







# POWER ENGINEERING 2012 | ENERGETIKA 2012

15. 5. 2012	10:00	13:30	Registration / Registrácia					
	Lunch / Obed							
	13:30	14:00	Opening of the Event / Otvorenie podujatia					
	14:00	17:30	Plenary Lectures / Plenárne prednášky					
	19:00		Welcome Party / Spoločenský večer					
16. 5. 2012	8:00	12:00	 <b>EEE 2012</b>		 <b>CPS CPS 2012</b>		 <b>OZE 2012</b>	
			Room EEE-1	Room EEE-2	Room CPS-1	Room CPS-2	Room OZE-1	Room OZE-2
			<b>Development of Nuclear Energy Industry</b> (Rozvoj jadrovej energetiky)	<b>Transmission and Distribution Systems</b> (Prenosové a distribučné sústavy)	<b>Modeling and Control of Power Systems I.</b> (Modelovanie a riadenie ES I.)	<b>Power System Reconfigurations</b> (Rekonfigurácie ES)	<b>Biomass I.</b> (Biomasa I.)	<b>Solar Energy</b> (Slnecná energia)
			Coffee Break					
			<b>Development of Nuclear Energy Industry</b> (Rozvoj jadrovej energetiky)	<b>Transmission and Distribution Systems</b> (Prenosové a distribučné sústavy)	<b>Modeling and Control of Power Systems I.</b> (Modelovanie a riadenie ES I.)	<b>Power System Reconfigurations</b> (Rekonfigurácie ES)	<b>Biomass I.</b> (Biomasa I.)	<b>Solar Energy</b> (Slnecná energia)
	Lunch / Obed							
	13:30	18:00	Excursion Tour / Leisure Time Activities Exkurzia / Voľný program					
	13:45	15:15	Round Table Discussion: Development of the smart grid in Slovakia / Diskusia pri okrúhlym stole: Rozvoj inteligentných sietí v SR.					
	15:30	18:00	<b>Discussion Big Fut with Š. Hríb and M. Mojžiš: Will there be a worldwide blackout by 2030?</b> <b>Guests: Klaus Willnow, Siemens Energy, Pompilio Caramuscio, ENEL, prof. Ing. Jozef Sitek, DrSc., FEI STU, prof. Ing. Ján Gaduš, PhD., SPU Nitra</b> Diskusia Big Fut s moderátormi Š. Hríbom a M. Mojžišom na tému: Hrozí nám v roku 2030 celosvetový blackout? Hostia: Klaus Willnow, Siemens Energy, Pompilio Caramuscio, ENEL, prof. Ing. Jozef Sitek, DrSc., FEI STU, prof. Ing. Ján Gaduš, PhD., SPU Nitra					
	18:00	19:00	Poster Presentation Session / Prezentácia posterov					
19:00		Banquet / Spoločenský večer						
17. 5. 2012	8:20	12:00	 <b>EEE 2012</b>		 <b>CPS CPS 2012</b>		 <b>OZE 2012</b>	
			<b>Energy Market and Economy in Power Engineering</b> (Trh a ekonomika v energetike)	<b>Renewable Sources, Ecology and Efficiency in Power Engineering</b> (Obnoviteľné zdroje, ekológia a efektívnosť v energetike)	<b>Stability and Power System Control</b> (Stabilita a riadenie ES)	<b>Modeling and Control of Power Systems II.</b> (Modelovanie a riadenie ES II.)	<b>Biomass II.</b> (Biomasa II.)	<b>General Application of the RES / Hydro and Wind Energy</b> (Všeobecné aplikácie OZE / Vodná a veterná energia)
			Coffee Break					
			<b>Energy Market and Economy in Power Engineering</b> (Trh a ekonomika v energetike)	<b>Renewable Sources, Ecology and Efficiency in Power Engineering</b> (Obnoviteľné zdroje, ekológia a efektívnosť v energetike)	<b>Stability and Power System Control</b> (Stabilita a riadenie ES)		<b>Biomass II.</b> (Biomasa II.)	<b>General Application of the RES / Hydro and Wind Energy</b> (Všeobecné aplikácie OZE / Vodná a veterná energia)
Lunch / Obed								

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May 15, 2012			
10:00	13:30	Registration / Registrácia	
		Lunch / Obed	
		Opening of the Event / Otvorenie podujatia	
13:30	14:00	<b>Opening Speech of the Event Chairman František Janíček</b> Príhovor garanta podujatia Františka Janíčka	
		<b>Speech of Dean of the Faculty of Electrical Engineering and Information Technology Gabriel Juhás</b> Príhovor dekana Fakulty elektrotechniky a informatiky Gabriela Juhása	
PLENARY LECTURES / PLENÁRNE PREDNÁŠKY			
<b>Chairman: František Janíček</b>			
14:00	14:30	<b>LEGISLATION TO SUPPORT BIOGAS AND BIOMETHANE DEVELOPMENT</b> Legislatíva v oblasti podpory bioplynu a biometánu	<b>Juraj Novák,</b> hlavný štátny radca, Ministerstvo hospodárstva SR
14:30	15:00	<b>EDUCATIONAL ACTIVITIES OF EkoFond IN THE AREA OF ENERGY EFFICIENCY</b> Vzdelávacie aktivity EkoFondu v oblasti zvyšovania energetickej efektívnosti	<b>Eva Guliková,</b> správca neinvestičného fondu, EkoFond, n. f.
15:00	15:30	<b>SOME INFLUENCES OF THE GLOBAL ASPECTS OF THE EU ENERGY STRATEGY ON THE SLOVAK POWER SYSTEM</b> Niektoré vplyvy globálnych aspektov energetickej stratégie EÚ na Elektrizačnú sústavu SR	<b>Miroslav Gramblička,</b> výkonný riaditeľ sekcie rozvoja ES, SEPS, a. s.
15:30	16:00	<b>THE ROLE OF INNOVATION IN THE ENEL GROUP</b> Úloha inovácií v Enel Group	<b>Pompilio Caramuscio,</b> ENEL Ingegneria & Innovazione
16:00	16:30	<b>SUPPLEMENT TO REGULATION POLICY AND CHANGES OF BASIC LEGISLATION BY REGULATORY OFFICE FOR NETWORK INDUSTRIES</b> Dodatok k regulačnej politike a zmeny základných právnych noriem Úradu pre reguláciu sieťových odvetví	<b>Jozef Holjenčík,</b> predseda Rady pre reguláciu, Úrad pre reguláciu sieťových odvetví
16:30	17:00	<b>SMARTGRID AND RES STATUS IN ZSE DISTRIBÚCIA, a. s.</b> SmartGrid a OZE v podmienkach ZSE Distribúcia, a. s.	<b>Miroslav Jalec,</b> vedúci technického rozvoja distribučnej sústavy, Západoslovenská energetika, a. s.
17:00	17:30	<b>FINANCING OF THE NATIONAL AND INTERNATIONAL RESEARCH PROJECTS IN THE FIELD OF THE POWER ENGINEERING FROM PUBLIC SOURCES TILL THE YEAR 2020</b> Financovanie národných a medzinárodných výskumných projektov z oblasti energetiky do roku 2020 z verejných zdrojov	<b>Stanislav Sipko,</b> predseda občianskeho združenia SOVVA
19:00		WELCOME PARTY	

## CPS 2012 • May 16, 2012

<b>Modeling and Control of Power Systems I. (English Speaking Section)</b> Modelovanie a riadenie ES I.				<b>Power System Reconfigurations (Slovak Speaking Section)</b> Rekonfigurácie ES			
<b>Chairmen: Teofana Puleva, Karel Máslo</b>				<b>Chairmen: Ján Hribik, Pavel Cvešpr</b>			
<b>8:20</b>	<b>9:00</b>	<b>POWER SYSTEM DYNAMICS MODELING</b>	<b>Máslo K.</b>	<b>8:20</b>	<b>9:00</b>	<b>FEEDBACK ON LINKY SMART METERING PILOT IN FRANCE</b>	<b>Schricke H., Chochol P.</b>
9:00	9:20	LOAD DISTURBANCE REJECTION BASED ON WIENER FILTERING	Puleva T., Haralanova E.	9:00	9:20	TOPOLOGY CHANGES IN THE TRANSMISSION SYSTEM OF THE SLOVAK REPUBLIC	Jedinák M., Prieložný S., Šmidovič R.
9:20	9:40	APPLICATION OF SICAM PAS SYSTEM IN AUTOMATION AND CONTROL OF 400/110 kV STIP	Sarac V., Minovski D.	9:20	9:40	MICROPROCESSOR CONTROLLED PORTABLE AC CURRENT AND VOLTAGE SOURCE FOR ELECTRICITY METERS TESTING	Hribik J., Hruškovic M., Fuchs P.
9:40	10:00	MODEL OF TRANSMISSION SYSTEM FOR EMS APPLICATIONS IN THE DISPATCH CONTROL SYSTEM	Klouček T., Baxant P.	9:40	10:00	ACCURATE DETERMINATION OF NUCLEAR REACTOR OUTPUT	Pliska J., Londýnová K., Machát Z., Papuga J., Smíšek J.
<b>10:00</b>	<b>10:30</b>	<b>Coffee Break</b>					
<b>Modeling and Control of Power Systems I. (English Speaking Section)</b> Modelovanie a riadenie ES I.				<b>Power System Reconfigurations (Slovak Speaking Section)</b> Rekonfigurácie ES			
<b>Chairmen: Teofana Puleva, Karel Máslo</b>				<b>Chairmen: Ján Hribik, Pavel Cvešpr</b>			
10:30	10:50	DECENTRALIZED CONTROL OF BOILER-TURBINE SYSTEM	Holič I., Rosinová D., Veselý V.	10:30	10:50	THE SMART METERING SYSTEM FOR THE POWER CONSUMPTION OF THE PRODUCTION SYSTEMS	Porubský M., Gregáč H., Božek P.
10:50	11:10	HYDRO TURBINE ACCELERATED POWER CONTROL BASED ON MODEL PREDICTIVE CONTROLLER	Ruykova V., Puleva T., Garipov E.	10:50	11:10	COMPREHENSIVE APPROACH TO MANAGEMENT OF SERVICE LIFETIME OF POWER GENERATION EQUIPMENT	Cvešpr P.
<b>Lunch</b>							
<b>13:30</b>	<b>18:00</b>	<b>Excursion Tour / Leisure Time Activities</b> Exkurzia / Voľný program					
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<b>15:30</b>	<b>18:00</b>	<b>Discussion Big Fut with S. Hrib and M. Mojzis: Will there be a worldwide blackout by 2030?</b> Diskusia Big Fut s moderátormi Š. Hribom a M. Mojžišom na tému: Hrozí nám v roku 2030 celosvetový blackout?					
<b>18:00</b>	<b>19:00</b>	<b>Poster Presentation Session/ Prezentácia posterov</b>					
<b>19:00</b>	<b>Banquet/ Spoločenský večer</b>						

## CPS 2012 • May 17, 2012

Stability and Power System Control (English Speaking Section) Stabilita a riadenie ES				Modeling and Control of Power Systems II. (Slovak Speaking Section) Modelovanie a riadenie ES II.			
<b>Chairmen: Petr Neuman, Stefan Paszek</b>				<b>Chairmen: Ján Murgaš, Anton Beláň</b>			
8:20	9:00	DEVELOPMENT OF SMART UNDERFREQUENCY LOAD SHEDDING SYSTEM	Chuvychin V., Petrichenko R.	8:20	8:40	IMPACT OF EMBEDDED RENEWABLES ON TRANSMISSION AND DISTRIBUTION NETWORK	Pistora M., Máslo K.
9:00	9:20	ON ADAPTIVE POSI-CAST CONTROLLER: PMSM SPEED CONTROLLER DESIGN	Tárník M.	8:40	9:00	STORY OF CPS CONFERENCES & POWER AND HEATING PLANTS: MODELS FOR OPERATOR TRAINING SIMULATORS	Neuman P.
9:20	9:40	DETERMINATION OF POLISH POWER SYSTEM ANGULAR STABILITY FACTORS BASED ON ANALYSIS OF CHOSEN DISTURBANCE STATES	Pruski P., Paszek S.	9:00	9:20	OPTIMIZATION OF PSS PARAMETERS	Murgaš J., Ernek M.
9:40	10:00	POWER SYSTEMS: SYNCHRONISATION OF SYNCHRONOUS GENERATOR IN ENGINEERING AND TRAINING SIMULATORS	Neuman P., Jirkovský J.	9:20	9:40	BLACKSTART OF COMBINED CYCLE POWER PLANTS IN SLOVAK POWER SYSTEM	Murgaš J., Ernek M.
				9:40	10:00	EASY TUNING OF ROBUST PID CONTROLLERS FOR NON-MINIMUM PHASE PROCESSES BASED ON SINE-WAVE IDENTIFICATION	Bucz Š., Veselý V.
<b>Coffee Break</b>							
<b>Stability and Power System Control (English Speaking Section) Stabilita a riadenie ES</b>							
<b>Chairmen: Petr Neuman, Stefan Paszek</b>							
10:30	10:50	FORECAST AND LOAD DETERMINATION OF 110/20-10kV TRANSFORMER SUBSTATIONS FOR RIGA CITY TILL 2025	Guseva S., Borscevskis O., Skobeleva N.				
10:50	11:10	SMART METERING AND SMART GRID – (WHEN) WILL IT BE A REALITY?	Kukuča P., Hartánský R.				
<b>Lunch</b>							



## EEE 2012 • May 16, 2012

### Transmission and Distribution Systems Prenosové a distribučné sústavy

### Development of Nuclear Energy Industry Rozvoj jadrovej energetiky

Chairmen: František Janíček, Zoltán Kovács

Chairmen: Vladimír Nečas, Ivan Daruľa

8:00	8:30	<b>SURVEY OF LOW-FREQUENCY ELECTROMAGNETIC FIELDS IN EHV AND UHV SUBSTATIONS USING A MATHEMATICAL MODELLING</b>	Bojda, P., Lago, J., Skurčák, L., Savčák, M.	8:00	8:30	<b>APPLICATIONS OF NUCLEAR ENERGY IN FUTURE</b>	Sitek, J., Nečas, V.
8:30	8:50	COMPARISON OF EHV OVER HEAD LINE CABLES FROM ASPECT OF THEIR STEEL CORE MAGNETIZATION	Lago, J., Pavlov, L.	8:30	8:50	EVALUATION OF AN EXTERNAL EXPOSURE OF A WORKER DURING MANIPULATION WITH WASTE PACKAGES STORED IN BOHUNICE RADIOACTIVE WASTE TREATMENT CENTRE	Slimák, A., Hrnčíř, T., Nečas, V.
8:50	9:10	OPTIMIZATION OF ELECTRICAL PARAMETERS OF WINDINGS USED IN AXIAL FLUX ELECTRICAL MACHINES	Uhrík, M.	8:50	9:10	ASSESSMENT OF EXPOSURE PATHWAYS CONNECTED WITH CONSTRUCTION AND OPERATION OF CONCRETE BRIDGE REINFORCED WITH VERY LOW LEVEL RADIOACTIVE STEEL	Pánik, M., Nečas, V.
9:10	9:30	RELIABILITY AND E.M.C. APPROACH TO POWER SYSTEMS	Pantůček, E.	9:10	9:30	EXPOSURE PATHWAYS ANALYSIS IN SCENARIO OF VERY LOW LEVEL RADIOACTIVE STEEL UTILIZATION IN TUNNEL CONSTRUCTIONS	Hrnčíř, T., Nečas, V.
9:30	9:50	USE OF PSA METHODOLOGY FOR ANALYSIS OF SHUNT FAULTS AT A VARIOUS LOCATIONS ON THE 400 kV LINES	Hlaváč, P., Kovács, Z., Janíček, F.	9:30	9:50	VERIFICATION OF THE DEPLETION CAPABILITIES OF THE MCN-PX CODE ON A LWR MOX FUEL ASSEMBLY	Čerba, Š., Hrnčíř, M., Nečas, V.
<b>9:50</b>	<b>10:20</b>	<b>Coffee Break</b>					
10:20	10:40	RELIABILITY OF THE GRID AS FUNCTION OF POWER FLOW AND CONFIGURATION DURING MAINTENANCE	Kovács, Z., Hlaváč, P., Janíček, F.	10:20	10:40	CALCULATION OF THE CONCENTRATION OF MINOR ACTINIDES IN SPENT NUCLEAR FUEL	Bajan, M., Nečas, V.
10:40	11:00	NUMERICAL SOLUTION OF BOUNDARY INVERSE PROBLEMS OF ELECTRICAL CONDUCTIVITY	Brilla, I.	10:40	11:00	ANALYSIS OF RADIOACTIVITY INCREASE OF RADWASTE FILLED IN FIBRE-REINFORCED CONCRETE CONTAINER REGARDING EXTERNAL EXPOSURE OF WORKERS	Barátová D., Hrnčíř T., Nečas, V.
11:00	11:20	NUMERICAL DETERMINATION OF VOLTAGE POTENTIAL INSIDE ORTHOTROPIC MEDIA USING VARIATIONAL METHODS	Brilla, I.	11:00	11:20	MONITORING OF SAFETY RELATED NPP WWER-440 PRIMARY CIRCUIT COMPONENTS	Balák, M., Kupča, L., Březina, M.
11:20	11:40	POWER FLOW MODELLING IN ELECTRIC NETWORKS WITH RENEWABLE ENERGY SOURCES IN LARGE AREAS	Buhawa, Z. M., Dvorský, E.	11:20	11:40	ANALYSIS OF MIXING OF COOLANT IN VVER-440 REACTOR USING CFX CODE	Mojto, E., Kutiš, V., Paulech, J., Murín, J.
				11:40	12:00	PROTON SCATTERING FROM LI ISOTOPES IN THE CONTEXT OF THE GLAUBER THEORY. NUCLEAR STRUCTURE AND INTERACTION MECHANISMS	Pramantayeva, B.A., Kuterbekov, K.A., Temerbayev, A.A., Tleulessova, I.K., Zhigalova, A., Ibrayeva, E.T.
<b>Lunch</b>							
<b>13:30</b>	<b>18:00</b>	<b>Excursion Tour / Leisure Time Activities</b> Exkurzia / Voľný program					
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## EEE 2012 • May 17, 2012

### Energy Market and Economy in Power Engineering

Trh a ekonomika v energetike

Chairmen: Daniela Špírková, Ivan Daruľa

8:30	9:00	<b>NEW VISION OF DSM STRATEGY AS THE MAIN TOOL IN COOPERATION SUPPLIERS AND CONSUMERS OF ELECTRICAL ENERGY</b>	Szkutnik, J.
9:00	9:20	APPROACH OF OPTIMUM CROSS-SECTION CHOICE FOR CABLE LINES IN MARKET PRICES CONDITIONS	Guseva, S., Petrichenko, L.
9:20	9:40	ROBOTIZED WORPLACES VS . ECONOMIC IMPACTS ON POWER ENGINEERING	Tóthová, M., Iring, P., Božek, P.
9:40	10:00	INDUSTRIAL SYSTEMS PROGRAMMING ACCORDING TO EFFECTIVE ENERGY CONSUMING	Trnka, K., Kňážík, M., Pintér, T., Božek, P.

### Renewable Sources, Ecology and Efficiency in Power Engineering

Obnoviteľné zdroje, ekológia a efektívnosť v energetike

Chairmen: František Janíček, Pavel Timár

8:30	9:00	<b>THE ENERGY SECTOR CHANGES THE FACE OF THE WORLD</b>	Ludrovský, P.
9:00	9:20	A STUDY ON UTILIZATION IMPROVEMENT OF COGENERATION POTENTIAL IN A COMPLEX INDUSTRIAL STEAM AND POWER PLANT	Mierka, O., Variny, M.
9:20	9:40	3E MODEL FOR A SMALL HEPP DESIGN	Tešňjak, S., Krznarić, M., Buinac, R. Lipovača, N.
9:40	10:00	OPTIMIZATION OF EQUIPMENT PERFORMANCE FOR REGENERATION OF USED TRANSFORMER OILS	Timár, P., Štibrányi, L., Stopka, J., Báleš, V., Nemsilová, L.

### 10:00 10:30 Coffee Break

10:30	10:50	OKTE , A.S. - CENTRAL METERING DATA HOUSE	Janíček, F., Šedivý, J., Šulc, I.	10:30	10:50	ECOLOGICAL AND TECHNICAL SITUATION OF FLOODED OIL WELLS IN KAZAKHSTAN	Kuterbekov K.A., Kabdrakhimova G.D., Nukonov D.N., Kushkimbaev B.M., Nurakhmetov T.N., Nurmukhanbetova A.K., Zhaksigulova A.
10:50	11:10	BUSINESS AND METERING INFORMATION SYSTEM	Ščípa, V., Görfölová, E.				

### Lunch



## OZE 2012 • May 16, 2012

Biomass I. Biomasa I.				Solar Energy Slnečná energia			
<b>Chairman: Ján Gaduš</b>				<b>Chairmen: Július Círák, Vladimír Šály</b>			
<b>8:30</b>	<b>9:00</b>	<b>BIOENERGY AND ITS VISION</b>	<b>Víglaský, J.</b>	<b>8:30</b>	<b>9:00</b>	<b>PHOTOVOLTAICS: TECHNICAL AND SAFETY PROBLEMS</b>	<b>Šály, V., Packa, J., Perný, M.</b>
9:00	9:20	CHEMICAL COMPOSITION OF LIQUEFIED PRODUCTS FROM LIGNOCELLULOSIC MATERIALS DEGRADATION	Ház A., Mikulášik R., Orságová A., Mészáros, G., Šurina, I.	9:00	9:20	GEOGRAFICAL ASPECTS OF PHOTOVOLTAIC INDUSTRY IN SLOVAKIA WITH COMPLEX ANALYSIS OF THE FINAL PLACEMENT	Chovanec, M., Jarás, M.
9:20	9:40	STUDY OF MICROWAVE DEGRADATION OF LIGNOSULFONATES	Orságová, A., Mészáros, G., Mikulášik, R., Ház, A., Šurina, I.	9:20	9:40	LUMINESCENT CONVERTERS OF SOLAR RADIATION BASED ON MESOPOROUS SILICA OXIDE ACTIVATED BY RARE-EARTH IONS	Nurakhmetov T.N., Kuterbekov K.A., Schmedake, et. al.
9:40	10:00	HYDROTHERMAL PROCESSING OF WASTE BIOMASS TO CARBON PRODUCTS	Mikulášik, R., Ház, A., Orságová, A., Mészáros, G., Šurina, I.	9:40	10:00	IMPEDANCE SPECTROSCOPY OF SOLAR CELLS	Ďurman, V., Perný, M., Šály, V.
<b>10:00</b>	<b>10:30</b>	<b>Coffee Break</b>					
Biomass I. Biomasa I.				Solar Energy Slnečná energia			
<b>Chairman: Ján Gaduš</b>				<b>Chairmen: Július Círák, Vladimír Šály</b>			
<b>10:30</b>	<b>11:00</b>	<b>SECURITY OF SUPPLY</b>	<b>Krušpan, M. - SPP</b>	10:30	10:50	ORGANIC PHOTOVOLTAIC CELLS BASED ON MOLECULAR DONOR - ACCEPTOR HETEROJUNCTIONS	Círák, J., Sokolský, M.
11:00	11:20	BIOENERGY AND VALUE-EDED PRODUCTS FROM SWITCHGRASS	Pekarovic J., Busso M., Raycraft L., Pekarovicova A.	10:50	11:10	PROPERTIES OF SCREEN PRINTED TIO2 BASED LAYERS FOR DYE SENSITIZED SOLAR CELLS	Gemeiner, P., Mikula, M. Omastová, M., Gemeiner, P.
11:20	11:40	THE ROLE OF SURFACTANTS IN FIBRE RECYCLING	Botková, M., Kučerková, L., Vrška, M., Šutý, Š.	11:10	11:30	FUTURE OF POWER ENGINEERING DEPENDS ON YOUNG PEOPLE	Stuchlíková, L., Benkovská, J., Stuchlík, M., et. al.
11:40	12:00	ENERGETICKÉ, EKOLOGICKÉ ÚČINKY TEPELNÝCH ČERPADIEL	Tomlein, P.				
<b>Lunch</b>							
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## OZE 2012 • May 17, 2012

### Biomass II. Biomasa II.

Chairman: Igor Šurina

8:30	9:00	EXPERIMENTS WITH BIOGAS PRODUCTION USING DRY FERMENTATION TECHNOLOGY	Gaduš, J., Jančo, Š., Gierl, T.
9:00	9:20	CATALYTIC DESTRUCTION OF TARS CONTAINED IN PROCESS GAS	Šugár, L., McCafferty, P., Gašparovič, L., Jelemenský, L., Markoš, J.
9:20	9:40	TRANSFORMATION OF DUMPED TARS INTO A PROCESS GAS	Gašparovič, L., Šugár, L., Jelemenský, L., Markoš, J.
9:40	10:00	PRODUCTION OF COMBUSTIBLE GAS FROM PYROLYSIS OIL	Gašparovič, L., Šugár, L., Jelemenský, L., Markoš, J.

10:00 10:30 **Coffee Break**

### Biomass II. Biomasa II.

Chairman: Igor Šurina

10:30	11:00	BIOMETHANE – THE CONNECTION TO THE DISTRIBUTION NETWORK AND DISTRIBUTION	Đurica, P. - SPP
11:00	11:20	DISTRIBUTION OF SULPHUR INTO PRODUCTS FROM WASTE TIRE PYROLYSIS	Susa, D., Haydary, J., Markoš, J.
11:20	11:40	BIODEGRADABLE PACKAGING MATERIALS	Mikušová, M., Tománová, K., Plavec, R., Mihalík, M., Benovič, F., Alexy, P.
11:40	12:00	ALTERNATIVE ENERGY SOURCES AT FACULTY OF MATERIALS SCIENCE AND TECHNOLOGY STU IN TRNAVA – RESEARCH AND PROMOTION	Soldán, M., Fiala, J., Bliňová, L., Michalíková, A., Gerulová, K., Kuracina, R.

Lunch

### General Application of the RES/ Hydro and Wind Energy Všeobecné aplikácie OZE/ Vodná a veterná energia

Chairmen: Július Cirák, Vladimír Šály

8:30	9:00	OPTIMIZATION OF THE CLAUSIUS-RANKIN AND ORGANIC CLAUSIUS-RANKIN CYCLES IN THE POWER PLANT CONCERNING WITH EXHAUST HEAT EXPLOITATION	Murín, J., Kutiš, V. Paulech, J., Janíček, F.
9:00	9:20	ENERGY MANAGEMENT AND RENEWABLE ENERGY SOURCES	Kultan, J.
9:20	9:40	EFFECT OF ALTERNATIVE ENERGY SOURCES ON STABILITY OF ELECTRICAL NETWORK	Mühlbacher, J., Frank, L.
9:40	10:00	OPTIMALIZATION OF THE ELECTRICITY CONSUMPTION FOR THE OPERATING AREA	Ondriga, L., Ondriga, M.

### General Application of the RES (English Speaking Section) / Hydro and Wind Energy Všeobecné aplikácie OZE / Vodná a veterná energia

Chairmen: Július Cirák, Vladimír Šály

10:30	10:50	IMPACTS FROM NEW 50 MW WIND POWER PLANT - BOGDNACI ON THE PRICE OF ELECTRICAL ENERGY IN MACEDONIA	Minovski, D., Sarac, V., Causevski, A.
10:50	11:10	RENEWABLE SOURCES AND THEIR INTEGRATION IN THE SMART GRIDS	Turček, J. Hropko, D., Šmidovič, R.
11:10	11:30	FUTURE SHARE OF RES IN ENERGY MIX OF POLAND	Sowinski, J.
11:30	11:45	SERVICE QUALITY MANAGEMENT: SUPPLYING KLAIPEDA REGION WITH ELECTRIC POWER	Peciulyte, S., Tamosiunas, T.



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TRANSMISSION ABILITY INCREASE BASED ON A WEATHER PREDICTION	Vostracký, Z., Šnajdr, J., Krutina, A., Velek, J.
SYSTEMS FOR PROTECTION AND AUTOMATION OF DISTRIBUTION ELECTRIC NETWORKS 22 kV	Horák, M.
THE DESTRUCTION INFLUENCES OF PULSE AND SURGE CURRENTS ON OVERVOLTAGE PROTECTION	Glasa M., Hüttner L.
THE APPLICATION OF FINITE ELEMENT METHOD ON METAL OXIDE VARISTOR MODEL	Glasa M.
IMPORTANCE OF BACKUP DEVICE IN OVERVOLTAGE PROTECTION	Kertész, I.
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IMPACT OF OIL PRICES ON THE PRICE OF POWER ELECTRICITY IN THE CZECH REPUBLIC	Nový, F., Hejtmánková, P., Majer, V.
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SOURCES OF THE WIND POWER STATIONS	Chudiváni, J., Hüttner, L.
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MODEL REFERENCE CONTROL OF SYNCHRONOUS GENERATOR BASED ON MODIFIED LAGUERRE MODEL	Škultéty J., Miklovičová E., Bars R.