

iCEER 2004 Final Programme

Pre-conference Workshop - Prague			iCEER 2004 Conference - Olomouc					
	Friday June 25	Saturday June 26	Sunday June 27	Monday June 28	Tuesday June 29	Wednesday June 30	Thursday July 1	
8:00		Transfer to Senat Security check		Registration				
9:00		Opening		Opening Ceremony	Parallel sessions T01a1, T06a, T05a, T09a, T01a2	Parallel sessions T01e1, T06e, T04e, T08e, T01e2		
10:00		Workshop meeting		Plenary session A	Coffee break	Coffee break	Transfer to Prague (extra payment)	
11:00				Coffee break	Parallel sessions T01b, T06b, T05b, T09b, T07b	Closing Ceremony		
12:00	Individual check-in to hotels	Excursion to Senat	Transfer to Olomouc	Plenary session B	Lunch	Lunch	Transfer to Prague (extra payment)	
13:00		Individual programme		Lunch	Lunch			
14:00		Excursion to Prague		Poster Session	Parallel sessions T01c, T06c, T05c, T03c, T02c	Transfer to Prague (extra payment)		
15:00				Transfer to Bouzov Castle	Coffee break			
16:00				Parallel sessions T01d, T06d, T09d, T03d, T02d				
17:00		Transfer to hotels		Registration	Meeting at Bouzov Castle, iNEER Awards Ceremony	Dinner		Excursion to Prerov (extra payment)
18:00								
19:00		Buffet lunch						
20:00								
21:00				Steering Committee Meeting		Organ concert Sv. Mořic		

Workshop Prague June 26, 2004

8.00-8.30 Transfer to Senate

8.30-9.00 Security Check

9.00-9.30 Opening Ceremony - Prof. Roubíček The Knights Hall

Speakers:

- a) Representative of the Senate of the Czech Republic
- b) Ministry of Education, Youth and Sports: Dr. Petra Buzková
- c) VŠB-TU Ostrava: Dr. Vladimír Kebo
- d) iNEER: Dr. Win Aung

9.45-11.30 Workshop - The Government Policy Issues The Horse School

Speakers:

- a) Rector of Western Bohemia University: Prof. Josef Průša
- b) US Universities: Dr. John Dunn
- c) Rector of VUT Brno: Prof. Jan Vrbka
- d) University of Western Sydney: Prof. Vojislav Ilic

11.30-12.00 Coffee break

12.00-13.00 Excursion to Senate

13.00-14.00 Walk through Prague castle gardens

14.00-17.00 Excursion to Prague or individual programme

19.00-21.00 V.I.P. dinner in Salon 'Tulipan'
200 meters walk from hotel Mövenpick
by invitation only

iCEER 2004 Programme

Monday June 28, 2004

8.00-8.45 Registration, Hotel Flora

8.30-9.00 Transfer to Convict

9.00-10.00 Opening Ceremony

Speakers:

- | | |
|---|--------------------|
| a) Rector of VŠB-TU Ostrava: | Prof. Tomáš Čermák |
| b) Ministry of Education, Youth and Sports: | Dr. Petr Kolář |
| c) iNEER: | Dr. Win Aung |

10.00-11.00 Plenary Session A

Speakers:

- | | |
|--------------------------------------|-------------------------|
| a) President of NJIT: | Prof. Robert Altenkirch |
| b) Vice Chancellor SIU Carbondale: | Prof. John Koropchak |
| c) Taiwan delegation representative: | Prof. Mu-Lin Lu |

11.00-11.30 Coffee break

11.30-12.30 Plenary Session B

Speakers:

- | | |
|------------------------------|--|
| a) Dr. Chi-Cheng Chang: | The Development of Professional Certification in Taiwan--Some Strategies for Promoting Students' Professional Capability |
| b) Dr. Marios Kassinopoulos: | Academic and Professional recognition of UK Engineering Degrees in Cyprus |
| c) Prof. Gou-Jen Wang: | Toward A Comprehensively Interdisciplinary Nanoscience and Nanotechnology Personnel Training Program |

12.30-14.00 Transfer to Hotel Flora, lunch

14.00-15.00 Poster session, Hotel Flora

15.30-16.30 Transfer to Bouzov castle

17.00-22.00 Bouzov castle programme

Monday June 28, 2004

14.00-15.00 Poster session

- 1 Core Courses and Core Activities in the Pharmaceutical Engineering Program at NJIT: A Re-evaluation of what Constitutes the Core Knowledge of an Emerging Engineering Field
Piero M. ARMENANTE, Joseph J. MANFREDI, Maureen A. HOWLEY & Steven A. OSTROVE
- 1 Some Philosophical and Psychological Aspects of Engineering Problem Solving
Zbigniew M. BZYMEK
- 1 The Teaching of Unsteady Heat Conduction Using the Thermo-electric Analogy and the Code pspice. Nonlinear Models
Francisco DEL CERRO, Antonio CAMPO & Francisco ALHAMA
- 1 DWDM Transmission Systems and Networks: Experiment by Simulation
R. GANGOPADHYAY, Ch. SRINIVASA RAO, S. NAGESWARA RAO, A. VISHNU VARDHANAN, V. KAMAL & S. CHANDRA
- 1 Teaching Teachers to Design and Conduct Experiments
Jed LYONS
- 1 Innovation Technologies in Engineering Education
Alexandr MINAYEV, Y. A. BASHKOV & Oleg MOROZ
- 1 Education and Training of Power Engineers in Australia
Mahmood NAGRIAL & Jamal RIZK
- 1 A Multi-Discipline Undergraduate Renewable Energy Engineering Project
Jamal RIZK & Mahmood NAGRIAL
- 1 Innovative Approach to Teaching an Undergraduate Microprocessor Class
Ceeyavash (Jeff) SALEHI
- 1 Incorporation of Biology Knowledge and Skills into a Chemical Engineering Laboratory Course to Address a Biotechnology Professional Profile
Lorenzo SALICETI-PIAZZA & Rosa BUXEDA
- 1 Service Sector Systems Engineering: The Early Stages of an Innovative Degree Program
Sheryl A. SORBY & Robert O. WARRINGTON
- 1 Teaching Engineering Ethics to Freshmen
Keita SUGIHARA
- 1 Spreadsheet as a Tool in Teaching of Buckling Fundamentals
Jacek UZIAK, Marian A. GIZEJOWSKI & John D. G. FOSTER
- 1 On the Use of Mathematica in Engineering Education
Audun WEIERHOLT
- 3 Solutions to Meet the Requirements of Educational Robotics
Uwe GERECKE, Patrick HOHMANN & Bernardo WAGNER
- 3 A Collaborative Program for Development of Frictional Materials Using Industrial Wastes
Yoginder P. CHUGH, Peter FILIP, Samrat MOHANTY & Kok-Wai HEE
- 4 Nanotechnology for Engineering Education: a Frontier in Taiwan
S. H. CHANG, K. C. FAN & Y. B. YANG
- 4 An Interdisciplinary International Collaboration in Nano-structured Property and Nano-scale Contouring Measurement Research and Education
Yeau-Ren JENG
- 4 Physics Status in the Nanotechnology Education Project at the VŠB-Technical University of Ostrava
Jiří LUŇÁČEK, Jaromír PIŠTORA & Kamil POSTAVA

- 4 Preparing Nanostructural Materials by ECAP Method of Severe Plastic Deformation
Stanislav RUSZ, Miroslav GREGER, Martin KUBICEK & Martin PASTRNAK
- 4 The 3Dimensional Indicator for a Silo Stress/Pressure Measurement
Aleš SLÍVA
- 4 Design of Composite ENF Specimens and Conduct Three-Point Test to Calculate Mode II Fracture Toughness
Gwo-Chung TSAI
- 5 Experimental and Virtual Laboratories in Information Systems Teaching
Radim FARANA
- 6 Applications of Virtual Instruments in Electrical Engineering Education
Denise CONSONNI, Márcio F. AZEVEDO, Osvaldo BERNARDO NETO & Ronaldo C. ROGERI
- 7 A Fourth Year Experimental Course in the Measurement of Unsteady and Turbulent Flows
Peter B. V. JOHANSSON & Knud Erik MEYER
- 8 An Innovative "Introduction to Research" Workshop for 1st Year PhD Students.
Anthony Phillip BROMLEY, Jim BORAN & Paul John BRUNN
- 8 Postgraduate Skills Training in Teamwork and Project Planning –
Paul John BRUNN, Jim BORAN & Anthony Phillip BROMLEY
- 8 Striving for Excellence in Teaching Graduate Software Engineering by Using a Helycoidal-based Educational Program
Justo N. HIDALGO, Jesús PANCORBO, Pilar VÉLEZ & Alberto LÓPEZ
- 8 Funding of R&D Activities in the Czech Republic – Experiences of Selected Countries
Andrea SAMOLEJOVÁ
- 8 Experience with Foundation of New Private University
Vladimir STRAKOS & Ivan BARANCIK
- 8 Structural Funds for Financing of the International Co-operation in Human Resource Development
Šárka VILAMOVÁ, Roman KOZEL & Josef KAŠÍK
- 9 The Research of Integrating Information Technology with Problem-based Learning in Engineering Education: A Case Study of English Instruction
Shao-Tsu CHU, Yu-Wen CHU & Yo-Ming CHENG
- 9 English Skills Acquired from the Collaborative Teaching and Supervision
Lenka LANDRYOVÁ & Christopher IRGENS
- 9 Foreign Languages in Engineering University Education
Emília MIRONOVOVÁ & Juraj MIŠTINA

Tuesday June 29, 2004

9.00 - 10.30	T01a1 New Developments in Engineering Education
Kavárna	Chairperson: Vojislav ILIC, Robert ALTENKIRCH

- 9.00 A Study of Evaluation of Group Study Quality
Tetsuro FURUKAWA, Masakatu MATSUISHI, Shigeo MATSUMOTO, Kazuya TAKEMATA & Taketo YAMAKAWA
- 9.15 Hands-on Design and Virtue Experiment Training in Medical Mechtronics
Ming-Yih LEE & Chung-Hsien KUO
- 9.30 The use of Functional Modules in the Mechatronics Education of non-Electrical Engineering Students
Victor GIURGIUTIU
- 9.45 Empowering Learning in Engineering: A Study of Learning Styles, Strategies, and Success of First-Year Students
Christopher M. ANSON, Leonhard E. BERNOLD, Joni SPURLIN & Cathy CROSSLAND
- 10.00 Virtual Instrumentation – Significant Means of Effective Engineering Education
Pavel KLATIL
- 10.15 Entrepreneurial Skills for Engineers - An Interdisciplinary, Team Project Approach
Sheryl BALL, George MORGAN & Judy HOOD

Tuesday June 29, 2004

9.00 - 10.30	T06a Distance Learning
Orchidej	Chairperson: Denis GILLET, Lubomír SMUTNÝ

- 9.00 Adaptive Hypermedia in Learning on the Web
Konstantinos MARKELLOS, Penelope MARKELLOU, Maria RIGOU, Spiros SIRMAKESSIS & Athanasios TSAKALIDIS
- 9.15 A Personal Learning Tool for Second Language Engineering Vocabulary Acquisition
Hua-Li JIAN & Frode Eika SANDNES
- 9.30 SMART CITIZENS, a Virtual Course for Training Tutors in Flexible Learning
Didier HEUMANN, Vanya LOROCH & Denis GILLET
- 9.45 Using Web-Based Technology to Teach a Computer Network Course
Hamid R. MAJLESEIN & Ahmet TAN
- 10.00 Considerations in the Development of an Online Teaching Course
Hamid R. MAJLESEIN & Hediye IMAMOGLU-TAN
- 10.15 e-Physics - the First Multimedia Textbook
Miroslava OŽVOLDOVÁ, Soňa HALUSKOVÁ & Peter BALLO

Tuesday June 29, 2004

9.00 - 10.30	T05a Information Technology and Computational Mathematics
Chryzantéma	Chairperson: Michael KING, , Yury CHEBOTAREVSKY

- 9.00 Teaching Coupled Differential Equations by the Network Method
Francisco DEL CERRO & Francisco ALHAMA
- 9.15 Applications of the Fourier Transform In Chemical Instrumentation: A Computer Simulation With Mathcad
José Luis GUIÑÓN, Valentín PÉREZ-HERRANZ, José GARCÍA-ANTÓN & Emma ORTEGA
- 9.30 Combining Engineering Problem Solving with Numerical Methods to Enhance Learning Effectiveness
Mordechai SHACHAM & Michael B. CUTLIP
- 9.45 Application of Finite Element Method to Create Animated Simulation of Beam Analysis for the Course of Mechanics of Materials
Gwo-Chung TSAI
- 10.00 Developing a Countrywide Virtual Facility Center for Opto-Mechatronics Engineering Education in Taiwan
An-Bang WANG, Long-Sun HUANG, Chi-Kung LEE, I-Ping CHEN, Ming-Chang HSU, Yu-Sin CHEN & Jeng-Ywan JENG
- 10.15 A Virtual Reality Tool in Civil Engineering Education
Alcinea Z. SAMPAIO, Pedro G. HENRIQUES & Pedro S. FERREIRA

Tuesday June 29, 2004

9.00 - 10.30	T09a International Accreditation and Programs
Učebna	Chairperson: Marios KASSINOPOULOS, Dagmar MALÍKOVÁ

- 9.00 Joint Degree Programs between European and Asian Universities: Concepts, Models, Structures and Tools
Axel HUNGER, Christian SCHÜTZ, Frank SCHWARZ & Stefan WERNER
- 9.15 Partnering to Establish an International Joint Engineering Degree Program
Sheryl A. SORBY, James P. CROSS & Robert O. WARRINGTON
- 9.30 Engineering Educational and Research Collaboration between a U.S. and a Russian University: A Sustainable Model for International Programs
Darren E. MASON, Ronald S. HARICHANDRAN, Thomas L. MALECK, Vera GALISHNIKOVA, Jason MERRILL, David PRESTEL & Paul STRENG
- 9.45 Exchange Programs as a Means of Increasing Engineering Student's International Study Options
Thomas K. JEWELL & William W. THOMAS
- 10.00 Hungarian Participation in International Engineering Exchange Programs
Peter MOSON
- 10.15 Doctoral Study at TU Ostrava in the International Context
Dalibor CIPRIAN, Jaromír PIŠTORA, Martin FOLDYNA & Kamil POSTAVA

Tuesday June 29, 2004

9.00 - 10.30	T01a2 New Developments in Engineering Education
Pomněnka	Chairperson: Ryszard WILK, Shan-Hwei OU

- 9.00 A New Perspective for Improving Quality in Teaching & Learning Processes
Fui Tong LEE & Boon Han YEAP
- 9.15 Some Strategies for Making Problem-based Learning Teaching Plans
Shao-Tsu CHU, Yi-Ping LIN & Yu - Wen CHU
- 9.30 First Experiences of Teaching of Energy Engineering and Environmental Protection at the Silesian University of Technology
Ryszard K. WILK
- 9.45 Alternative Assessment In Information Systems Engineering Education
Paulo Rupino CUNHA, Ana Paula AFONSO & António Dias FIGUEIREDO
- 10.00 Lab Project Management: A learning Scenario for Experimental Courses
Moisès GRAELLS
- 10.15 The Impact of Course Resource Utilization upon Student Performance
Edward E. ANDERSON, Roman TARABAN, Matthew W. HAYES & M. P. SHARMA

Tuesday June 29, 2004

11.00 - 13.00	T01b New Developments in Engineering Education
Kavárna	Chairperson: Timothy SKVARENINA, Wojciech ZIELIŃSKI

- 11.00 Development and Implementation of a Practice-Oriented Masters Program in Engineering
Leyla CONRAD, Bethany BODO, Rao TUMMALA, Gary MAY & Joseph HOEY
- 11.15 What Makes the Process Engineering Design Project Different
M. M. FARID, S. D. OAKLEY, B. THOMPSON & J. J. J. CHEN
- 11.30 Innovation in Engineering Education
Elizabeth M. LAWS
- 11.45 Requirements for the Integral Design of Experiments through Real Laboratory and Simulations in Engineering Education
Eduardo A. MONTERO, Cristina ALONSO, María Jesús GONZÁLEZ, Fernando AGUILAR & Montserrat DÍEZ
- 12.00 Teaching Wireless Sensor Technology to Undergraduate Students Through Research Projects
Manuel TOLEDO-QUIÑONES, Jhon Arvey HENAO-SEPULVEDA, Yi JIA, Manuel JIMÉNEZ & Rogelio PALOMERA
- 12.15 A Flexible Software Middleware for Interactive Learning Environments
Dirk GROENEVELD, Tara C. HUTCHINSON & Falko KUESTER
- 12.30 Recycling Graduate Coursework to Introduce Freshmen to Engineering Fields
Jhon Arvey HENAO-SEPULVEDA, Manuel TOLEDO-QUIÑONES, José G. COLOM-USTÁRIZ & Rafael MEDINA
- 12.45 Experience on Design of Tests in Robotics by the Students
Arturo GARCÍA, José Luis DELGADO, Rubén ROMÁN, Yolanda RODRÍGUEZ & Justo N. HIDALGO

Tuesday June 29, 2004

11.00 - 13.00	T06b Distance Learning
Orchidej	Chairperson: Hamadou SALIAH-HASSAN, Jaromír PIŠTORA

- 11.00 A Distance Education Course with both Lecture and Laboratory Components
Kevin D. TAYLOR, John P. DENTON & Karl A. PERUSICH
- 11.15 Evaluation of Reduced Perception and Tele-tutorial Support in Remote Automation Technology Laboratories
Nils FALTIN, Andreas BÖHNE & Bernardo WAGNER
- 11.30 Laboratories in Engineering Courses via Internet
Mamane Moustapha DODO AMADOU, Hamadou SALIAH-HASSANE & Maarouf SAAD
- 11.45 Pedagogical Engineering Fundamentals to Build Robust Software Components for Online Laboratories
Bouchaib FATTOUH & Hamadou SALIAH-HASSANE
- 12.00 A Generic 3D Environment to Remotely Drill and Practice on Embedded Automated Systems
Mohamed MHAMDI & Hamadou SALIAH-HASSANE
- 12.15 Telemeasured Performances of a DSP based CDMA Software Defined Radio
Oreste ANDRISANO, Andrea CONTI, Davide DARDARI & Alberto ROVERSI
- 12.30 Collaborative Distributed Laboratories: Technical Issues
Oreste ANDRISANO, Andrea CONTI, Davide DARDARI & Alberto ROVERSI
- 12.45 Web Services and Semantic Web in Remote Control of Laboratory scale and Matlab Simulation Models
Jan TAMÁŠ & Bohumil ŠULC

Tuesday June 29, 2004

11.00 - 13.00	T05b Information Technology and Computational Mathematics
Chryzantéma	Chairperson: Chi-Cheng CHANG, Edward ANDERSON

- 11.00 The Strategy to Enhance the Effectiveness of Software Engineer Training Program in Taiwan
Chyan-Goei CHUNG, Ta-Yu TSENG, Ming-ji WU & Hwi-Min KUO
- 11.15 The Use of Emotional Intelligence in the Process of Teaching Software Engineering
Justo N. HIDALGO, Maria Eugenia DÍEZ & Pilar VÉLEZ
- 11.30 Good Bye to Hello World — An Interactive Approach to Java
Ulrike JAEGER & Jochen SCHMIDT
- 11.45 Adoption of a Uniform Programming Platform in an Undergraduate Biomedical Engineering Program
Michael R. KING
- 12.00 Introduction of Information Technologies in Educational Process of the National University of Uzbekistan
Sergey GARNOV, Abdugapur KARIMKHODJAEV, Tursunali NORBOEV & Laurence LEGG
- 12.15 Higher IT Education: Ways of Development
Yury CHEBOTAREVSKY & Olga DOLININA

Tuesday June 29, 2004

11.00 - 13.00	T09b International Accreditation and Programs
Učebna	Chairperson: Thomas K. JEWELL, Ludmila NEUWIRTHOVÁ

- 11.00 Defining the IT Curriculum: The Results of the Past 2½ Years
Barry M. LUNT, Joseph J. EKSTROM, Edith A. LAWSON, Reza KAMALI, Jacob MILLER, Sandra GORKA & Han REICHGELT
- 11.15 Continuous Improvement Educational Initiative: A Campus-Wide Assessment Effort – Looking Beyond Accreditation
Anand D. SHARMA & Ramón E. VÁSQUEZ ESPINOSA
- 11.30 Professional Accreditation, Assessment, and Licensing: Fundamentals of Engineering Exam
Enno "Ed" KOEHN & Rajesh D. MALANI
- 11.45 The Integrated Strategies and Implementing Processes of the Accreditation Criteria in Taiwan
Pei-Fen CHANG, Chia-Hao KO, Chia-Ling HO, Jia-Yush YEN, Andrew M. WO & Yeong-Bin YANG
- 12.00 Impact of Accreditation on Internationalization of Engineering and Technology Education in the United States
H. Oner YURTSEVEN
- 12.15 Development of Key Performance Indicators for the Engineering Technology Education Programs in Taiwan
Lung-Sheng LEE & Chun-Chin LAI
- 12.30 The Correlation in Constituency Assessment Results from EC2000 Based Survey Questionnaire
Thuy T. LE

Tuesday June 29, 2004

11.00 - 13.00	T07b Bologna Declaration Processes
Pomněnka	Chairperson: Frode Eika SANDNES, John DUNN

- 11.00 Student and Staff Mobility in European Higher Education Institutions, during the First Years of the Bologna Process
Marios KASSINOPOULOS
- 11.15 Towards Transparent, Readable and Comparable Third Degree: Making Doctorate-level Engineering Education a Part of the Bologna Process
Andrzej KRASNIEWSKI
- 11.30 Higher Engineering Education Reform in the Universities in Serbia
Vojo ANDJUS & Dragoslav STOJIC
- 11.45 DonNTU's Experience in Organization of the Inter-University Students' Exchange and its Development within the Frameworks of the Bologna Declaration
Alexandr MINAYEV, Ilija NAVKA & Oleg MOROZ
- 12.00 Problems of Link-Up in Structured Study
Jaroslav DVOŘÁČEK
- 12.15 Engineering Degree and Competencies
Janos BARSONY & Tibor KUKAI
- 12.30 A Masters Program in Computational and Experimental Turbulence
T. Gunnar JOHANSSON, William K. GEORGE & Lars DAVIDSON
- 12.45 The Conception of Higher Education at Donetsk Technical University
Vadim PRISEDSKY

Tuesday June 29, 2004

14.00 - 15.30	T01c New Developments in Engineering Education
Kavárna	Chairperson: Benjamin MELAMED, Georgios GRAVANIS

- 14.00 Education and Research on Sound-Guided 3D CAS Navigation System for Problem Based Learning and Assessment
Chung-Hsien KUO, Ming-Yih LEE & Shuo-Suei HUNG
- 14.15 Learning to Collaborate in Student Project Teams: Tools and Processes
Reidar KVADSHEIM
- 14.30 Teaching Micro System Design by Using Multi-User Micro Avionics System Laboratory in Aerospace Educational Reform Program of Taiwan
Tzong-Shyng LEU, Yei-Chin CHAO, Yun-Che WEN & Yu-Jane WU
- 14.45 Teaching and Design on Smart MEMS Pressure Sensor Module
Jium-Ming LIN
- 15.00 Educational Robotics in Algorithm Concretization
Javier LÓPEZ, Niko MYLLER & Erkki SUTINEN
- 15.15 Plagiarism and Pedagogy: Reflections on the Causes and Consequences of Plagiarism among Engineering Students
Christene MOORE & D'Arcy RANDALL

Tuesday June 29, 2004

14.00 - 15.30	T06c Distance Learning
Orchidej	Chairperson: Tetsuro FURUKAWA, Radim FARANA

- 14.00 Integration and Collaboration of Distance Learning to Conduct the Curricula
Yo-Ping HUANG, Tsun-Wei CHANG & Dankai LIU
- 14.15 Virtual Technologies with WEB Solutions in e-Learning
Lubomír SMUTNÝ, Radim FARANA & Pavel SMUTNÝ
- 14.30 Students' Activities in Engineering Design Courses by Using Web Collaboration Tools
Kazuya TAKEMATA, Masakatsu MATSUIISHI, Toshiyuki YAMAMOTO, Tetsuro FURUKAWA & Shigeo MATSUMOTO
- 14.45 Cluster-Based E-Education Network on Precision Mechatronics
Jhy-Cherng TSAI, Wenlung LI, Cheng-Kuo SUNG & Jennie Y. J. WU
- 15.00 A Web Based Teaching Aid for Reinforced Concrete Design
José Márcio CALIXTO, Gláucia Nolasco ALMEIDA, Elizabeth Vieira MAIA & Frederico RODRIGUES
- 15.15 Applying Educational Technological Tools to Promote Effective Student Learning in Engineering Education
Fui Tong LEE & Namal SENANAYAKE

Tuesday June 29, 2004

14.00 - 15.30	T05c Information Technology and Computational Mathematics
Chryzantéma	Chairperson: Mordechai SHACHAM, Uwe GERECKE

- 14.00 Virtual Reality Lab in Education of Automation
Oldřich KODYM
- 14.15 The FAQ Robot – Managing Large-class E-mail Correspondence
Frode Eika SANDNES, Baard H. Rehn JOHANSEN, Nils Einar EIDE & Andreas N. BLAAFLADT
- 14.30 The Development of WLAN-based Indoor Positioning Systems for Aerospace Engineering Education Improvement Programs
S. J. WU, Chih-Chen YIH & S. H. YEN
- 14.45 Automatic Management Control-system of Nursing Center in Hospital
Chun-liang HSU, Rwei-ching CHANG & Fu-hsien CHEN
- 15.00 New Technology in Teaching Statistics
Radim BRIŠ
- 15.15 WEB Education Support of Sensors and Control Devices Laboratories
Lubomír SMUTNÝ, Marek BABIUCH & Jaromír ŠKUTA

Tuesday June 29, 2004

14.00 - 15.30	T03c Role of Advanced Technology Centres
Učebna	Chairperson: Peter FILIP, Vladimír STRAKOŠ

- 14.00 A Formula for Success in Research Partnerships
Dale E. WITTMER
- 14.15 Interaction of Research and Engineering Education at the University of Illinois at U/C
H. H. KORST
- 14.30 Industry Sponsored Practical Undergraduate Learning: Two Case Studies from The University of Puerto Rico
Manuel TOLEDO-QUIÑONES, Manuel JIMÉNEZ & Rogelio PALOMERA
- 14.45 On the Problem of Utilization of Scientific-technological Potential of Young Researchers
Ján ČOREJ & Tatiana ČOREJOVÁ
- 15.00 Possibilities of Improving the Transfer of PhD Theses Results from Slovak Universities into the Entrepreneurial Practice of Small and Medium Sized Enterprises
Mária ROSTÁŠOVÁ & Danuša VAVRÍKOVÁ

Tuesday June 29, 2004

14.00 - 15.30	T02c Research in International Context
Pomněnka	Chairperson: Jørgen HANSEN, Wolfgang MELECKÝ

- 14.00 International Engineering Students in Cross-cultural, Interdisciplinary Teams
Joergen HANSEN
- 14.15 International Cooperation in Engineering Education
Kazuo HATAKEYAMA & Gudrun JÄGERSBERG
- 14.30 Sabato's Triangle and International Academic Cooperation: The Importance of Extra-Relations for the Latin American Enhancement
Kazuo HATAKEYAMA & Dirlene RUPPEL
- 14.45 Globalization of Engineering Design Projects
Wes GREBSKI & Jacek TUROWSKI
- 15.00 Collaborative Partnership in Education and Research
Jerzy MOŚCIŃSKI
- 15.15 Support for Research Teams in Applying for European Union Funds on the Example of the Silesian University of Technology
Wojciech ZIELIŃSKI

Tuesday June 29, 2004

16.00 - 17.45	T01d New Developments in Engineering Education
Kavárna	Chairperson: Lucyna KORNECKI, John KOROPCHAK

- 16.00 Multi-functional Laboratory Demonstration System
Matti VÄÄNÄNEN & Jussi HORELLI
- 16.15 Self-Test Designs in Devices of Avionics
Yun-Che WEN, Yei-Chin CHAO, Tzong-Shyng LEU & Yu-Jane WU
- 16.30 An Integrated Approach to the Teaching of Engineering Design
Rainer SEIDEL
- 16.45 Application and Analysis of the use of Outcomes for a Higher Education Course Unit
Anthony PRIOR & David GLANCE
- 17.00 Approaches to Graduate World Class Engineers and to Meet the Needs of Next Decades in Colombia
Jaime Alberto ESCOBAR
- 17.15 The Role of Business Education in Engineering Curricula
Robert O. WARRINGTON & Sheryl A. SORBY
- 17.30 A Phenomenological Approach to Ethics Education
Veikko PORRA

Tuesday June 29, 2004

16.00 - 17.15	T06d Distance Learning
Orchidej	Chairperson: Jerzy MOŚCIŃSKI, Radim BRIŠ

16.00 Distance Learning and Education Support Tools Development
Jerzy MOŚCIŃSKI

16.15 Development of an e-Learning System for Chemical Engineering Education
Valentin PLESU, Raluca ISOPESCU, Razvan ONOFREI, Ana Maria JOSCEANU, Romulus DIMA & Stefan MORCOV

16.30 A Tool to Construct the "POLI PARA TODOS" Program
Itana STIUBIENER, Ian KOROLKOVAS, Luiz Fernando de BIASE, Gustavo Bianchi CINELLI, Sergio RODRIGO, Regina Melo SILVEIRA, Tereza Cristina de Melo Brito CARVALHO & Wilson Vicente RUGGIERO

16.45 Recapitulation of Usage Barborka E-learning System on VŠB – Technical University of Ostrava
Radoslav FASUGA, Jana ŠARMANOVÁ & Libor HOLUB

Tuesday June 29, 2004

16.00 - 17.30	T09d International Accreditation and Programs
Chryzantéma	Chairperson: Kumares C. SINHA, Milena KRHUTOVÁ

16.00 Streaming Video for Enhanced Foreign Language Training in Vocational Education
Hans HEBENSTREIT & Ingrid BURGER

16.15 Engineering Communication (ESL) and Logical Cohesion in Student Papers
Kristin MUNDAY

16.30 Standardising Foreign Language Knowledge in Electrical Engineering Education
Ludmila NEUWIRTHOVA

16.45 An Instruction Tool for Effective Technical/Scientific Writing in English
Dagmar MALÍKOVÁ

17.00 Specific Stylistic Features of English for Electrical Engineering
Milena KRHUTOVÁ

17.15 Civil Engineering Education in the U.S.: What Lies Ahead?
Kumares C. SINHA

Tuesday June 29, 2004

16.00 - 17.45	T03d Role of Advanced Technology Centres
Učebna	Chairperson: Bernardo WAGNER, Vladimír KEBO

- 16.00 Internationalizing our Campuses: Multinational Project-Based Approaches
Gretchen KALONJI
- 16.15 The Current State of Engineering, Science and Mathematics Education Centers in the United States
Jed LYONS & Christine EBERT
- 16.30 Industry - University Based Curricula to Address Skill Needs in Microelectronics
Jugdutt (Jack) SINGH, Ronny VELJANOVSKI & Aleksandar STOJCEVSKI
- 16.45 Lessons Learned from 10 Years Experience with Remote Laboratories
James TREVELYAN
- 17.00 Converging Courses to Suit Converging Technologies
Trevor LUND & Neil RUSSELL
- 17.15 Technical Framework for Robot Platforms in Education
Bernardo WAGNER, Patrick HOHMANN, Uwe GERECKE & Christian BRENNEKE
- 17.30 Effectiveness of Robotics Peer Mentoring Program for Raising Interest in Engineering, Science and Technology
Zorica NEDIC, Brenton DANSIE & Andrew NAFALSKI

Tuesday June 29, 2004

16.00 - 17.30	T02d Research in International Context
Pomněnka	Chairperson: John MEAD, Wolfgang MELECKÝ

- 16.00 International Experiences in Sustainable Education for Engineering and Technology Students
Patricia FOX, Claudia GROSSMANN, Elizabeth COLES, Stephen HUNDLEY & Ramana PIDAPARTI
- 16.15 Combination of Network Computer-Aided and Traditional Teaching Methods in Delivering High-Tech Master's Degree Courses
Tatiana S. PETROVSKAYA, Victor A. KILIN & Sergei A. GORISEV
- 16.30 The Review and Future Development of the International Cooperation in Aviation Technology Education in Taiwan
Chuan-Sheng LIU, Cheng-Ying LO, Yeong-Ley TSAY, Shih-Ying YANG & Liang-Rui CHEN
- 16.45 A US-Czech Republic Cooperative Research Program in Friction Materials
Zdeněk WEISS, Václav ROUBÍČEK & Peter FILIP
- 17.00 Periodical Structures and International Research Cooperation
Jaromír PIŠTORA, Tomuo YAMAGUCHI, Koki WATANABE, Roman ANTOŠ, Jaroslav VLČEK, Monika KŘÍSTKOVÁ, Ondřej ŽIVOTSKÝ, Kamil POSTAVA & Martin FOLDYNA
- 17.15 The Assessment of Hidden Curriculum on Technological Creativity in Technological University
Jeh-Lou MENG & Chi-Cheng CHANG

Wednesday June 30, 2004

9.00 - 10.30	T01e1 New Developments in Engineering Education
Kavárna	Chairperson: Sheryl SORBY, Robert WARRINGTON

- 9.00 Reengineering Learning Using Comic Story
A. CHATTERJEE & S. G. DHANDE
- 9.15 Enhancing Connection between Theories and Engineering Practices by Designing and Manufacturing Miniature Stirling Engines
Chin-Hsiang CHENG
- 9.30 Avionics Education in Taiwan's Vocational University
Liang-Rui CHEN, Roy-Chaoming HSU & Chuan-Sheng LIU
- 9.45 Decision Making and Experiments in the Engineering Laboratory
Eduardo A. MONTERO, Cristina ALONSO, María Jesús GONZÁLEZ, Fernando AGUILAR & Montserrat DÍEZ
- 10.00 Significance of Skill and Management Formation for the Future of the Formation of Engineering
Gabriela RIBES GINER & María DE MIGUEL MOLINA
- 10.15 Entrepreneurship Education for Engineering Students
Lucyna KORNECKI & Andrew J. KORNECKI

Wednesday June 30, 2004

9.00 - 10.30	T06e Distance Learning
Orchidej	Chairperson: Jhy-Cherng TSAI, Radim BRIŠ

- 9.00 Students' Telepresence in a Remote Laboratory: a Case Study - NetLab
Zorica NEDIC & Jan MACHOTKA
- 9.15 Virtual Laboratory Concept for Engineering Education
Alexander BABICH & Konstantinos MAVROMMATIS
- 9.30 Improving Understanding of Distributed Systems through Shared Work among Teacher and Students
Justo N. HIDALGO
- 9.45 Collaborative Compilation: An Experience on Using Groupware Tools Applied To Computer Programming Learning
Manuel GARRIDO, Jesús C. PANCORBO & Justo N. HIDALGO

Wednesday June 30, 2004

9.00 - 10.30	T04e Nanotechnology in Engineering Education
Chryzantéma	Chairperson: Gou-Jen WANG, Zdeněk WEISS

- 9.00 Interdisciplinary Collaboration in Teaching Nanotechnology
Mel MENDELSON, Gary KULECK, Jeff SANNY, John BULMAN, Nazmul ULA, Rafiq NOORANI & James ROE
- 9:15 Nanotechnology Education Concept at the VŠB-Technical University of Ostrava
Jaromír PIŠTORA & Zdeněk WEISS
- 9:30 New Method of a Silo Stress/Pressure Observation using the 3Dimensional Indicator
Aleš SLÍVA, Jiří ZEGZULKA & Jaromír POLÁK
- 9.45 Engineering Education in the Nanomachining Technology Curriculum
Hsiharng YANG
- 10.00 Convergent Science and Technology as a New Concept in Engineering Education at Northern Illinois University
Michael J. HAJI-SHEIKH & Promod VOHRA
- 10.15 Nanotechnology Exposure in a First-Year Engineering Program
Heidi A. DIEFES-DUX, P. K. IMBRIE, Kamyar HAGHIGHI, Gil LEE, Steve WERELEY & Phillip WANKAT

Wednesday June 30, 2004

9.00 - 10.30	T08e Government Policy Issues
Učebna	Chairperson: Sonia M. BARTOLOMEI-SUÁREZ, Andrea SAMOLEJOVÁ

- 9.00 Women at UPR's College of Engineering: Students and Faculty, Quite a Distinct Reality
Sonia M. BARTOLOMEI-SUÁREZ, Viviana I. CESANÍ-VÁZQUEZ, María IRIZARRY-SERRANO & Freya TOLEDO-FERIA
- 9.15 Women into Engineering
Kazuo HATAKEYAMA, Irmtraud MUNDER & Marília Gomes de CARVALHO
- 9.30 Using Social Relevance to Recruit and Retain Minority and Women Engineers
Ruth E. DAVIS
- 9.45 UK Government Policy in Postgraduate Skills Training: a model for other nations?
Jim BORAN, Anthony Phillip BROMLEY & Paul John BRUNN
- 10.00 Center for Collaborative Product Design and Development
Sundaram KRISHNAMURTHY & Jesa KREINER
- 10.15 European Research Area and Energy Engineering Education
Václav ROUBÍČEK & Pavel KOLAT

Wednesday June 30, 2004

9.00 - 10.30	T01e2 New Developments in Engineering Education
Pomněnka	Chairperson: Dale WITTMER, Jed LYONS

- 9.00 Can Ethics Be Taught?
Vojislav ILIC
- 9.15 Engineering and Social Responsibility: Incorporating Environmental Culture in Management
María DE MIGUEL MOLINA & Gabriela RIBES GINER
- 9.30 Do Technologies Impoverish or Improve the Lives of Those They Touch? A Student's Perspective on the Ethics of Engineering
Gyanam SADANANDA
- 9.45 Ethics And Social Responsibility in Engineering Courses
Alessandro LA NEVE & Carla Soares DE ARAUJO
- 10.00 The Internet Phenomenon – Ethical Challenge in Engineering Education of the Information Age
Juraj MIŠTINA & Roman HRMO
- 10.15 The Role of Humanities and Social Sciences in Engineering Practice and Engineering Education
Josef ROJTER

