. Ing. Želmíra Ferková, PhD.
doc. Ing. Ján Fetyko, PhD.
doc. Ing. Michal Girman, PhD.
doc. Ing.Felicita Chromjaková, PhD. (till Sept.2008)
doc. Ing. Michal Kostelný, CSc.
doc. Ing. Peter Kováčik, PhD.
doc. Ing. Daniela Perduková, PhD.
doc. Ing. Jaroslava Žilková, PhD.

Assistant Professors:
Ing. Peter Bober, PhD.
Ing. František Ďurovský, PhD.
Ing.Mgr. Peter Kmec, PhD.
Ing. Peter Košč, PhD.
Ing. Ján Kaňuch, PhD.
doc. Ing. Jozef Ondera, PhD.

Assistants:
Ing. Peter Girovský
Ing. Jana Harvanová

Senior Scientists:
Ing. Peter Keusch
doc. Ing. Juraj Oetter, PhD.
Ing. Peter Višnyi, PhD.
Peter Hajsák
Ing. Martin Olejár (by September to December 2008)
prof. Ing. Ladislav Zboray, CSc.

Technical Staff:
Ing. Gabriela Brečková
Zuzana Olexová
Ing. Vladimír Suchý
František Hajsák

Ph.D. Students:
Ing. František Baník (by September 2008)
Ing. Ľubomír Cibuľa
Ing. Milan Lacko
Ing. Peter Macko (till August 2008)
Ing. Ľubomír Matis
Ing. Martin Olejár (till August 2008)
Ing. Vladimír Ruščin

3 EQUIPMENT

3.1. Teaching and Research Laboratories

- Laboratories of Electrical Engineering
- Power Electronics Laboratory
- Laboratory for CAD (COSMOS, ProEngineer, MATLAB, PSpice, and applied SW)
- Laboratory of Industrial Automation
- Laboratory of Electrical Machines
- Laboratory of Electrical Drives
- Laboratory of Controlled Electrical Drives and Mechatronics
- Laboratory of Process Modelling and Simulation
- Laboratory of Control Systems and Robotics

3.2. Special Measuring Instruments and Computers

Control Systems

- Modicon TSX Premium (Schneider Electric) incl. development SW (PL7 Pro V3.1), TELEMECANIQUE (TSX 07).
- OMRON - Sysmac Mini SK20, OMRON - Sysmac CQM 1
- Allen Bradley Programmable controller SLC 200 incl. development SW RS logic 500, Tech. Terminal AB PanelView 550 and converter AB 1305
- Control system Simadyn - Siemens
- SIEMENS - SIMATIC S7-400 with SIMATIC NET CP for Industrial Ethernet, FM-458, SIMATIC S7-300 with PID Control Module and SIVAREX Weight Module, SIMATIC ET200M, SIMATIC Touch Panels.

Apparatus

- Logic Analyser PHILIPS
- Controlled electrical drives and converters
- DSP controlled AC drive
- DSP based dSpace DS1102 for Hardware in the Loop simulation
- 4-channel digital oscilloscope METIX
- 4-channel oscilloscope TDS 5034B including TDSPWR3 power measurement and analysis software and probes
- 4-channel mixed signal digital phosphor oscilloscope MSO4034 including current and voltage differencial probes

Converters

- AC Frequency Converter ABB ACS 600, 5,5 kW,
- AC Frequency Converters SIEMENS: SIMOVERT 6SE21, MicroMaster Junior, SIMOVERT 6SE70 Master drive, 6SE70 Master Drives - Motion Control 2-axes servodrive, SINAMICS S120
- DC thyristor converters SIMOREG 6RA24 a 6RA70 DC Master (SIEMENS)
- Softstarter (ABB, Siemens)

Mechatronics systems

- Educational Robot Tech Quipment MA 2000
- Physical model of production line

- Model of liquid reservoir
- Model of caster material reservoirs
- Model of flow rate control
- Model of crane and inverted pendulum
- Modular Production System from FESTO DIDACTIC (full functional distribution, testing, and processing stations controlled by PLC)

Software
- ARIS tool for business process reengineering
- Cognos 8 Business Inteligence
- ELCAD for electrical engineering design
- Macromedia Director
- Matlab, Simulink, dSpace
- PS-8 project management software,
- PV 4 simulation software
- SIMPLE++ simulation software
- Arena simulation software
- CosmosEMS 3.0
- Pro/Engineer Wildfire
- CarSim and CarSim RT
- RT-Lab simulator for HIL

4 TEACHING

4.1. Undergraduate Study (Bc.)

a) Bc. study programme in Electrical Engineering

Subject	Semester	Lectures/exercises (hours per week)	Lecturer
Electrical Engineering Fundamentals	1st	2/2	Kaňuch
Electrical Machines and Apparatus	3rd	3/3	Záskalický
CAE Programs	3th	2/2	Fedák
Electrical Actuators and Drives	4th	3/2	Timko
Automation in Electrotechnics	4th	2/2	Fedor
Applied Electronics	4rd	2/2	Kováčová
Semiconductor Supply Sources and Converters	5th	3/2	Dudrik
Microcomputer Techniques	5th	2/2	Perduková
Bachelor Thesis I.	5th	0/5	Dudrik
Electrical Equipment of Vehicles	5th	2/2	Ďurovský
Electrical Systems Projecting	5th	0/2	Kaňuch
Controlled Drives	6th	3/3	Ďurovský
Bachelor Thesis II.	6th	0/9	Dudrik
Mechatronic Production Systems	6th	2/2	Fetyko

b) Bc. study programme in Automotive Mechatronics

Subject	Semester	Lectures/exercises (hours per week)	Lecturer
Electrical Engineering Fundamentals	1st	2/2	Kaňuch
Electrical Machines and Apparatus	3rd	3/3	Záskalický
Electrotechnics for Vehicles	3th	2/2	Ďurovský
Electrical Actuators and Drives	4th	3/3	Timko
Automation in Mechatronics I.	4th	2/2	Fedor
Electromagnetic Compatibility	4th	2/2	Kováčová
Visualisation Systems in Mechatronics	4th	2/2	Perduková
Controlled Drives	5th	2/2	Ďurovský
Microcomputer Techniques	5th	2/2	Perduková
Bachelor Thesis I.	5th	0/4	supervisor
Robotics	5th	2/2	Fetyko
Automotive Mechatronics	6th	2/2	Ďurovský
Projecting in Mechatronics	6th	2/2	Ďurovský
Bachelor Thesis II.	6th	0/8	Fedák
Mechatronic Production Systems	6th	2/2	Fetyko
Intelligent Control in Mechatronics I.	6th	2/2	Perduková, Žilková
Industrial Control Systems	6th	2/2	Fedor

c) Bc. study programme in Informatics and Control Systems in Mechatronics

Subject	Semester	Lectures/exercises (hours per week)	Lecturer
Electrical Engineering Fundamentals	1st	2/2	Kaňuch
Electrical Machines and Apparatus	3rd	3/3	Záskalický
Electrotechnics in Vehicles	3th	2/2	Ďurovský
CAE Programs	3th	2/2	Fedák
Electrical Actuators and Drives	4th	3/3	Timko
Automation in Mechatronics I.	4th	2/2	Fedor
Electromagnetic Compatibility	4th	2/2	Kováčová
Visualisation Systems in Mechatronics	4th	2/2	Perduková
Controlled Drives	5th	2/2	Ďurovský
Dynamics of Electromechanical Systems	5th	2/2	Fedák
Microcomputer Techniques	5th	2/2	Perduková
Bachelor Thesis I.	5th	0/4	supervisor
Semiconductor Supply Sources and Converters	5th	2/2	Ondera
Robotics	5th	2/2	Fetyko
Mechatronic Production Systems	6th	2/2	Fetyko
Bachelor Thesis II.	6th	0/8	Fetyko
Projecting in Mechatronics	6th	2/2	Ďurovský
Database Systems	6th	2/2	Fedák

Intelligent Control in Mechatronics I.	6th	2/2	Perduková, Žilková
Industrial Control Systems	6th	2/2	Fedor

d) Bc. study programme in Industrial Engineering

Subject	Semester	Lectures/exercises (hours per week)	Lecturer
Business and Management	1th	2/0	Kováčik, Kmec
Human Resource Management	3th	2/2	Girman, Košč
Simulation of Production Systems	3th	2/2	Girman, Bober
Automation of Production Processes	3th	2/2	Kováčik
Programming Seminar I.	3rd	0/4	Girman, Keusch
Technology of Production in Electrotechnics	3rd	2/2	Kostelný
Information Systems in Industry	4rd	2/2	Girman, Košč
Production Management and Logistics	4th	2/2	Kováčik
Industrial Systems	4th	2/2	Kováčik, Bober
Programming Seminar II.	4rd	0/4	Girman, Keusch
Database systems in CIM	4th	2/2	Fedor
Production Quality	5th	2/2	Girman
Design of Electrical Systems	5th	2/2	Záskalický
Automotive Electrical Systems	5th	2/2	Záskalický, Kaňuch
Economic Analysis and Accounting	6rd	2/2	Kováčová
Robotics	6th	2/2	Fetyko
Bachelor Thesis	6th	0/4	supervisor

4.2. Graduate Study (Ing.)

a) Ing. study programme in Electrical Engineering

Subject	Semester	Lectures/exercises (hours per week)	Lecturer
Signal Transmission and Processing	7th	2/2	Fedor
Models of Dynamic Systems	7th	2/2	Fedák
Power Semiconductor Systems	7th	2/2	Ondera
Logic and Non-linear Control	7th	2/2	Fedor
Electromagnetic Compatibility	8th	2/2	Kováčová
Control Circuits for Power Electronics	8th	2/2	Dudrik
Motion Control	8th	2/2	Fetyko
Semester Project	8th	0/4	supervisor
Projecting of Electrical Machines	8th	2/2	Ferková
Artificial Intelligence Methods in Control	8th	2/2	Žilková
Marketing	8th	2/2	Kováčová

Signal Processors	9th	2/2	Višnyi
Control of Robots	9th	2/2	Fetyko
Semiconductor Converters Construction	9th	2/2	Ondera
Control of Production Systems	9th	2/2	Ďurovský

b) Ing. study programme in Industrial Engineering

Subject	Semester	Lectures/exercises (hours per week)	Lecturer
Automation of Technological processes	7th	2/2	Kováčik
Operational Management	7th	2/2	Kováčik
Intelligent Control of Production Systems	7th	2/2	Žilková
Strategic Management	8th	2/2	Kováčik, Kmec
Statistical Process Control	8th	2/2	Girman
Modelling of Business Processes	9th	2/2	Girman
Human Resources Development	8th	2/2	Kováčik, Košč
Semester Project	8th	0/5	
Project Management	9th	2/2	Girman, Kmec
Modelling, Simulation and Optimisation of Processes	9th	2/2	Girman

4.3. Undergraduate and Graduate Study for Foreign Students (in English)

All subjects listed above are offered in English language for foreign students.

4.4. Ph.D Postgraduate Course in Electrical Engineering

Subject	Semester	Lectures/exercises (hours per week)	Lecturer
Power Electronics	1st	2/0	Dudrik
Ph.D Project I	1st	0/2	supervisor
Foreign Language I	1st	2/0	Dept. of Foreign Languages
Servosystems	2nd	2/0	Fetyko
Ph.D Project II	2nd	0/2	supervisor
Foreign Language II	2nd	2/0	Dept. of Foreign Languages
Ph.D Project III	3rd	0/4	Supervisor
Subject of specialization	3rd	2/0	according to the subject
Scientific activity	3rd	0/8	Supervisor
Ph.D Project IV	4th	0/2	Supervisor
Scientific activity	4th	0/8	Supervisor
Ph.D Project IV	5th	0/2	Supervisor
Scientific activity	5th	0/8	Supervisor
Ph.D Thesis	5th	0/9	Supervisor

5 RESEARCH PROJECTS

- *Analysis and quality quantification of building construction projects from EMC aspect.* VEGA (Scientific Grant Agency) project No 1/4174/07, (01/2007 - 12/2009). Co-ordinator: KOVÁČOVÁ, I.
- *Modern Methods of the Electrical Drives Control.* VEGA (Scientific Grant Agency) project No 1/4076/07 (2007 - 2009). Co-ordinator: TIMKO, J.
- *Research and Development of New Generations Electric Linear Drives with High Resolution of Position*. APVV project No. APVV -99-031205 (2006-2008). Project contractor: Elektrotechnický výskumný a projektový ústav, a.s., Nová Dubnica, co-operation FEI TU Košice. Co-ordinator: DUDRIK, J.
- *Research of New Generation High Frequency Soft Switching Converters.* APVV project No. APVV -0095-07 (2008-2010). Project contractor: FEI TU Košice. Co-ordinator: DUDRIK, J.
- *New Circuit Breaker up to 63 A and Equipments for Breaker Hourly Tests .* APVV project No. APVV -0287-07 (2008-2010). Project contractor: SEZ Krompachy, co-operation FEI TU Košice. Co-ordinator: DUDRIK, J.
- *Research of behaviour of the small electrical motor by a non harmonic supply;* APVV project No: APVV 0510-06, Co-ordinator, ZÁSKALICKÝ, P.

6 CO-OPERATION

6.1. Co-operation in Slovakia

The Department co-operates with many industrial enterprises in Slovakia having joint project at modernising of the electrical drive systems, control and mechatronic applications: U.S.STEEL Košice, SIEMENS, ABB, BSH Drives and Pumps Michalovce, Křižík Prešov, Schneider Electric Slovakia, Spell Procont Prešov, Vonsch Brezno, Kybernetika Košice, TEKO Košice, ENERGO CONTROL Košice, ZŤS VVU Košice, ŽP Podbrezová, Bukóza Hencovce, Genesis Ltd. Prešov, Embraco Slovakia Ltd. Spišská Nová Ves, Kopex Ltd. Košice, Cogent Ltd. Košice, Regada Ltd. Prešov, Slovak Union for Quality, Innovation and Design Q-IMPULZ, Košice, SEZ Krompachy, STAPRO Ltd. Košice.

6.2. International Co-operation

- University of Zagreb, Croatia
- Brno University of Technology, Czech Republic
- Technical University of Liberec, Czech Republic
- VŠB -Technical University of Ostrava, Czech Republic
- West Bohemian University, Pilsen, Czech Republic
- University of Vaasa, Finland
- University of Technology and Economy, Budapest, Hungary
- University of Miskolc, Hungary
- Delft University of Technology, The Netherlands
- Warsaw University of Technology, Poland
- Czech Academy of Science, Prague.
- Silesian Polytechnic Institute of Gliwice
- Transilvania University of Brasov, Romania
- University of Oradea, Romania
- Procter & Gamble - Rakona Rakovník

6.2.1. Visits of Staff Members to Foreign Institutions

- BANÍK, F.: Anatalya, Turkey, October 2008 (Workshop "Schneider Electric Initi@tive 2008",)
- BOBER P., KOŠČ P.: Czech Republic, Zlín, 15 – 17 Oct. 2008, Tomas Bata University
- ĎUROVSKÝ, F., FETYKO J.: Serbia, Čačak, 20. Jan. – 5. Feb. 2008 (Technological control of flying steel sheet cutter on slitting line – line commisioning)
- ĎUROVSKÝ F., MATIS Ľ.: Austria, Viena, 22 October 2008 (Student visit to Siemens)
- DUDRIK, J. – FEDÁK, V.: Universitatea din Oradea, 14 – 27 July 2008 (ERASMUS mobility)
- DUDRIK J., ZÁSKALICKÝ P.: Poland, Poznan, 31 Aug. – 3 Sept. 2008 (EPE-PEMC 2008 Conference)
- FEDAK, V.: Transilvania University of Brasov, 7 - 10 July 2008 (Summer school lecturing)
- FEDÁK, V.: Technische Universität Ilmenau: 28-30 Aug. 2008 (IDENTITY project meeting)
- FEDÁK, V.: Politechnical University Poznan, 1 – 4 Sept. 2008 (EPE-PEMC 2008 Conference and 3JCCM - EDIPE project coordinator meeting).
- FEDÁK, V.: Delft University of Technology, 26-29 Nov. 2008 (cooperation on the joint project, 4JCCM - EDIPE project meeting)
- FEDÁK V.: Poland, Poznan, (ISC meeting of the EPE-PEMC 2008), 13 - 17 March 2008
- FERKOVÁ Ž.:, Czech Republic, Prague, 19 - 21 Feb. 2008, ČVUT Prague
- FERKOVÁ Ž., KAŃUCH J., ZÁSKALICKÝ P.: Czech Republic, Brno, 2 – 5 Nov. 2008, VÚT Brno
- GIRMAN M., PERDUKOVÁ D., ZÁSKALICKÝ P.: Grecee, Athens, 6 – 12 Sept. 2008 (AEI 2008 Conference)
- HARVANOVÁ J., MACKO P., MATIS Ľ., OLEJÁR M., RUŚČIN V.: Italy, Torino, Milano , 15. June -14 July 2008 (European Social Foundation Project)
- KOSTELNÝ M.: Czech Republic, Prague 9 – 12 Sept. 2008, ČVUT Prague

6.3. Membership in International Organizations, Societies and Committees

- FEDÁK, V.: EPE – European Power Electronics and Drives Association, Brussels: Executive Council member, General Assembly member
- FEDÁK, V., FETYKO, J., TIMKO, J.: Power Electronics and Motion Control Council EPE-PEMC – Budapest. DUDRIK, J. Council members
- KOVÁČIK, P.: The Institute of Electrical and Electronics- Senior Member, American Institute of Aeronautics and Astronautics - Senior Member, European Engineering educator – International society for Engineering Education, Member of the International Astronautical Federation, Member of the International Council of Aeronautical Sciences
- ZÁSKALICKÝ, P.: Steering Committee of ISEF 2007 Conference in Prague, 13-15. 9. 2007.
- ZÁSKALICKÝ, P.: Journal KOMEL, Maszyny elektryczne; Sience commitee, Poland.
- DUDRIK, J.: Member of the steering committee International Conference on Engineering of Modern Electric Systems, EMES 08, Oradea, Romania, (Section Electronics).

- DUDRIK, J.: Member of the steering committee International Conference on Renewable Sources and Environmental Elektrotechnologies, RSEE08, Oradea, Romania.

Members of the Programme and Steering Committees of the International Conferences

- FEDÁK, V.: Co-Chairman of the 12th *Power Electronics and Motion Control International Conference*, EPE-PEMC 2008, Poznan, Sept. 1 – 3, 2007
- FEDÁK, V.: Programme Committee Chairman of the 6th *Int. Conference on Emerging eLearning Technologies and Applications*, ICETA 2007, The High Tatras, Sept. 11-13, 2008
- ZÁSKALICKÝ, P.: Chairman of organizing committee SEKEL, 16-18.9.2008, Herľany

6.4. Membership in Slovak Professional Bodies

- TIMKO, J. (Vice-chairman); FEDÁK, V.; ZBORAY, L.; FEDOR, P. FETYKO J., DUDRIK J. - members of Joint Slovak Board for the Ph.D. Study in Electrical Engineering
- TIMKO, J. (chairman), FETYKO, J., GIRMAN, M., KOVÁČOVÁ, I., FEDOR, P., FEDÁK, V., DUDRIK, J.: members of board for the PhD. Study in Electrical Engineering at FEI TU Košice
- FERKOVÁ, Ž.: member of Technical Standards Commission on Electrical Machines in SR
- FEDÁK, V.; FETYKO, J.; KAŇUCH, J.; ONDERA, J.; TIMKO, J.; ZÁSKALICKÝ, P.; ZBORAY, L.: members of The SES (Slovak Electrotechnical Society), Branch at FEEI TU Košice
- FEDÁK, V.: Council of the Secondary Technical School for EE, Košice (delegate of the FEEI TU Košice)
- KOVÁČIK, P.: The Slovak Society for Applied Cybernetics and Informatics, SLOVAK TRANSPORT SOCIETY at the Slovak Academy of Sciences, Žilina
- ONDERA, J.: Slovak Electrotechnical Society, Committee member
- GIRMAN, M., BOBER, P. Editorial board for Journal „Kvalita, Inovácia, Prosperita" (Quality, Innovation, Prosperity), ISSN 1335-1745

6.5. Editorial Boards

- ZÁSKALICKÝ, P.: *Journal KOMEL, Editorial board for journal Maszyny elektryczne; Sience commitee, Poland.*
- GIRMAN, M., BOBER, P. *Editorial board for journal „Kvalita, Inovácia, Prosperita" (Quality, Innovation, Prosperity), ISSN 1335-1745*

6.6. Contracts, International Projects

- Project name: **E-learning Distance Interactive Practical Education** - EDIPE
  EU programme: Leonardo da Vinci
  Project No: CZ/06/B/F/PP-168022,
  Project Duration: 10/2006 - 12/2008
  Contracting Institution: VUT Brno,
  Project co-ordinator for FEEI: FEDÁK, V.
  Project web site: www.PEMCWebLab.com.

The objectives of the project - to develop a complete set of 18 different interactive design oriented virtual or distance laboratories covering basic fields of applied electrical engineering starting from fundamentals of EE, through electronics, power electronics, applications of power electronics, dynamics of electro-mechanical systems including industrial application of electrical drives, motion control and also complex drive systems.
Project partners: Brno University of Technology (CZ), Technische Universiteit Delft (NL), Technische Universität Wien (A), Ruhr Universität Bochum (D), National Technical University of Athens (EL), Institut National Polytechnique de Lorraine (F), Budapest University of Technology and Economics (H), Simulation Research CASPOC (NL), Politechnika Warszawa (PL), Politehnica University Timişoara (RO), FEEI Technical University of Košice (SK), Trenčín University of A. Dubček v Trenčíne (SK), University of Maribor (SI).

- Project name: Learning Enhanced by Virtual Reality - IDENTITY
  EU programme: SOCRATES/MINERVA: ODL and ICT in EDUCATION
  Project No: 229930-CP-1-2006-1-RO-MINERVA-M
  Project Duration: 10/2006 - 09/2008.
  Contracting Institution: Transylvania University of Brasov, Romania
  Project co-ordinator for FEEI: FEDÁK, V.
  Project web site: http://iesc.unitbv.ro/identity
  The overall project objective is to produce a high level quality learning environment in an academic European network ensuring an open access to improved educational resources, as well as to the best practices.

  Project partners: Transilvania University of Brasov (RO), Noema-CMI Oy, FINLAND, Technical University of Ilmenau (D), DIBE - University of Genoa (I), Laboratorio delle Idee (I), Universidade Nova de Lisboa (PT), SIEMENS PSE (RO), FEEI, Technical University of Kosice, (SK), The Swedish TelePed. Knowledge Centre (S), EMMERCE EEIG (S)

- SOCRATES Program: Higher education (ERASMUS), SOCRATES project, partner: University of Vaasa (Finland), duration: 2003 - 2009, contact at department BOBER, P., activity: Co-operation within the SOCRATES Program - students and teachers exchange program.

- SOCRATES Program: Higher education (ERASMUS), SOCRATES project, partner: University of Oradea (Romania), duration: 2006 – 2010 contact: DUDRIK, J., activity: Co-operation within the SOCRATES Program - students and teachers exchange program.

6.7. National Educational Projects

- Key Competences Development at PhD. Students for Creating Research Teams, for Research Project Preparation and Management in Mechatronics and Relative Fields. European Social Fund.
  Goal of the project: to prepare 10 PhD. students in order to be able to submit research projects in framework of European Union research programmes and to teach them to all skills to be able to manage such projects and research teams.
  Project co-ordinator: GIRMAN, M., project manager: FEDÁK, V.

- Virtual Laboratory of Technological Processes Control by Programmable Logic Controllers, 2006-2008, KEGA, No 3/4196/06. Project co-ordinator: PERDUKOVÁ, D.

- Virtual Laboratory of Mechatronic Systems Control, 2007-2009, KEGA, No 3/5240/07. Project co-ordinator: ĎUROVSKÝ, F.
- E-lerning multimedial education of the subject – Electromagnetic compatibility, 2008-10, KEGA, No 3/6388/08. Project co-ordinator: KOVÁČOVÁ, I.

7 THESES

7.1. Bachelor Theses

a) Bachelor Theses, study program on Informatics and Control Systems in Mechatronics, full –time students

1. Balog, T.: : Remote experiment with a position controlled drive. Supervisor: Fedák, V.
2. Batmend, M.: Physical model of position machine. Supervisor: Perduková, D.
3. Brunovský, M.: Servo drives of industrial robots. Supervisor: Fetyko, J.
4. Eötvös, E.: Test bench with asynchronous motor. Supervisor: Žilková, J.
5. Hančar, J.: Virtual model of inteligent gate control. Supervisor: Perduková, D.
6. Hlad, J.: Design and realization of teaching tools based on automotive components. Supervisor: Ďurovský, F.
7. Horváth, L.: Control of technological process with microsystem LOGO!. Supervisor: Žilková, J.
8. Horváth, P.: Possibilities of LED lighting sources supply by converters. Supervisor: Ondera, J.
9. Chorovský, P.: Residual current circuit braker. Supervisor: Ferková, Ž.
10. Jún, M.: Design and realization of teaching tools with steering servo unit. Supervisor: Kaňuch, J.
11. Karas, M.: Drives for multimedia equipment mechanisms. Supervisor: Kostelný, M.
12. Karch, Ľ.: Virtual model of conveyors control. Supervisor: Perduková, D.
13. Ocilka, M.: Mathematical model of salient poles synchronous motor. Supervisor: Timko, J.
14. Pavličko, M.: Simulation of vehicle drive cycles by CarSim. Supervisor: Ďurovský, F.
15. Perduľak, J.: Mathematical model of squirrel cage induction motor. Supervisor: Timko, J.
16. Stebnický, J.: Soft switching PWM converter. Supervisor: Dudrik, J.
17. Suško, M.: Design and realization of teaching tools with ABS. Supervisor: Kaňuch, J.
18. Štofej, J.: Virtual model of liquid storage tank control. Supervisor: Perduková, D.
19. Tarnócy, T.: Výukový systém s mikrosystémom LOGO!. Supervisor: Žilková, J.
20. Tkáč, L.: Mathematical model of liear asynchronnous motor. Supervisor: Žilková, J.
21. Vansáč, M.: Vector control of asynchronnous motor. Supervisor: Žilková, J.
22. Vartaš, T.: Servo drives for mobile robots. Supervisor: Fetyko, J.
23. Vápeník, M.: Control of mobile robot drive by microcontroller. Supervisor: Ďurovský, F.

b) Bachelor Theses, study program Industrial Engineering, full –time students

1. Benka, J.: Realisation Study of Multi-dimensional Analysis for Academic Institution. Supervisor: Bober, P.
2. Ferenčík, M.: Physical model of colour blending tank controlled by PLC.

Supervisor: Girovský, P.
3. Fialka, P.: Controlling and effectiveness of company. Supervisor: Harvanová, J.
4. Gomboš, P.: Supply Chain Management. Supervisor: Chromjaková, F.
5. Jackuliaková, A.: Modern tools of enterprise marketing for the rentability improvement. Supervisor: Chromjaková, F.
6. Jurčák, M.: Advantages and disadvantages of electronics marketing. Supervisor: Harvanová, J.
7. Kaľavský, P.: Production of examples for statistical control of quality. Supervisor: Harvanová, J.
8. Karolová, M.: Time-Table Quality Analysis by Means of Cognos 8 Business Intelligence. Supervisor: Bober, P.
9. Kertés, P.: E-learning education of production workers. Supervisor: Chromjaková, F.
10. Kriak, P.: Improvement of quality of services in company Sport & Fashion. Supervisor: Košč, P.
11. Matloň, Š.: Comparison of a big and a small firm on the same market. Supervisor: Kmec, P.
12. Matviak, M.: Analysis of next year plan based on financial analysis of terminated year. Supervisor: Kováčik, P.
13. Mlynarčík, J.: Design of Role Play Simulation Game for Skills Training in Software Quality Engineering. Supervisor: Bober, P.
14. Molnár, S.: Development of management skills. Supervisor: Košč, P.
15. Ogurčák, D.: A class experiment for statistical process control. Supervisor: Kmec, P.
16. Pavlová, M.: Modelling of control of reservs. Supervisor: Harvanová, J.
17. Ročkai, D.: Reporting for Strategic Decision Making in Healthcare Service. Supervisor: Bober, P.
18. Soták, J.: Physical model of light crossing controlled by PLC. Supervisor: Girovský, P.
19. Šivecová, J.: Cost calculation conception for the offer production. Supervisor: Chromjaková, F.
20. Škurka, P.: Realisation Study of Balanced Scorecard for Academic Institution. Supervisor: Bober, P.
21. Škyto, M.: Control of reservs in retail. Supervisor: Harvanová, J.
22. Štefanec, J.: Financial and economic enterprise analysis. Supervisor: Chromjaková, F.
23. Štefaňák, M.: Modern tools of enterprise marketing for the rentability improvement. Supervisor: Chromjaková, F.
24. Stramba, R.: Model of autonomous motion vehicle. Supervisor: Kováčik, P.
25. Takáč, J.: Control and visualization proposition of the process reduction Cr6+ of the colourcounting line. Supervisor: Girovský, P.
26. Toronský, N.: Possibilities of the atractivity rising by internet customer's portfolio. Supervisor: Chromjaková, F.
27. Trembecký, V.: E-learning course for the methods and tolls of productivity raising. Supervisor: Chromjaková, F.
28. Valchář, D.: Price reductions and customer choices. Supervisor: Kmec, P.
29. Verba, M.: Personnel Management in Enterprise. Supervisor: Chromjaková, F.
30. Zeman, J.: E-learning course for the methods and tolls of lean production. Supervisor: Chromjaková, F.
31. Žák, M.: Simulation of the FESTO production line by program ARENA. Supervisor: Girovský, P.

7.2. Masters Theses

a) Master Theses, study program Electrical Drives, full –time students

1. Čéplő, J.: Direct and indirect field oriented control of IM. Supervisor: Žilková, J.
2. Baník, F.: Physical model of intelligent tracked vehicle. Supervisor: Perduková, D.
3. Czetö, J.: Drive control with DC motor on fuzzy model base. Supervisor: Fedor, P.
4. Dorov, M.: DC Dynamometer-measurement and control. Supervisor: Kaňuch, J.
5. Frištik, D.: Mathematical model of internal combustion engine. Supervisor: Ďurovský,F.
6. Grivalský, L.: Linear motor with permanent magnet. Supervisor: Ferková, Ž.
7. Házy, Š.: Universal model of continuous dynamic system. Supervisor: Fedor, P.
8. Hoľko, M.: Renewal of testbench for internal combustion engines. Supervisor: Ďurovský,F.
9. Horňák, P.: The analysis of electromagnetic compatibility motor vehicles. Supervisor: Kaňuch, J.
10. Kováč, M.: Artificial intelligence application for field oriented control of IM. Supervisor: Timko, J.
11. Köver, Š.: Artificial intelligence application for DTC control of IM. Supervisor: Žilková, J.
12. Lazorčík, Z.: Position controlled drive – learning materials for a remote experiment. Supervisor: Fedák, V.
13. Mihaľov, P.: The measurement equipment for the high-speed motors of the small power. Supervisor: Kostelný, M.
14. Sakmar, M.: Control of the Maxon motor by means of EPOS control unit. Supervisor: Ferková, Ž.
15. Švagerko, J.: Height control of air column level. Supervisor: Perduková, D.

b) Master Theses, study program Industrial Engineering, full –time students

1. Bača, T.: Management Information System for University Departments. Supervisor: Bober, P.
2. Bak, L.: Information system for the stock and material flow administration. Supervisor: Chromjaková, F.
3. Baranec, M.: Value Stream Mapping. Supervisor: Chromjaková, F.
4. Bednarčík, L.: Management Information System for Strategic Decision Making at the Level of Self– Governing Region in the Area of Hospital Performance Evaluation. Supervisor: Bober, P.
5. Berník, M.: Lean manufacturing tools – application of 5S method in the selected firm. Supervisor: Chromjaková, F.
6. Bovan, M.: Utilisation of Web 2.0 technologies for the creation of electronic study materials. Supervisor: Chromjaková, F.
7. Brajerová, A.: Creativity development as management skill. Supervisor: Košč, P.
8. Budzák, P.: Design of production material flow using travelling salesman problem. Supervisor: Košč, P.
9. Fidermák, M.: E-learning application for the selected method of industrial engineering. Supervisor: Chromjaková, F.
10. Fodor, P.: Information system for the stock and material flow administration. Supervisor: Chromjaková, F.
11. Gunda, M.: Information systems for tourist trade. Supervisor: Košč, P.
12. Harčár, I.: Quality system design in tourism and hospitality industry. Supervisor: Košč, P.

13. Harvan, R.: Implementation of e-commerce solution in company. Supervisor: Košč, P.
14. Házy, M.: JIT utilization to improve storage and logistics of company. Supervisor: Kováčik, P.
15. Horevaj, J.: Design of an Assembly Line For Circuit-Breaker Manufacturing. Supervisor: Girman, M.
16. Horváth, R.: Value Stream Mapping. Supervisor: Chromjaková, F.
17. Jasaň, M.: Production processes standardisation – 5S method. Supervisor: Chromjaková, F.
18. Jesenská, S.: Use of enneagram for management skills development. Supervisor: Košč, P.
19. Kender, M.: Business process modeling and improvement in tourism and hospitality industry. Supervisor: Košč, P.
20. Kováč, B.: Batch Size Optimisation by Simulation Supervisor: Bober, P.
21. Kreheľ, F.: Simulačná hra pre výučbu predmetu Inžinierstvo kvality softvéru. Supervisor: Bober, P.
22. Lamrani, S.: Implementation of a Kanban system of production line. Supervisor: Girman, M.
23. Leginski, F.-E.: Web Application for Data Collection for Management Information System. Supervisor: Bober, P.
24. Lesný, J.: Software for administration of production resources. Supervisor: Girman, M.
25. Lichvár, J.: Financial analysis of company. Supervisor: Kováčik, P.
26. Matuševský, P.: Self-organizing social systems. Supervisor: Kmec, P.
27. Medvedz, M.: Process management model proposal for the production process. Supervisor: Chromjaková, F.
28. Mertan, S.: Analysis of a company in the wood-processing industry. Supervisor: Kmec, P.
29. Missbach, A.: Scheduling Methods Comparison. Supervisor: Bober, P.
30. Náci, T.: JIT utilization to improve storage and logistics of company. Supervisor: Kováčik, P.
31. Palička, M.: Optimization of in-time ordering. Supervisor: Kmec, P.
32. Pješčák, M.: Quality system of education supported with e-learning technologies. Supervisor: Košč, P.
33. Pleva,J.: Process management model of selected production process. Supervisor: Chromjaková, F.
34. Revák, M.: Production processes standardisation. Supervisor: Chromjaková, F.
35. Skysľak, M: Tools of questionnaire survey. Supervisor: Košč, P.
36. Sminčák, P.: Optimal schemas of enterprise logistics – lean logistics. Supervisor: Chromjaková, F.
37. Ščerbák, P.: Decision making under pressure. Supervisor: Kmec, P.
38. Tomajka, T.: Design of information portal for city High Tatras. Supervisor: Košč, P.
39. Trnik, S.: Productivity raising of enterprise processes. Supervisor: Chromjaková, F.
40. Varga, J.: Layout optimization of production capacities. Supervisor: Kováčik, P.

c) Master Theses, study program Industrial Engineering, part–time students

1. Nociar, M. Bc.: Analysis, Modeling and Improvement of Maintenance Process. Supervisor: Bober, P.

Note: All theses are in Slovak language.

7.3. Theses to the PhD. Exam.

1. CIBUĽA, Ľ.: Direct torque control of the asynchronous motor with the help of fuzzy. Supervisor: TIMKO, J.
2. RUŠČIN, V.: High frequency DC/DC converters with soft switching. Supervisor: DUDRIK, J.

7.4. PhD. Theses

1. MACKO, P.:Fuzzy modelling and control of mechatronic systems. Supervisor: Perduková D.

8 OTHER ACTIVITIES

8.1. Symposia, Workshops, Conferences

- *High-Tech Workshop, Herľany 2008* (May 16 -18, 2008). High-Tech (as the abbreviation of High-Technology) presents an engineering workshop aimed to the informal exchange of ideas of teachers, students, graduates and colleagues from practise in the Educational and Training Centre of Technical University of Košice in Herľany (www.gejzir.sk). Organiser: Perduková D. More information about this activity is to be found in www.tuke.sk/hth.
- *SEKEL, 16-18.9.2008, Herľany,* International Conference of the Teachers of Electrical Engineering
- STRAPING'08: Seminar and Meeting of Industrial Engineers, May 9 - 11, 2008, Herľany, Slovakia
- Student visit in enterprises (October 20 – 23, 2008): Železiarne Podbrezová, SIEMENS Wienna (AT), Slovalco Žiar n.Hr., SE Gabčíkovo, Osram Nové Zámky, Mondi SCP Ružomberok, NDS – highway tunnel Branisko (29 students + 2 pedagogical staff). Organiser: Ďurovský F.
- Student visit in enterprises - SI week in Procter & Gamble – Rakona, Rakovník, Czech Republic

8.2. Student Competitions and Rewards

- Schneider Electric award: The best Bachelor/Master Theses, first price for František Baník
- Schneider Electric award: The best Bachelor/Master Theses, second price for Mišel Batmend
- STOČ´08 Zlín, second price for Štefan Köver
- SCYR 2008: RUŠČIN, V.- BODOR,M.: Dean Award in EEE Section
- SCYR 2008: BANÍK, F.: Dean Award in IT Section
- SCYR 2008: PÁSTOR, M.: SES Branch Award in EEE Section

8.3. Projects for Industry

Project title: 4-ST mil drive problem identification.
Done for: U.S.Steel, Košice
Project manager: Ferková, Ž.

Project title: Technical assistance with solution of problems with drives VT DP HRM
Done for: U.S.Steel, Košice
Project manager: Ferková, Ž.
Co-operating staff: Keusch, P. - Bugár, T.

Project title: Control of flying steel sheet cutter on thick slitting line in U.S.Steel, Košice.
Done for: Kybernetika, s.r.o. Košice
Project manager: Fetyko, J.
Co-operating staff: Ďurovský, F.

Project title: Technological control of flying steel sheet cutter on slitting line (Čačak, Serbia)
Done for: Kybernetika, s.r.o. Košice
Project manager: Fetyko, J.
Co-operating staff: Ďurovský, F.

Project title: Control of drives and process lines (training)
Done for: BWG, Prešov
Project manager: Fetyko, J.
Co-operating staff: Ďurovský, F.

Project title: Reseting of main drive controllers on cellulose making machine.
Done for: Bukocel, s.r.o. Hencovce
Project manager: Fetyko, J.

Project title: Intergrated gate signalling system
Done for: U.S.Steel, Košice
Project manager: Kaňuch, J.
Co-operating staff: Suchý, V. – Hajsák, P.

Project title: Repair of gates signalling equipment
Done for: U.S.Steel, Košice
Project manager: Kaňuch, J.
Co-operating staff: Suchý, V. – Hajsák, P.

Project title: Repair of operator control desks in MPO1 control centre at Steel-plant 2
Done for: U.S.Steel, Košice
Project manager: Kaňuch, J.
Co-operating staff: Suchý, V. – Hajsák, P.

9 PUBLICATIONS

9.1 Books

University coursebooks

1. TIMKO, Jaroslav - ŽILKOVÁ, Jaroslava - DUDRIK, Jaroslav - GIROVSKÝ, Peter: Elektrické pohony a výkonová elektronika. Košice : TU, 2008. 177 s. ISBN 978-80-553-0093-1.

9.2 Scientific Journals

Current Contents

1. DUDRIK, Jaroslav - BAUER, Pavol: New methods in teaching of power electronics converters and devices. In: The International Journal of Engineering Education. vol. 24, no. 5 (2008), p. 1040-1048. ISSN 0949-149X.

Forreign Journals

1. CIBUĽA, Ľubomír - TIMKO, Jaroslav - ŽILKOVÁ, Jaroslava - GIROVSKÝ, Peter: Direct torque control of the asynchronous motor. In: Journal of Computer Science and Control Systems. (2008), p. 18-21. ISSN 1844-6043.
2. ĎUROVSKÝ, František - ZBORAY, Ladislav - FERKOVÁ, Želmíra: Computation of rolling stand parameters by genetic algorithm. In: Acta Polytechnica Hungarica. vol. 5, no. 2 (2008), p. 59-70. ISSN 1785-8860.
3. FEDOR, Pavol - PERDUKOVÁ, Daniela: Fuzzy model based control of thermal systems. In: Acta Technica CSAV. vol. 53, no. 1 (2008), p. 81-92. Internet: <http://journal.it.cas.cz>. ISSN 0001-7043.
4. FERKOVÁ, Želmíra - ZBORAY, Ladislav: Optimal switching angles of a switched reluctance motor. In: Acta Technica CSAV. vol. 53, no. 3 (2008), p. 211-218. ISSN 0001-7043.
5. KÁCSOR, Gabriel - ŠPÁNIK, Pavol - DUDRIK, Jaroslav – LUFT, Miroslaw – SZYCHTA, Elżbieta. Principles of Operation of Three-level Phase Shift Controlled Converter // Electronics and Electrical Engineering. – Kaunas: Technologija, 2008. – No. 2(82). – P. 69–74
6. KOVÁČ, Dobroslav - KOVÁČOVÁ, Irena: Electromagnetic coupling of the electrical drive EMC (Part 2). In: Electrical Power Quality and Utilisation. vol. 14, no. 1 (2008), p. 89-93. ISSN 1234-6799.
7. KOVÁČOVÁ, Irena - KOVÁČ, Dobroslav: Galvanic coupling - EMC of electrical systems (Part 3.). In: Journal of Electrical Engineering. vol. 8, no. 2 (2008), 4 p. ISSN 1582-4594.
8. RUŠČIN, Vladimír - DUDRIK, Jaroslav: Soft switching DC/DC converter using auxiliary circuits. In: Journal of Electrical and Electronics Engineering. (2008), p. 242-245. ISSN 1844-6035.
9. TRIP, Nistor Daniel - POPESCU, Viorel - DUDRIK, Jaroslav - MARUSCA, Andrei : Consideration on a low power solar energy renewable source. In: Journal of Electrical and Electronics Engineering. (2008), p. 276-279. ISSN 1844-6035.
10. ZÁSKALICKÝ, Pavel: Dynamic model of an universal motor with respect of armature reaction and saturation effect. In: Acta Technica CSAV. vol. 53, no. 1 (2008), p. 93-102. ISSN 0001-7043.
11. ZÁSKALICKÝ, Pavel – ZÁSKALICKÁ ,Mária: Analytical Method of Calculation of the Current and Torque of a Reluctance Stepper Motor Using Fourier Complex Series: CSAV No: 3, Vol. 53 (2008), pp. 267-276, Prague 2008.

National Journals

1. BOBER, Peter: Použitie genetických algoritmov pre optimalizáciu rezných plánov (Optimization of Cutting Plans Using Genetic Algorithms). In: Kvalita Inovácia Prosperita (Quality Innovation Prosperity), Vol. 12, No. 2 (2008), ISSN 1335-1745, about to be published.
2. CIBUĽA, Ľubomír - TIMKO, Jaroslav - ŽILKOVÁ, Jaroslava: Fuzzy DTC riadenie pohonu s asynchrónnym motorom. In: Acta Mechanica Slovaca. roč. 12, č. 3-b (2008), s. 105-116. ISSN 1335-2393.

3. DUDRIK, Jaroslav - RUŠČIN, Vladimír: ZVZCS PWM DC-DC Converter with energy recovery clamp. In: Advances in Electrical and Electronic Engineering. roč. 7, č. 1-2 (2008), s. 99-102. ISSN 1336-1376.
4. FETYKO, Ján - ĎUROVSKÝ, František - REINER, Jozef - FEDÁK, Viliam: Modernizácia pohonov a riadiaceho systému vertikálnych valcov predvalcovacej stolice. In: Acta Mechanica Slovaca. roč. 12, č. 1-a/2008 (2008), s. 107-118. ISSN 1335-2393.
5. FETYKO, Ján - ŠIMKO, Ondrej: Adaptive Control of Servo Drives of Robots using Neural Network Based Dynamic Model. In: Acta Mechanica Slovaca. Vol.. 12, No. 2-a/2008, pp.181 – 192, ISSN 1335-2393.
6. GIROVSKÝ, Peter - ŽILKOVÁ, Jaroslava - TIMKO, Jaroslav: Neurónový pozorovateľ rýchlosti asynchrónneho motora. In: Acta Mechanica Slovaca. roč. 12, č. 3-b (2008), s. 227-236. ISSN 1335-2393.
7. HARVANOVÁ, Jana - MIHALÍKOVÁ, Jana: Využitie virtuálnej reality vo výučbe projektovania. In: Acta Mechanica Slovaca. Vol. 12, No. 1-a/2008 (2008), p. 321-324. ISSN 1335-2393.
8. KOŠČ, Peter - HARČÁR, I.: Návrh systému kvality pre penzión podľa ISO 9000. In: Kvalita Inovácia Prosperita (Quality Innovation Prosperity), Vol. 12, No. 2 (2008), ISSN 1335-1745, about to be published.
9. KOŠČ, Peter - PJEŠČÁK, M.: Štandardy kvality pre e-learning produkty a služby. In: Kvalita Inovácia Prosperita (Quality Innovation Prosperity), Vol. 12, No. 2 (2008), ISSN 1335-1745, about to be published
10. KOVÁČ, Dobroslav - KOVÁČOVÁ, Irena: The magnetic fields of electric motors and their EMC. In: Advances in Electrical and Electronic Engineering. roč. 7, č. 1-2 (2008), s. 183-186. ISSN 1336-1376.
11. KOVÁČOVÁ, Irena - KOVÁČ, Dobroslav: EMC capacitive coupling. In: Acta Electrotechnica et Informatica. roč. 8, č. 1 (2008), s. 16-21. ISSN 1335-8243.
12. KOVÁČOVÁ, Irena - KOVÁČ, Dobroslav: Non-harmonic power measuring. In: Acta Electrotechnica et Informatica. roč. 8, č. 3 (2008), s. 3-6. ISSN 1335-8243.
13. MATIS, Ľubomír: Model spínaného reluktančného motora (SRM) v programe PSpice. In: Acta Mechanica Slovaca. roč. 12, č. 1-a/2008 (2008), s. 341-346. ISSN 1335-2393.
14. MIHALÍKOVÁ, Jana - LÍŠKA, Ondrej - HARVANOVÁ, Jana: Simulačný nástroj Cosimir Professional pre programovanie PLC. In: Acta Mechanica Slovaca. roč. 12, č. 1-a/2008 (2008), s. 313-316. ISSN 1335-2393.
15. TIMKO, Jaroslav - ŽILKOVÁ, Jaroslava: Matematický model vstupnej časti kontinuálnej linky. In: Acta Mechanica Slovaca. roč. 12, č. 3-b (2008), s. 805-814. ISSN 1335-2393.
16. ZÁSKALICKÁ, Mária - ZÁSKALICKÝ, Pavel: Analytical method of calculation of the current and torque a reluctance stepper motor via Fourier series ; Advances in Electrical and Electronic Engineering, No.1-2. Vol.7/2008, pp.187-190 , Žilina, 2008

9.3 Specialized Journals

Foreign Specialized Journals

1. PERDUKOVÁ, Daniela - FEDOR, Pavol: Virtuálne laboratórium riadenia technologických procesov programovateľnými automatmi. In: Elektrotechnika v praxi. vol. 18, no. březen, duben (2008), p. 84-87. Internet: <http://www.bael.cz>. ISSN 0862-9730.
2. FERKOVÁ, Želmíra - KUBÍN, Karol: Analýza dôsledkov imperfektnej manipulácie s bremenových ele-ktromagnetom. In: Zdvihací zařízení v teorii a praxi : Elektronický odborný časopis o konstru-kci a provozu zdvihacích,

manipulačních a transportních zařízení a dopravních prostředků. no. 2 (2008), p. 9-13. Internet: <http://www.id.vsb.cz/zdvihacizarizeni/> ISSN 1802-2812.

National Specialized Journals

1. KAŇUCH, Ján: Jednosmerný stroj - historický vývoj. In: EE časopis : Odborný časopis pre elektrotechniku a energetiku. roč. 14, č. 1 (2008), s. 22-25. ISSN 1335-2547.

9.4 Conferences

Conferences Abroad

1. BAUER, Pavol – FEDAK, Viliam – HAJEK Vitezslav – LAMPROPOULOS, Ioannis: Survey of Distance Laboratories in Power Electronics, IEEE 39th Annual Power Electronics Specialists Conference, Rhodos. ISBN 978-1-4244-1668-4.
2. BAUER, Pavol – FEDÁK, Viliam – ROMPELMANN, Otto: PEMCWebLab - Distance and Virtual Laboratories in Electrical Engineering – Development and Trends. EPE-PEMC 2008 Poznaň. ISBN 978-1-4244-1742-1, IEEE catalog number CFP083A-CDR (abstract: ISBN 978-83-921340-6-0).
3. BOBER, Peter: Štúdia použitia genetických algoritmov pre optimalizáciu rezných plánov (Study of Utilization of Genetic Algorithms for Optimizimg Cutting Plans). In: KONFERENCE PI´ 08 - Setkání kateder průmyslového inženýrství, Zlín, 16.-17.10.2008, Zlín: Univerzita Tomáše Bati ve Zlíně, ISBN 978-80-7318-769-9
4. DUDRIK, Jaroslav - RUŠČIN, Vladimír: Voltage fed zero-voltage zero-current switching PWM DC-DC converter. In: EPE-PEMC 2008 : 13th International Power Electronics and Motion Control Conference : 1 - 3 September 2008, Poznan - Poland. S.l. : IEEE, 2008. p. 295-300. ISBN 978-1-4244-1742-1.
5. FEDÁK, Viliam – PERDUKOVÁ, Daniela: Application of Virtual Reality in the Field of Web-Based Education. International Conference on Applied Electrical Engineering and Informatics 2008, AEI 2008, Sept. 8-11, Athens, Greece, ISBN978-80-553-0066-5
6. FERKOVÁ, Želmíra - ZBORAY, Ladislav: Optimal trajectory control. In: ISEM 2008 : 16. International Symposium on Electric Machinery : 10.-11. September 2008, Prague. Prague : Czech Technical University, 2008. p. 130-136. ISBN 978-80-01-04172-7.
7. FERKOVÁ, Želmíra: Determination of optimal switching Angeles of a SRM by genetic algorithm. International conference „Low Voltage electrical machines“, Brno, November 2008, ISBN 978-80-214-3795-1.
8. FERKOVÁ, Želmíra, Kuchta J, Rafajdus P., Franko M. : Electromagnetic design of ironless permanent magnet synchronous linear motor. In: SPEEDAM 2008 : International Symposium on Power Electronics, Electrical Drives, Automation and Motion : Ischia, Italy, 11th-13th June, 2008. S.l. : IEEE, 2008. p. 721-726. ISBN 978-1-4244-1664-6.
9. FETYKO, Jan - DUROVSKY, Frantisek - FEDAK, Viliam: Motion Control of Steel Sheet Shears with Rocking Knife Mechanism. EPE-PEMC 2008 Poznaň. pp.976 – 981, ISBN 978-1-4244-1742-1, IEEE catalog number CFP083A-CDR (abstract: ISBN 978-83-921340-6-0).
10. GIRMAN, Michal - KEUSCH, Peter - KMEC, Peter: Reliability of automated services. In: AEI '2008 : International Conference on Applied Electrical

Engineering and Informatics : September 8-11, Greece, Athens 2008. Košice : FEI TU, 2008. p. 126-129. ISBN 978-80-553-0066-5.

11. KAŇUCH, Ján - ZÁSKALICKÝ, Pavel: Comparison of the behaviour of the serial universal motor supplied by triac and half-controlled rectifier; International conference on Low Voltage Electrical Machines, 3-4. November, 2008, Brno, Czech republic
12. KOVÁČIK, Peter - KEUSCH, Peter: Human operator characteristics modelling. In: Process Control 2008 : Elektronický zdroj : Proceedings of the 8th international scientific - technical conference : June 9 - 12, 2008, Kouty nad Desnou, Czech Republic. Pardubice : Univerzita Pardubice, 2008. p. c140a-1-c140a-6. ISBN 978-80-7395-077-4.
13. KOVÁČIK, Peter - KEUSCH, Peter: Alternative control of flight altitude. In: Process Control 2008 : Proceedings of the 8th international scientific - technical conference : June 9 - 12, 2008, Kouty nad Desnou, Czech Republic. Pardubice : Univerzita Pardubice, 2008. p. c140b-1-c140b-7. ISBN 978-80-7395-077-4.
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