

5TH INTERNATIONAL CONFERENCE ON INTERDISCIPLINARITY IN EDUCATION ICIE'10:

NEW HIGHER EDUCATION PROGRAMS

& JOINTLY 4th INTERNATIONAL STEERING COMMITTEE MEETING

June 17-19, 2010, TALLINN, ESTONIA

VENUE: TALLINN UNIVERSITY OF TECHNOLOGY, EHITAJATE 5, 19086 TALLINN, ESTONIA

PROVISIONAL AGENDA

Wednesday, June 16, 2010		
	International Organizing and Scientific Committee Meeting	
Thursday June 17, 2010, Room 211A		
09.30-10.00	Registration	Chairpersons
10.00-10.45	Opening Ceremony/ Welcome Addresses	Piia Tint, Virve Siirak
10.45-11.00	Café break	
11.00-13.00	Plenary Session 1, Room 211A	Piia Tint
13.00-14.00	Lunch break	
14.00-17.00	Oral Sessions 1, Room 211A	Rozalina Dimova
14.00-17.00	Oral Sessions 2, Room 211B	Rodica Aurora Tuduce
14.00-17.00	Poster Session 1, Room 211C	Mihai Cernat
19.00	Conference Dinner: Olde Hansa Restaurant, Vana Turg 1, 10140, Tallinn, tel. 627-9020	
Friday June 18, 2010, Room X-211C		
10.00-13.00	Oral Sessions 3, Room 211A	Toomas Rang
10.00-13.00	Oral Sessions 4, Room 211B	Virve Siirak
10.00-13.00	Poster Session 2, Room 211C	Galina Merkurieva, Zoltan Puklus
10.00-13.00	Poster Session 3, Room 211C	Irene Kamberidou, P. Tsarabaris
13.00-14.00	International Steering Committee meeting	(optional)
14.00-15.00	Lunch break	
17.00-19.00	Study Visit 1: The Old Town	(optional)
Saturday, June 19, 2010		
9.00-18.00	Study Visit 2. The Ida-Viru County	(optional)
18.00-18.30	Conclusions and Closing	

**5TH INTERNATIONAL CONFERENCE ON INTERDISCIPLINARITY IN EDUCATION ICIE'10:
NEW HIGHER EDUCATION PROGRAMS
& JOINTLY 2nd ANNUAL MEETING ESTIA-EARTH 2010
June 17-19, 2010, TALLINN, ESTONIA
VENUE: TALLINN UNIVERSITY OF TECHNOLOGY, EHITAJATE 5, 19086 TALLINN, ESTONIA**

AGENDA

Opening Ceremony, Room X-212

Chairpersons: Piia Tint, Virve Siirak TUT, Estonia

Welcome Address, Rector/ Vice-Rector, TUT

Welcome Address, Piia Tint, Dean, TUT

Plenary Session 1. New Trends in Higher Education

Chairperson: Piia Tint

- PL1.** Karin Reinhold and Piia Tint, Tallinn University of Technology, Learning Environment in Computer-Classes in Tallinn University of Technology
- PL2.** Lothar Cerny, Köln University of Applied Sciences, Germany, Culture–Economics-Business: A Systems-Theoretical View
- PL3.** Paul Dan Cristea and Rodica Tuduce, Bio-Medical Engineering Center, University Politehnica Bucharest, Interdisciplinarity-Epistemology Dynamics and Promotion of Collaborative Activities
- PL4.** Gabriela Schroffenegger, The FBI Centre, Innsbruck, Selected Austrian Programmes to support Women in Science, Technology, Engineering and Handicraft
- PL5.** Elena Paspalanova and Sonya Dragova, New Bulgarian University, Sofia, Motivation to Study Computer Science, Engineering and Technology
- PL6.** Burhanettin Uysal and Oya Önalán, Karabük University, The Way Forward to Higher Education and Science in Turkey
- PL7.** Maria Ioannides, National Technical University of Athens, The Estia-Earth Master Programme and the Expectations for Education of Women

Session 1. ESTIA-Earth: Women in Engineering, Computers, Science and Education

Chairperson: Rozalina Dimova

- S1.1.** Rozalina Dimova, Valentina Markova, Technical University of Varna, Outreach Initiatives in Context of Engineering Education
- S1.2.** Monica Alexandru, National Agency for Scientific Research of Romania, Oana Gui, University Art Design, Cluj, Knowledge Transfer Enhancement over the Women in Science Community in Western Balkans and Latin America

- S1.3.** Zuzana Maliková, Technical University of Košice, Female Researchers in Business Enterprise Sector and Impact of Research and Development Expenses
- S1.4.** Irene Kamberidou, National Kapodistrian University of Athens, The "*Glass Escalator*" and "*Gender Fatigue*": Getting Gender Back on the Agenda
- S1.5.** Sonya Dragova, Elena Paspalanova, New Bulgarian University, Perceived barriers to finding a job in the field of computer science, engineering and technology
- S1.6.** Veronika Černáková, Technical University of Košice, Business Information Systems – The Future of Women in IT Sector?
- S1.7.** Flordeliza C. Reyes, Saint Michael's College of Laguna, Philippines, Enhancement of Research Capability, Productivity, and Dissemination in Higher Education: A Prototype and An Explanatory Theory
- S1.8.** Matus Kubak, Technical University of Košice, Experimental Economics and Differences Between Mens' and Womens' Behavior in Investment Game
- S1.9.** Panagiota Rouni, Constantina Chryssikopoulou, Greek Women's Engineering Association EDEM, 'Engineering Students: Research for Their Opinion About Curricula and Teaching Methods Laying Stress on the Gender Factor'

Session 2. ICT in Education, Distance Learning and Research

Chairperson: Rodica Aurora Tuduce

- S2.1.** Daiva Rimkuvienė, Janina Kaminskienė, Vilija Venckūnienė, Lithuanian University of Agriculture, Applying Informatics Technologies in Teaching Mathematics and Statistics in Lithuanian University of Agriculture
- S2.2.** Doinita Ariton and Viorel Ariton, Danubius University, Galati, ICT Education Faces New Requirements of ICT Practitioners
- S2.3.** Ioannis Giannoukos, Vassili Loumos, Eleftherios Kayafas, Elias Koukoutsis and Maria Ioannides, National Technical University of Athens, Enhancing Student Collaboration and Knowledge Production in Code Development E-Learning Courses
- S2.4.** S. Terzieva, Rosica Betcheva, Motivation of Higher School Graduates to Study at the University of Chemical Technology and Metallurgy, Sofia, Bulgaria
- S2.5.** Dan Floroian, Florin Moldoveanu, Mihai Cernat, Transilvania University Brasov, Stelianos Papazis, National Technical University of Athens, Fuzzy Controlled, Multiagent Robotic Vision System Used For E-Learning Platforms
- S2.6.** Severin Căzănescu, University of Agricultural Sciences and Veterinary Medicine, Bucharest, Romania, Pedro Macia Garcia, Aplicaciones Topograficas S.L., Spain, Oana Gui, University of Art and Design Cluj, Using LanDTM to Generate a Digital Terrain Model for Drainage and Irrigation Works in Romania
- S2.7.** Theo Muresan, Radu Solovastru, Doina Ienei, University of Art and Design Cluj, Monica Alexandru, National Agency for Scientific Research of Romania, Digitization in Cultural Heritage Preservation
- S2.8.** Elias Koukoutsis, Demetrios Karolidis, Pantelis Prentakis and Maria Ioannides, National Technical University of Athens, Adaptive E-Learning Information System

- S2.9.** George Papadopoulos and Fotini-Niovi Pavlidou, Aristotle University of Thessaloniki, Greece, Software Tools for Wildfire Monitoring

Session 3. Interdisciplinary and Multidisciplinary Higher Education Programs

Chairperson: Toomas Rang

- S3.1.** Toomas Rang and Natalja Sleptšuk, Department of Electronics, Tallinn University of Technology, New Interdisciplinarity Master Program at Tallinn University of Technology
- S3.2.** Elena Helerea, Maria Popescu: Transilvania University Brasov, Quality Tools For The Education & Industry Relationship Management
- S3.3.** Ozlem Ture Abaci, Middle East Technical University, Ankara, Turkey, Exploring Culture Through Oral Literature: Okot p'Bitek's *Song of Lawino*
- S3.4.** Carmen Gerigan, Petre Ogrutan, Lia Elena Aciu, Transilvania University Brasov, Electrical Engineering and Environment. A Sustainable Development Approach
- S3.5.** Mihaela Gorcea, Ioana Antoniu, Radu Șerban, Emil Dobriban, Adina Comșa, Dorin Arion, University Art-Design, Cluj, Visual Education in Multicultural Transition
- S3.6.** Mircea Adrian Grigoraș, Growth vs. Sustainability, University of Agriculture Sciences and Veterinary Medicine, Cluj Napoca, RO
- S3.7.** Galina Merkuryeva, Yuri Merkuryev, Igors Tipans, Riga Technical University, International Interdisciplinary Master Studies at Riga Technical University
- S3.8.** Antonia Moropoulou and Agoritsa Konstanti, National Technical University of Athens, Master Level Education on Protection of Cultural Heritage: National Experiences and European Perspectives
- S3.9.** Septimiu Jugrestan, Radu Moraru, Alexandru Pasat, University Art Design, Cluj, Bridging the Gap between Art and Science: CAD-CAM-CAE, Rapid Prototyping and Reverse Engineering for Sculpture
- S3.10.** Andor Komives, Mihaela Gorcea, Emil Dobriban, University Art Design, Soimita Komives, Titu Maiorescu Elementary School, Cluj, Environmental Education Through Art - EcoArt: Urban Birds

Session 4: Education, Research, Innovation

Chairperson: Virve Siirak

- S4.1.** Virve Siirak, Tallinn University of Technology, Duty of Care as a Basic Concept of Modern Occupational Health and Safety Solutions in Estonia
- S4.2.** Nurten Birlik & Hatice Esberk, Middle East Technical University, Ankara, Turkey, The Uncanny in *A Burnt-Out Case*: Dialogising Psychology and Literature
- S4.3.** Tiberiu Kolozsi, Radu Moraru, Alexandru Pasat, Oana Mara Gui, University of Art and Design Cluj, Daniela-Julieta Chelaru, Technical University Cluj Napoca, Romania, Digital Techniques in Reinforcement and Conservation of a Large Sculptural Group. Case Study: The Sculptural Group of Mathias I in Cluj Napoca
- S4.4.** Melania Filip, Elena Helerea, Transilvania University Brasov, On the Induction Motor Vibration Testing

- S4.5.** Marius-Daniel Calin, Larisa Zoitanu, Elena Helerea, Transilvania University Brasov, Monitoring Systems for Electrical Machines Used in Automotive
- S4.6.** Olympiada Syggeridou and Maria Ioannides, National Technical University of Athens, Application of AI Tools for Detection of Electrical Faults in Induction Motor Electric Drives. A Review
- S4.7.** Agnieszka Lisowska-Lis, Robert Wielgat, Daniel Król, Tomasz Potempa, State Higher Vocational School in Tarnow, Poland, Acoustical Bird Monitoring System. Part I. Recordings Methodology and Species Chosen for Recordings
- S4.8.** Daniel Król, Robert Wielgat, Tomasz Potempa, Agnieszka Lisowska-Lis, State Higher Vocational School in Tarnow, Poland, Acoustical Bird Monitoring System: Part II. Electronic Equipment
- S4.9.** Tomasz Potempa, Robert Wielgat, Agnieszka Lisowska-Lis, Daniel Król, State Higher Vocational School in Tarnow, Poland, Acoustical Bird Monitoring System: Part III. Database Aided Signal Recognition

Poster Session 1: Multidisciplinary Research 1

Chairperson: Mihai Cernat

- P1.1.** Dan Puiu, Florin Moldoveanu, Mihai Cernat, Department of Automation, Transilvania University Brasov, Message Scheduling for Real-Time Communications
- P1.2.** Caius Suliman, Florin Moldoveanu, Mihai Cernat, Gigel Macesanu, Transilvania University Brasov, Kalman Filter Position Estimation Approaches in Mobile Robot Navigation
- P1.3.** Gigel Macesanu, Tiberiu Teodor Cocias, Mihai Cernat, Caius Suliman, Transilvania University Brasov, Development of a Computer Vision Based Autonomous Mobile Robot for Indoor Environments
- P1.4.** L. Floroian, Mihai Cernat, Department of Physics, Transilvania University Brasov, Fotini Ioannidou, National Technical University of Athens, Biocompatibility Study of New Nanocomposite Coatings Used in Life and Health Engineering
- P1.5.** Florin Moldoveanu, Mihai Cernat, D. Floroian, Transilvania University Brasov, An Active Vision Tracking System For Robotic Applications
- P1.6.** Vasile Comnac, Simona Coman, Cristian Boldișor, Mihai Cernat, Transilvania University Brașov, Maria G. Ioannides, National Technical University of Athens, Sensorless State-Space Control of Elastic Two-Inertia Drive System Using a Minimum State Order Observer
- P1.7.** Ovidiu Sebastian Chirila, Dan Stoia, Mihai Cernat, Transilvania University Brasov, Romania, Maria G. Ioannides, National Technical University of Athens, Greece, Educational Bench of Magnetic Gears. I. General Design Principles
- P1.8.** Ovidiu Sebastian Chirila, Dan Stoia, Mihai Cernat, Transilvania University Brasov, Romania, Maria G. Ioannides, National Technical University of Athens, Greece, Educational Bench of Magnetic Gears. II. New PM Machine Topology for Low Speed, High Torque Drives
- P1.9.** Cristian Boldișor, Vasile Comnac, Mihai Cernat, Simona Coman, Transilvania University Brașov, Fotini Ioanidou, National Technical University of Athens, On Pharmacodynamics Modeling for Fuzzy Control of Hemodynamic Variables Through Non-Square Drug Infusion
- P1.10.** Ásrún Matthíasdóttir, Reykjavik University, Iceland, How to Teach a First Year Math Course? Is Group Work the Solution?

Poster Session 2: Multidisciplinary Research 2

Chairperson: Galina Merkuryeva, Zoltan Puklus

- P2.1.** Liana Napalkova and Galina Merkuryeva, Riga Technical University, Multi-objective Simulation Optimisation
- P2.2.** Zoltan Puklus, Szekeny Istvan University Gyor, Design and Computation of Voltages and Currents in Active Filters Using VEE Software
- P2.3.** Ileana Hamburg, Institut Arbeit und Technik, Fachhochschule Gelsenkirchen, Germany, Timothy Hall, Emma O'Brien, EMRC, University of Limerick, Plassey, Limerick, Ireland, Supporting Lifelong Learning and Continuing Professional Development
- P2.4.** Savvas Tsotoulidis, Athanasios Safacas, Department of Electrical and Computer Engineering, University of Patras, Greece, Investigation of students' thinking for substantial and efficient learning of electrical machines
- P2.5.** Ileana Hamburg and Anita Pörtl, Institut für Arbeit und Technik, Fachhochschule Gelsenkirchen, Germany, Workplace Learning – The Role of Informal Learning and the Dialog
- P2.6.** Stylianos Papazis, Maria G. Ioannides, Mihai Cernat, Vasile Comnac, Florin Moldoveanu, Integration of Wind Turbines in Slip Power Recovery System Based on Double Output Induction Generator
- P2.7.** Savvas Tsotoulidis, Athanasios Safacas, Department of Electrical and Computer Engineering, University of Patras, Greece, Operational behaviour of an electric motor drive system powered by a fuel cell stack
- P2.8.** Balázs Tóth, Zoltán Puklus, László Hodossy, Széchenyi István University, Introduction to Spice Simulation of Active Filters
- P2.9.** Stylianos Papazis, National Technical University of Athens, E-Government for Higher Education Institutions: A Study Case
- P2.10.** György Tomozi, Zoltán Puklus, B-Spline Based Tool Path Generation
- P2.11.** Theodora Slini, Niovi Pavlidou and N. Moussiopoulos, Aristotle University Thessaloniki, Training Young Scientists at the School of Engineering of AUTH

Poster Session 3: Multidisciplinary Research 3

Chairperson: Panayotis T. Tsarabaris, Irene Kamberidou

- P3.1.** Irene Kamberidou, European Center for Women and Technology ECWT, National and Kapodistrian University of Athens, Greece Inspiring Women Into Technology: The EUD Mega-Community
- P3.2.** Tamilla Alyieva, Azerbaijan Medical University, Baku, Maria G. Ioannides and Stylianos Papazis, National Technical University of Athens, Networks of International Relations between Academics and Researchers from Azerbaijan and Greece to Enhance Higher Education
- P3.3.** Panagiota Rouni, Constantina Chryssikopoulou, Greek Women's Engineering Association EDEM, 'Students Mentoring: a process to empower women in engineering carriers'

- P3.4.** Gorana Botic, Board of European Students in Technology BEST, France, Survey on Gender Issues for Students and for Alumni
- P3.5.** John S. Katsanis and Panayotis T. Tsarabaris, National Technical University of Athens, A New Method for Calculating Energy Consumption in Hospital Laundries
- P3.6.** Stavros D. Anagnostatos, Constantinos D. Halevidis, Fotini S. Karagrigoriou, Ekaterini D. Polykrati and Perikles D. Bourkas, National Technical University of Athens, Teaching of Safety Regulations in Laboratory Environment
- P3.7.** Stavros D. Anagnostatos, Constantinos D. Halevidis, Fotini S. Karagrigoriou, Ekaterini D. Polykrati, Perikles D. Bourkas, National Technical University of Athens, Thematic Insufficiency Concerning the Provided Education to Graduate Engineers in Fact Findings
- P3.8.** Stylianos Papazis, Perikles Bourkas and Maria G. Ioannides, National Technical University of Athens, Expectations and Generated Value from Techno TN Fora as an Archipelago of Science and Engineering Academic Networks
- P3.9.** Stylianos Papazis, National Technical University of Athens, New Trends in Intensive Multidisciplinary Postgraduate Education to Develop New Skills for New Jobs
- P3.10.** Constantin D. Ioanidis, University of Texas System, Evaluation Issues of International Joint Research and Collaboration Programmes and Academic Networks
- P3.11.** Sveva Avveduto, M. Carolina Brandi, National Research Council, Institute For Research On Population and Social Policies, Rome, Italy, Gender Issues in Scientific Flexible Labor Market in Italy
- P3.12.** Susan G. Aquino, Mariano Marcos State University, Gender Mapping in the Biomass Energy Sectors in Northern Philippines

International Steering Committee Meeting:

Estia-Earth: Next Steps with Lifelong Learning Erasmus Network and Expectations for Careers of Women. Round Table Discussion

Conclusions and Closing: All participants