

## SCIENTIFIC COMMITTEE

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Prof. Viorel Popa  
Prof. Florin Popescu  
Lect. Ionel OPREA  
Lect. Marcel DRĂGAN  
Lect. Spiru Paraschiv

## PROGRAM

### THURSDAY, 31<sup>st</sup> October

17<sup>00</sup> – 19<sup>00</sup> – Receiving the guests at Mechanical Engineering Faculty –G Building

### FRIDAY, 1<sup>st</sup> November

09<sup>00</sup> – 10<sup>30</sup> – Receiving the guests at Mechanical Engineering Faculty –G Building

10<sup>30</sup> – Opening the Conference METIME 2013 – G Building

11<sup>30</sup> – 13<sup>30</sup> – Presentation of papers – Section A and B – G Building

13<sup>30</sup> – 15<sup>30</sup> – Lunch

16<sup>00</sup> – 19<sup>00</sup> – Presentation of papers – Section A and B – G Building

University “Dunărea de Jos” of  
Galați

Mechanical Engineering Faculty  
Thermal Systems and  
Environmental Engineering  
Department



THERMAL SCIENCE  
SOCIETIES FROM  
ROMANIA



5<sup>th</sup> International Conference on  
Thermal Engines and Environmental  
Engineering

**METIME**

November 1-2, 2013  
Galati, Romania

## List of papers

### Section A - *Thermodynamics and Thermal Systems; Heat and Mass Transfer*

1. Dan-Teodor BALANESCU, Mario-Vlad HOMUTESCU - Recovering energy from wood wastes in a semi-closed cycle power plant
2. Aneta HAZI, Gheorghe HAZI, Sorin-Gabriel VERNICA - Opportunity study for heat recovery from large power transformers in substations
3. G.Yildiz Tore, M.Çalışır - A Case Study for The Evaluation of Different Color Removal Methods carried out on Textile Finishing Wastewater Treated by Sequencing Batch Activated Sludge System (SBASS)
4. Zhivko KOLEV, Pencho ZLATEV, Valentin BOBILOV, Iliya ILIEV, Georgi GENCHEV, Plamen MUSHAKOV - Graph-analytical method for estimation of flow distribution in low pressure gas transport systems
5. Veaceslav ZELENTSOV, Tatiana DATSKO - Thermodynamics of flourine adsorption onto modified trepel
6. Ahmet DURAK, Ugur AKYOL - Modeling of a hot air drying process by using artificial neural network method
7. Soner ÇELEN, Kamil KAHVECİ, Ugur AKYOL, Aytaç MORALAR - Drying behaviour of tomato slices under vacuum conditions
8. Dinçer AKAL, Çiğdem SUSANTEZ, Kamil KAHVECİ, Ugur AKYOL - Simulation of drying of a wool yarn
9. Dinçer AKAL, Çiğdem SUSANTEZ, Kamil KAHVECİ, Ugur AKYOL - Simulation of drying of a wool fabric
10. Gheorghe HAZI, Aneta HAZI, Sorin-Gabriel VERNICA - Experimental study on heating of uninsulated electrical conductors
11. Ionel OPREA - Effect of the pressure pulsation on the performance of vortex tube
12. Marcel DRAGAN, Krisztina Uzuneanu, Gelu COMAN - The thermodynamics irreversibility analysis for the steam generator
13. Dan ANDREI - Exergetic efficiency of high power thermoacoustic plant
14. Nicusor VATACHI - Dynamic answer of the steam boiler pressure and the flue gases dew point
15. Gelu COMAN, Krisztina UZUNEANU, Marcel DRĂGAN, Valeriu DAMIAN - Study on measurement the temperature of a skating ring by thermography method
16. Silviu VLASIE - The application of integral method in the solution of transient heat conduction problems in solids with heat generation
17. Anton PAL, Aura-Speranța COJOCARU, Eduard-Petre CIUCESCU - The exergo-economical analysis of the combustion process into the R-13-300 turboreactor

### Section B - *Renewable Energy Sources and Advanced Engineering Technics on Environmental Pollution; Internal Combustion Engines and Automotive; Refrigeration, Air-Conditioning and Cryogenic*

1. Pencho ZLATEV, Zhivko KOLEV, Valentin BOBILOV, Plamen MUSHAKOV, Georgi GENCHEV - Heat pump installation “Water to water” with solar assistance in heat supply working conditions
2. Iliya ILIEV, Angel TERZIEV, Veselka KAMBUROVA - Combined heat and power production trough biomass gasification with „heat pipe-reformer”
3. Veselka KAMBUROVA, Iliya ILIEV, Angel TERZIEV - Biogas combined heat and power production
4. Aristotel POPESCU, Carmen-Ema PANAITTE, Ovidiu-Virgil STADOLEANU - Combined photovoltaic and thermal solar panels -enhanced energy conversion and heat transfer
5. Petre STAN, Marinică STAN - The random vibrations for the nonlinear oscillators with an elastic sine-like feature
6. Marinică STAN, Petre STAN - The study of the random vibrations of a vehicle for the model with a degree of freedom
7. Răzvan MAHU, Florin POPESCU, Ion V. ION - CFD modelling of Biomass Combustion in a Heating Boiler
8. Gheorghe MANOLACHE, Edward RAKOSI, Sorin TALIF - Optimised I.C. engine piston rings
9. Krisztina UZUNEANU, Marcel DRAGAN, Gelu COMAN - Mathematical modeling based on experimental data of internal combustion engines supplied by ethanol-gasoline blends
10. Angela CHIOSA, Dan SCARPETE, Raluca-Cristina BUTURCA - An overview on combustion and performance characteristics of diesel engine using diesel-water emulsion
11. Salvatore Mugurel BURCIU - Mathematical model based of transfer functions for dynamic operations of supercharged engine
12. Emil JUGUREANU, Marius ATANASIU - The analysis of transition conditions from self-regulation to automatic control in refrigeration machine
13. Gratiela TARLEA, Mioara VINCERIUC, Ana TARLEA - R22 replacement study in air conditioning system