

**DEPARTMENT OF ELECTROTECHNOLOGY**

<http://aladin.elf.stuba.sk/Katedry/KETG/>

**Head of Department**

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**I. STAFF**

Associate Professors	Doc. Ing. Anna Grusková, PhD., Doc. Ing. Jaroslav Lelák, PhD., Doc. Ing. Vladimír Šály, PhD., Doc. Ing. Miroslav Kopča, PhD.
Assistant Professors	Ing. Vladimír Durman, PhD, Ing. Juraj Packa, PhD., Ing. Peter Poljovka, PhD, Ing. Michal Váry
Senior Scientists	Ing. Michal Ružinský, PhD.
Technical Staff	Anna Ferenčíková (secretary), Marián Kamendy
PhD. Students	Ing. Tomáš Ďuriš, Ing. Ján Budaj

**II. EQUIPMENT**

**II.1 Teaching and Research Laboratories**

- Photovoltaic Laboratory
- High Voltage and Ageing Tests Laboratory
- Laboratory of Cables and Wires
- Laboratory of Health Protection at Work
- Laboratory of Dielectric Properties of Materials
- Laboratory of Electrical Components
- Laboratory of Liquid Dielectrics
- Laboratory of Magnetic Materials

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

- Test chambers for combined ageing tests of insulating systems
- Solar Simulator for Photovoltaics
- Climatic test chamber Feutron
- System for Measuring of Complex Impedance
- Vibration Magnetometer PVM-1

**III. TEACHING**

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

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

Safety and Protection of Health at Work I	(1st sem., 1-2h)	M. Kopča, V. Šály, J. Packa
Materials for Electrical Engineering	(3rd sem., 2-3h)	V. Šály
Materials and Technology for Electrical Engineering	(3rd sem., 2-3h)	J. Lelák
Safety and Protection of Health at Work II	(4th sem., 1-4h)	M. Kopča, V. Šály

Technological Processes	(6th sem., 2-3h)	V. Šály, A. Grusková
<b>III.2 Graduate Study (Ing.)</b>		
Technology of Electronic Devices	(1st sem., 2-2h)	M. Kopča
Renewable Energy Sources	(1st sem., 2-1h)	M. Ružinský
Technology of Ceramic Composites	(2nd sem., 2-2h)	A. Grusková
Materials Physics 2	(2nd sem., 2-3h)	V. Ďurman
Quality Management	(3rd sem., 2-1h)	P. Poljovka
Metallic and Optical Cables	(3rd sem., 2-2h)	J. Lelák

### III.3 Undergraduate Study (Bc. Distance Education Method)

Safety and Protection of Health at Work I	(1st sem.)	M. Kopča
Safety and Protection of Health at Work II	(4th sem.)	M. Kopča
Materials for Electrical Engineering	(3rd sem.)	J. Lelák

## IV. RESEARCH PROJECTS

Research on Relation between Polarisation and Degradation Processes in Electro-insulating Systems, VEGA 1/4086/07, J. Lelák

Photovoltaic Structures for Solar Cells, Modules and Systems, VEGA 1/4080/07, M. Ružinský

Research of Magnetic Materials Intended for Electrical Engineering, Electronics, Data-Recording and Applications Related to the Electromagnetic Compatibility, VEGA 1/3096/06,

J. Sláma, A. Grusková, V. Ďurman

- Magnetic Structural Processes in Nano and Microcrystalline States Prepared from Amorphous

Precursors, VEGA 1/3189/06, J. Sitek, A. Grusková

Investigation of Ageing the Electroinsulating Materials for Objective Determination of Durability of Selected Electrical Systems, APVV-99-011905 (VUKI), J. Lelák

Establish of Research-Development Network for Materials and Technology (MATNET) ESF Nr. JPD 3 2005/1-018 UMMS SAV, KETG FEI, J. Lelák

### International Scientific Projects:

- Preparation and Characterization of Materials Based on Iron Oxides by Magnetic Methods, Czech /Slovak cooperation, ZS-4/2001-2010, J. Šubrt, A. Grusková
- Magnetic and Microstructural Studies of New Nanocomposited and Substituted Ferrites, Synthesized by Mechanical Alloying and Other Advanced Methods, CONACYT project 89783(UABC, Mexicali), Mexico Slovak Cooperation, A. Gozález, A. Grusková

## V. COOPERATION

### V.1 Cooperation in Slovakia

- VUKI jsc, Bratislava
- EZ-Elektromont jsc
- VÚJE jsc, Trnava
- MURAT Ltd., Pezinok
- BEZ jsc, Bratislava
- HAKL Ltd., Bratislava
- DELTA ENERGY SYSTEMS Ltd Nová Dubnica

- SE jsc OZ EBO, Jaslovské Bohunice
- SYLEX Ltd., Bratislava
- Elkonď HHK jsc, Trstená
- Institute of Electrical Engineering, Slovak Academy of Sciences, Bratislava
- Institute of Physics, Slovak Academy of Sciences, Bratislava
- VUSAPL, Nitra
- THERMO-SOLAR Ltd., Źiar n. Hronom
- ELBA jsc, Kremnica
- PPC Ćab jsc, Nové Sady
- TAU-CHEM Ltd., Bratislava
- All Deco Ltd., Jaslovské Bohunice
- Institute of Materials Research, Slovak Academy of Sciences, Košice
- Elektroservis jsc, Bratislava
- SONY Slovakia Ltd., Nitra Plant
- UPJŠ Košice
- ZSE jsc, Bratislava
- UMMS-SAV, Bratislava

## V.2 International Cooperation

- ABB Corporate Research, Baden Daettwil, Switzerland
- Technical University, Brno, CzR
- University of West Bohemia, FEE Pilsen
- Czech Technical University, Prague, CzR
- Institute of Anorganic Chemistry, Academy of Sciences, ŹeŹ, CzR
- Piezoceram Ltd., Hradec Králové, CzR
- Motorpal, jsc Světlá Hora, CzR
- Silcotec Europe Ltd., Ireland
- PROTECH Group, Ltd., Klatovy, CzR
- Fraunhofer Institute for Solar Energy Systems ISE, Freiburg, Germany
- EC JRC Ispra, Italy
- Solartec Ltd., RoŹnov pod Radhoštem, CzR
- Foundation for Research and Technology, MRG-IESL, Heraklion, Crete, Greece
- WSC – World Solar Challenge, Adelaide, Australia
- Institute of Microelectronics and Optoelectronics, Warsaw University of Technology, Poland
- WREN - World Renewable Energy Network, Reading, UK
- UA of BAJA CALIFORNIA, Mexicali, Mexico
- Aristotle University, Thessaloniki, Greece
- TU Plovdiv, Bulgaria
- Angel Kunchev University of Rousse, Bulgaria

## V.3 Membership in International Organizations and Societies

- M. RuŹinský: Senior Member, IEEE - EDS (Electron Devices Society), USA
- M. RuŹinský: WREN - World Renewable Energy Council /Network, UK
- V. Šály: WREN - World Renewable Energy Council /Network, UK
- A. Grusková: member of International Steering Committee EMFM
- A. Grusková: member of European Physical Society
- M. Váry: member of European Physical Society
- V. Šály: member of European Physical Society
- J. Budaj: member of European Physical Society

## V.4 Contracts

- Źurman, V.: Permittivity Measurements of Liquids. Contract with Biocentrum VÚP Bratislava
- Lelák, J. at all.: Long Time Combine Ageing Tests of Insulation Systems. Contract with ABB Corporate Research, Baden Daettwil, Switzerland

- Lelák, J. at all.: DC Ageing Tests on Outdoor Composite Insulators. Contract with ABB Corporate Research, Baden Daettwil, Switzerland
- Lelák, J. at all.: Impulse and AC Breakdown Voltage Tests of 22 kV XLPE Cables. Contract with NKT Cables Velké Meziříčí k.s., NKT Group, Czech Republic
- Lelák, J., Váry, M.: Comparative Tests Dielectric Properties of High Voltage Coils. Contract with MEZ Elektromotory Ltd., Kežmarok
- Lelák, J. at all.: Measurement of Dielectric Properties of Cables VUJE
- Lelák, J. at all.: Ageing Tests of NPP cables. Contract with VUJE jsc, Trnava
- Lelák, J., Šály, V.: Design of high voltage testing laboratory in cables factory ICS Slovakia, plc., Industrial Park NITRA North. Contract with Tectra Ltd., Levice
- Lelák, J. at all.: Preparing of Apparatus for Ageing Tests on Model Coils. Contract with ABB Corporate Research, Baden Daettwil, Switzerland
- Lelák, J.: Induction course of staff of cable testing laboratory in ISC Slovakia Ltd., Nitra, contract with Tectra Levice
- Lelák, J., Váry, M.: Testing and Analysing of Data Cables in Terminal OSC1 in Slovnaft and PS 5 Bučany, Contract with Transpetrol jsc, Bratislava

## **VI. THESES**

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

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

- [1] L. Bežová: Study of Magnetic Properties of Substituted Ba and Sr Ferrites Prepared by Different Technologies (A. Grusková)
- [2] J. Budaj: Effect of Thermal Ageing on Dielectric Parameters of Cables with Combined Insulation (J. Lelák)
- [3] D. G. Diez: Electric Measurement on Crystalline Silicon Concentration Cells (V. Šály)
- [4] O. Diviak: Encapsulation Materials for Fotovoltaic Applications (J. Packa)
- [5] B. Hudec: Measurement of Relative Dielectric Constant and Dielectric Loss Factor of PZT Samples with Voltage under 2 kV and Frequency 1 kHz (J. Lelák)
- [6] M. Pavlov: Proposal of 100 kW Grid-connected Photovoltaic System (V. Šály)
- [7] P. Prokein: Optical and Electrical Properties of Zincnitride Thin Films (V. Šály)
- [8] M. Sloboda: On Operation of Monocrystalline Solar Cells (V. Šály)

## **VII. OTHER ACTIVITIES**

- organising of 17<sup>th</sup> International conference DISEE 2008 in Demänovská Dolina, 17- 19 September 2008
- organising of International seminar 'ESD in Electrical Engineering' FEI STU Bratislava, 9 June 2008
- member of International Steering Committee of 'World Renewable Energy Congress X', WREC 2008, 19 – 25 July 2008, Glasgow (M. Ružinský)
- member of Committee of Slovak Physical Society (A. Grusková)
- activities in Czech-Slovak section CS-IEEE – merited member (M. Ružinský)
- activities in: Renewable Energy World/PennWell's International Directories, 2007-2008 (M. Ružinský)
- collaboration with IEEE-EDS Photovoltaic Devices Technical Committee and EDS Administrative Committee (AdCom), USA (M. Ružinský)
- bilateral agreement, Socrates programme Higher education (ERASMUS) STU Bratislava - Angel Kunchev University of Rouse (V. Šály)

## **VIII. PUBLICATIONS**

### **VIII.1 Journals**

- [1] DOSOUDIL, R., UŠÁKOVÁ, M., FRANEK, J., GRUSKOVÁ, A., SLÁMA, J.: Dispersion of

- Complex Permeability and EM-Wave Absorbing Characteristics of Polymer-Based Composites with Dual Ferrite Filler. In: *Journal of Magnetism and Magnetic Materials*. - ISSN 0304-8853. - Vol. 320 (2008), e849-e852. (in English)
- [2] DOSOUDIL, R., UŠÁKOVÁ, M., SLÁMA, J., GRUSKOVÁ, A.: Frequency Variation of Complex Permeability in Dual Ferrite Filler - Single Polymeric Matrix Composites. In: *Acta Physica Polonica A*. - ISSN 0587-4246. - Vol. 113, No. 1 (2008), p. 621-624. (in English)
- [3] GONZÁLEZ-ANGELES, A., GRUSKOVÁ, A., LIPKA, J., SLÁMA, J., JANČÁRIK, V.: Magnetic and Structural Studies of Ba<sub>0.5</sub>Sr<sub>0.5</sub>(ZnTi)<sub>x</sub>Fe<sub>12-2x</sub>O<sub>19</sub> Prepared by Ball Milling. In: *Jordan Journal of Physics*. - ISSN 1994-7607. - Vol. 1, No. 1 (2008), p. 37-42. (in English)
- [4] GONZÁLEZ-ANGELES, A., LIPKA, J., GRUSKOVÁ, A., JANČÁRIK, V., TÓTH, I., SLÁMA, J.: (Ni, Zn, Sn) Ru and (Ni, Sn) Sn Substituted Barium Ferrite Prepared by Mechanical Alloying. In: *Hyperfine Interactions*. - ISSN 0304-3843. - Vol. 184 (2008), p. 135-141. (in English)
- [5] GRUSKOVÁ, A., SLÁMA, J., GONZÁLEZ-ANGELES, A., ĎURMAN, V., UŠÁKOVÁ, M., JANČÁRIK, V., ŠOKA, M.: Electromagnetic Properties of Selected Hexaferrites. In: *Advances in Electrical and Electronic Engineering*. - ISSN 1336-1376. - Vol. 7, No. 1-2 (2008), p. 401-405. (in English)
- [6] GRUSKOVÁ, A., SLÁMA, J., DOSOUDIL, R., UŠÁKOVÁ, M., JANČÁRIK, V., UŠÁK, E.: Microwave Properties of Some Substituted LiZn Ferrites. In: *Journal of Magnetism and Magnetic Materials*. - ISSN 0304-8853. - Vol. 320 (2008), e860-e864. (in English)
- [7] GRUSKOVÁ, A., JANČÁRIK, V., SLÁMA, J., UŠÁKOVÁ, M.: Optimization of Magnetic and Structural Properties of Sr Ferrite Prepared by Low-Temperature Combustion. In: *Acta Physica Polonica A*. - ISSN 0587-4246. - Vol. 113, No. 1 (2008), p. 557-560. (in English)
- [8] JANÍČEK, F., POLJOVKA, P.: Integrity Management Systems in Power Engineering. In: *Zeszyty Naukowe Politechniki Opolskiej*. - ISSN 1429-1533. - Z. 60, Nr. 323 (2008), p. 123-124. (in English)
- [9] KOPČA, M.: Future of Electrotechnology. In: *Elektrorevue*. - ISSN 1336-8559. - Vol. 10, Special Issue (2008), on-line. (in Slovak)
- [10] LELÁK, J., VÁRY, M.: Evaluation of PVC Cables Degradation State. In: *Spravodaj ATD SR*. - ISSN 1337-8252. - Vol. 1, No. 1 (2008), p. 21-23. (in Slovak)
- [11] LELÁK, J., VÁRY, M.: Slow Dielectric Polarisation Processes in Thermoplastic Insulating Materials. In: *Sťarnutie elektroizolačných systémov*. - ISSN 1337-0103. - No. 4 (2008), p. 3-5. (in English)
- [12] LELÁK, J., ĎURMAN, V., BUDAJ, J.: Study of the Dielectric Properties of Flame Retardant Insulation during Thermal Ageing. In: *Sťarnutie elektroizolačných systémov*. - ISSN 1337-0103. - No. 4 (2008), p. 6-8. (in English)
- [13] PACKA, J., ĎURMAN, V., LELÁK, J.: Localization of Degraded Insulation in Embedded Cables. In: *Electrotehnica, Electronica si Automatica*. - ISSN 1582-5175. - Vol. 56, No. 1-2 (2008), p. 50-51. (in English)
- [14] RUSNÁK, J., RUŽINSKÝ, M., KOBAYASHI, H., TAKAHASHI, M., ŠTEFEČKA, M., PINČÍK, E.: Research on HCN Passivated Very Thin Oxide/Silicon Structures with Advanced Equipment Based on Transient Event Principle. In: *Metallurgical Analysis*. - ISSN 1000-7571. - Vol. 28, Suppl. 2 (2008), p. 1198-1201. (in English)
- [15] RUŽINSKÝ, M.: Solar Vehicle Cars. In: *EE časopis pre elektrotechniku a energetiku*. - ISSN 1335-2547. - Vol. 14, No. 6 (2008), p. 44-45. (in Slovak)

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- [16] RUŽINSKÝ, M.: Solar Cars on Rally F1. In: Stop. - ISSN 1335-0730. - Vol. 38, No. 17 (2008), p. 44-45. (in Slovak)
- [17] RUŽINSKÝ, M.: Solar Houses from Universities of Technology. In: TZB Haustechnik. - ISSN 1210-356X. - Vol. 16, No. 4 (2008), p. 20-23. (in Slovak)
- [18] RUŽINSKÝ, M.: Solar Houses from Technical Universities. In: TZB Haustechnik. - ISSN 1210-356X. - Vol. 16, No. 1 (2008), p. 27-30. (in Czech)
- [19] ŠÁLY, V., PACKA, J.: Materials and Material Structures for Modern Photovoltaics. I: Photovoltaic Conversion. In: EE časopis pre elektrotechniku a energetiku. - ISSN 1335-2547. - Vol. 14, No. 3 (2008), p. 40-42. (in Slovak)
- [20] ŠÁLY, V., PACKA, J.: Materials and Material Structures for Modern Photovoltaics II: Materials for Photovoltaic Applications. In: EE časopis pre elektrotechniku a energetiku. - ISSN 1335-2547. - Vol. 14, No. 4 (2008), p. 34-39. (in Slovak)
- [21] ŠÁLY, V., PACKA, J.: Materials and Material Structures for Modern Photovoltaics III. Modern Applications of Photovoltaics. In: EE časopis pre elektrotechniku a energetiku. - ISSN 1335-2547. - Vol. 14, No. 5 (2008), p. 40-47. (in Slovak)
- [22] SLÁMA, J., GRUSKOVÁ, A., JANČÁRIK, V., ŠTOFKA, M., GONZÁLEZ-ANGELES, A.: Electromagnetic Properties of Substituted Barium Hexaferrites. In: Acta Physica Polonica A. - ISSN 0587-4246. - Vol. 113, No. 1 (2008), p. 609-612. (in English)
- [23] SLÁMA, J., OLAH, V., GRUSKOVÁ, A., JANČÁRIK, V., HUDEC, I., DOSOUDIL, R., ŠIROKÝ, P., ŠOKA, M.: Magnetic Spectra Analysis of Dielectrics. In: Advances in Electrical and Electronic Engineering. - ISSN 1336-1376. - Vol. 7, No. 1-2 (2008), p. 393-397. (in English)
- [24] VERBICH, O., SULOVA, J., PACKA, J., ĎURMAN, V., LELÁK, J., VÁRY, M.: Effect of a Long-Term Flooding on the Dielectric Properties of Flame Retarding Cables. In: Electrotehnica, Electronica si Automatica. - ISSN 1582-5175. - Vol. 56, No. 1-2 (2008), p. 14-16. (in English)
- [25] VOULGAROPOULOU, P., DOUNIS, S., KAMBILAFKA, V., ANDROULIDAKI, M., RUŽINSKÝ, M., ŠÁLY, V., PROKEIN, P., VISKADOURAKIS, Z., TSAGARAKI, K., APERATHITIS, E.: Optical Properties of Zinc Nitride Thin Films Fabricated by rf-Sputtering from ZnN target. In: Thin Solid Films. - ISSN 0040-6090. - Vol. 516 (2008), p. 8170-8174. (in English)

## VIII.2 Conference Proceedings

- [1] ĎURIŠ, T., ŠÁLY, V., PACKA, J., RUŽINSKÝ, M., BAŘINKA, R., PORUBA, A.: Accelerated Ageing of Experimental Fotovoltaic Mini-Modules-Evaluation I-V Characteristic under Illumination. In: 3rd Czech Photovoltaic Conferenece: Brno, Czech Republic, 3.-5.11.2008. - Rožnov p. Radhoštěm: Czech RE Agency, 2008. - ISBN 978-80-254-3528-8. - p. 163-167. (in Slovak)
- [2] ĎURIŠ, T., ĎURMAN, V., ŠÁLY, V.: Accelerated Ageing Studies on Polyvinyl Butyral for Photovoltaic Applications. In: Dielectric and Insulating Systems in Electrical Engineering: 17th International Conference DISEE 2008. Demänovská Dolina, Slovak Republic, 17.-19.9.2008. - Bratislava: STU, 2008. - ISBN 978-80-227-2933-8. - p. 219-222. (in English)
- [3] ĎURIŠ, T., ŠÁLY, V., PACKA, J., RUŽINSKÝ, M., BAŘINKA, R., PORUBA, A.: Indoor Accelerator Ageing Experiments on Different Encapsulated Mini-Solar Modules - Evaluation of PV Parameters. In: 23rd European Photovoltaic Solar Energy Conference: Valencia, Spain, 1.-5.9.2008. - Munich: WIP-Renewable Energies, 2008. - ISBN 3-936338-24-8. - p. 2925-2928. (in English)
- [4] ĎURMAN, V., LELÁK, J., BUDAJ, J.: Ageing Tests on Flame Retardant Cables.

- In: Dielectric and Insulating Systems in Electrical Engineering: 17th International Conference DISEE 2008. Demänovská Dolina, Slovak Republic, 17.-19.9.2008. - Bratislava: STU, 2008. - ISBN 978-80-227-2933-8. - p. 44-47. (in English)
- [5] ĎURMAN, V., GRUSKOVÁ, A., UŠÁKOVÁ, M.: Dielectric Properties and Conductivity of Ba-Sr Ferrites. In: APCOM 2008. Applied Physics of Condensed Matter: Proceedings of 14th International Workshop. Bystrá, Slovak Republic, 25.-27.6.2008. - Bratislava: STU, 2008. - ISBN 978-80-227-2902-4. - p. 57-60. (in English)
- [6] FERENC, M., KOVÁCS, Z., RAPŠÍK, M., KRONDIK, E., POLJOVKA, P., SMITKOVÁ, M.: Reliability Theory and Its Application to Maintenance. In: Control of Power Systems '08: 8th International Conference. Štrbské Pleso, Slovak Republic, 11.-13.6.2008. - Bratislava: STU, 2008. - ISBN 978-80-227-2883-6. - CD-Rom. (in English)
- [7] KOPČA, M., VÁRY, M.: Estimation of Charge Dissipation Capability of ESD Protecting Materials. In: APCOM 2008. Applied Physics of Condensed Matter: Proceedings of 14th International Workshop. Bystrá, Slovak Republic, 25.-27.6.2008. - Bratislava: STU, 2008. - ISBN 978-80-227-2902-4. - p. 101-104. (in English)
- [8] LELÁK, J., VÁRY, M., PACKA, J.: Complex Evaluation of PVC Cable Insulation systems Degradation State. In: Dielectric and Insulating Systems in Electrical Engineering: 17th International Conference DISEE 2008. Demänovská Dolina, Slovak Republic, 17.-19.9.2008. - Bratislava: STU, 2008. - ISBN 978-80-227-2933-8. - p. 68-72. (in Slovak)
- [9] LELÁK, J., ĎURMAN, V., PACKA, J.: Some Aspects of Using Underground Protectors for PVC Power Cables. In: Study and Control of Corrosion in the Perspective of Sustainable Development of Urban Distribution Grids: 7th International Conference. Baile Felix, Romania, 25.-27.6.2008. - Bucharest: Publishing House Printech, 2008. - ISBN 978-606-521-032-5. - p. 211-213. (in English)
- [10] LELÁK, J.: Influence of Working Condition of Distribution Transformers on Their Lifetime. In: New Trends in Diagnostic and Repair Electric Machine and Devices: 7th International Conference. Zuberec, Slovak Republic, 27.-29.5.2008. - Žilina: Žilinská univerzita, 2008. - ISBN 978-80-8070-850-4. - p. 10-13. (in Slovak)
- [11] POLJOVKA, P.: Management System Quality. In: Quality, Environment, Health Protection and Safety Management Development Trends: International Scientific Conference. Neum, Bosnia and Herzegovina, 2.-6.9.2008. - Brno: Tribun EU, 2008. - ISBN 978-80-7399-479-2. - p. 246-249. (in English)
- [12] RUŽINSKÝ, M., ŠÁLY, V., PACKA, J., ĎURIŠ, T.: Photovoltaic R&D, Education and Training - Experiences at the Slovak University of Technology. In: IWTPV 08. 4th International Workshop on Teaching in Photovoltaics: Prague, Czech Republic, 27.-28.3.2008. - Prague: Czech Technical University, 2008. - ISBN 978-80-01-04047-8. - p. 33-37. (in English)
- [13] ŠÁLY, V., DIEZ, D.G., PACKA, J., ĎURIŠ, T., RUŽINSKÝ, M.: AC Measurements on Crystalline Silicon PV Cells for Concentrator Application. In: Dielectric and Insulating Systems in Electrical Engineering: 17th International Conference DISEE 2008. Demänovská Dolina, Slovak Republic, 17.-19.9.2008. - Bratislava: STU, 2008. - ISBN 978-80-227-2933-8. - p. 231-234. (in English)
- [14] ŠÁLY, V., SLOBODA, M., ĎURIŠ, T., PACKA, J., RUŽINSKÝ, M., BAŘINKA, R., PORUBA, A.: Crystalline Silicon Solar Cell Model Structure for Concentration Applications - Electrical Characterization. In: IWTPV 08. 4th International Workshop on Teaching in Photovoltaics: Prague, Czech Republic, 27.-28.3.2008. - Prague: Czech Technical University, 2008. - ISBN 978-80-01-04047-8. - p. 95-99. (in English)
- [15] ŠÁLY, V., PACKA, J., ĎURIŠ, T., ĎURMAN, V.: Electric Parameters of Solar Cells and Modules - AC Measurement. In: 3rd Czech Photovoltaic Conference: Brno, Czech Republic, 3.-5.11.2008. - Rožnov p. Radhoštěm: Czech RE Agency, 2008. - ISBN 978-80-254-3528-1 -

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p. 81-85. (in English)

- [16] ŠÁLY, V., PACKA, J., ĎURIŠ, T., RUŽIŇSKÝ, M.: Encapsulation Materials for Photovoltaic Applications. In: Dielectric and Insulating Systems in Electrical Engineering: 17th International Conference DISEE 2008. Demänovská Dolina, Slovak Republic, 17.-19.9.2008. - Bratislava: STU, 2008. - ISBN 978-80-227-2933-8. - p. 227-230. (in English)
- [17] ŠÁLY, V., PACKA, J.: Fotovoltaics - from Principle to Modern Applications. In: Talking about Materials and Technologies. - Bratislava: Institute of Materials and Machine Mechanics SAS, 2008. - ISBN 978-80-970027-6-3. - p. 127-140. (in Slovak)
- [18] ŠÁLY, V., DIEZ, D.G., PACKA, J., ĎURIŠ, T., BAŘINKA, R., RUŽIŇSKÝ, M.: Results of DA and AC Measurements on Crystalline Silicon Solar Cells for Concentrator Applications. In: 23rd European Photovoltaic Solar Energy Conference: Valencia, Spain, 1.-5.9.2008. - Munich: WIP-Renewable Energies, 2008. - ISBN 3-936338-24-8. - p. 1658-1571. (in English)
- [19] SLÁMA, J., ŠOKA, M., GRUSKOVÁ, A., JANČÁRIK, V., ĎURMAN, V.: Magnetic and Dielectric Spectroscopy of Ferrites. In: Magnetic Measurements '08: International Conference. Budapest, Hungary, 21.-24.9.2008. - Budapest: MTA MFA, 2008. - p. 35-36. (in English)
- [20] VÁRY, M., LELÁK, J., KOPČA, M.: Investigation of Changes in Slow Dielectric Polarisation Processes in PVC Based Insulating Cable Systems Activated by Thermal Ageing. In: Dielectric and Insulating Systems in Electrical Engineering: 17th International Conference DISEE 2008. Demänovská Dolina, Slovak Republic, 17.-19.9.2008. - Bratislava: STU, 2008. - ISBN 978-80-227-2933-8. - p. 223-226. (in English)
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### VIII.3 Textbook

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