



UNIVERSITATEA
Petru Maior
TÂRGU - MUREȘ

The 4th edition of the
Interdisciplinarity in Engineering
International Conference



CONFERENCE PROGRAM

“Petru Maior” University of Tg. Mureș
Faculty of Engineering
www.inter-eng.upm.ro

12 - 13 November 2009
Tg. Mureș, România

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Tg. Mureș, România

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Program Summary

Date Time	Wednesday November 11	Thursday November 12	Friday November 13
09:00- 10:00		Registration/Information Desk Room A102	Registration/Information Desk Room A102
10:00- 10:30		Opening Ceremony Room Aula Magna	Technical Sessions - E&PE, Room A210 - CSE, Room A310
10:30- 12:00		Plenary Session Room Aula Magna	- IT&C, Room A316 - M&TE, Room A308
12:00- 14:00		Lunch Continental Restaurant	Lunch Continental Restaurant
14:00- 16:00		Technical Sessions - E&PE, Room A210 - CSE, Room A310 - IT&C, Room A316 - M&TE, Room A308 - M&R, Room A208 - M&EE, Room A309	
16:00- 16:30		Coffee Break Cafeteria UPM	
16:30- 18:30	Registration/ Information Desk Room A102	Technical Sessions - E&PE, Room A210 - CSE, Room A310 - IT&C, Room A316 - M&TE, Room A308 - M&EE, Room A309 - EE, Room A208	
19:00- 23:00		Gala Dinner Europa Restaurant	

Opening Ceremony

Thursday, November 12, 10:00-10:30

Aula Magna

Welcome Addresses:

Marius PAŞCAN – Mures County Prefect

Dorin FLOREA – Tg.Mureş City Mayor

LOKODI Eموke Edita – Chairman of Mures County Council

Prof.dr.ing. Liviu MARIAN – Rector of “Petru Maior” University of Târgu Mureş

Prof.dr.ing. Vasile BOLOŞ – Prorector of “Petru Maior” University of Târgu Mureş

Prof.dr. Cornel SIGMIREAN – General Cancelar of “Petru Maior” University of Târgu Mureş

Conf.dr.ing. Mircea DULĂU – Dean of the Faculty of Engineering of the “Petru Maior” University of Târgu Mureş

Plenary Session

Thursday, November 12, 10:30-12:00

Aula Magna

Facts and Perspectives in Faculty of Engineering Task

Mircea DULĂU, Faculty of Engineering, Dean

The Next Generation of Applications: Multi-Agent Systems on the Semantic Web

Miklos NAGY, The Open University, United Kingdom

Segments of New Management Philosophy

Johan KOCHER, General Manager of Dr. KÖCHER GmbH Fulda, Germany

Social Function of Industrial Design: Today and Tomorrow

Dan-Horia CHINDA, Professor, DHC Creative, Miami, Florida USA

Electrical & Power Engineering (E&PE)

E&PE – Room A210

Thursday, November 12, 14:00-16:00

Session chairs:

Mihai Gavrilăș, “Gheorghe Asachi” Technical University of Iași, Romania

Mikho Mikhov, Technical University of Sofia, Bulgaria

14:00-14:15 – Day-Ahead Load Forecasting Using Exponential Smoothing

Radu Bindiu, Mircea Chindriș, Gabriel Vasile Pop

14:15-14:30 – Power Capability in Low Voltage DC Distribution Systems

Călin-Octavian Gecan, Mircea Chindriș, Radu Bindiu

14:30-14:45 – Economical Implications Regarding the Operation of Power Transformers in Harmonic Polluted Power Systems

Gabriel Vasile Pop, Mircea Chindriș, Călin Octavian Gecan

14:45-15:00 – Determination of the Power Transformer Efficiency Monitoring the Electrical Insulation Parameters

Adrian Munteanu, Lucian Iulian

15:00-15:15 – Some Aspects of the Distortion State in Electric Energy Repartition and Distribution Public Networks

Gheorghe Georgescu, Bogdan Neagu

15:15-15:30 – Possibilities of Optimal Power Flow in Public Repartition and Distribution Systems of Electric Energy

Gheorghe Georgescu, Bogdan Neagu

15:30-15:45 – The Power Quality Impact of Electronic Equipment Use in Office Buildings

Horațiu-Călin Albu, Florin Pop

15:45-16:00 – Analysis of Saturation Effects on the Operation of Magnetic-Controlled Switcher Type FCL

Faramarz Faghihi, Homa Arab

E&PE – Room A210

Thursday, November 12, 16:30-18:45

Session chairs:

Mircea Chindriș, *Technical University of Cluj – Napoca, Romania*

Vasile Dub, *“Petru Maior” University of Târgu Mureș, Romania*

16:30-16:45 – A Multifunctional Two-Coordinate Drive System with Hybrid Stepping Motors

Mikho Mikhov, Panayot Nakov, Georgi Mitrinski, Mladen Stoev

16:45-17:00 – Reliability Improvement Methods and Their Effects on Voltage Sag Incidence Rate in Distribution Networks

Hajar Abdi, Alireza Ghods, Azad Amiry

17:00-17:15 – REI Equivalents With Synchrophasor Measurements

Mihai Gavrilaş, Gilda Gavrilaş, Ovidiu Ivanov

17:15-17:30 – Improved WLS Estimation in Large Systems Using Genetic Algorithms

Ovidiu Ivanov, Mihai Gavrilaş

17:30-17:45 – Calculation Program for the Theoretical Study of the Performances of the Steam Condenser Of The 330 MW Turbine

Ovidiu Săftoiu, Mihai Nagi

17:45-18:00 – Optimization of Reliability Centered Maintenance (RCM) Based on Renewal Processes

Dorin Sarchiz, Daniel Bucur, Dorin Bică

18:00-18:15 – Bipolar Hybrid Stepper Motor Control and Drive with Dedicated Ics L297 + L298

Zsolt Albert Barabas, Alexandru Morar

18:15-18:30 – Microstepping Test Board with LMD18245 Specialized Circuit for Bipolar Stepper Motor

Zsolt Albert Barabas, Alexandru Morar

18:30-18:45 – Optimization of Reliability Electric Supply of a Hospital

Daniel Bucur, Dorin Sarchiz, Dorin Bică

E&PE – Room A210

Friday, November 13, 10:00-12:15

Session chairs:

Lucian Iulian, *Transilvania University of Brașov, Romania*

Dorin Bică, *“Petru Maior” University of Târgu Mureș, Romania*

10:00-10:15 – Four Quadrant Chopper Drive with Specialized Integrated Circuits

Alexandru Morar

10:15-10:30 – Power Distribution Networks’ Graph Optimization

Dorin Sarchiz, Vasile Dub

10:30-10:45 – Middle Voltage Distribution Systems and Scale-Free Networks

Vasile Dub, Sarchiz Dorin

10:45-11:00 – Four Phases Driver for Stepper Motor Control

Ionuț Silviu Luca, Alexandru Morar

11:00-11:15 – Power Quality Disturbance and Power Flow Analysis in a Hybrid Renewable Energy System Using Matlab

Adrian Gligor, Cristian Dragoș Dumitru, Horațiu Grif

11:15-11:30 – Constructive and Functional Improvements of the Electromagnetic Reciprocating Machines (EMRM)

Gheorghe Remus Codoiu

11:30-11:45 – New Polarized Solenoid Type Electromagnetic Hammers

Gheorghe Remus Codoiu

11:45-12:00 – Modeling of Renewable Hybrid Energy Sources

Cristian Dragoș Dumitru, Adrian Gligor

12:00-12:15 – Current Trends and Challenges in Power Engineering Education

Dorin Bică, Daniel Bucur, Arina Modrea

Control Systems Engineering (CSE)

CSE – Room A310

Thursday, November 12, 14:00-16:00

Session chairs:

Vasile Comnac, *Transilvania University of Brasov, Romania*

Mircea Dulău, *“Petru Maior” University of Târgu Mures, Romania*

**14:00-14:15 – Sensorless State-Space Control of Elastic Two-Inertia Drive System
Using a Minimum State Order Observer**

Vasile Comnac, Simona Coman, Cristian Boldisor, Anca Acreala

14:15-14:30 – Networked Control Systems for DC Electrical Drives

Simona Coman, Vasile Comnac, Cristian Boldisor

**14:30-14:45 – Influence of Variable Time Delay on the Performances of
Networked Control Systems**

Anca Acreala, Cristian Boldisor, Vasile Comnac

**14:45-15:00 – Rule-Bases Construction Through Self-Learning for a Table-Based
Sugeno-Takagi Fuzzy Logic Control System**

Cristian Boldisor, Vasile Comnac, Simona Coman, Anca Acreala

15:00-15:15 – Numerical Structures for Slow Processes Control

Mircea Dulau, Stelian Oltean, Adrian Gligor, Titus Jovrea

15:15-15:30 – Automation Solutions for Thermal Systems

Mircea Dulau, Irfan Gultekin, Murat Kulustepe, Stelian Oltean

**15:30-15:45 – Minimum Variance Adaptive Control of Reactive Sputtering
Process**

Katalin Gyorgy

15:45-16:00 – SCADA Architecture for Natural Gas Plant

Traian Turc, Horatiu Grif

CSE – Room A310

Thursday, November 12, 16:30-18:30

Session chairs:

Florin Moldoveanu, *Transilvania University of Brașov, Romania*

Alexandru Morar, *“Petru Maior” University of Târgu Mures, Romania*

16:30-16:45 – Intelligent Servo Drives Control of an Articulated Arm Robot

Dan Puiu, Florin Moldoveanu

16:45-17:00 – Mobile Robot Position Estimation Using the Kalman Filter

Caius Suliman, Cristina Cruceru, Florin Moldoveanu

17:00-17:15 – Focusing and Deflecting Systems Modelling and Simulation of the CTW 5/60 Electron Beam Equipment

Stelian Emilian Oltean, Mircea Dulau

17:15-17:30 – Intelligent Microstepping System for Bipolar Stepper Motor Control with Step and Direction Interface

Alexandru Morar

17:30-17:45 – Neural Daylight Control System With On-Line Inverse Process Modeling

Horatiu-Stefan Grif

17:45-18:00 – Fuzzy daylight control system

Horatiu-Stefan Grif

18:00-18:15 – Modeling and Simulation of Renewable Hybrid Energy Sources Using Matlab Environment

Cristian Dragos Dumitru, Adrian Gligor, Adrian-Vasile Duka

18:15-18:30 – Monitoring and Control by Virtual Tools of an Educational Renewable Energy System

Adrian Gligor, Cristian Dragos Dumitru, Traian Turc

CSE – Room A310

Friday, November 13, 10:00-11:30

Session chairs:

Alexandru Morar, “Petru Maior” University of Târgu Mures, Romania
Zoltan German-Sallo, “Petru Maior” University of Târgu Mures, Romania

**10:00-10:15 – FIR Filter Synthesis for Discrete Wavelet Transform
Implementation**

Zoltan German-Sallo, Janos Szalai

10:15-10:30 – ECG Signal Interpretation Using Multiresolution Analysis

Zoltan German-Sallo, Marta German-Sallo

10:30-10:45 – Stepper Motor Model for Dynamic Simulation

Zsolt Albert Barabas, Alexandru Morar

**10:45-11:00 – DC Motor Speed and Position Control System Connects Directly
To Microcomputer Chips**

Ionut Silviu Luca, Alexandru Morar

11:00-11:15 – Microcontroller Base Process Emulator

Titus Claudiu Jovrea

11:15-11:30 – Sinusoidal Output Switching Power Supply

Titus Claudiu Jovrea

IT&C Applications in Engineering (IT&C)

IT&C – Room A316

Thursday, November 12, 14:00-16:00

Session chair:

Piroska Haller, “Petru Maior” University of Târgu Mureș, Romania

14:00-14:15 – Security Protocol Composition for Web Services

Bela Genge, Piroska Haller

14:15-14:30 – Multimedia Streaming Platform Based On Components

Ovidiu Ratoi, Piroska Haller, Bela Genge

14:30-14:45 – Project Monitoring and Control Using Burn Down Charts

Attila Vajda

14:45-15:00 – Development of EXAMBREV Integrated System for Patent Application

Tamas Vajda, Jozsef Domokos, Sandor Tihamer Brassai, Laszlo David, Attila Aszalos

15:00-15:15 – Formal Verification and Implementation of Real-Time Applications

Liviu Hategan, Piroska Haller

15:15-15:30 – A Data-Oriented Approach for Application Development

Marius Muji

15:30-15:45 – Gas Plant SCADA Software Application

Traian Turc, Adrian Gligor

15:45-16:00 – Translating English Technical Texts: The Role of the Translator and the Challenges of Technological Facilities

Dana Rus

IT&C – Room A316

Thursday, November 12, 16:30-18:45

Session chairs:

Miklos Nagy, *The Open University, Knowledge Media Institute, UK*
Calin Enachescu, “Petru Maior” University of Târgu Mureș, Romania

16:30-16:45 – Mouse Controlled by Hand Gestures Using Digital Image Processing

Florin Ioan Bardosi, Horatiu Stefan Grif, Ovidiu Ratoi

16:45-17:00 – Handwritten Digits Recognition Using Neural Computing

Calin Enachescu, Cristian-Dumitru Miron

17:00-17:15 – Fuzzy Clustering in an Intelligent Agent for Diagnosis Establishment

Vlad Zdrenghia, Diana Ofelia Man, Maria Tosa-Abrudan

17:15-17:30 – Behavior Recognition Using Template Matching

Tamas Vajda

17:30-17:45 – First Results of an Evolutionary Approach for the Entity Refactoring Set Selection Problem

Camelia Chisalita-Cretu

17:45-18:00 – Reasoning Representation and Visualisation Framework for Ontology Mapping Using 3D modeling

Miklos Nagy, Maria Vargas-Vera

18:00-18:15 – Generations Problems and Constraint Programming in choco

Radu Boriga

18:15-18:30 – The Nature of Geospatial Image Processing

Nidelea Marinela, Dascalescu Ana Cristina

18:30-18:45 – One Networks Robustness Approach for Natural Language Texts’ Automatic Taxonomy

Vasile Dub

IT&C – Room A316

Friday, November 13, 10:00-12:00

Session chairs:

Adrian Petrescu, “Petru Maior” University of Târgu Mureş, Romania

Bela Finta, “Petru Maior” University of Târgu Mureş, Romania

10:00-10:15 – A 3-Quasigroup Stream Cipher

Adrian Petrescu

10:15-10:30 – A Novel Method for Generating Encryption Keys

Dascalescu Ana Cristina, Nidelea Marinela

10:30-10:45 – Expansion of the Notions of Normed Algebras to Locally Multiplicatively Convex Algebras

Diana Marginean, Nicola Oprea

10:45-11:00 – Overdetermined Infinite Linear Systems (II)

Bela Finta

11:00-11:15 – Using Graph Theory to Solve the Trains Time-Table Problem

Ion Cozac

11:15-11:30 – Numerical Solutions of First Order Iterative Functional-Differential Equations By Spline Functions of Even Degree

Nicola Oprea

11:30-11:45 – The Elements with Bounded Numerical Range from Locally m-convex Algebras

Diana Marginean Petrovai, Arina Modrea

11:45-12:00 – Spline Approximation Solution for the Delay Differential Equation

Nicola Oprea

Mechanical & Technological Engineering (M&TE)

M&TE – Room A308

Thursday, November 12, 14:00-16:00

Session chairs:

Laurențiu Slătineanu, “Gheorghe Asachi” Technical University of Iași, Romania

Lucian Grama, “Petru Maior” University of Târgu Mureș, Romania

14:00-14:15 – CAD Facilities Used for Design of Parts of Plastics Injection Machines

Lucian Grama, Virgilius Vasilache, Monica Vasilache

14:15-14:30 – Evaluation of the Electroconductive Materials Machinability By Electrical Discharge Erosion

Laurențiu Slătineanu, Oana Dodun, Margareta Coteață, Dumitru Uliuliuc, Nicolae Pop

14:30-14:45 – Microhardness of Ti-Al-Si-N Coatings Deposited by DC Reactive Magnetron Sputtering

Gabriela Strnad, Dominic Biro, Ioan Vida-Simiti

14:45-15:00 – Optimization of the Injection Process for a Plate Part Using Mold Flow Soft

Aurelian Flavius Ardelean

15:00-15:15 – Comparative Evaluation of On-Road Tests Conducted on a Si Engine to Run on Compressed Natural Gas

Rajesh C. Iyer, S. A Channiwala, T. R Seetharam

15:15-15:30 – Effect of N Concentration on Microstructure Evolution of the Nanostructured (Al, Ti, Si)N Coatings Prepared by d.c. Reactive Magnetron Sputtering

Laszlo Jakab-Fakas, Sandor Papp, Dominic Biro

15:30-15:45 – Study On The Possibilities of Dedicated CAD Applications Development for the Furniture Industry

Ioan Mocian, Răzvan Cazacu

15:45-16:00 – An Application of the Vibrations Suppression Compensator Design For 3-DOF Systems

Lucian Grama, Marius Sebastian Rusu

M&TE – Room A308

Thursday, November 12, 16:30-18:45

Session chairs:

Ligia Cristina Brezeanu, “Petru Maior” University of Târgu Mureș, Romania
Alexandru Pozdârcă, “Petru Maior” University of Târgu Mureș, Romania

16:30-16:45 – A Cam Profile Determination Using Enveloping Method

Alexandru Pozdârcă

16:45-17:00 – About the Flexibility Increasing of Flexible Cells Using Modular Fixture System

Rareș Panu, Moldovan Ovidiu, Macedon Ganea

17:00-17:15 – AWPC Function Assisted by Robot at the Flexible Cells for Prismatical Parts

Rareș Panu, Moldovan Ovidiu, Macedon Ganea

17:15-17:30 – Tooth's Tensions Analysis of Face Worm Gears With Cylindrical Pinion Development of Fea

Ion Gavrilă

17:30-17:45 – Stiffness Evaluation of Advanced Composite Laminates Under Off-Axis Loading Systems

Arina Modrea, Dorin Bică

17:45-18:00 – FEM Modelling and Analysis of the Assembly “SRM Slide”

Ligia Cristina Brezeanu, Alexandru Pozdârcă

18:00-18:15 – Biomechanical Application - Parametric Modeling and Transfer for FEM Analysis

Ligia Cristina Brezeanu, Cristina Bică

18:15-18:30 – Perforations Optimization on Corrugated Board Boxes – Case Study

Nadina Neidoni, Vasile Boloș, M.I. Buzdugan

18:30-18:45–Some Aspects About the Use of Ecological Materials in Construction
Petruta Blaga, Codruta Bolos

M&TE – Room A308

Friday, November 13, 10:00-11:30

Session chairs:

Teodor Socaciu, “Petru Maior” University of Târgu Mureș, Romania

Cosmin Petra, “Petru Maior” University of Târgu Mureș, Romania

10:00-10:15 – New Experimental Research Concerning the Improvement of Energetic Parameters in the Extrusion Using the Friction Forces as Active Forces
Teodor Socaciu, Liviu Dorin Pop

10:15-10:30 – Spiroplane Gears and Their Role in the Building Process of Gearmotors
Claudiu Ioan Boanta

10:30-10:45 – The possibility and usage of spiroid gears in vehicle drive axle construction
Ioan Dănuț Silvaș

10:45-11:00 – Computer Aided Analysis of Cylindrical Gears Geometry With Modified Profile
Cosmin Petra

11:00-11:15 – Biomechanic Study about Lateral Ankle Laxity
Bogdan Voicu, Remus Opris

11:15-11:30 – Three Dimensional Modeling of Lumbar Column and Spinal Implants
Remus Opris, L. Gruionu, B. Voicu

11:30-11:45 – Industrial Design and Ecological Balance
Dan-Horia Chinda

Mechatronics & Robotics (M&R)

M&R – Room A208

Thursday, November 12, 14:00-16:00

Session chairs:

Ionel Starețu, *Transilvania University of Brașov, Romania*

Sergiu Berian, *Baptist Highschool “Emanuel” of Oradea, Romania*

14:00-14:15 – Interface for Manipulation of the 3D Virtual Objects in the Training Activities to Disciplines of Applied Mechanics

Ionel Starețu, Cristian Dudulean, Florin Girbacia

14:15-14:30 – The Design and Implementation of a 2-DOF Motion Tracking Mechatronic System

Andrei Florin Borca, Marius Sebastian Rusu

14:30-14:45 – Aspects Regarding the Design of a Simple Didactic Stepper Motors Based SCARA Robot

Ovidu Virgil Suci, Marius Sebastian Rusu

14:45-15:00 – Multimode Vibrations Suppression Compensator Design for Flexible Mechatronic Systems

Marius Sebastian Rusu, Lucian Grama

15:00-15:15 – The Trans-Thematic Identity of Mechatronics

Sergiu Berian, Vistrian Mătieș

15:15-15:30 – The Design of the Vibrations Suppression Compensator for a Closed-Loop DC Motor Based System

Marius Sebastian Rusu, Lucian Grama

15:30-15:45 – Research for Developing a Nitinol Linear Actuator Using a Two-Way Shape Memory Process

Teodor Socaciu, Mihai Simon

15:45-16:00 – Research Regarding CNC Retrofits of Older Manual Milling Machine Tools

Mihai Simon, Dumitru Șoaită

Environmental Engineering (EE)

EE – Room A208

Thursday, November 12, 16:30-18:45

Session chairs:

Lucian Bârsan, *Transilvania University of Brașov, Romania*

Nicolae Chirilă, *“Petru Maior” University of Târgu Mureș, Romania*

16:30-16:45 – Investigation Regarding Water Depollution Using IC14D

Installation

Nicolae Chirilă

16:45-17:00 – Investigation Regarding Obtaining Demineralization Water Using IC46D Installation

Nicolae Chirilă

17:00-17:15 – Comparative Determination of Nitrate Ion Using Spectrophotometer And Chromatographic Methods

Florin Lupeiu, Nicolae Chirilă

17:15-17:30 – Methods For Monitoring VOCs - Flame Ionization Detector

Florin Lupeiu, Nicolae Chirilă

17:30-17:45 – Promoting the Production of Electric Energy From Wind Energy

Florica Morar, Costel Gheorghe Dane

17:45-18:00 – The Efficient Use of the Productive Potential of Technical Plant Cultures With the Purpose of Providing an Alternative Energetic Fuel Source

Florica Morar

18:00-18:15 – Considerations about Reducing the Environmental Impact in the Product Using Stage

Lucian Bârsan, Anca Bârsan, Maria Paralika

18:15-18:30 – The Specific Methods Use for Identifying Environmental Effects and Impacts

Cosmin Petra

18:30-18:45 – Harmonisation of the Romanian Legislation with the EU Aquis in the Environment Protection

Mihaela Pop

Management & Economics Engineering (M&EE)

M&EE – Room A309

Thursday, November 12, 14:00-15:30

Session chairs:

Constantin Militaru, *Polytechnic University of Bucharest, Romania*

Liviu Moldovan, *“Petru Maior” University of Târgu Mureș, Romania*

14:00-14:15 – Quality Culture – An Important Factor in Quality Assurance in Higher Education

Raluca Fărcaș, Sorina Moica

14:15-14:30 – 7S's System Foundation of Total Productive Maintenance House for Lean Organization

Daniel Georgescu, Constantin Militaru

14:30-14:45 – Mathematical Statistics Method in a Quality Risk Management

Gábor Dimény

14:45-15:00 – Taguchi Experiment to Establish the Process Parameters for Die Cast Aluminum Parts

Sorina Moica, Raluca Fărcaș, Paula Monica Năsălean

15:00-15:15 – Study on the Need to Increase the Quality of the Services Sector in Romania

Mioara Pop-Florea, Emilia Herman

15:15-15:30 – Computer Aided Administration of the Budget of a State Institution

Ioan Mocian, Răzvan Cazacu

M&EE – Room A309

Thursday, November 12, 16:30-18:45

Session chairs:

Felicia Pop, *Contab Lex Audit Company, Romania*

Ioan Mocian, *“Petru Maior” University of Târgu Mureș, Romania*

16:30-16:45 – Projects from the Center Region Financed from Structural Funds

Felicia Pop, Adriana Tatiana Suciu

16:45-17:00 – Evaluation of Projects Funded from Structural Funds

Felicia Pop, Adriana Tatiana Suciu

17:00-17:15 – Development of Innovative Tools and Models for Vocational Education and Training in Central and Western Romania

Liviu Moldovan

17:15-17:30 – Sustainable Development and Envised Impact of The Move-It Project

Liviu Moldovan

17:30-17:45 – Change Management in Romanian Rail Way

Petruța Blaga

17:45-18:00 – How to Make an Effective Strategy for a Complex Sale

Calin Sarchiz

18:00-18:15 – Blue Ocean Strategy – Reaching Customers Beyond Your Market Boundaries

Calin Sarchiz

18:15-18:30 – Professional Performance, Attribute of Work Place Stability

Emil Nutiu

18:30-18:45 – Enterprise Evaluation in the Field of Cconstructions in the Crisis

Emil Nutiu

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