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**DEPARTMENT OF APPLIED INFORMATICS AND INFORMATION TECHNOLOGY**

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<http://www.fei.stuba.sk/>

**Head of Department**

**Prof. RNDr. Otokar Grošek, PhD.**  
e-mail: otokar.grosek@stuba.sk

Tel: ++421-2-602 91 226  
Fax: ++421-2-654 20 415

**I. STAFF**

|                      |   |
|----------------------|---|
| Professor            | Prof. RNDr. Otokar Grošek, PhD.   |
| Associate Professors | Doc. RNDr. Jaroslav Fogel, PhD., Doc. RNDr. Gabriel Juhás, PhD.,<br>Doc. RNDr. Karol Nemoga, PhD., Doc. Dr. Ing. Miloš Oravec,  |
| Assistant Professors | Ing. Štefan Balogh, Ing. Alexander Hambalík, PhD.,<br>RNDr. Igor Kossaczky, CSc., RNDr. Eva Kostrecová, PhD.,<br>Mgr. Marek Sýs, PhD., Mgr. Zuzana Ševčíková,<br>Ing. Milan Vojvoda, PhD. (Deputy Head of Dept.)<br>Ing. Pavol Zajac, PhD.  |
| Research Workers     | Ing. Fedor Lehocki  |
| Technical Staff      | Zuzana Šabíková (secretary)<br>Brigita Timková  |
| PhD. Students        | Ing. Lukáš Adamko, Ing. Michal Braško, Ing. Matej Feder,<br>Ing. Ondrej Gallo, Ing. Jaroslav Hamráček, Ing. Matúš Jókay,<br>Ing. Igor Kazlov, Ing. Stanislav Marček, Ing. Ján Mazanec,<br>Mgr. Michal Mikuš, Ing. Vladislav Novák, Ing. Ľuboš Omelina,<br>Ing. Filip Pilka, Ing. Štefan Počarovský, Ing. Marek Repka,<br>Ing. Martin Riesz, Ing. Milan Zelina |

**II. EQUIPMENT**

**II. 1 Teaching and Research Laboratories**

- Laboratory of Security Technologies
- DIEDC - Database Information Education and Demonstration Center
- Laboratory of System Programming
- Laboratory of Medical Informatics
- Laboratory of Operating Systems and Communication Protocols

**II. 2 Special Measuring Instruments and Computers**

- HP Proliant ML 150
- 2x CPU INTEL XEON 2,8 GHz
- RAM 12 GB
- HDD 35 GB
- MSDN Academic Alliance (MSDN AA) = Microsoft Developers Network Academic Alliance

**III. TEACHING**

**III.1 Undergraduate Study (Bc.)**

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

|                                       |                   |               |
|---------------------------------------|-------------------|---------------|
| Algorithms and Programming            | (1st sem., 3-2 h) | P. Zajac      |
| Algorithms and Programming            | (1st sem., 3-2 h) | M. Sýs        |
| Algorithms and Programming            | (1st sem., 3-2 h) | I. Kossaczký  |
| Analysis and Complexity of Algorithms | (5th sem., 3-1 h) | M. Vojvoda    |
| Classical Ciphers                     | (4th sem., 2-2 h) | O. Grošek     |
| Database Systems                      | (3rd sem., 3-2 h) | M. Vojvoda    |
| Operating Systems                     | (3rd sem., 3-2 h) | J. Fogel      |
| Programming Techniques                | (2nd sem., 3-2 h) | I. Kossaczký  |
| Designing of Database Systems         | (2nd sem., 3-1 h) | G. Juhás      |
| Information Security                  | (5th sem., 2-2 h) | E. Kostrecová |
| Computer Crimes                       | (6th sem., 2-2 h) | E. Kostrecová |
| Modelling in Software Engineering     | (5th sem., 2-2 h) | J. Hanák      |
| Introduction to Cryptography          | (5th sem., 2-2 h) | O. Grošek     |
| Fast Algorithms                       | (6th sem., 2-2 h) | K. Nemoga     |
| Communication Protocols               | (6th sem., 4-1 h) | A. Hambalík   |
| Introduction to Computer Science      | (3rd sem., 3-2 h) | O. Grošek     |
| Communication Networks 1              | (2nd sem., 3-1 h) | M. Oravec     |
| Software Application Development 1    | (3rd sem., 2-2 h) | G. Juhás      |
| Software Architecture                 | (5th sem., 2-2 h) | G. Juhás      |
| Management of IT Projects             | (6th sem., 2-2 h) | F. Lehocki    |
| Workflow Management Systems           | (6th sem., 2-2 h) | F. Lehocki    |

### III.2 Graduate Study (Ing.)

|   |                        |                                 |
|---|------------------------|---------------------------------|
| Object-Oriented Programming                             | (1st sem., 3-2 h)      | V. Novák                        |
| Ciphers in Communication Networks                       | (1st sem., 3-2 h)      | K. Nemoga                       |
| Modelling and Simulations of Event Systems              | (1st sem., 3-2 h)      | G. Juhás                        |
| Practice of Security of Information Systems             | (1st +3rd sem., 3-2 h) | M. Zanechal                     |
| Formal Methods  | (1st sem., 3-2 h)      | J. Fogel                        |
| Cryptanalysis   | (3rd sem., 3-2 h)      | M. Vojvoda, M. Sýs,<br>P. Zajac |
| Analysis and Synthesis of Event Systems                 | (2nd sem., 3-2 h)      | G. Juhás                        |
| Biometrics  | (2nd sem., 3-2 h)      | M. Oravec                       |
| System Programming                                      | (2nd, 4th sem., 3-2h)  | J. Fogel                        |
| Design of Ciphers                                       | (3rd sem., 3-2 h)      | P. Zajac                        |
| Machine Learirng and Neural Networks                    | (1st sem., 3-2h)       | M. Oravec                       |
| Workflow Management Systems, Processes and Web Services | (2nd sem., 3-2 h)      | F. Lehocki                      |

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

|                            |                          |            |
|----------------------------|--------------------------|------------|
| Algorithms and Programming | (1st sem., 12 h consul.) | M. Sýs     |
| Programming Techniques     | (2nd sem., 12 h consul.) | M. Sýs     |
| Databases Systems          | (3rd sem., 12 h consul.) | Š. Balogh  |
| Computer Architecture      | (2nd sem., 12 h consul.) | M. Jókay   |
| Business Management        | (2nd sem., 12 h consul.) | F. Lehocki |
| Classical Ciphers          | (4th sem., 12 h consul.) | O. Grošek  |

### **III.4 Distance Study**

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|----------------------------|---------------------------|-------------|
| Algorithms and Programming | (1st sem., 6x2 h consul.) | A. Hambalík |
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## **IV. RESEARCH PROJECTS**

- ERASMUS Educational Project, Bilateral Agreement, University of La Laguna, Spain (O. Grošek)
- Technology Transfer in the Area of Workflow Process Analysis, Grant APVV-0618-07 (G. Juhás)
- Synthesis of Petri Nets From Nonsequential Scenarios, VEGA 1/0872/08 (G. Juhás)
- Development of Norwegian – Slovak Cooperation in Cryptology, NIL Fund Supporting Cooperation in the Field of Education NIL-I-004, 07.07.2008 – 30.09.2010 (O. Grošek)
- Solution of Current Problems in Cryptology, VEGA 1/0244/09 (O. Grošek)
- Modernization of Education Process in Basic and Grammar Schools., ITMS: 26110130083, 26140130013 and ITMS: 26110130084, 26140130084, certified lector in the project, (A. Hambalík)
- Proposal of Methods of Analysis and Classification for Biometric Recognition of Human Faces and Traffic in Communication Networks, VEGA 1/0214/10 (M. Oravec)
- Cryptographic Algorithms and Primitives with Increased Resistance Against Side Channel Attacks, Project SK-FR-0011-09 (O. Grošek)
- Centre of Excellence of SMART Technologies, Systems and Services ITMS: 26240120005 (G. Juhás)
- Centre of Excellence of SMART Technologies, Systems and Services II ITMS: 26240120029 (G. Juhás)

## **V. COOPERATION**

### **V.1 Cooperation in Slovakia**

- Mathematical Institute, Slovak Academy of Sciences, Bratislava
- National Security Authority, Bratislava
- Faculty of Mathematics, Physics and Informatics, Comenius University, Bratislava
- Association of the Infovek Project, Ministry of Education of the Slovak Republic – Project of Informatization of Regional School – PIRŠ
- Slovak Research and Development Agency, Bratislava
- Faculty of Chemical and Food Technology, STU, Bratislava
- Technical University, Zvolen
- J. Selye University, Komárno
- Bratislava Metodical and Pedagogical Centre

- Trenčín Metodical and Pedagogical Centre
- Virtual Academy of Bratislava Self-Governing Region
- University of Constantin the Philosopher, Nitra
- Department of Engineering Pedagogy and Psychology, MtF STU Bratislava
- Ministry of Finance of the SR
- Institute of Measuremet, Slovak Academy of Sciences, Bratislava
- Slovak Standards Institute
- Ministry of Health of the SR, Strategic Targets of Health
- Security Authority of the Ministry of Defence of the SR
- Institute of Forensic Science of Police Corps, Bratislava
- ÚIPŠ Bratislava
- Elfa, Ltd. Košice
- Datalan, Ltd. Bratislava
- Centre of Distance Education (SDV ICV CUP REK), Bratislava
- Centire, Ltd. Bratislava

## V.2 International Cooperation

- Institute of Informatics, Academy of Sciences of the Czech Republic, Prague, CzR
- University of LA LAGUNA, Department of Statistics, Operations Research and Computing, Tenerife, Spain
- Department of Information Systems Security, Concordia University College of Alberta, Canada
- Faculty of Informatics MU Brno, CzR
- Department of Mathematics, Faculty of Electrical Engineering, ČVUT Prague, CzR
- Lehrstuhl fuer Angewandte Informatik, Katholische Universitaet Eichstaett-Ingolstadt, Germany
- Fachgruppe Simulation und Modellierung, Institut fuer Systems Engineering, Universitaett Hannover, Germany
- Florida Atlantic University, Boca Raton, Florida, USA
- Department of Mathematics, University of Washington, Tacoma, Washington, USA
- Institute for Experimental Mathematics, University of Essen, Germany
- Department of Mathematics and Science, Indiana State University, USA
- Eszterházy Károly College, Eger, Hungary
- DELTA Elektronik Limited, Budapest, Hungary
- Fundatia Sapientia–Universitatea Sapientia, Facultatile din Miercurea Ciuc, Roumania
- AINTEK A.E, Greece
- Virginia Tech, Blacksburg, Virginia, USA
- McMaster University, Hamilton, Canada
- University of Waterloo, Canada
- University of Toronto, Canada
- Universität Augsburg, Germany
- Institut for Informatikk, Universitetet i Bergen, Norway
- Department of Computer Engineering and Mathematics, Universitat Rovira i Virgili, Spain
- Laboratoire Hubert Curien, Université Jean Monnet, Saint -Etienne, France
- Technische Universiteit Eindhoven, Eindhoven, The Netherlands
- University of Southampton, UK

## V.3 Membership in International Organizations and Societies

- AMS – American Mathematical Society (O. Grošek)
- SIAM – Society for Industrial and Applied Mathematics (O. Grošek)
- IEEE Computer Society (J. Fogel)
- IACR (K. Nemoga)
- IET, IEEE (M. Oravec)
- The European Association for the Transfer of Technologies, Innovation and Industrial Information (F. Lehocki)

- IEEE EBMS (F. Lehocki)

#### **Membership in Editorial Boards of International Journals**

- Tatra Mountains Mathematical Publications, publisher: Mathematical Institut of SAS, O. Grošek
- Tatra Mountains Mathematical Publications, publisher: Mathematical Institut of SAS, K. Nemoga – managing editor
- Zentralblath Math, publisher: De Gruyter, K. Nemoga - managing editor of the Slovak Unit
- Journal of Mathematical Cryptology, O. Grošek
- Central European Journal of Computer Science (CEJCS), publisher: Versita, co-published with Springer Verlag, M. Oravec - editor
- Transactions on Petri Nets and Other Models of Concurrency (publisher: Springer Verlag), G. Juhás

## **VI. THESES**

### **VI.1 Masters Theses**

Masters theses supervised at the Department of Applied Informatics and Information Technology. The names of supervisors are in brackets.

- [1] Laššák, J.: Security Communication in Client/Server Applications (K. Nemoga)
- [2] Kühnel, M.: Random Number Generator Based on Elliptic Curve (K. Nemoga)
- [3] Vagánek, P.: Alternative Representations of Elliptic Curves in Cryptography (P. Zajac)
- [4] Török, T.: LLL Algorithm in Cryptography (M. Sýs)
- [5] Repka, M.: Generic Attacks on Feistel Schemes (O. Grošek)
- [6] Petříčko, D.: Encryption in Botnets (P. Košinár, O. Grošek)
- [7] Oravec, I.: Network Information System Security Assessment Methodology (V. Janský, O. Grošek)
- [8] Šrenkel, V.: Timing Side Channel Attacks (M. Vojvoda)
- [9] Schwarcz, M.: Analysis of Algorithms for Fingerprints Classification (K. Nemoga)
- [10] Rybánska, D.: Side Channel Attacks Based on Error Messages (M. Vojvoda)
- [11] Prídavok, M.: Side Channel Attacks with Fault Induction (M. Vojvoda)
- [12] Najeeb, N.: Cryptographic Algorithms in Arabic Countries in Recent and Distant History (K. Nemoga)
- [13] Moravčík, T.: Steganography in JPG Image File (M. Jókay)
- [14] Michalica, M.: Verification of Communication Protocols (J. Fogel)
- [15] Lehocký, L.: Modern Computer Infiltrations and Possibilities of Protection against them (F. Schindler, O. Grošek)
- [16] Král, T.: Honeypot/Honeynet in Forensics Analysis (L. Páleník, O. Grošek)
- [17] Kosorinsky, M.: Preparation of Base for NFS (P. Zajac)
- [18] Bartko, J.: Ways to Protect Software against Debugging (Š. Balogh)
- [19] Brinzik, J.: Quantification of SOA Proposition (F. Lehocki)
- [20] Bajesi, O.: Generating eForms Based on Web Service (G. Juhás)
- [21] Čižmár, M.: Creating of Multimedia Learning System for Children Patients (F. Lehocki)
- [22] Hačkulič, D.: Design and Implementation on Intelligent Systems in Modern Buildings (F. Lehocki)
- [23] Hamráček, J.: Integrated Information System of Public Administration-Infrastructure (G. Juhás)
- [24] Chatrnúch, M.: Software Support of Modelling of Concurrency in Petri Nets (G. Juhás)
- [25] Kazlov, I.: Dynamic Soundness of Workflow Processes (G. Juhás)
- [26] Koščáková, B.: E-Prescribing (F. Lehocki)
- [27] Kubačka, S.: Client-Server Architecture of EHR Systems (F. Lehocki)
- [28] Mach, M.: Telemedicine Applications for Monitoring Patient Blood Pressure (F. Lehocki)
- [29] Nadanyi, P.: Architecture and Design of HER (F. Lehocki)

- [30] Perašín, M.: Medical Diagnostic System (F. Lehocki)
- [31] Slovák, M.: Real-Time Automata Systems Modelling ( J. Fogel)
- [32] Široký, A.: Workflow Systems to Support Business Processes (F. Lehocki)
- [33] Škoda, A.: Electronic Prescribing System Implementation (F. Lehocki)
- [34] Šutka, M.: Modern Techniques for Programming with Databases MS SQL in NET Framework (F. Schindler, O. Grošek))
- [35] Terpák, P.: Knowledge Discovery (G. Juhás)
- [36] Vaczula, M.: Modelling of Clinical Processes (F. Lehocki)
- [37] Vanák, J.: Social Server for Synchronization of Data from Mobile Device (F. Lehocki)
- [38] Vojta, M.: Analysis of Dependences in Petri Nets Transitions (Z. Ševčíková)
- [39] Zibura, Š: E-learning for Patients with Long-Term Diseases (F. Lehocki)

## **VI.2 PhD Theses**

none

## **VII. OTHER ACTIVITIES**

- Seminar Crypto (O. Grošek)
- Reviewer of ZentralblattMath (K. Nemoga, O. Grošek)

## **VIII. PUBLICATIONS**

### **VIII.1 Journals**

- [1] ADAMKO, L. - SÝS, M.: Statistical Testing of Random Number Generators HMAC DRBG and HASH DRBG. In: EE časopis pre elektrotechniku a energetiku. - ISSN 1335-2547. - Vol. 16, Special Issue (2010), p. 5-10. (in Slovak)
- [2] BALOGH, Š.: Methods for Detection of Viruses and Malicious Code. In: EE časopis pre elektrotechniku a energetiku. - ISSN 1335-2547. - Vol. 16, Special Issue (2010), p. 11-16. (in Slovak)
- [3] BAN, J. - FÉDER, M. - ORAVEC, M.: Biometric Methods for Recognition of Human Face Images. In: Posterus.sk. - ISSN 1338-0087. - March (2010), <http://www.posterus.sk/?p=5334>. (in Slovak)
- [4] BRAŠKO, M.: Deterministic Random Number Generators defined by NIST SP 800-90. In: EE časopis pre elektrotechniku a energetiku. - ISSN 1335-2547. - Vol. 16, Special Issue (2010), p. 17-20. (in Slovak)
- [5] GROŠEK, O. - SÝS, M.: Isotopy of Latin Squares in Cryptography. In: Tatra Mountains Mathematical Publications. - ISSN 1210-3195. - Vol. 45: NILCRYPT '10 (2010), p. 27-35. (in English)
- [6] JÓKAY, M. - MORAVČÍK, T.: Image-Based JPEG Steganography. In: Tatra Mountains Mathematical Publications. - ISSN 1210-3195. - Vol. 45: NILCRYPT '10 (2010), p. 65-74. (in English)
- [7] JÓKAY, M. - MORAVČÍK, T.: Image-Based JPEG Steganography. In: EE časopis pre elektrotechniku a energetiku. - ISSN 1335-2547. - Vol. 16, Special Issue (2010), p. 36-40. (in Slovak)

- [8] KOSTRECOVÁ, E.: Need for Personal Data Protection from Legal Aspect In: *Policajná teória a prax.* - ISSN 1335-1370. - Police Theory and Practice (2010), p. 50-58. (in Slovak)
- [9] MIKUŠ, M. - ZAJAC, P.: NIL-I-004 Project Supports the International Cooperation. In: *Spektrum.* - ISSN 1336-2593. - Roč.17, č.4 (2010), s. 10-11 (in Slovak)
- [10] RADDUM, H. - SÝS, M.: The Zodiac Killer Ciphers. In: Tatra Mountains Mathematical Publications. - ISSN 1210-3195. - Vol. 45: NILCRYPT '10 (2010), p. 75-91. (in English)
- [11] RIESZ, M. - JUHÁS, G.: Synthesis of Petri Nets in PetriFlow. In: *Petri Net Newsletter.* - ISSN 0931-1084. - Vol. 76 (2010), p. 3-10. (in English)
- [12] SCHILLING, T. - ZAJAC, P.: Phase Transition in a System of Random Sparse Boolean Equations. In: Tatra Mountains Mathematical Publications. - ISSN 1210-3195. - Vol. 45: NILCRYPT '10 (2010), p. 93-105. (in English)
- [13] SEMAEV, I. - MIKUŠ, M.: Methods to Solve Algebraic Equations in Cryptanalysis. In: Tatra Mountains Mathematical Publications. - ISSN 1210-3195. - Vol. 45: NILCRYPT '10 (2010), p. 107-136. (in English)
- [14] SLAMINKOVÁ, I. - VOJVODA, M.: Cryptanalysis of a Hash Function Based on Isotopy of Quasigroups. In: Tatra Mountains Mathematical Publications. - ISSN 1210-3195. - Vol. 45: NILCRYPT '10 (2010), p. 137-149. (in English)
- [15] SLAMINKOVÁ, I. - VOJVODA, M.: Cryptanalysis of a Hash Function Based on Isotopy of Quasigroups. In: *Posterus.sk.* - ISSN 1338-0087. - September (2010), <http://www.posterus.sk/?p=8466>. (in Slovak)
- [16] ZAJAC, P.: On the Use of the Lattice Sieve in the 3D NFS. In: Tatra Mountains Mathematical Publications. - ISSN 1210-3195. - Vol. 45: NILCRYPT '10 (2010), p. 161-171. (in English)
- [17] ZELINA, M. - ORAVEC, M.: Estimation and Reduction of Bins in Traffic Classification. In: *EE časopis pre elektrotechniku a energetiku.* - ISSN 1335-2547. - Vol. 16, Special Issue. (2010), p. 53-57. (in English)

### VIII.2 Conference Proceedings

- [1] BRAŠKO, M.: Random Number Generators Approved by NIST. In: ELITECH'10: 12th Conference of Doctoral Students. Bratislava, Slovak Republic, 26.5.2010. - Bratislava: STU, 2010. - ISBN 978-80-227-3303-8. - CD-Rom. (in English)
- [2] GALLO, O. - NEČAS, T. - LEHOCKI, F.: A Tool for the Synthesis of Asynchronous Speed Independent Circuits. In: Application of Region Theory (ART): 1st Workshop. Braga, Portugal, 21.-22.6.2010. - Springer Verlag, 2010. - ISBN 978-972-8692-54-4. - p. 61-65. (in English)
- [3] GUBÁŠ, M. - ADAMKO, L.: DNA Code Overview Study. In: ŠVOČ 2010: Proceedings of Selected Works. - Bratislava: FEI STU, 2010. - ISBN 978-80-227-3286-4. - CD-Rom. (in Slovak)
- [4] HAMBALÍK, A.: Checking the Originality of Digital Pictures. In: Trends in Education: Olomouc, Czech Republic, 24.6.2010. - Olomouc: Votobia, 2010. - ISBN 978-80-87244-09-0. - Part 2, p. 360-363. (in Slovak)
- [5] JÓKAY, M.: Remarks on the GRID Computation of the Characteristics of Boolean Matrices. In: GCCP 2010 Proceedings: 6th International Workshop on Grid Computing for Complex Problems, Bratislava, Slovakia, 8.-10.11.2010. - p. 57-63. (in English)

- [6] MIKOLÁŠEK, M. - RACKO, J. - HARMATHA, L. - GALLO, O. - REŽNÁK, J.: A New Model of Trap Assisted Band-to-Band Tunnelling. In: ASDAM 2010. 8th International Conference on Advanced Semiconductor Devices and Microsystems: Smolenice Castle, Slovak Republic. 25.-27.10.2010. - Piscataway: IEEE, 2010. - ISBN 978-1-4244-8572-7. (in English)
- [7] OMELINA, I. - ORAVEC, M.: IRIS Recognition Based on Gabor Filters. In: ELITECH'10: 12th Conference of Doctoral Students. Bratislava, Slovak Republic, 26.5.2010. - Bratislava: STU, 2010. - ISBN 978-80-227-3303-8. - CD-Rom. (in English)
- [8] PAVLOVIČOVÁ, J. - ORAVEC, M. - OSADSKÝ, M.: An Application of Gabor Filters for Texture Classification. In: Proceedings ELMAR-2010: 52nd International Symposium ELMAR-2010. Zadar, Croatia, 15.-17.9.2010. - Zadar: Croatian Society Electronics in Marine, 2010. - ISBN 978-953-7044-11-4. - p. 23-25. (in English)
- [9] PONDELÍK, M. - BALOGH, Š.: Capture of Encryption Keys by Analyzing Memory. In: ELITECH'10: 12th Conference of Doctoral Students. Bratislava, Slovak Republic, 26.5.2010. - Bratislava: STU, 2010. - ISBN 978-80-227-3303-8. - CD-Rom. (in English)
- [10] RIESZ, M. - SEČKÁR, M. - JUHÁS, G.: PetriFlow: A Petri Net Based Framework for Modelling and Control of Workflow Processes. In: Application of Region Theory (ART): 1st Workshop. Braga, Portugal, 21.-22.6.2010. - Springer Verlag, 2010. - ISBN 978-972-8692-54-4. - p. 45-59. (in English)
- [11] SELICKÝ, P. - ZAJAC, P.: Computation of the ANF of Sparse Boolean Functions. In: ŠVOČ 2010: Proceedings of Selected Works. - Bratislava: FEI STU, 2010. - ISBN 978-80-227-3286-4. - CD-Rom. (in Slovak)
- [12] SESTRIENKA, M. - ORAVEC, M. - PAVLOVIČOVÁ, J.: Simulation of Physical Layer and Medium Access Control Sublayer in IEEE 802.11x Networks. In: Proceedings ELMAR-2010: 52nd International Symposium ELMAR-2010. Zadar, Croatia, 15.-17.9.2010. - Zadar: Croatian Society Electronics in Marine, 2010. - ISBN 978-953-7044-11-4. - p. 261-264. (in English)
- [13] SIGETI, P. - ORAVEC, M.: Simulation of Video Transmission over IEEE 802.11g LAN. In: Proceedings Redžúr 2010: 4th International Workshop on Speech and Signal Processing. Bratislava, Slovak Republic, 14.5.2010. - Bratislava: Nakladatel'stvo STU, 2010. - ISBN 978-80-227-3296-3. - p. 26-31. (in English)
- [14] SLAMINKOVÁ, I. - VOJVODA, M.): Cryptanalysis of Hash Function Based on Quasigroups. In: ŠVOČ 2010: Proceedings of Selected Works. - Bratislava: FEI STU, 2010. - ISBN 978-80-227-3286-4. - CD-Rom. (in Slovak)
- [15] ZAJAC, P.: Algebraic Cryptanalysis in Practice. In: 10th Central European Conference on Cryptography: Beldewo, Poland, 10.12.6.2010. - Warsaw: International Mathematical Center, 2010. - on-line. (in English)
- [16] ZELINA, M. - ORAVEC, M.: Feature Selection for Application Recognition in Communication Networks. In: International Masaryk Conference for PhD. Students and Young Researchers: Hradec Králové, Czech Republic, 6.-10.12.2010. - Hradec Králové: Magnanimitas, 2010. - ISBN 978-80-86703-41-1. - p. 708-715. (in English)
- [17] ZELINA, M. - ORAVEC, M.: Representation of Traffic in Communication Networks. In: ELITECH'10: 12th Conference of Doctoral Students. Bratislava, Slovak Republic, 26.5.2010. - Bratislava: STU, 2010. - ISBN 978-80-227-3303-8. - CD-Rom. (in English)

**VIII.3 Parts of Books**

- [1] JUHÁS, G. - KAZLOV, I. - JUHÁSOVÁ, A.: Instance Deadlock: A Mystery behind Frozen Programs. In: Lecture Notes in Computer Science. - ISSN 0302-9743. - Vol. 6128 Applications and Theory of Petri Nets (2010), p. 1-17. (in English)
- [2] KOSTRECOVÁ, E.: Business Intelligence and Information Security. In: Selected Parts of New Economics. - Praha: Wolters Kluwer, 2010. - ISBN 978-80-7357-569-4. - p. 106-140. (in Czech)
- [3] ORAVEC, M. - MAZANEC, J. - PAVLOVIČOVÁ, J. - EIBEN, P. - LEHOCKI, F.: Face Recognition in Ideal and Noisy Conditions Using Support Vector Machines, PCA and LDA. In: Face Recognition. - Vukovar: In-Tech, 2010. - ISBN 978-953-307-060-5. - p. 125-150. (in English)