

## DEPARTMENT OF MANUFACTURING SYSTEMS

### Head of Department:

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## I. STAFF

### Professors

*Edita Hekelová*, PhD., Prof.

Professor in: Production quality and technological systems safety.

Research topics: Total quality management, Human factor in quality management systems,

Quality increasing in of higher education institutions

*Aleš Krsek*, PhD., Prof.

Professor in: Manufacturing systems with industrial robots and manipulators.

Research topics: Geometric products specification (GPS), Automation of machinery production

*Štefan Valčuha*, PhD., Prof.

Professor in: Construction of manufacturing machines

Research topics: Technologies in machinery production- application of thin layers at cutting

tools, Automation of engineering activities

*Jozef Zongor*, PhD., Prof.

Professor in: Mechanical engineering technologies

Research topics: Technologies in machinery production, Expert systems for the choice of machining technology, Space research

### Associate Professors

*Vojtech Geleta*, PhD., Assoc. Prof..

Associate Professor in: Mechanical engineering technologies

Research topics: Ultra-precision machining, Water jet machining, Design for manufacture

*Igor Ščepka*, PhD., Assoc. Prof.

Associate Professor in: Industrial economics

Research Topics: Strategic management, Improving quality of higher education

*Marian Tolnay*, PhD., Assoc. Prof.

Associate Professor in: Mechanical engineering technologies

Research topics: Strengthening surface layers of machine components, Industrial robots and manipulators

Senior lecturers: 6

Research workers: 5

PhD. students: 8

Technical staff: 4

## II. EQUIPMENT

### II.1 Teaching and Research Laboratories

- Laboratory for Automated Manufacturing Systems
- CNC Equipment and Robotics Laboratory
- Metal-Cutting Laboratory
- Measurement Laboratory
- Computer Laboratory

## III. TEACHING

### III.1 Undergraduate Study (*Mechanical Production and Quality Management*)

Name of subject	semester	hours per week		reader's name
		lectures	seminars	
Technology II	5	3	2	V. Geleta, J. Zongor
Foundations of Management	5	2	2	I. Ščepka
Production Control and Logistic	5	2	2	I. Součková
Design of Technological Processes	5	2	2	A. Pavlov
Foundations of Dimensional Metrology	5	2	2	A. Krsek
Integrated Systems of Control	5	2	2	E. Hekelová
Business Economics	6	3	2	I. Ščepka
Quality Management	6	2	2	E. Hekelová
Foundations of Design and Programming of Manufacturing Production	6	2	2	M. Králik
Operation of Manufacturing Systems	6	2	2	M. Tolnay

### III.2 Graduate Study (*Automated Manufacturing Systems, Quality Management in Machinery Enterprises*)

Name of subject	semester	hours per week		reader's name
		lectures	seminars	
Dimensional Metrology	1	2	2	A. Krsek
Manipulation and Transport Equipment	1	2	2	M. Tolnay
Machining Technology	1	2	2	J. Zongor

CAX systems	1	2 – 2	Š. Valčuha
Design for Manufacture	1	2 – 2	V. Geleta
Progressive Technologies	1	2 - 2	V. Geleta
Human Resources Management	4	2 – 2	E. Hekelová
Design and Operation of Manufacturing Systems	4	2 – 2	M. Králik
Production Planning and Control	3	2 – 1	I. Součková,
Discrete Systems Simulation	3	2 – 2	V. Jerz
Terminal Project I	1	0 – 5	
Terminal Project II	3	0 – 4	
Theory of Machining	3	2 – 2	A. Pavlov
Industrial Robots Effectors	3	2 – 2	M. Tolnay
Technology of Automated Production	2	2 – 2	J. Zongor
Automation of Machine Tools	2	2 – 2	A. Krsek
Innovation Management	2	1 – 2	J. Chal'
Reliability and Technical Diagnostic	3	2 – 1	
Industrial and Service Robotic	2	2 – 2	A. Červeňan
Marketing	1	2 – 1	E. Hekelová
QMS, Normalization, Certification and Accreditation	1	2 – 2	E. Hekelová, R. Palenčár
Automation of Production Process Planning	4	2 – 2	A. Pavlov
Progressive Technologies	3	3 – 1	V. Geleta, J. Zongor
Applied Database Systems	4	0 – 3	E. Havlíčková
Logistics of Enterprises	2	2 – 2	I. Součková
Quality of Mechanical Processes	2	2 - 2	A. Krsek
Total Quality Management	3	2 – 1	E. Hekelová
Production Management	1	2 – 2	I. Součková
Operation Analysis	2	2 – 2	V. Jerz
Decision Models	3	2 – 1	V. Jerz
Strategic Management	2	2 – 2	I. Ščepka
Project Management	3	2 – 2	I. Ščepka

#### IV. RESEARCH TOPICS

##### Production Technologies and Manufacturing Systems

- NC and CNC Programming of Machine Tools
- Automation of Production Process Planning
- Programming of Industrial Robots and Manipulators
- Technology and Theory of Machining

- Design and Operation of Flexible Manufacturing Systems
- Tools, Mechanism and Systems of Machine Tools for Ultrasonic Hardening of Machined Surfaces of Bearing Castings
- Evaluation of Geometric Surfaces Parameters
- Research of Diamond Films in Technological Applications
- Metrology in Mechanical Engineering

#### **Management of Machinery Enterprises**

- New Approaches in Production Control and Logistics and Possibilities of their Application
- Total Quality Management and Role of Human Factor Theory of Innovation
- Management of Innovation, Problems of Innovation Activity in Slovakia
- Organization Culture and Teamwork
- Quality Increasing in Higher Education
- Financial Management in Manufacturing Companies

### **V. RESEARCH PROJECTS**

- 6th Framework ManVis. Manufacturing Visions. Integrating Diverse Perspectives Info Pan – European Foresight, project under EU 6th Framework Program (A. Pavlov)
- 5th Framework MANTYS, Thematic Network on Manufacturing Technologies – MANTYS, project under EU 5th Framework Program (Š. Valčuha)
- An Innovative Methodology for Assessing and Training Interpersonal – Transferable Skills of Career Starters: Development and Testing, project Leonardo da Vinci (E. Hekelová)
- Key Students Competencies of Technical Fields of Study in National and European Context, Grant VEGA 1/2533/05 (E. Hekelová)
- Distance Learning in the Field of Effectiveness and Efficiency Improvement of TQM Methods, KEGA 3/3113/05 (E. Hekelová)
- Development of the new high temperature short time vertebrate blood pasteurization equipment for the tsetse flies diet, IAEA, project International Atomic Energy Agency –12722 (I. Morávek)
- Dimensional Metrology, Grant VEGA 1/1087/04 (A. Krsek)
- Research Facilities New Super Hard Films on Base Boride Titanium on Cutting Tools, VEGA 1138 (Š. Valčuha)
- Information System about Conditions of Machining with WJM and Laser for Request of Integrity Surface, VEGA 1088 (J. Zongor)
- Selected Problems of Production Structures Simulation and Optimization, VTP KE 1200 (M. Tolnay)
- Research and Realization of Virtual Factory in European Research and Manufacturing Area, VTP 1014 (Š. Valčuha)
- Application of Modern Simulations Programs in Subjects of New Study Programs “Production Technologies”, KEGA 2411 (M. Tolnay)
- Project of E – learning and Design Virtual Environment in the Field Virtual Enterprises Building on Base Intelligent Manufacturing Systems, KEGA 0103 (Š. Valčuha)
- New Methods of Education for Flexible Manufacturing Systems, grant KEGA 2041 (M. Tolnay)

- Intelligent Robotic Systems in the Scientific and Pedagogical Process at the Middle European Universities, project CEEPUS SK – 133 (M. Tolnay)
- Development of mechanical engineering (design, technology and production management) as an essential base for progress in the area of small and medium companies' logistics - research, preparation and implementation of joint programs of study CEEPUS II-PL-0033-01-0506 (M. Tolnay)

## **VI. COOPERATION**

### **VI.1 Cooperation in Slovakia**

- VOLKSWAGEN Slovakia, Inc.
- Institute for Standardization, Metrology and Testing SR
- Konštrukta - Industry, Inc., Trenčín
- MTF Faculty STU Trnava
- Slovak Academy of Sciences
- Slovak Institute of Metrology
- Slovak Institute of Technical Standardization
- TU Košice, Faculty of Economics
- TU Košice, Faculty of Mechanical Engineering
- ZU Žilina, Faculty of Mechanical Engineering
- TU Zvolen, Faculty of Wood Sciences and Technology
- VOJUS, Inc., Považská Bystrica
- VUNAR, Inc. Nové Zámky
- ZTS LR – NaJUS, Inc. Dubnica nad Váhom
- ZTS VVÚ Košice, Inc.

### **VI.2. International Cooperation**

- Department of Management, University of Southern Mississippi, USA
- Faculty of Technical Sciences, University of Novi Sad, Serbia and Montenegro
- Forschungsinstitut für Europafragen, Wirtschaftsuniversität, Vienna, Austria
- Anglia Polytechnic University, Cambridge, England
- Institut für Fertigungstechnik, Austauschbau und Messtechnik, TU Vienna, Austria
- Institut für Wirtschaftsforschung, Halle, Germany
- Krakow University of Technology, Mechanical Engineering Faculty, Production Engineering Institute, Poland
- Oradea University, Romania
- OvG University Magdeburg, Germany, Institute for Ergonomics, Manufacturing Systems and Automation, Germany
- TechSET, Vienna, Austria
- University of Rouse, Department of Machine Engineering, Bulgaria
- Technik Akademie. Learning & Knowledge in Centrope

### **VI.3 International Scientific Programs**

- 6<sup>th</sup> Framework ManVis. Manufacturing Visions. Integrating Diverse Perspectives Info Pan – European Foresight, project under EU 6th Framework Program) (A. Pavlov)

- 5<sup>th</sup> Framework MANTYS. Thematic Network on Manufacturing Technologies – MANTYS, project under EU 5th Framework Program (Š. Valčuha)
- An Innovative Methodology for Assessing and Training Interpersonal – Transferable Skills of Career Starters: Development and Testing, project Leonardo da Vinci (E. Hekelová)
- Development of the new high temperature short time vertebrate blood pasteurization equipment for the tsetse flies diet. IAEA, project International Atomic Energy Agency – 12722 (I. Morávek)

#### **VI.4. Contracts**

- HZ No 4/05 Mill works (House of Technology). Principal investigator: I. Morávek
- HZ No 23/05 Study of Dynamical Characters for Manufacturing Line PL – 50 and Comparison of Alternative Possible Layout and Parameters (AWECO Appliances Slovakia, k. s.). Principal investigator: V. Jerz
- HZ No 53/05 Vibration Measurement of Long Drill during Machining on the CNC Milling Machine (Institute of Materials and Machine Mechanic, Slovak Academy of Sciences Bratislava). Principal investigator: I. Morávek
- HZ No 26/05 Conference Mechanical Engineering 2005, Principal investigator: V. Geleta
- HZ No 65/2005 Production 40 parts „Flange“ according to part no. 861147 (M&M, P&P Nové Zámky). Principal investigator: I. Morávek

#### **VI.5 Memberships in Domestic Organizations and Societies**

- E. Hekelová - Member of the Technological standard creating commission No. 72 Environmental Management
- E. Hekelová - Member of PhD study field joint committees
- E. Hekelová - Member of an Accreditation Commission, Slovak Republic - work group
- E. Hekelová - Chairperson of the control commission of the Slovak Association of Mechanical Engineers
- E. Hekelová - Member of an Expert commission for developing the content of the study branch Industrial engineering and production quality
- E. Hekelová - Member of the Scientific Board of the Faculty of Mechanical Engineering, STU Bratislava
- E. Hekelová - Member of the Scientific Board of the College of Management, Trenčín, Slovak Republic
- E. Hekelová - Member of the Scientific Board of the science journal Management of industrial Enterprises
- A. Krsek - Member of PhD study field joint committee
- A. Krsek - Member of testing commission of the SKSI– appointed by the Minister for Environmental issues of the Slovak Republic
- A. Krsek - Member of the Scientific Council of the Faculty of Mechanical Engineering, STU Bratislava
- A. Krsek - Member of TNK No. 77 Geometric Specifications of Products, Slovak Institute of Technical Standardisation, Bratislava
- M. Tolnay - Member of PhD study field joint committees
- M. Tolnay - Slovak Association of Mechanical Engineers – president
- M. Tolnay - Member of the Council of the Slovak Association of Scientific-technological Societies

- M. Tolnay - Member of an Accreditation Commission, Slovak Republic - work group
- J. Zongor - Member of the Technological standard creating commission No. 29 Safety of Machines and Ergonomic. Slovak Institute of Technical Standardisation, Bratislava

#### **VI.6 Memberships in International Organizations and Societies**

- M. Tolnay – Member of the International Informatization Academy (UNESCO)
- Š. Valčuha – Representative of SR in CECIMO (Brussels)

#### **VI.7 Foreign Visitors to the Department**

- Univ. Prof. Dr. P. H. Osanna - TU Vienna, Austria (1 day)
- Mgr. Adam Kmiecik, PhD. - Politechnika Krakowska, Poland (1 month)
- Univ. Prof. Dr. P. H. Osanna - TU Vienna, Austria (1 day)
- Login Gondek - Politechnika Krakowska, Poland (7 days)
- Scientific community (50 persons) - University Novi Sad, Serbia and Montenegro (1 day)
- Univ. Prof. Dr. P. H. Osanna - TU Vienna, Austria (1 day)
- Chavdar Kostadinov – Bulgaria (1 moth)
- Dr. Berkant Gloch – Bulgaria (1 month)
- Dr. Venelin Dikov – Bulgaria (1 month)
- Prof. Ivica Veza – Croatia (13 days)
- Univ. Prof. Dr. P. H. Osanna, TU Vienna, Austria (1 day)
- Univ. Prof. Dr. P. H. Osanna, TU Vienna, Austria (1 day)
- Prof. Janko Hodolič - TU Novi Sad, Serbia and Montenegro (11 days)
- Asoc. Prof. Dr. Ing. Miodrag Stevič - TU Novi Sad, Serbia and Montenegro (11 days)

#### **VI.8 Visits of Staff Members and Postgraduate Students to Foreign Institutions**

- Š. Valčuha - Bilbao, Spain (2 days)
- A. Guniš - Vienna, Austria (1 day)
- Š. Valčuha - Brussels, Belgium (4 days)
- A. Krsek - Vienna, Austria
- Š. Valčuha - Brussels, Belgium (3 days)
- M. Tolnay - TU Novi Sad, Serbia and Montenegro (3 days)
- Š. Valčuha - TU Novi Sad, Serbia and Montenegro (3 days)
- A. Pavlov - TU Novi Sad, Serbia and Montenegro (3 days)
- Š. Valčuha - Brussels, Belgium (days)
- Š. Valčuha - Gliwice, Wisla, Poland (4 days)
- Ľ. Hrubá - Gliwice, Wisla, Poland (4 days)
- J. Šišlák - Gliwice, Wisla, Poland (4 days)
- A. Guniš - Vienna, Austria (1 day)
- M. Králik - Hallein, Salzburg, Austria (1 day)
- A. Guniš - Hallein, Salzburg, Austria (1 day)
- A. Červeňan - Hallein, Salzburg, Austria (1 day)
- Š. Valčuha - Torino, Italy (4 days)
- M. Králik - Maribor, Slovenia (11 days)
- A. Krsek - TU Vienna, Austria
- I. Morávek - Vienna, Austria (5 days)
- I. Morávek - Vienna, Austria (5 days)

- M. Tolnay - Oradea, Romania (4 days)
- Š. Valčuha - Oradea, Romania (4 days)
- A. Pavlov - Oradea, Romania (4 days)
- A. Guniš - Serbia and Montenegro (6 days)
- J. Bajzek - Vienna, Austria (1 day)
- A. Červeňan - Vienna, Austria (1 day)
- A. Guniš - Vienna, Austria (1 day)
- M. Tolnay - TU Russe, Bulgaria (15 days)
- A. Krsek - TU Vienna, Austria (1 day)
- Š. Valčuha - Salerno, Italy (7 days)
- M. Tolnay - Salerno, Italy (7 days)
- Š. Valčuha - Hannover, Germany (4 days)
- M. Tolnay - Hannover, Germany (4 days)
- M. Králik - Hannover, Germany (4 days)
- A. Pavlov - Hannover, Germany (4 days)
- M. Bachratý - Hannover, Germany (4 days)
- V. Jerz - Hannover, Germany (4 days)
- A. Krsek - Hannover, Germany (4 days)
- E. Hekelová - Antalya, Turkey (7 days)
- Š. Valčuha - Milan, Italy (4 days)
- A. Pavlov - Vrnjačka Banja, Serbia and Montenegro (6 days)
- Š. Valčuha - Paris, France (3 days)
- A. Pavlov - Blend, Slovenia (4 days)
- A. Guniš - Blend, Slovenia (4 days)
- A. Krsek - Vienna, Austria (1 day)
- Š. Valčuha - Budapest, Hungary (3 days)
- A. Krsek - TU Vienna, Austria (1 day)
- A. Krsek - TU Vienna, Austria (1 day)
- J. Šišlák - Hannover, Germany (4 days)
- Ľ. Hrubá - Hannover, Germany (4 days)
- D. Somora - Hannover, Germany (4 days)

## VII. THESES

### VII.2 Graduate Theses (Diploma works)

(Supervisor's name in the brackets)

Study branch *Manufacturing Systems with Industrial Robots and Manipulators*

- |  |               |
|--|---------------|
| [1] Dadík, M.: <i>Manipulating with Products Pallets in a Technological Equipment to Feed PU Packing</i>   | (A. Červeňan) |
| [2] Furka, J.: <i>Database and its Implementation for E-Learning in the Area of Ultraprecise Machining</i> | (V. Geleta)   |
| [3] Haris, R.: <i>Design of a Conveyor in the Company OSRAM Slovakia</i>                                   | (A. Červeňan) |
| [4] Hofer, A.: <i>Design of the Robot's KUKA Gripper for VW Slovakia Paint Shop</i>                        | (A. Červeňan) |
| [5] Horecký, M.: <i>Design of an E-Learning Model System for a Virtual Factory</i>                         | (Š. Valčuha)  |
| [6] Irša, M.: <i>Monitoring of Oscillation in a Technology Configuration</i>                               | (J. Zongor)   |

- [7] Junas, M.: *Generating the Module of Industrial Robots and Manipulators in a Structured Database* (M. Tolnay)
- [8] Koreň, J.: *Database and its Implementation for E-Learning in the Area of Ultraprecise Machining* (V. Geleta)
- [9] Kosnáčová, A.: *Design of a Hypothetical Model for Cutting Environments Classification* (M. Bachratý)
- [10] Královič, J.: *Applying CAE Technology to Design of a Robotized Workplace for Arc Welding* (A. Červeňan)
- [11] Kubrický, I.: *Cutting Tool Wear and Durability* (J. Zongor)
- [12] Kútik, T.: *Supporting System for the Choice of Machine Tools System* (J. Zongor)
- [13] Lauro, E.: *Applying CAE Technology to Design of a Robotized Cell for Conducting Finishing Technology Operations* (J. Zongor)
- [14] Maruška, D.: *Structured Database for Being Addressed Control of Transport Containers* (M. Tolnay)
- [15] Medňanský, M.: *Packaging Automation in the Company Chirana Stará Turá, Injekta* (A. Červeňan)
- [16] Mikuš, R.: *Simulation of Manufacturing Lines in the Company Nestlé Slovakia by means of the Program Witness* (V. Jerz)
- [17] Molnár, M.: *Project of E-learning in Teaching the CNC Machines Programming* (M. Králik)
- [18] Oršula, R.: *Design of a Modular Concept of a Mobile Robot's Chassis* (A. Červeňan)
- [19] Popjak, J.: *Development, Vision and Production Strategy in European Area* (A. Pavlov)
- [20] Repta, J.: *Automation of Technology Processes design* (A. Pavlov)
- [21] Slávik, J.: *Design of a Layout of Mould Casting Cells to Manufacture 1 300 T AL Castings* (V. Jerz)
- [22] Štvrtecký, P.: *Design of a Technology Process to manufacture a Component* (J. Zongor)
- [23] Tužinský, D.: *Making of Integrated Manufacturing Systems in Modelling Environment LEGO Robotic* (M. Tolnay)
- [24] Vaculová, K.: *Characteristics of a Surface Machined by High-Energy Liquid Beam* (J. Zongor)
- Study branch *Management of Machinery Enterprises*
- [1] Bartošová, H.: *Design of a Warehousing System for the company PASTPRKALT* (I. Součková)
- [2] Bekarlanov, P.: *Employees' Fluctuation in the Company RIEKER SHU, AG and its Selected Subsidiaries in Slovakia* (I. Janiga)
- [3] Bubán, T.: *Project of the Company's OTS Bratislava Organization Structure and Management* (E. Hekelová)
- [4] Dorňák, K.: *Improving Firm's Quality by means of Marketing Tools* (E. Hekelová)
- [5] Gálik, D.: *The Influence of Input Materials on Products Quality in the Company SAM HOLDING Myjava* (I. Janiga)
- [6] Hrajnoha, I.: *Logistics in Manufacturing Technologies* (J. Zongor)
- [7] Hulla, P.: *Statistical Quality Control in Production in the Company KAPPA Štúrovo* (I. Janiga)
- [8] Kainová, M.: *Application of Intranet in the IBM Subsidiary Management* (I. Verešová)

- [9] Kelemenová, M.: *Design of New Office Furniture in the Company VITAL* (J. Chal')
- [10] Martinkovičová, M.: *Statistical Quality Control of Products Made from the Spring of Formed Parts from Wire and Band in the Company PFS, Brezová pod Bradlom* (I. Janiga)
- [11] Michalková, M.: *Statistical Control of the Preciseness of Liquids Filling in the Company AMT, Nové Mesto nad Váhom* (I. Janiga)
- [12] Nôtová, L.: *Regional Technology Foresight* (M. Šestáková)
- [13] Oško, M.: *Analysis and Optimization of Materials Flows in the Company KRAFT FOODS Slovakia by Means of a Program System Witness* (I. Součková)
- [14] Paál, A.: *Financial Planning in the Company SES Tlmače* (M. Šestáková)
- [15] Palcutová, V.: *Design of an Effective Storing of Hydraulic Equipment Inventories in the Company IKEMA* (I. Janiga)
- [16] Paroš, J.: *Statistical Regulation in the Company Železiarne Podbrezová* (I. Janiga)
- [17] Plevová, J.: *Financial Characteristics of the Company PALMA – TUMYS* (M. Šestáková)
- [18] Podmajerský, P.: *The Relation between Interest Rates and the Size of Households' Deposits* (I. Janiga)
- [19] Pokrivčáková, M.: *Building the Quality Management system in the Firm according to Standards STN EN ISO 9001:2001* (E. Hekelová)
- [20] Smolen, P.: *Automating the Glass Fibre Transportation* (P. Sivák)
- [21] Szabóová, E.: *Design of a System „Management by Objectives“ under Conditions of the Company SHP Harmanec* (J. Chal')
- [22] Šimko, J.: *Design of a Firm's Strategy in the Company SVORNOST', Co Ltd.* (I. Ščepka)
- [23] Štvrtecký, B.: *Application of rational organizational structure in company NAFTASTROJ with application process control principles* (I. Ščepka)
- [24] Šuleková, E.: *Design of an Effective Storing of Spare Parts Inventories for High-pressure Hydraulics* (I. Janiga)
- [25] Zemesová, J.: *Applying Program System Witness to Production Cost Optimization in a Manufacturing Enterprise* (V. Jerz)

### VII.3 Bachelor works

Study branch *Mechanical Production and Management*  
(Supervisor's name in the brackets)

- [1] Abramovič, R.: *Classification and Description of Construction Grippers of Industrial Robots* (M. Tolnay)
- [2] Albert, R.: *Design of a Human Resources Database Generating* (E. Havlíčková)
- [3] Bednár, T.: *Classification and Description of Industrial Robots and Manipulators* (M. Tolnay)
- [4] Bojnáková, R.: *New Market at the Slovakia's Capital Market* (K. Maletzová)
- [5] Bublavá, B.: *Material Flows Optimization Possibilities* (I. Součková)
- [6] Czuczor, G.: *Analysis of Financial Alternatives in Enterprises* (K. Maletzová)
- [7] Dobrovodský, R.: *Industrial Application of UH Radiation* (I. Morávek)
- [8] Drobný, M.: *Different Directions of Machinery Production Development* (A. Guniš)
- [9] Fiľarská, K.: *Determining the Number of Employees in a Manufacturing*

- Enterprise* (K. Maletzová)
- [10] Hičák, Š.: *Small and Medium-Sized Enterprises – Analysis of the Sector, Financing Possibilities* (K. Maletzová)
- [11] Kaláber, J.: *Possibilities of Automatic Monitoring the Terminal Tasks and their Scoring* (E. Havlíčková)
- [12] Katrenčík, T.: *Possibilities of Applying Witness System in Teaching* (I. Součková)
- [13] Kubal, P.: *Scanning Systems for Coordinate Measurement Machines* (M. Králik)
- [14] Lučenič, M.: *Possibilities to Use Intranet as One of the Management Tools in a Firm* (E. Havlíčková)
- [15] Paľko, T.: *Application input - output place for automated warehousing system* (A. Červeňan)
- [16] Petráš, M.: *Automation of Technology Processes Design* (A. Pavlov)
- [17] Ritomský, P.: *Analysis of Current Situation in Internet Using from the Point of Vies of Small Enterprises Operations* (E. Havlíčková)
- [18] Straková, J.: *Analysis of Production Control Systems in a Machinery Enterprise* (I. Součková)
- [19] Szabová, A.: *Reliability of Machines and Equipment in Manufacturing Systems* (V. Jerz)
- [20] Žifčák, M.: *Analysis of Enterprises' Environment, Evaluation of Firms' Objectives* (K. Maletzová)
- [21] Žilka, P.: *Quality Control of Selected Car Components* (M. Králik)

## VIII. OTHER ACTIVITIES

- E. Hekelová - Chairman of Commission for Quality Management System of Education at the Faculty of Mechanical Engineering STU Bratislava
- E. Hekelová - Deputy Chairman of the Commission for the Quality Management System of Education at the STU
- J. Zongor - Member of the Commission for PhD. Dissertations at VUT Brno, Faculty of Mechanical Engineering, Czech Republic
- Organising of the International Conference *Mechanical Engineering 2005*, STU in Bratislava, Faculty of Mechanical Engineering, November 16, 2005.

## IX. PUBLICATIONS

- [1] Bachratý, M.: *Cutting environs selection by using a new approach to marking*. In.: 9. International Conference Mechanical Engineering 2005, Bratislava 2005, pp. 738-740, ISBN 80-227-2314-2 (in Slovak)
- [2] Durakbasa, M. N., Osanna, H., Afjehi-Sadat, A., Samarawickrama, D., Krsek, A.: *Application of Sophisticated Production Metrology and Nanometrology for Quality Control in Bio-Engineering*. In.: Measurement Science Review – Journal of the Institute of Measurement Science SAS, Volume 5, 2005, pp. 1-10, ISSN 1335-8871
- [3] Feik, M., Tolnay, M.: *Transformation of Education System with Accent on High Education*. In: Ten Years of Slovak Republic, Matica slovenská, Martin, 2004, pp. 379- 388, ISBN 80-7090-763-0 (in Slovak)

- [4] Fidler, B., Fidler, M.: *Capability Maturity Model version 1.1, use for successful manufacturing systems acquisition*. In: 9. International Conference Mechanical Engineering 2005, Bratislava 2005, pp. 651-658, ISBN 80-227-2314-2 (in Slovak)
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