

ASTRU Innovative Power Engineering
Sino-Russian Student Competition in Innovative Power Engineering
29 June – 2 July 2015
Perm National Research Polytechnical University, Perm, Russia

COMPETITION PROGRAM

Tuesday 30 June 2015

Session 1. «Power Resource Saving Technologies». Lecture hall 425

09:00	10:00	Registration		
10:30	12:10	Opening the Conference		
12:10– 13:00	1.	Development of a Hybrid Energy Recovery System within Power Grid	Yang Feng	Chongqing University
	2.	Modular system	Zenkov A. Beisekov M.	Tomsk Polytechnic University
13:00	14:00	<i>Lunch</i>	<i>60 minutes</i>	
14:00– 15:45	3.	The Electricity Generation System Based on Piezoelectric Ceramic Applying on Road Deceleration Strip	Shi Rui	Southeast University
	4.	Array float bowls storm proof wave energy conversion system used in island	Xu Yifan Huang Siqu	Southeast University
	5.	A Novel Energy-Saving Smart Start-Control System for Diesel Engine	Li Mingjia Hu Zhengtao Tian Huidong	Xi'an Jiaotong University
	6.	Nested Energy-saving Water Boiler Based On Air-source Heat Pump	Yu Tianning Wang Xuchen Li Songqi Li Haoran	Northwestern Polytechnical University
15:45	16:00	<i>coffee & tea</i>	<i>15 minutes</i>	
16:00- 17:30	7.	Cavitation Options for Waste Autoclave Technology for Power Generation	A.S. Kudryavtsev	Moscow State University of Information Technology, Radioengineering and Electronics

16:00-17:30	8.	Production of heat-insulating autoclaved aerated concrete with using multifunctional blowing agents	S.V. Leontyev, D.I. Baranyuk	Perm National Research Polytechnic University
18:00	19:00	<i>Concert</i>		

Session 2. «Power Management». Lecture hall 426

09:00	10:00	Registration		
10:30	12:10	Opening the Conference		
12:10-13:00	1.	Optimization complex systems of renewable energy sources (RES) based on computer program "VizProRES"	Velkin V.I., Shcheklein S.E., Denisov K.S.	Ural Federal University
	2.	Using a measuring system for the study of POLIS d'Alembert's paradox and the continued use of this phenomenon for various spheres of power	Nikiforov A.V., Sheklein S.E.	Ural Federal University
	3.	Development of electronic model of heat supply system of a city based on teplograph information graphics system for town of Dobryanka	D.A. Startsev, V.V. Tiunov, N.A. Laba, S.M. Kuminov, A.M. Lotokhov, E.V. Makhnutina	Perm National Research Polytechnic University
13:00	14:00	<i>Lunch</i>	<i>60 minutes</i>	

Session 3. «Innovations in the Power Engineering». Lecture room 426

14:00-15:45	1.	Design of a Wave Powered Combination Electric Generator Based on the Liquid Metal MHD	Sun Yue Han Bing Teacher Liu Chao	Harbin Institute of Technology
	2.	The Design and Production of Ventilation Windows Based on Ionic Wind and Electrostatic Precipitation	Sun Chen Teacher Liu Chao	Harbin Institute of Technology
14:00-15:45	3.	A Refrigerator Defrosting Device Based on A Single Adsorption Bed Driven by Waste Heat	Tang Yuqing	Chongqing University

14:00-15:45	4.	Air-conditioning condenser integrated with a spray system utilizing condensate water	Huang Chengcheng	Chongqing University
15:45	16:00	<i>coffee & tea</i>	<i>15 minutes</i>	
16:00-17:30	5.	An innovative design of temperature control based on controllable heat pipes	Jiang Jibing Peng Weiwei Tian Kan	Huazhong University of Science and Technology
	6.	The control speed system of wind turbine	E. Solomin, E. Sirotkin, S. Chetoshnikov	South Ural State University (national research university)
	7.	Electron-beam welding as a highly efficient energy-saving method of jointing the metalwork materials	S.V. Varushkin	Perm National Research Polytechnic University
	8.	The development of the thermoelectric energy generator for oil and gas pipelines electrochemical protection	D. Fedorovtsev, P. Pisarev	Perm National Research Polytechnic University
18:00	19:00	<i>Concert</i>		

Section 4. «Alternative and Renewable Power Sources». Lecture hall 428

09:00	10:00	Registration		
10:30	12:10	Opening the Conference		
12:10-13:00	1.	Photosynthesis algal microbial fuel cell system	Xue Yifei	Beijing Institute of Technology
	2.	High Efficiency with Multi Load Wireless Power Transmission	Hu Borong	Chongqing University
13:00	14:00	<i>Lunch</i>	<i>60 minutes</i>	
14:00-15:45	3.	The Imagine about Thermoelectric Power Generation Glass	Peng Hongrui	Chongqing University
	4.	Vertical axis wind turbine with collecting tide power as a complement generator	Li Haoran Yu Tianning Wang Xuchen Li Songqi	Northwestern Polytechnical University

14:00-15:45	5.	Development of the Far North Coast by wind hydrogen energy	D.D. Ivaschenko	Moscow State University of Information Technology, Radioengineering and Electronics
	6.	Experimental and calculated Studying for the effect of the orientation on photovoltaic effectiveness	Jailany A.T., Shcheklein S.E., Nemikhin Y.E., Nemkov D.A.	Alexandria University (Egypt), Ural Federal University
15:45	16:00	<i>coffee & tea</i>	<i>15 minutes</i>	
16:00-17:30	7.	The Design of a New Solar-powered Unmanned Aircraft	Li Songqi Yu Tianning Wang Xuchen Li Haoran	Northwestern Polytechnical University
	8.	Forecast generation biogas on msw landfill lifespan	A. Yegorova, Y. Tatarkina, M. Burmistrova, N.N. Slyusar	Perm National Research Polytechnic University
	9.	Innovative Design about Offshore Wind Power Resists the Typhoon	Wang Xuchen Yu Tianning Li Songqi Li Haoran	Northwestern Polytechnical University
18:00	19:00	<i>Concert</i>		

* The names of all submitted projects preserve the authors spelling