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INES 2005

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9<sup>th</sup> International Conference on  
Intelligent Engineering Systems

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Cruising on Mediterranean Sea

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# INES 2005

# FINAL PROGRAM

**9<sup>th</sup> International Conference  
on  
Intelligent Engineering Systems**

September 16-19, 2005  
Cruising on Mediterranean Sea

# INES 2005 Conference Program

## September 16 (Friday)

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9:00 – 10:30	Check-in the cruise	<b>Piraeus</b>
11:00	Departure from Piraeus	
11:00 – 12:30	Registration	<b>Piano Bar, Belvedere Deck</b>
12:30 – 14:00	Lunch	<b>Lido Lounge, Allegro Deck</b>
14:00 – 14:30	<b>OPENING CEREMONY</b>	<b>Room Cinema, ‘D’ Deck</b>
14:30 – 15:15	<b>PLENARY SESSION I</b> <b>Human Adaptive Mechatronics</b> <i>Satoshi Suzuki, Fumio Harashima, Japan</i> <u>Chair: Imre J. Rudas, Hungary</u>	<b>Room Cinema</b>
15:15 – 16:00	<b>PLENARY SESSION II</b> <b>Hybrid Dynamical Method of FMS Scheduling – A New Level of Intelligence and Automation</b> <i>János Somló, Hungary</i> <u>Chair: Péter Arató, Hungary</u>	<b>Room Cinema</b>
16:00 – 16:15	<b>COFFEE BREAK</b>	<b>Rendezvous Lounge</b>
16:15 – 18:15	<b>PARALLEL SESSION I</b> <b>Image Processing and Analysis</b> <u>Chair: Baltazár Frankovic, Slovakia</u>	<b>Room Cinema</b>
16:15-16:35	<b>Feature Vector Generation for Image Integrity Verification</b> <i>József Lenti, István Loványi, Hungary</i>	
16:35-16:55	<b>Software for Co-ordinate Measurement</b> <i>Gyula Hermann, Hungary</i>	
16:55-17:15	<b>Reconstruction of Myocardial Short-scan SPECT Images</b> <i>Ákos Szlávecz, Balázs Benyó, Péter Várady, Tamás Bükki, Hungary</i>	

- 17:15-17:35     **Erasable, Semi-fragile Watermark Embedding Process for Images**  
*József Lenti, István Loványi, Hungary*
- 17:35-17:55     **Visual Cortex Inspired Intelligent Contouring**  
*Barna Reskó, Zoltán Petres, A. Róka, Péter Baranyi, Hungary*
- 17:55-18:15     **Application of System of Positional Recognition of Parts in Hybrid Assembly of Electrotechnic Products**  
*Ladislav Madarász, J. Kovác, Rudolf Andoga, K. Senderská, Slovakia*
- 16:15 – 18:15     **PARALLEL SESSION II                      Room Library, Allegro Deck**  
**Large Scale Systems**  
Chair: *Richard Perdriau, France*
- 16:15-16:35     **PROFESY: Intelligent Global Energy Management**  
*Thomas Rausch, Peter Palensky, Austria*
- 16:35-16:55     **Infatuation in Multi-Agent Systems**  
*Mirko Maleković, Mirko Čubrilo, Croatia*
- 16:55-17:15     **The G-Calculus Based Compositional Rule of Inference**  
*Márta Takács, Hungary*
- 17:15-17:35     **Adoption of Advanced Manufacturing Technology - New Trends in the Czech Republic**  
*Josef Hynek, Václav Janeček, Czech Republic*
- 17:35-17:55     **Mathematical Investigations in Network Properties**  
*György Hermann, Hungary*
- 17:55-18:15     **Multi-Sensors Switch Technique in Multi-bases System**  
*Yanhua Liu, Weidong Chen, Dongjin Wang, China*
- 18:00             Arrival to Mykonos, Greece
- 23:00             Departure from Mykonos

## September 17 (Saturday)

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6:00 – 7:00	Breakfast	
7:00	Arrival to Kusadasi, Turkey	
12:00	Departure from Kusadasi	
12:00 – 13:30	Lunch	Lido Lounge, Allegro Deck
13:30 – 15:50	<b>PARALLEL SESSION III</b> Special Session <b>Control Design I</b> Special Session organizer: <b>Péter Baranyi</b> <u>Chair: <i>Balázs Benyó, Hungary</i></u>	<b>Room Cinema</b>
13:30-13:50	<b>Centralized and Decentralized Applications of a Novel Adaptive Control</b> <i>József K. Tar, Imre J. Rudas, János F. Bitó, Hungary, J. A. Tenreiro Machado, Portugal</i>	
13:50-14:10	<b>Different Affine Decompositions of the Prototypical Aeroelastic Wing Section Model by the TP Model Transformation</b> <i>Péter Baranyi, Péter L. Várkonyi, Hungary, Yeung Yam, Hong Kong</i>	
14:10-14:30	<b>Multi Agent Approach to the Creation of Intelligent Distributed Control System</b> <i>Baltazár Frankovic, Slovakia</i>	
14:30-14:50	<b>Different Affine Decompositions of the TORA Model by the TP Model Transformation</b> <i>Zoltán Petres, Péter L. Várkonyi, Péter Baranyi, Péter Korondi, Hungary</i>	
14:50-15:10	<b>Parallel Processing Method based on Equivalent Transformation</b> <i>Hidemi Ogasawara, Kiyoshi Akama, Hidekatsu Koike, Hiroshi Mabuchi, Yusuke Saito, Japan</i>	
15:10-15:30	<b>Reducing of the Load Effect by Inductive Link in the Implantable Systems</b> <i>Mondher Chaoui, Hamadi Ghariani, Mongi Lahiani, Fayçal Sellami, Tunisia, Richard Perdriau, Mohamed Ramdani, France</i>	

15:30-15:50	<b>Some Classes of Binary Operations in Approximate Reasoning</b> <i>József Tick, János Fodor, Hungary</i>	
13:30 – 15:50	<b>PARALLEL SESSION IV</b> <b>Information Processing and Representation</b> <u>Chair:</u> <i>Josef Hynek, Czech Republic</i>	<b>Room Library</b>
13:30-13:50	<b>Performance Analysis of Incremental Update of Association Rules Mining Approaches</b> <i>Muhaimenul Adnan, Reda Alhaji, Ken Barker, Canada</i>	
13:50-14:10	<b>Reasoning about Dependencies in Partial Knowledge Bases</b> <i>Mirko Maleković, Croatia</i>	
14:10-14:30	<b>A Case Study on Automation of Verification Logics</b> <i>Reiner Dojen, Tom Coffey, Ireland</i>	
14:30-14:50	<b>An Approach to Collaborative Scheduling through Group Decision Support</b> <i>Ana Almeida, Goreti Marreiros, Portugal</i>	
14:50-15:10	<b>Scheme Implementation of the Functional Language for Mobile Agents with Dynamic Extension</b> <i>Yasushi Kambayashi, Munehiro Takimoto, Japan</i>	
15:10-15:30	<b>Thesaurus and Ontology: a Formalism of Generic Inheritance of Conceptual Characteristics</b> <i>Rudolf Ungváry, Tamás Radnai, Hungary</i>	
15:30-15:50	<b>Quality Assurance for Electronic Systems Using Fault Tree Analysis</b> <i>Marianna Lendvay, Attila L. Bencsik, Hungary</i>	
15:30	Arrival to Patmos	
21:00	Departure from Patmos	
21:30	<b>Banquet</b>	Dining Room, ‘C’ Deck

## September 18 (Sunday)

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- 6:00 – 7:00      Breakfast  
7:00              Arrival to Crete  
11:00             Departure from Crete
- 11:00 – 13:00    **PARALLEL SESSION V**                              **Room Cinema**  
**Modeling**  
Chair: *Mirko Maleković, Croatia*
- 11:00-11:20      **Spatial - temporal Modelling**  
*Dana Klimešová, Czech Republic, Eva Oceliková, Slovakia*
- 11:20-11:40      **Combining Spatial and Topological Data in a Spatiotemporal Relational Model**  
*Ágnes B. Novák, Zsolt Tuza, Hungary*
- 11:40-12:00      **Modeling of Dynamical Systems and Applications**  
*Piroska B. Kis, Hungary*
- 12:00-12:20      **Software Reconfigurable Signal Diagnosis in Embedded CAN Networked Systems**  
*Dénes Fodor, Hungary*
- 12:20-12:40      **Tools and Intelligent Methods in Enterprise Modeling**  
*Ladislav Madarász, Michal Raček, Martin Kováč, Maroš Timko, Slovakia*
- 12:40-13:00      **The Construction of the Information Graph - the Underlying Structure of the Tactile Map of the Urban Spaces**  
*Rajko Mahkovic, Slovenia*
- 11:00 – 12:40    **PARALLEL SESSION VI**                              **Room Library**  
**Medical and Human Applications**  
Chair: *Manuel Crisóstomo, Portugal*
- 11:00-11:20      **Proposed Parallel and Distributed Architectures for Behavioral Animation**  
*Liberios Vokorokos, Slavomír Petrik, Slovakia*
- 11:20-11:40      **Human-Computer Communication in Intelligent Engineering Processes at Extended Companies**  
*László Horváth, Imre J. Rudas, Hungary*

- 11:40-12:00      **An Artificial System for Visual Perception in Autonomous Robots**  
*Benjamin Auffarth, Germany, Yasumasa Muto, Yasuharu Kunii, Japan*
- 12:00-12:20      **Novel Communication Services Based on ENUM Technology**  
*Balázs Benyó, F. Hatwágner, T. Heckenast, K. Kovács, Á. Varga, N. Varjasi, Hungary*
- 12:20-12:40      **Application of Infrared Imaging in Rehabilitation Medicine in Spinal Cord Injured Individuals**  
*Jozef Živčák, Radovan Hudák, Peter Kneppo, Slovakia*
- 12:30 – 14:00      Lunch      Dining Room, ‘C’ Deck
- 14:00 – 16:40      **PARALLEL SESSION VII**      **Room Cinema**  
**Intelligent Signal Processing**  
Chair: *Yasushi Kambayashi, Japan*
- 14:00-14:20      **Parallel Processing of Continuous Data Streams**  
*Antal Buza, Hungary*
- 14:20-14:40      **Optimal Life-time Maintenance Policy and Deterioration Process**  
*András Bakó, Lajos Tóth, Hungary*
- 14:40-15:00      **Mobile Learning at the Technical University of Košice**  
*Pavol Galajda, Stanislav Marchevský, Dušan Kocur, Stanislav Benčo, Slovakia*
- 15:00-15:20      **Classification of Time Series Using Singular Values and Wavelet Subband Analysis with ANN and SVM Classifiers**  
*Balázs Benyó, Péter Somogyi, Péter Várady, Béla Paláncz, Hungary*
- 15:20-15:40      **Fuzzy Based Brightness Compensation for High Dynamic Range Images**  
*Annamária R. Várkonyi-Kóczy, András Rövid, Péter Várlaki, Hungary*

- 15:40-16:00      **Evaluation of Course Model for Implementation of Virtual Classroom in Higher Education Practice**  
*József Gáti, Gyula Kártyás, Hungary*
- 16:00-16:20      **Configuration of EEG Input-unit by Electric Circuit Evolution**  
*György Györök, Margit Makó, Hungary*
- 16:20-16:40      **Sigma-delta Look-up Table Based Half-sine Pulse Shaper**  
*Tomislav Matić, Marijan Herceg, Tomislav Švedek, Croatia*
- 14:00 – 16:00      **PARALLEL SESSION VIII**      **Room Library**  
Special Session  
**Control Design II**  
Special Session organizer: **Péter Baranyi**  
Chair: *Munehiro Takimoto, USA*
- 14:00-14:20      **A New Algorithm for RNO-INO Type Tensor Product Model Representation**  
*Péter L. Várkonyi, Domonkos Tikk, Péter Korondi, Péter Baranyi, Hungary*
- 14:20-14:40      **Intelligent Control Software for Industrial CNC Machines**  
*António Ferrolho, Manuel Crisóstomo, Miguel Lima, Portugal*
- 14:40-15:00      **Stationary-Frame Vectorized Current Controller for Field-Oriented Induction Motor Drive**  
*Ioan Iov Inceze, Maria Imecs, Csaba Szabó, Romania*
- 15:00-15:20      **Off-line Mobile Robot Path Planning Process with Given MLE and Constructing the Safety Final Route**  
*István Nagy, Hungary*
- 15:20-15:40      **A Programming Language Interpreter System Based on Equivalent Transformation**  
*Hidekatsu Koike, Kiyoshi Akama, Hiroshi Mabuchi, Japan*
- 15:40-16:00      **Investigation of the Approximation Accuracy of the TP Model Transformation through the Prototypical Aeroelastic Wing and the TORA System**  
*Zoltán Petres, Tamás Kiss, Hungary*
- 16:00              Arrival to Santorini



21:00

Departure from Santorini

21:00

**CLOSING CEREMONY**

**Room Cinema**

**September 19 (Monday)**

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7:00

Arrival to Piraeus

Check-out