

**DEPARTMENT OF ELECTROMAGNETIC THEORY**

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**Head of Department**

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**I. STAFF**

Professors	Prof. Ing. Jozef Jasenek, PhD., Prof. Ing. Jozef Sláma, PhD.,
Associate Professors	Doc. Ing. Ivan Bojna, PhD., Doc. Ing. Jan Bydžovský, PhD., Doc. Ing. Peter Jahn, PhD., Doc. Ing. Vladimír Jančárik, PhD., Doc. Ing. Ľubomír Šumichrast, PhD., Doc. Ing. Elemír Ušák, PhD.
Assistant Professors	Ing. Jozefa Červeňová, PhD., Ing. Rastislav Dosoudil, PhD., Ing. Jaroslav Franek, PhD., Ing. Štefan Hušek, PhD., Ing. Mojmír Kollár, PhD., Ing. Pavol Krivošík, PhD. Ing. Roman Kukuča, PhD., Ing. Marcel Mičan
Senior Scientists	Doc. Ing. Pavel Kaboš, DrSc., Ing. Marian Štofka, PhD.
Research Workers	Ing. Vladimír Olah, Ing. Marianna Ušáková, Ing. Jozef Paľa
Technical Staff	Marta Jančovičová (secretary), Mária Brunovská, Milan Brunovský, Alojz Vďačný
PhD Students	Ing. Marek Hlaváč

**II. EQUIPMENT**

**II.1 Teaching and Research Laboratories**

- Laboratory of Electric Circuits
- Laboratory of Electromagnetic Field
- Laboratory of Optoelectronics
- Laboratory of Signal Processing
- Laboratory of Microwave Technology
- Laboratory of Pulse and Nonlinear Electrodynamics
- Laboratory of Electronics
- Laboratory of Applied Magnetism
- Laboratory of Magnetic Measurement
- Laboratory of Magnetic Materials Testing
- Laboratory of Magnetic Materials Technology
- Laboratory of Chemical Technology

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

- Michelson interferometer for measurement of chromatic dispersion of single mode optical fibres
- Apparatus for generation of second harmonics in optical frequency range
- Apparatus for back-scattering measurement in optical fibers using photon counting method
- Correlator and Signal Analyzer, frequency range to 50 kHz
- Microwave power meter HP-432 B
- Spectral analyzer 10 MHz - 4 GHz
- Precision Wattmeter 104B, 4mW - 60 kW, up to 200 kHz
- VSM Magnetometer,  $H_m$  up to 0.8 MA/m, temperature range 77 K - 800 K

- Precision Gaussmeter, 1  $\mu$ T - 10 T at DC, up to 1 kHz AC
- Lock-in-amplifier DSP SR 850 2nV to 1V
- VHS Video-Cassette Drop-Out Measuring Apparatus
- High Coercivity Measuring Apparatus
- PC Controlled AC Permeameter
- Automated System for Magnetic Susceptibility Temperature Dependence Measurement
- Universal Counter HP53132A up to 12.4 GHz
- Vibrator DERRITRON SC-3000 – mechanical resistivity testing equipment
- RF Impedance/Material Analyzer HP4191 A 1 MHz-1 GHz, 1 mOhm - 100 kOhm, APC-7 coaxial (50 Ohm) input, GP-IB standard; spot, linear and logarithmic frequency sweep.
- HP4192A LF Gain Phase - Impedance Analyser, 5 Hz - 13 MHz, 0.1 mOhm - 1 MOhm, GPIB.

### **III. TEACHING**

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

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

Electric Circuits I	(2nd+3rd sem., 3-2h)	J. Bydžovský, E. Ušák
Electrotechnology I	(2nd+3rd sem., 3-2h)	E. Šumichrast
Electrotechnology	(2nd+3rd sem., 3-2h)	J. Jasenek
Electrotechnology	(FIIT 2nd sem., 3-2h)	V. Jančárik
Theory of Electricity I	(2nd+3rd sem., 3-2h)	P. Jahn
Electric Circuits II	(3rd+4th sem., 3-3h)	J. Bydžovský, M. Kollár, E. Ušák
Electrotechnology II	(2nd+3rd sem., 3-2h)	E. Šumichrast
Theory of Electricity II	(2nd+3rd sem., 3-2h)	P. Jahn
Electromagnetic Field	(4th+5th sem., 3-2h)	I Bojna, J. Sláma
Electromagnetic Field and Waves	(4th+5th sem., 3-2h)	E. Šumichrast
Construction of Computers	(FIIT 3rd sem., 3-2h)	V. Jančárik
Analog and Digital Circuits	(5th sem., 3-2h)	V. Jančárik
Safety of Electric Equipment	(8th sem., 2-1h)	I. Bojna

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

Magnetic Materials	(1st sem., 2-2h)	J. Sláma
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#### **III.3 Undergraduate and Graduate Study for Foreign Students (in English Language)**

Electric Circuits I	(2nd sem., 2-2h)	E. Ušák
Electric Circuits II	(3rd sem., 4-2h)	V. Jančárik
Electromagnetic Fields	(4th sem., 3-1h)	E. Šumichrast

#### **IV. RESEARCH PROJECTS**

- Optical-fibre sensoric systems based on OTDR, G 1/0165/03, J. Jasenek, E. Šumichrast
- Methods and algorithms for computer simulation of high-frequency electromagnetic fields G/1056/04, E. Šumichrast, M. Kollár
- Research of magnetic materials for electronics, recording media and transport of bioactive materials, G 1/0163/03, J. Sláma, A. Grusková
- Magnetic and magneto-structural properties of materials and their utilisation in sensoric and non-invasive testing methods, G 1/0143/03, J. Bydžovský, E. Ušák
- Progressive magnetic materials – study of magnetization processes and their modelling with related applications in electromagnetic elements and sensors, G 1/0142/03, V. Jančárik, J. Sláma
- APVT-20-012902 (project in co-operation with Slovak Academy of Sciences) Electromagnetic properties of superconductive composite conductors, E. Šumichrast
- APVT-54-052702 (project in co-operation with Slovak Academy of Sciences) Novel multiphase nanostructured materials with extraordinary physical properties, J. Bydžovský
- Properties of hexagonal ferrites and their characterization, bilateral project Mexico – Slovakia, J. Sláma, A. Grusková
- Investigation of magnetic materials based on ferrous oxides for utilization in electronic and recording media systems, bilateral project Czech republic – Slovakia, J. Sláma, A. Grusková
- Investigation of magnetic materials based on ferrous oxides for utilization in electronic and recording media systems, bilateral project Mexico – Slovakia, J. Sláma, A. Grusková
- APVT – 99 – 017904 (project in co-operation with EVPU a.s. Nová Dubnica) Research and development of electrical application of nanocrystalline and amorphous materials, J. Bydžovský

#### **V. COOPERATION**

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

- Matador Púchov
- VA SNP L.Mikuláš
- EÚ SAV, Bratislava
- FÚ SAV, Bratislava
- IBOK, Bratislava
- EVU, Nová Dubnica

##### **V.2 International Cooperation**

- School of Physics and Electronic Systems Engineering, University of South Australia, Pooraka
- TU Budapest, Hungary
- Doshisa University, Japan
- Nuclear Engineering Research Laboratory, University of Tokyo, Japan
- Department of Physics Colorado State University Fort Collins, USA
- Istituto Elettrotecnico Nazionale Galileo Ferraris, Torino, Italy
- TU Kaiserslautern, Germany
- TU Darmstadt, Institut für Hochfrequenztechnik, Germany
- TU Ilmenau, Germany
- TU Vienna, Austria
- Cardiff University, Wolfson Centre for Magnetic Technology, United Kingdom
- VEV Elektrotechnisch Vakondermus Nijkjerck, The Netherlands
- TU of Czenstochowa, Poland
- Moscow Energy Institute, Russia

- Lublin Technical University, Poland
- Institute of Physics, Academy of Sciences of Czech Republic, Prague, CzR
- Institute of Inorganic Chemistry, Academy of Sciences of Czech Republic, Prague, CzR
- Czech Technical University, Prague, CzR
- West Bohemian University, Pilsen, CzR
- Technical University, Brno, CzR
- CINVESTAV, Saltillo, Mexico
- Research Institute for Technical Physics and Materials Science, Hungarian Academy of Sciences, Budapest, Hungary

### **V.3 Membership in International Organizations and Societies**

- J. Jasenek, IEEE, Optical Society of America, European Physical Society
- M. Kollár, IEE Slovak Centre
- J. Sláma, IEE Slovak Centre, SAES, European Physical Society
- Ľ. Šumichrast, IEEE, IEE Slovak Centre, European Physical Society, URSI (President of Slovak National Committee), Optical Society of America, European Physical Society

## **VI. THESES**

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

Masters theses supervised at the Department of Electromagnetic Theory. The names of supervisors are in brackets.

- [1] J. Kertész: Automated System for Material Demagnetizing (V. Jančárik)
- [2] P. Zrník: Design of Integrated Website Module Supporting the Education in the Subject Electric Circuits II (E. Ušák)
- [3] T. Višňovec: Optimization of Experimental Data Processing for the MAT Method Application (J. Bydžovský)
- [4] Z. Czafíková: Optimisation of Magnetic Properties of Ni-Zn Ferrites with Regard to Their Utilisation in Magnetic Composites (M. Ušáková)

## **VII. OTHER ACTIVITIES**

- Soft Magnetic Materials 17, Bratislava, International Program Committee (J. Bydžovský, M. Kollár, J. Sláma)
- Presidentship of Slovak Committee of URSI and membership of International (Ľ. Šumichrast)
- Membership in Evaluation Commission for Professorship in Electrical Engineering, at Czech Technical University Prague and Technical University Brno, Czech Republic (J. Sláma)
- Membership in Slovak Expertise Commission for Electromagnetic Theory, SOK 26-02-9 (I. Bojna, J. Bydžovský, J. Jasenek, J. Sláma, Ľ. Šumichrast)
- Head of Commission for Title Philosophy Doctor (PhD) in Electromagnetic Theory (26-02-9) (J. Sláma)
- Membership in Slovak Expertise Commission for Electronics (J. Jasenek)
- Membership in Working Group of Accreditation Commission of the Government of Slovak Republic (J. Jasenek)
- Membership in Inauguration Commission at Military Academy L. Mikuláš (J. Sláma)
- Membership in Commission for Title Doctor of Sciencie (DrSc) in Electromagnetic Theory (26-02-9) (J. Sláma)
- Membership in Slovak Academy of Engineering Sciences and Guarantor for Electrical Engineering (J. Sláma)
- Membership in Headquarters of the Slovak Association of Electrical Engineers, SEZ (I. Bojna)
- Membership in Examination Commission at Office for Control of Network Branches (I. Bojna)
- Membership in Committee of President of Institute for Standardization Metrology and Testing,

- for Government Policy and Approximation in Technical Standardization (I. Bojna)
- Expert No. 256 for Branch of Metrology at the Institute of Normalization, Measurement and Standards (ÚNMS) of Slovak Republic (J. Bydžovský)
- Expert for Magnetic Compounds and Steels at Slovak Institute of Technical Normalization (SUTN) of Slovak Republic (J. Bydžovský)
- Cooperation with Encyclopaedic Institute of Slovak Academy of Sciences - Encyclopaedia Beliana, (J. Sláma, P. Jahn, J. Franek)
- Head of Editorial Board of Journal: EE - Elektrotechnika a energetika (I. Bojna)
- Executive Editor of Journal of Electrical Engineering - Elektrotechnický časopis (M. Kollár)

## **VIII. PUBLICATIONS**

### **VIII.1 Journals**

- [1] BOJNA, I.: 10 Years of EE Journal. In: EE - časopis pre elektrotechniku a energetiku. - Vol.11, No.3 (2005), - p. 5. (in Slovak)
- [2] BOJNA, I.: Electrical Installation in Objects with Reserve Power Supply. In: EE - časopis pre elektrotechniku a energetiku. - Vol.11, No.2 (2005), - p. 38. (in Slovak)
- [3] BOJNA, I.: Human Body Impedance. In: Schneider magazín. - Vol.6, No.1 (2005), - pp. 6-7. (in Slovak)
- [4] BOJNA, I.: Inductivity, Inductance, Inductive. In: EE - časopis pre elektrotechniku a energetiku. - Vol.11, No.1 (2005), - p. 37. (in Slovak)
- [5] BOJNA, I.: New Standards Information. In: EE - časopis pre elektrotechniku a energetiku. - Vol.11, No.1 (2005), - pp. 30-31. (in Slovak)
- [6] BOJNA, I.: New Standards Information. In: EE - časopis pre elektrotechniku a energetiku. - Vol.11, No.4 (2005), - p. 34. (in Slovak)
- [7] BOJNA, I.: Periodical Verification Terms for Electrical Installations According to Established Regulations and Technical Standards. In: EE - časopis pre elektrotechniku a energetiku. - Vol.11, No.3 (2005), - p. 37. (in Slovak)
- [8] BOJNA, I.: New Regulations in Electricity Sector. In: EE - časopis pre elektrotechniku a energetiku. - Vol.11, No.6 (2005), - p. 12. (in Slovak)
- [9] BOJNA, I.: Standardisation - Related Activities and Documents. In: EE - časopis pre elektrotechniku a energetiku. - Vol.11, No.4 (2005), - pp. 32-33. (in Slovak)
- [10] BOJNA, I.: Protection of a Person in a Bath by the Residual Current Operated Circuit -Breaker. In: EE - časopis pre elektrotechniku a energetiku. - Vol.11, No.1 (2005), - pp. 44-45. (in Slovak)
- [11] BOJNA, I.: Conductor Protection against Overcurrent in Electrical Distribution . In: EE - časopis pre elektrotechniku a energetiku. - Vol.11, No.3 (2005), - pp. 34-36. (in Slovak)
- [12] BOJNA, I.: Resistance of Flexible Cord and Faulted Circuit Impedance. In: EE - časopis pre elektrotechniku a energetiku. - Vol.11, No.5 (2005), - pp. 38-39. (in Slovak)

- [13] BOJNA, I.: Verification of Disconnection Time in Protection by the Automatic Source Disconnection. In: EE - časopis pre elektrotechniku a energetiku. - Vol.11, No.6 (2005), - p. 34. (in Slovak)
- [14] BOJNA, I.: Marking of Electrical Networks TN. In: EE - časopis pre elektrotechniku a energetiku. - Vol.11, No.5 (2005), - pp. 36-37. (in Slovak)
- [15] BOJNA, I.: Assemblies for Construction Sites. In: EE - časopis pre elektrotechniku a energetiku. - Vol.11, No.6 (2005), - p. 14. (in Slovak)
- [16] BOJNA, I.: Concurrent Validity of Technical Standards. In: EE - časopis pre elektrotechniku a energetiku. - Vol.11, No.1 (2005), - pp. 28-30. (in Slovak)
- [17] BOJNA, I.: Electric Lighting Drives for Swimming Pools in the Area 1. In: EE - časopis pre elektrotechniku a energetiku. - Vol.11, No.4 (2005), - p. 36. (in Slovak)
- [18] BOJNA, I.: External Influences Acting on Electrical Equipment: Snow and Ice Coating. In: EE - časopis pre elektrotechniku a energetiku. - Vol.11, No.2 (2005), - p. VII. (in Slovak)
- [19] BOJNA, I.: Initial and Periodical Verifications of Electrical Installations According to New Technical Standards and Established Legal Regulations. In: Elektrotechnický magazín - ETM. - Vol.15, No.8 (2005), - pp. 35-38. (in Slovak)
- [20] BOJNA, I.: Beginning Contra Origin. In: EE - časopis pre elektrotechniku a energetiku. - Vol.11, No.5 (2005), - pp. 41. (in Slovak)
- [21] FRANEK, J.: Some Remarks about Mathcad. In: EE - časopis pre elektrotechniku a energetiku. - Vol.11, No.4 (2005), - pp. 24-26. (in Slovak)
- [22] FRANEK, J.: A Hundred Years of Theory of Relativity. In: Advances in Electrical and Electronic Engineering. - Vol.4, No.4 (2005), - pp. 36-40. (in Slovak)
- [23] FRANEK, J., KOLLÁR, M.: Remembering a Hundred Years Since Publishing the Theory of Relativity. In: Acta Technica CSAV. - Vol.50 (2005), - pp. 307-318. (in English)
- [24] GONZÁLEZ-ANGELES, A., MENDOZA-SUÁREZ, G., GRUSKOVÁ, A., LIPKA, J., PAPÁNOVÁ, M., SLÁMA, J.: Effect of (Ni, Zn) Ru mixtures on Magnetic Properties of Barium Hexaferrites Yielded by High-Energy Milling. In: Journal of Magnetism and Magnetic Materials. - Vol.285 (2005), - pp. 450-455. (in English)
- [25] GONZÁLEZ-ANGELES, A., MENDOZA-SUÁREZ, G., GRUSKOVÁ, A., SLÁMA, J., LIPKA, J., PAPÁNOVÁ, M.: Magnetic Structure of Sn<sup>2+</sup>+Ru<sup>4+</sup>-Substituted Barium Hexaferrites Prepared by Mechanical Alloying. In: Materials Letters. - Vol.59 (2005), - pp. 1815-1819. (in English)
- [26] GONZÁLEZ-ANGELES, A., MENDOZA-SUÁREZ, G., GRUSKOVÁ, A., PAPÁNOVÁ, M., SLÁMA, J.: Magnetic Studies of Zn-Ti-Substituted Barium Hexaferrites Prepared by Mechanical Milling. In: Materials Letters. - Vol.59 (2005), - pp. 26-31. (in English)
- [27] SLÁMA, J., GRUSKOVÁ, A., PAPÁNOVÁ, M., KEVICKÁ, D., JANČÁRIK, V., DOSOUDIL, R., MENDOZA-SUÁREZ, G., GONZÁLEZ-ANGELES, A.: Properties of M-Type Barium Ferrite Doped by Selected Ions. In: Journal of Electrical Engineering. - Vol.56, No.1-2 (2005), - pp. 21-25. (in English)

- [28] SLÁMA, J., OLAH, V., GRUSKOVÁ, A.: Microelectromagnetic Media for Mechatronic Systems. In: EE - časopis pre elektrotechniku a energetiku. - Vol.11, No.mimoriadne (2005), - pp. 63-65. (in Slovak)
- [29] SONG, Y.Y., GRINOLDS, M.S., KRIVOŠÍK, P., PATTON, C.E.: Pulsed Laser-Deposited Single-Crystal LiZn-Ferrite Films with Low Microwave Loss. In: Journal of Applied Physics. - Vol.97 (2005), - pp. 103516.1-5. (in English)

### VIII.2 Conferences

- [1] BOJNA, I.: Current Information of Technical Standardisation in Electrical Engineering Field. In: 23rd Conference of Slovak Electrical Engineers : Poprad, Slovak Republic, 9.-10.11.2005. pp. 21-30. (in Slovak)
- [2] BOJNA, I.: Safety Requirements for Servicing and Work on Electrical Installations in Transmission and Distribution of Electricity. In: 33rd Meeting of Slovak Inspectors and Electrical Engineers : Zilina, Slovak Republic, 27.-28.9.2005. pp. 14-22. (in Slovak)
- [3] BOJNA, I.: Adverse Consequences of 3Nth Order Harmonics in Three-Phase Networks. In: 23rd Conference of Slovak Electrical Engineers : Poprad, Slovak Republic, 9.-10.11.2005. pp. 36-49. (in Slovak)
- [4] BOJNA, I.: New Regulations and Standards Information - Current Stage. In: 22nd Conference of Slovak Electrical Engineers : Bratislava, Slovak Republic, 22.-23.3.2005. pp. 45-56. (in Slovak)
- [5] BOJNA, I.: New Standards STN 33-2000-4-43, STN 33 2000-5-523 and Some Problems with Their Applications. In: 22nd Conference of Slovak Electrical Engineers : Bratislava, Slovak Republic, 22.-23.3.2005. pp. 69-80. (in Slovak)
- [6] BOJNA, I.: Protection Against Overcurrent and Conductors Current-Carrying Capacity According to Current Technical Standards. In: 3rd Regional Electrotechnical Days : Nitra, Slovak Republic, 15.11.2005. (in Slovak)
- [7] BOJNA, I.: Initial and Periodical Verifications of Electrical Installations According to New Standards and Established Legal Regulations. In: 22nd Conference of Slovak Electrical Engineers : Bratislava, Slovak Republic, 22.-23.3.2005. pp. 57-68. (in Slovak)
- [8] BOJNA, I.: Initial and Periodical Verifications of Electrical Installations According to New Technical Standards and Established Legal Regulations. In: 3rd Regional Electrotechnical Days : Nitra, Slovak Republic, 15.11.2005. (in Slovak)
- [9] DOSOUDIL, R., FRANEK, J., UŠÁKOVÁ, M.: Frequency Variation of Complex Permeability of NiZn Ferrite - PVC Polymer Composites and Their RF Absorption Properties. In: 7th International Conference on Advanced Methods in the Theory of Electrical Engineering. Applied to Power Systems : Pilsen, Czech Republic, 12.-14.9.2005. pp. D19-24. (in English)
- [10] DOSOUDIL, R., UŠÁKOVÁ, M., FRANEK, J., SLÁMA, J., OLAH, V., GRUSKOVÁ, A.: RF Electromagnetic Wave Absorbing Properties of Ferrite Polymer Composite Materials. In: Soft Magnetic Materials Conference : Bratislava, Slovak Republic, 7.-9.9.2005. p. 182. (in English)
- [11] DOSOUDIL, R., UŠÁKOVÁ, M., UŠÁK, E., GRUSKOVÁ, A., SLÁMA, J., JANČÁRIK, V.: Magnetic Properties of Be or Cu Substituted Ni-Zn Ferrites. In: Soft Magnetic Materials Conference : Bratislava, Slovak Republic, 7.-9.9.2005. p. 183. (in English)

- [12] FRANEK, J., KOLLÁR, M.: A Hundred Years Since Publication of the Relativity Theory. In: 7th International Conference on Advanced Methods in the Theory of Electrical Engineering. Applied to Power Systems : Pilsen, Czech Republic, 12.-14.9.2005. pp. A23-A26. (in English)
- [13] GRUSKOVÁ, A., ĎURMAN, V., UŠÁKOVÁ, M., GONZÁLEZ, A., SLÁMA, J., ŠTOFKA, M.: Magnetic and Dielectric Properties of  $Ba_{1-x}Sr_2Fe_{12}O_{19}$  Hexagonal Ferrites. In: Soft Magnetic Materials Conference : Bratislava, Slovak Republic, 7.-9.9.2005. p. 185. (in English)
- [14] GRUSKOVÁ, A., JANČÁRIK, V., SLÁMA, J., DOSOUDIL, R.: Effect of Zn-Ti Substitution on Electromagnetic Properties of Li Ferrites. In: Soft Magnetic Materials Conference : Bratislava, Slovak Republic, 7.-9.9.2005. p. 184. (in English)
- [15] GRUSKOVÁ, A., LIPKA, J., SLÁMA, J., JANČÁRIK, V., PAPÁNOVÁ, M., GONZÁLES, A.: Magnetocrystalline Properties of  $BaFe_{12-2x}M_xSn_xO_{19}$  (M=Zn, Sn, Ni) Nano-Sized Particles. In: International Conference on the Applications of the Mössbauer Effect : Montpellier, France, 5.-9.9.2005. pp. T8-P51. (in English)
- [16] GRUSKOVÁ, A., PAPÁNOVÁ, M., KEVICKÁ, D., SLÁMA, J., DOSOUDIL, R., GONZÁLEZ-ANGELES, A., CORRAL-HUACÚZ, J.C., MENDOZA-SUÁREZ, G.: Microstructure and Magnetic Properties of  $BaFe_{12-2x}M_xZi_xO_{19}$  (M=Zn, Co) Ferrites Prepared by Modified Methods. In: 9th International Conference on Ferrites - ICF 9 : San Francisco, USA, 2004. pp. 39-44. (in English)
- [17] HLAVÁČ, M., JASENEK, J.: The Reconstruction of the Ultra Low Power Level Optical Signal by Photon Counting. In: 5th Electronic Circuits and Systems Conference : Bratislava, Slovak Republic, 8.-9.9.2005. pp. 185-190. (in English)
- [18] JASENEK, J.: OTDR and Its Application to PMD Measurement and Fiber Optics Sensor. In: 14th International Travelling Summer School on Microwave and Lightwaves : Brno, Czech Republic, 10.-15.7.2005. pp. 236-255. (in English)
- [19] JASENEK, J., ZAMIEŠAL, M.: Correlation Methods in Optical Time-Domain Reflectometry. In: Conference "Optical Communications 2005" : Prague, Czech Republic, 20.-21.10.2005. pp. 61-67. (in Slovak)
- [20] KOPČA, M., VÁRY, M., KOZÍK, T., DOSOUDIL, R.: Thermal Ageing of the Plastic Ferrite Foils with PVC Matrix. In: 11th International Workshop on Applied Physics and Condensed Matter : Malá Lučivná, Slovak Republic, 15.-17.6.2005. pp. 29-33. (in English)
- [21] LELÁK, J., VÁRY, M., MILOVSKÁ, S., KOZÍK, T., DOSOUDIL, R.: Evaluation of Long-Term Stability of the Plastic Ferrite Composite Foils Using the Accelerated Thermal Ageing Method. In: International Conference "Diagnostics '05" : Nečtiny, Czech Republic, 6.-8.9.2005. pp. 314-318. (in English)
- [22] PALA, J., STUPAKOV, O.: Magnetic Field Modeling in Single Yoke Magnetizing Set-Up. In: 7th Conference for PhD Students ELITECH 2005 : Bratislava, Slovak Republic, 9.2.2005. pp. 114-116. (in English)
- [23] SLÁMA, J., JANČÁRIK, V., GRUSKOVÁ, A., MYDLA, M.: Method of Determination of Electromagnetic Parameters of Ferricomposites. In: 7th International Conference on Advanced Methods in the Theory of Electrical Engineering. Applied to Power Systems : Pilsen, Czech Republic, 12.-14.9.2005. pp. D75-D80. (in English)



- [24] SLÁMA, J., MYDLA, M., ŠIROKÝ, P.: Magnetic Loss Description on Electromechanics Systems. In: 8th International Symposium on Mechatronics "Mechatronika 2005" : Trenčianske Teplice, Slovak Republic, 19.-21.5.2005. pp. 203-207. (in English)
- [25] ŠTOFKA, M.: Zero-Centred Phase-Shifting Circuit. In: Electronic Devices and Systems IMAPS CS International Conference 2005 : Brno, Czech Republic, 15.-16.9.2005. pp. 183-188. (in English)
- [26] ŠUMICHRASŤ, L.: Numerical Phase and Group Velocities in the ADI-FDTD and CNSS-FDTD Method. In: 7th International Conference on Advanced Methods in the Theory of Electrical Engineering. Applied to Power Systems : Pilsen, Czech Republic, 12.-14.9.2005. pp. A55-A60. (in English)

### VIII.3 Textbooks

- [1] BOJNA, I.: Safety of Electrical Installations: Specific Capability Examination Handbook. – Bratislava: STU, 2005. - 175 pp. (in Slovak)
- [2] BOJNA, I., BOJNA, I.jr., KAROVIČ, I., LORKO, O., RAJCZY, L., ŠČEVĽÍK, V., ŠTEVKO, M., ŠTIBRÁNYI, F., VOJS, A.: Proceedings of Technical Standards and Legal Regulations in Electrical Engineering Issued at Year 2004. - Bratislava: SEZ, 2005. - 180 pp. (in Slovak)