



**October 12-14
2009 Zakopane**

Final Programme

MONDAY 12	
14:00-16:00	Registration
16:00-16:30	Opening Ceremony Chairmen: S. Wiak, P. Szczepaniak, L. Byczkowska-Lipińska
	1. Plenary Session
	Chairman: P. Szczepaniak
16:30-17:15	Damage identification using parameter-dependent structural response changes Krzysztof Dems, Zenon Mróz (invited paper)
17:15-18:30	Analysis of eddy currents influence on the magnetic field distribution in laminated structures Ewa Napieralska-Juszczak, Krzysztof Komęza, Nabil Hihat, J.Ph.Lecointe (invited paper)
18:30-19:15	3D-modelling magnetic microfibrres Sławomir Wiak, Anna Firych-Nowacka, Krzysztof Smółka (invited paper)
19:30	Dinner (campfire - DW HYRNY)

TUESDAY 13	
2a. Algorithms and Numerical Techniques	
Chairman: S. Wiak	
9:00-9:30	Algorithm of friction force for intelligent microbearing system Krzysztof Wierzcholski
9:30-10:00	Pseudo-Gaussian distribution for bio-and-microbearing gap height Krzysztof Wierzcholski, Katarzyna Nowakowska
10:00-10:20	Minimizing the total completion time of deteriorating jobs with branch-and-bound algorithm Krzysztof M. Ocetkiewicz
10:20-10:40	Computation models and algebra of algorithms Volodymyr K. Ovsyak
10:40-11:00	A sequential method for the synthesis of formulae of algorithms Volodymyr K. Ovsyak, K.J. Latawiec, A. Smolczyk, J. Petruszka
11:00-11:30	Coffee break
2b. Modelling and simulation methodology / Software engineering	
Chairman: K. Wierzcholski	
11:30-11:50	Structural damage identification using frequency and modal changes Krzysztof Dems, Jan Turant
11:50-12:10	Application of mathematical modelling to the solution of software testing problems Kazimierz Worwa
12:10-12:30	Thermal modeling of photovoltaic modules under high solar radiation Witold Marańda, Maciej Piotrowicz
12:30-12:50	Complex Fourier Series Mathematical Model of a Single Phase Inverter with PWM of a Output Voltage Pavel Záškalický, Ján Kaňuch
12:50-13:10	On the robustness of digital watermarking software in practical applications Piotr Lipiński
13:10-13:30	Integration of Access Control in Distributed Information Systems Aneta Poniszewska-Maranda
13:30	Lunch (DW HYRNY)
2c. Modelling and simulation methodology / Software engineering	
Chairman: K. Komęza	
15:00-15:20	Evaluation of the Variance in the Estimates for the Global Illumination Algorithms Krzysztof Guzek, Piotr Napieralski
15:20-15:40	Electromechanical System Simulation using Stator-Field Oriented Control of Synchronous Machine Marijo Šundrica, Zlatko Maljković
15:40-16:00	Preliminary analysis of electromagnetic torque converter Konrad Walecki
16:00-16:30	Coffee break

2d. System Modeling Control (poster session)	
	Chairman: E. Napieralska-Juszczak
17:00-19:00	Modeling of 3D electromagnetic field distributions of a large power transformer Sławomir Wiak, Paweł Drzymała, Henryk Werfłe
	Sensitivity of optimal solution using particle swarm optimization algorithm Maria Dems, Sebastian Łacheciński, Sławomir Wiak
	Parallelization of calculations in construction of mathematical models using optimization Liliana Byczkowska-Lipińska, Petro Stakhiv, Yuriy Kozak
	Concept of distributed environments for system research and control purposes Grzegorz Ciesielski, Andrzej Albrecht, Rafał Wojciechowski
	Usage of distributed computing for linear time-invariant systems' modeling and optimal past-correction Grzegorz Ciesielski, Andrzej Albrecht, Rafał Wojciechowski
	Hypergraph coloring model in dedicated scheduling of multiprocessor task subject to various optimization criteria Paweł Obszarski
	Simulation of phase asymmetries in permanent magnet synchronous motor X.D. Zhao, J. Corda, T.X. Mei
	Multimedia algorithms in medical procedure Agnieszka Duraj, Edward Kącki, Joanna Stempczyńska
	Noise Immunity Rising of Offset Quadrature Phase Shift Keying Signal Detection Bohdan Mandziy, Andriy Bondarev, Liliana Byczkowska-Lipińska
	Query by Voice Example and sound similarity based on the Dynamic Time Warping algorithm Dominik Niewiadomy, Adam Pelikant
	Algorithms of writing music notation in database Anna Salak, Adam Pelikant
	A new genetic algorithm for optimal routes generation in public transport network Jolanta Koszelew, Anna Piwońska
	Communication with users in the computerized recruitment system of candidates for higher education studies Grzegorz Zwoliński, Maciej Kacperski
	The MOS value estimation based on the self-organizing neural structure Sławomir Przyłucki
	Spectral Characteristics of Cyrillic Letters Encoded by Line Codes for Digital Transmission Bohdan Mandziy, A. Bench, Janusz Lipiński
	Development of geometric conductor for finite element simulation of turbogenerators Jakub Andrzejewsk, Krzysztof Komęza
	GPU-based optimisation of volumetric ablation rendering Dominik Szajerman, Michał Szymczyk
	Dynamic data echange in the hybrid expert system supporting designing electromechanical converters Maria Dems, Artur Jeżyk
Which tool to choose? Electromagnetic fields in space Grażyna Sobiczewska	
19:00	Dinner (DW HYRNY)

WEDNESDAY 14	
3. Application of artificial intelligence / E-learning / Visualization	
Chairman: M. Rudnicki	
9:00-9:20	Dynamics of power transmission system with brushless DC motor using PID or Fuzzy controller Sławomir Wiak, Wojciech Rosiak, Maria Dems, Jerzy Powierza
9:20-9:40	Application of Genetically Evolved Artificial Neural Networks to Dynamic Terrain Generation Łukasz Chomątek, Marek Rudnicki
9:40-10:00	Frequent pattern mining for building student models in adaptive e-learning systems Danuta Zakrzewska
10:00-10:20	Fuzzy queries in relational databases Anna Kowalczyk-Niewiadomy, Adam Pelikant
10:20-10:40	Fixation point monitoring for stereoscopic viewing refinement Maria Pietruszka, Michał Iwanicki, Piotr Napieralski
10:40-11:00	Relational Fuzzy Cognitive Maps in Modelling Low-structural Closed Systems Aleksander Jastriebow, Grzegorz Słoń
11:00-11:30	Closing Session Chairmen: L. Byczkowska-Lipińska, S. Wiak
12:00	Lunch at DW HYRNY