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INTERNATIONAL
SCIENTIFIC CONFERENCE

UNITECH 2015 GABROVO

P R O G R A M

20 - 21 NOVEMBER 2015
GABROVO

International Scientific Conference "UNITECH 2015" – Gabrovo

International Scientific Conference UNITECH'15 iss organized by the Technical University of Gabrovo with the assistance of regional business establishments and companies. The conference is a forum at which traditionally every year at the end of November lecturers and research workers from home and abroad meet to promote the Development of Science and Education.

ORGANIZING COMMITTEE

Chairman: Assoc. Prof. Iliya Zhelezarov, Ph.D.
Vice Rector in charge of Research and Development
Members: Prof. Jordan Maximov, D.Sc.
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Assoc. Prof. Tsvetelina Gankova, Ph.D.
Assoc. Prof. Daniela Dimova, Ph.D.
Assoc. Prof. Dragomir Chantov, Ph.D.
Technical Assistant:
Petya Peneva, MA

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Prof. Elena Kovalenko, Ph.D., Ukraine
Prof. Igor Sazonov, D.Sc., Belarus
Prof. D.H.C. Nikolay Ganev, Ph.D., Czech Republic
Prof. Toshko Nenov, Ph.D., Bulgaria
Prof. Stoyan Kapralov, D.Sc., Bulgaria
Prof. Rumen Daskalov, D.Sc., Bulgaria
Assoc. Prof. Petar Petrov, Ph.D., Bulgaria

***UNITECH'15 will be held on 20 and 21 November 2015
at the Technical University of Gabrovo***

WORKING PROGRAM
OF THE SCIENTIFIC CONFERENCE

19th November 2015, Thursday

14.00 – 17.00 h Registration, Rectorat building

20th November 2015, Friday

08.00 – 10.30 h Registration, Rectorat building
10.30 – 11.00 h Opening ceremony – Library building, Conference hall
11.00 – 12.00 h *Contemporary possibilities of solar energy use* - a plenary report by Prof. Tomislav M. Pavlovic - University of Nis, Republic of Serbia
        Securing Sensitive Cloud Content: Cryptographic Approaches to Legal Compliance – a plenary report by Prof. Dimitar Jetchev - University of Lausanne, Switzerland
12.00 – 13.00 h Lunch
13.00 – 18.00 h Thematic sessions
- Electrical Engineering
- Electronics and Sensors
- Automation
- Chemistry and Ecology
- Communication Engineering and Technologies
- Computer Systems
- Computer Technologies
- Mathematics and Informatics
- Design of Machines and Instruments
- Technologies in Mechanical Engineering
- Technologies in Textile Production
- Mechatronics, Metrology and Quality Management
- Hydraulics, Pneumatics and Heat Engineering
- Economics and Finance
- Organization and Management
- Social Sciences and Humanities
- Educational Technologies
- Physics

15.00 – 15.30 h Coffee break
19.00 h   Formal dinner Restaurant Balkan Hotel

21st November 2015, Saturday

09.00 – 12.00 h Thematic sessions
10.00 h   Round table: „The influence of renewable energy sources to the protection of the environment in West Balkan Countries", Library building, Conference hall
10.00 h   Round table: IEEE Young Professionals Bulgaria, "YP Talks" Seminar, Rectorat building, Conference hall

THEMATIC SESSIONS

ELECTRICAL ENGINEERING

Chairmen: Assoc. Prof. Svilen Rachev, Ph.D., Prof. Zvezditsa Nenova, Ph.D.
Building № 2A, Hall 2603
Beginning: 13.00 h.

Current state of the renewable energy sources use in the Republic of Srpska

Dragana D. Milosavljevic[1], Dragoljub Lj. Mirjanic[2], Tomislav M. Pavlovic[1], Danica S.Pirsl[3]
[1] *University of Nis, Faculty of Sciences and Mathematics, Republic of Serbia*
[2] *Academy of Science and Arts, Republic of Srpska*
[3] *University of Nis, Faculty of sport and physical education, Nis, Republic of Serbia*

Micro wind turbines and power performance analyses

Hayati Mamur
Department of Electrical and Electronics Engineering, Faculty of Engineering, Cankiri Karatekin University, Turkey

Comparison of cogging torque reduction methods for micro wind turbines using permanent magnet synchronous generator

Hayati Mamur
Department of Electrical and Electronics Engineering, Faculty of Engineering, Cankiri Karatekin University, Turkey

Electrical engineers' professional development in the field of energy efficiency of electrical drives

Miroslav Bjekić, Dragana Bjekić
Faculty of technical sciences in Čačak – University of Kragujevac, Serbia

An economic and environmental analysis of hybrid system for trout pond supply

Milan Tomović, Miroljub Jevtić
Faculty of Technical Sciences, University of Priština in Kosovska Mitrovica

Thermal imaging study of the process of heating up to steady state of led luminaires

Plamen Tsankov, Milko Yovchev
Technical University of Gabrovo, Bulgaria

Study nonlinear properties of ferroelectric ceramic materials

Anka Ivanova Zheglova[1], Venetka Stoianova Popova[2], Ivailo Vasilev Lazarov[1]
[1] *Technical University of Gabrovo, Bulgaria*
[2] *Samel-90 Ltd of Samokov, Bulgaria*

Energy efficient in the main ventilation systems

Rumen Istalianov, Nikolay Lakov
University of Mining and Geology "St. Ivan Rilski", Bulgaria

Beitrag zur charakterisierung von drehstromkkabeln

Josef Timmerberg[1], Saba Mylvaganam[2],Andris Martinovs[3], Galina Kogay[4]
¹Jade University Wilhelmshaven, Germany
²Telemark University College, Norway
³Rēzeknes Augstskola, Latvia
⁴Technical State University Karaganda, Kazakhstan

Using generalized method for solving the problem determining mode of reactive power compensation

Yagup V.G.[1], Yagup K.V.[2]
¹O.M. Beketov National University of Urban Economy in Kharkov
²Ukrainian State University of Railway Transport in Kharkov

Rise of efficiency of germicidal plants for neutralizing drinking and waste waters using light-emitting-diode lamps

Govorov F.P., Korol O.V., Romanova T.I.
O.M. Beketov National University of Urban Economy in Kharkiv

Simulation of processes in electric circuits with booster transformer

Govorov F.P., Korol O.V., Govorov V.F.
O.M. Beketov National University of Urban Economy in Kharkiv

Electrical architecture of a hybrid power generation system

Hartmut Hinz[1], Yavor Stefanov[2]
¹Frankfurt University of Applied Science, Germany
²Technical University of Gabrovo, Bulgaria

Implementation of factor analysis in project of lighting system modernization

Tatjana Atanasova-Pacemska, Vasilija Sarac
Faculty of Electrical Engineering, University "Goce Delcev", Stip, Macedonia

Monitoring system for energy characteristics identification of inverter-fed single-phase collector motor drive

Dimitar Spirov[1], Milko Dochev[2]
¹University of Food Technology – Plovdiv, Bulgaria
²Technical College – Lovech, Bulgaria

Method and device for diagnosis of electropulsed coil power tools and micromachines

Milko Dochev
Technical College - Lovech, Bulgaria

Modeling and study of proton exchange membrane fuel cell

Emil Stanev
Technical University of Gabrovo, Bulgaria

Harmonic minimization technique for multilevel inverter using cascaded H-bridge modules

Enes Bektas[1], Hulusi Karaca[2]

[1]Dept. of Electrical & Electronics Eng. CankiriKaratekin University Cankiri, Turkey
[2]Dept. of Electrical & Electronics Eng. Konya, Turkey, Selcuk University

Study of 20 KV grid with distributed generation

Krasimir M. Ivanov[1], Ivan Jotov[2]

[1]Technical University of Gabrovo, Bulgaria
[2]ESO EAD, Bulgaria

Determining distortions in the voltage curve when working nonlinear loads

Vladimir Ch. Chikov

Technical University, Varna, Bulgaria

Improving power factor of a low power variable speed drives

Vladimir Ch. Chikov

Technical University, Varna, Bulgaria

Calibration of the electromagnetic brake

Marko Šućurović[1], Nebojša Mitrović[2], Miroslav Bjekić[1], Miloš Božić[1], Marko Rosić[1]
[1]Faculty of Technical Sciences Čačak, University of Kragujevac, Serbia
[2]Faculty of Electronic Engineering, University of Niš, Serbia

Investigation of the phase transitions of barium titanate doped with different amounts of boric acid

Ivaylo Lazarov, Petar Hristov

Technical University of Gabrovo, Bulgaria

PLC control of the seawater desalination reverse osmosis systems

Plamen V. Parushev

Technical University, Varna, Bulgaria

Force analysis of linear switched reluctance motor with modular core structure

Yusuf AVŞAR[1], Ahmet FENERCİOĞLU[2]

[1]Ipsala Higher Vocational School, Trakya University, Turkey
[2]Department of Mechatronics Engineering, Faculty of Engineering and Natural Science, Gaziosmanpasa University, Turkey

Research on the opportunities for improving the signal-to-noise ratio of electrical signals

Totyo Iliev, Plamen Danailov

Technical University of Gabrovo, Bulgaria

Analysis for installation of stand- alone pv system in household in radovis

Biljana Chitkusheva Dimitrovska, Maja Kukusheva Paneva, Goce Stefanov

Electrical Engineering Faculty, Goce Delcev University Stip, R. Macedonia

Analysis of effect of air cavities and humidity on electric field and potential distribution in xlpe insulated single-core medium voltage cables using finite element method

Mustafa KARHAN[1,2], Mukden UĞUR[2]
¹Electronics and Automation Department, Cankiri Karatekin University
²Department of Electrical and Electronics Engineering, Istanbul University

Determining parameters in the formula of the replacement scheme of photovoltaic module based on catalog data of pv modules

Tsvyatko Kolev Varbov
Technical University of Gabrovo, Bulgaria

Optimization regime of power supply system with arc discharge

Yagup V.G.[1], Yagup K.V[2]
¹O.M. Beketov National University of Urban Economy in Kharkov
²Ukrainian State University of Railway Transport in Kharkov

Estimate the speed of separately excited direct current motor to control field weakening

Vladimir Hristov
Technical University Sofia, Faculty of Automatics, Electrical Motion Automation Systems Department, Bulgaria

Optimization of the maximum power point of the photovoltaic systems by DC/DC converter

Vasil Ivanov[1], Ivaylo Stoyanov[2], Luydmil Mihailov[2]
¹Prof. Dr. Assen Zlatarov University – Burgas, Bulgaria
²"Angel Kanchev" University of Ruse, Bulgaria

Research power factor in various classes asynchronous motors

Vladimir Hristov
Technical University Sofia, Faculty of Automatics, Electrical Motion Automation Systems Department, Bulgaria

Improvement of the effciency of a power supply unit with a magnetic shunt

Todor Varbev
University of Mining And Geology "St. Ivan Rilski", Bulgaria

Grid parity for photovoltaic systems

Tsvyatko Kolev Varbov, Krasimir Marinov Ivanov
Technical University of Gabrovo, Bulgaria

Simulation of frequency-dependent magnetic hysteresis

Branko Koprivica, Alenka Milovanovic
University of Kragujevac, Faculty of Technical Sciences Cacak Department of Electrical and Electronic Engineering, Cacak, Serbia

Solution of monitoring for surge arrestors

Milan Vesković, Jeroslav Živanić, Vladimir Ostraćanin
Faculty of technical sciences Čačak

A Description of Electromechanical Systems using the Lagrange Approach

Karsten Schmidt
Dept of Computing and Engineering, Frankfurt University of Applied Sciences, Frankfurt, Germany

ELECTRONICS AND SENSORS

Chairmen: **Prof. Anatoliy Aleksandrov, Ph.D., Assoc. Prof. Velimira Todorova, Ph.D.**
Building: **№ 2, Hall 2311**
Beginning: **13.00 h**

System for wireless power transfer on spinning objects
Nikolay Madjarov, Valeri Petkov
Technical University of Gabrovo, Bulgaria

All optical networks. Main blocks
Ivan Kolev, Elena Koleva
Technical University of Gabrovo, Bulgaria

Power supply for operational modules and control systems for high-frequency converters
Valeri Petkov, Nikolay Madjarov
Technical University of Gabrovo, Bulgaria

Galvanomagnetic sensor unit for electric current measurement
Nikola Draganov
Technical University of Gabrovo, Bulgaria

Automotive bodywork coating obesity measurement device
Nikola Draganov
Technical University of Gabrovo, Bulgaria

Design and implementation of a low cost reconnaissance Robot using open-source platforms
Mustafa KARHAN[1,2], Musa Faruk ÇAKIR[1], Halil CAN GÜLLÜ[1], Fatih ÖZEN[3], Emre ÖZDEMİRCİ[1], Mehmet KARAYEL[4]
[1]Electronics and Automation Department, Cankiri Karatekin University
[2]Department of Electrical and Electronics Engineering, Istanbul University
[3]Electronics and Automation Department, Namik Kemal University
[4]Electric and Energy Department, Cankiri Karatekin University

An analysis of LCC resonant DC/DC converter in matlab
Yasen Madankov, Nikolay Bankov, Aleksandar Vuchev
University of Food Technologies – Plovdiv, Bulgaria

Collecting and processing information from galvanomagnetic sensors system
Dimitar Georgiev Georgiev[1], Anatoliy Trifonov Aleksandrov[1], Milos Jankovic[2]
[1]Technical University of Gabrovo, Bulgaria
[2] Slobomir P. University

Wireless sensor network with access to the main node over existing gsm network
Željko Gavrić, Miloš Janković
Faculty of information technology, Slobomir P University, Republic of Srpska, B&H

Precision microcomputer system for acquisition and storing parameters of freefall

Miloš Janković, Željko Gavrić
Faculty of information technology, Slobomir P University, Republic of Srpska, B&H

Application of the time recursive processing approach for the tracking needs

Djurdje Perišić[1], Aleksandar Žorić[2], Dragan Mitić[3], Željko Gavrić[o]
[1]Faculty for Information Technology-SPU, BiH
[2]Faculty of Techn. Sc., K. Mitrovica, Serbia
[3]Sc. Institute IRITEL, Belgrade, Serbia
[o]Faculty for Information Technology-SPU, BiH

Determination of the equivalent parameters of the inductor-workpiece system

Hristo Ibrishimov
Technical University of Gabrovo, Bulgaria

Power supply for electromagnetic brake

Ivaylo Stefanov Genchev, Anatoliy Aleksandrov
Technical University of Gabrovo, Bulgaria

Study of electromagnetic brake with automatic air gap

Ivaylo Stefanov Genchev, Anatoliy Aleksandrov
Technical University of Gabrovo, Bulgaria

Analysis of reliability of driver circuits for certain class positional electrical drives

Prodan Prodanov, Dobroslav Dankov, Mintcho Simeonov
Technical University of Gabrovo, Bulgaria

Software for collecting and processing information from galvanomagnetic sensors system

Dimitar Georgiev Georgiev[1], Anatoliy Trifonov Aleksandrov[1], Milos Jankovic[2]
[1] Technical University of Gabrovo, Bulgaria
[2] Slobomir P University

A matlab study of a battery – ultracapacitor hybrid energy source for ultralight electric vehicles

Radko Stoyanov
Technical University of Varna, Bulgaria

Stand alone data logger design

Aleksandar Č. Žorić[1], Đurđe M. Perišić[2], Siniša Ilić[3], Čedomir Žorić[o]
[1]Faculty of technical sciences, University of Priština, Serbia
[2]Faculty of information technology, Slobomir P University, Republic of Srpska, BiH
[3] Faculty of technical sciences, University of Priština, Serbia
[o]Faculty of electrical engineering, University of Belgrade, Serbia

Research of led lamp draiver

Dobroslav Dankov, Prodan Prodanov

Departament of Electronics, Technical University of Gabrovo, Bulgaria

Development of a custom data acquisition system based on internet of things

Vladimir Vujović

Faculty of Electrical Engineering, East Sarajevo, Bosnia and Herzegovina

A comparison study of three popular methods for 3D depth perception

Murat Olcay OZCAN[1], Deniz TASKIN[2], Eser SERT[3]

[1]Kirklareli University
[2]Trakya University
[3]Kahramanmaras Sutcu Imam University

Microsensor for temperature and subsequent 3-D magnetic field measurement

Siya Lozanova, Chavdar Rumenin

Institute of Systems Engineering and Robotics, Bulgarian Academy of Sciences (BAS)

Pseudorandom absolute position encoder implemented as a virtual instrument

Goran Miljković, Dragan Denić, Milan Simić, Milan Dinčić, Dragan Živanović

University of Niš, Faculty of Electronic Engineering, Serbia

Analysis of second degree polynomial model as substitute for sensor feedback on conveyors

Philipp Varley[1], Andrew Ball[1], Karsten Schmidt[2]

[1]Huddersfield University
[2]Frankfurt University of Applied Sciences

AUTOMATION

Chairmen: Prof. Toshko Nenov, Ph.D., Assoc. Prof. Dragomir Chantov, Ph.D.
Building: № 3, Hall 3410
Beginning: 13.00 h.

About the construction of a hybrid machine vision system
Elena Draganova, Vilian Petkov, Deyan Slavov
Technical University of Varna, Bulgaria

Autonomous mobile robots in rescue operations due to a natural disaster
Deyan Slavov, Elena Draganova, Vilian Petkov
Technical University of Varna, Bulgaria

Mobile learning platform – MOBI&LEARN
Aldeniz Rashidov
Technical University of Gabrovo, Bulgaria

Identification of the group membership of gaseous pollutants with application of anfis classifier
Georgi Georgiev
Technical University of Gabrovo, Bulgaria

Problems in modernization of milling machines
Marin Zhilevski[1], Madlena Zhilevska[2]
[1]Technical University of Sofia, Bulgaria
[2]Technical College of Lovech, Bulgaria

Algorithm for development of ladder diagram for machine tools
Madlena Zhilevska[2], Marin Zhilevski[1]
[1]Technical University of Sofia, Bulgaria
[2]Technical College of Lovech, Bulgaria

Automation of the processes of digital conductivity control of moistening solution for offset printing
Valery Morflyuk, Vladimir Churkin, Irina Karpenko
NTUU KPI Kiev, Ukraine

A model based control performance assessment
Aleksandar D. Micić[1], Milan A. Mišić[1], Ružica J. Micić[2]
[1]Faculty of Technical Science, University of Priština, K. Mitrovica, Serbia
[2]Faculty of Natural Sciences and Mathematics, University of Priština, K. Mitrovica, Serbia

Analysis of the pid controller performance/robustness tradeoff for different structure and order of the noise filter - stable SISO process case
Aleksandar D. Micić, Milan A. Mišić, Petar Lj. Spalević
Faculty of Technical Science, University of Priština, K. Mitrovica, Serbia

Development of controller for vibratory feeder
Stefan Ivanov, Georgi Mihalev
Technical University of Gabrovo, Bulgaria

Off-grid solar pump automation design and implementation
Aydın GÜLLÜ, Ozan AKI, Hilmi KUŞÇU
Trakya University

Stabilization of the flow of compressed air with low pressure feeded in industrial burner
Ivan Vladimirov
Technical University of Gabrovo, Bulgaria

Architecture of control system for compressor stations
Ivan Vladimirov, Stefan Ivanov, Stanimir Jordanov
Technical University of Gabrovo, Bulgaria

Study the simulation model behavior of detail in vibratory feeder device
Stanimir Jordanov, Georgi Mihalev
Technical University of Gabrovo, Bulgaria

Method of choosing an a selecting position for the machine vision system integrated in supervision of the vibratory feeder
Stanimir Yordanov, Georgi Mihalev
Technical University of Gabrovo, Bulgaria

PC-based machine vision system using artificial neural network with changing architecture
Georgi Mihalev
Technical University of Gabrovo, Bulgaria

Population size tradeoffs in de and pso-based methods for pnn training
Nikolay T. Dukov[1], Todor D. Ganchev[1], Dimitar M. Kovachev[1], Michael N. Vrahatis[2]
[1]Technical University of Varna, Bulgaria
[2]University of Patras

Control system of industrial water softeners
Kasim Arabadzhiev[1], B.Aleksandrov
[1] Technical University-Sofia IPF Sliven, Bulgaria
[2]Technical University of Gabrovo, Bulgaria

Imulation model of the electrical drive system of KS – S5600 loading/unloading station
Zdravko Pandev, Stanimir Yordanov, Ivan Babatov
Technical University of Gabrovo, Bulgaria

Impedance analyzer for analysis of liquids
Yasen Rayanov
Technical University of Gabrovo, Bulgaria

Towards a hybrid genetic algorithm for task scheduling of mobile robots
Vilian Petkov, Elena Draganova, Deyan Slavov
Technical University – Varna, Bulgaria

CHEMISTRY AND ECOLOGY

An application of cluster analysis to assess the water quality of a freshwater ecosystem: felent creek (Kütahya, Turkey)

Cem Tokatlı[1], Esengül Köse[2], Arzu Çiçek[3], Fatma Akbıyık[3]
[1]Trakya University, Ipsala Vocational School
[2]Osmangazi University, Osmangazi Vocational School
[3]Anadolu University, Environmental Research

An application of factor analysis to assess the water quality of a freshwater ecosystem: felent creek (Kütahya, Turkey)

Cem Tokatlı[1], Esengül Köse[2], Arzu Çiçek[3], Fatma Akbıyık[3]
[1]Trakya University, Ipsala Vocational School
[2]Osmangazi University, Osmangazi Vocational School
[3]Anadolu University, Environmental Research

Assessment of some drinking water quality parameters in certain counties from southeastern Romania

Nicoleta Matei (Ciobotaru), Mariana Carmen Burtea
"Dunarea de Jos" University of Galati, Faculty of Engineering and Agronomy, Braila, Romania

Chemical treatment of waste water from the production of rubber vulcanization accelerators

Milutin M. Milosavljević[1], Ivan M. Vukićević[1], Smiljka Milisavljević[1], Aleksandar D. Marinković[2], Slobodan D. Petrović[2]
[1]University of Priština, Kosovska Mitrovica, Serbia
[2]University of Belgrade, Belgrade, Serbia

Environmental assessment of the desulphurization installation of "Maritsa East - 3" thermal power plant

Pencho Stoychev
Technical University of Gabrovo, Bulgaria

System for monitoring and control in sewage water treatment station - Gabrovo

Pencho Stoychev
Technical University of Gabrovo, Bulgaria

Ultrasonic synthesis and spectroscopy elucidation of tert-butyl fatty acid esters

Dragomir Vassilev[1], Milena Koleva[1], Panteley Denev[2]
[1]Technical University of Gabrovo, Bulgaria
[2]University of food technologies, Plovdiv, Bulgaria

Corrosion behavior of titanium alloy in phosphoric acid solutions

Mladenka Loukaycheva
Technical University - Sofia, Bulgaria

Effect of welding on stress-corrosion cracking (SCC) behaviour of low-alloy steel in phosphate media

Yordanka Marcheva
Technical University – Sofia, Bulgaria

Ultrasound-assisted synthesis of undecylenoyl sucrose esters

Nadezhda Petkova[1], Dragomir Vassilev[2], Radka Grudeva[3], Milena Koleva[2], Panteley Denev[°]
[1]Organic Chemistry Department, University of Food Technologies, Plovdiv, Bulgaria
[2] Technical University of Gabrovo, Bulgaria
[3]University of Food Technologies, Plovdiv, Bulgaria
[°]Organic Chemistry Department, University of Food Technologies, Plovdiv, Bulgaria

COMMUNICATION ENGINEERING AND TECHNOLOGIES

Chairmen: Assoc. Prof. Nikolay Tashkov, Ph.D., Assoc. Prof. Pencho Penchev, Ph.D.
Building: № 2, Hall 2215
Beginning: 13.00 h.

Design of rfpower amplifier class A
Iliya Nedelchev, Miroslav Tomov
Technical Univercity of Gabrovo, Bulgaria

Experimental studies of impelented low-frequency powerful amplifier class D
Boyan Karapenev, Aleksandar Krumov
Technical University of Gabrovo, Bulgaria

Design of push-pull class e RF power amplifier with matching transformer
Iliya Nedelchev
Technical University of Gabrovo, Bulgaria

Segmentation of video image
Hristo Lalev, Javor Spasov
Konstantin Preslavski University of Shumen, Bulgaria

Application of kinect for windows in communication and information systems
Hristo Lalev, Javor Spasov
Konstantin Preslavski University of Shumen, Bulgaria

Comparative assessment between obtained parameters from studies of RC harmonic generators
Boyan Karapenev
Technical University of Gabrovo, Bulgaria

Error probabilities in a channel based on mgf method using rician fading for mpsk
Dragan Mitić[1], Aleksandar Lebl[1], Djurdje Perišić[2]
[1]Institute for Telecommunications and Electronics, IRITEL A.D. BELGRADE, Serbia
[2]Faculty of Information Technology, University Slobomir P, Bjeljina, Bosnia and Herzegovina

Delay-quality Characteristics of voice coders/compressors
Dragan Mitić, Mladen Mileusnić, Mihailo Stanić, Aleksandar Lebl, Žarko Markov
Institute for Telecommunications and Electronics, IRITEL a.d. BELGRADE, Serbia

Observations of electric arc rf-emissions with radial H-field probe
Kliment Angelov, Svetoslav Kremenski
Technical University of Sofia, Bulgaria

Monitoring of video and audio freeze in analog TV
Nikolay Tashkov, Todor Manev
Technical University of Gabrovo, Bulgaria

Piezo crystal generated high-voltage impulses for EMC testing

Kliment Angelov, Kalina Kalinovska
Technical University of Sofia, Bulgaria

The statistical analysis of the acoustic parameters obtained using the software packages easera and arta

Zoran Milivojević, Violeta Stojanović, Zoran Veličković
College of Applied Technical Sciences of Nis, Serbia

UHDTV into terrestrial and satellite systems

Branimir Jaksic[1], Mile Petrovic[1], Ivana Milosevic[2], Ratko Ivkovic[1], Smiljana Bjelovic[3]
[1]Faculty of Technical Sciences, University of Pristina, Serbia
[2]The School of Electrical and Computer Engineering, Belgrade, Serbia
[3]European University of Brcko District, Bosnia and Herzegovina

Estimation of the fundamental frequency of speech signal by means of parametric quasi-rational polya kernel

Nataša Savić[1], Zoran Milivojević[1], Dejan Blagojević[1], Darko Brodić[2]
[1]College of Applied Technical Sciences in Niš, Serbia
[2]University of Belgrade, Technical Faculty in Bor, Serbia

Handover control in D2D communications in 5G mobile networks

Grigor Mihaylov, Teodor Iliev, Elena Ivanova
University of Ruse "Angel Kanchev", Department of Telecommunications, Bulgaria

Multi-stage arnold transformation for 2D watermark encryption

Zoran Veličković[1], Zoran Milivojević[1], Milojko Jevtović [2]
[1]College of Applied Technical Sciences, Nis, Serbia
[2]Serbian Engineering Academy, Serbia

Moments of macrodiversity system with three microdiversity egc receivers in the presence gamma shadowing and K-M multipath fading

Djoko Bandjur[1], Branimir Jaksic[1], Stefan Panic[2], Mihajlo Stefanovic[3], Goran Petkovic[1]
[1]Faculty of Technical Sciences, University of Pristina, Serbia
[2]Faculty of Natural Science and Mathematics, University of Pristina, Serbia
[3]Faculty of Electronic Engineering, University of Nis, Serbia

Software research the quality of signals in a cellular network with the software asset

Stanimir Sadinov, Desislava Koleva
Technical University of Gabrovo, Bulgaria

Performance analysis of docsis 3.0 upstream channel bonding in cable television networks

Krasen Angelov[1], Panagiotis Kogias[2], Stanimir Sadinov[1]
[1]Technical University of Gabrovo, Bulgaria
[2]Kavala Institute of Technology, Greece

SDN architecture fundamentals and dos prevention basics: a case study with openflow

Gökhan AKIN[1], Enis Karaarslan[2], Ozan BÜK[3], Erdem UÇAR[1]

[1]Trakya University
[2]Mugla S.K. University
[3]İTÜ

COMPUTER SYSTEMS

Chairmen: **Prof. Lyudmil Dakovski, D.Sc., Assoc. Prof. Ivan Simeonov, Ph.D.**
Building: **№ 3, Hall 3312**
Beginning: **13.00 h.**

Functional analysis and formalization for problems of ergonomic quality assurance in systems of IT-service management

Lavrov E.A.[1], Krivodub A.S.[1], Pasko N.B.[2]
[1]Sumy State University (Ukraine)
[2]Sumy National Agrarian University (Ukraine)

Information technology for distribution of functions between operators in automated systems. Analysis of efficiency.

Lavrov E.A.[1], Pasko N.B.[2]
[1]Sumy State University (Ukraine)
[2]Sumy National Agrarian University (Ukraine)

Statistical analysis of the FPGA logic architecture model

Valentina Kukenska, Petar Minev
Technical University of Gabrovo, Bulgaria

Information systems: model of integration using sensors infrastructure

Olivera Janković
Orao a.d.

The implementation of etl processes on example of authorised DLS

Siniša S. Ilić[1], Danijela Milentijević[2], Alempije Veljović[3,] Slobodan Obradović[4]
Aleksandar Žorić[1], Nebojša Arsić[1]
[1]Faculty of Technical Sciences in Kosovska Mitrovica
[2]Secondary School "Nikola Tesla" Kostolac
[3]Faculty of Technical Sciences in Čačak
[4]VISER Beograd

Compositional planning of REAL-TIME systems in processors X_86

Stanislav Simeonov, Neli Simeonova, Assen Iliev
Prof. Dr. Assen Zlatarov University, Bulgaria

Comparative evaluation of free in-memory databases

Wilhelm Zugaj, Hannes Feichtl
FH JOANNEUM

A software framework for dynamic business applications

Hristo Yonchev, Boyan Bontchev
Chair of Software Engineering, FMI - Sofia University St Kl. Ohridski, Sofia, Bulgaria

Mathematical modeling of crack propagation in body of steam generator

Alexander Gondliakh, Andrey Chemeris, Vladyslav Onoprienko
National technical university of Ukraine «Kyiv polytechnic institute» (Kyiv, Ukraine)

Intelligent ultrasonic measurement module
Hristo Stefanov Kilifarev
Technical University of Gabrovo, Bulgaria

Development of an intelligent milking system
Nafiz ÜNLÜ
SAR Software Information Technology Consulting Training and Trade Limited Company

Detection of nanovibrations on the objects
Mikhail Prokofiev
National Technical University of Ukraine "KPI"

Gesture based system for user interface
Milena Lazarova
Technical University of Sofia, Bulgaria

Adaptive filtering and correction of digital facial images
Milena Lazarova
Technical University of Sofia, Bulgaria

FPGA - based programmable frequency divider
Borislav Petrov
Technical University of Gabrovo, Bulgaria

COMPUTER TECHNOLOGIES

Chairmen: Assoc. Prof. Valentina Kukenska, Ph.D., Assoc. Prof. Delyan Genkov, Ph.D.
Building: № 3, Hall 3303
Beginning: 13.00 h.

The **investigation of householders' tendancies on separate at source point of recyclable solid wastes in Istanbul by using machine learning method**
Turhan CİVELEK, Ömer APAYDIN
Kırklareli University, Faculty of engineering, Department of software engineering

The analysis of the laptop characteristics with the impact to the laptop magnetic field emission
Darko Brodić, Milena Jevtić
University of Belgrade, Technical Faculty in Bor

An analysıs of the performance analysıs of a problem based learnıng ımplementatıon conducted wıth 4th-year prımary school pupıls ın edırne wıth machıne learnıng algorıthms
Tolga DEMİRHAN, Özlem UÇAR
Trakya University

Simulator of sheduler for traffic prioritization in wimax networks
Veneta Aleksieva, Aydin Mehmed
Technical University of Varna, Bulgaria

Multicast indexing and search system in local network
Dimitar Todorov, Hristo Valchanov
Technical University of Varna, Bulgaria

Using data mining approach to determine the impact of weather factors on public health
Dragan Ranđelović[1], Kristijan Kuk[1], Brankica Popović[1], Petar Čisar[1], Stefan Kartunov[2]
[1]Department of Informatics and Computing, Criminalistic and Police University, Belgrade
[2]Department of Mechanical and Precision Engineering, Technical University of Gabrovo

Design of experimental setting for study of typical qos scenarios
Miroslav Slavov
Technical University of Gabrovo, Bulgaria

Towards scalability of web applications - A case study
Wilhelm Zugaj, Hannes Feichtl
FH JOANNEUM

Generating 2-D gaussian kernels for the purpose of studying fpga-based linear spatial filters
Ivan Kanev
Technical University - Sofia, Plovdiv branch, Bulgaria

Analysis of workarounds copyright protection vector images

Vasyl Karpinets[1], Yuriy Yaremchuk[1], Michail Prokofiev[2]
[1]Vinnytsia national technical university,
[2]National Technical University of Ukraine "Kiev Polytechnic Institute"

System development for indexing and searching of similar queries for web environment

Ilian Todorov
Technical University of Gabrovo, Bulgaria

Modern information systems: integration of sensors data in the context of opportunities and selection of database model

Olivera Janković
Orao a.d.

Creation of ETL processes

Liliya Dimitrova[1], Aleksandar Dimov[2]
[1]Department of Software Engineering, Faculty of Mathematics and Informatics, University of Sofia "St.Kl. Ohridski"
[2]Department of Software Engineering, Faculty of Mathematics and Informatics, University of Sofia "St.Kl. Ohridski"and Section of Software Technologies and Information Systems, Institute of Mathematics and Informatics, Bulgarian Academy of Sciences

The universal operators for developing of a control system in information space of the problem

Iuriy E. Iaremchuk, Liliya O. Nikiforova, Anatoliy A. Shiyan
Vinnitsia National Technical University

Modeling parameters of fire spreading based on the conclusions of an experts

Artem Bychenko, Alexandr Dzhulay, Alexandr Zemlianskiy
Cherkassy Institute of Fire Safety named after Heroes of Chornobyl

A study of short-time energy as a feature in BCI

Firgan Nihatov Feradov, Todor Dimitrov Ganchev, Nikolai Petrov Nikolov
Technical University of Varna, Bulgaria

Software metrics - application and significance in agile development

Alexander Iliev, Boyan Bontchev
Department of Software Engineering, Faculty of Mathematics and Informatics, Sofia University "St. KlimentOhridski", Sofia, Bulgaria

Face recognition through robust multimodal biometric system with sobel edge detection

Ivana Milošević[1], Ratko Ivković[2], Tatjana Petrović[3], Nebojša Denić[4], Branimir Jakšić[2]
[1]SP Audio and Video Technologies, The School of Electrical and Computer Engineering, Serbia
[2]Faculty of Technical Sciences, University of Pristina, Serbia
[3]Police Academy, Belgrade, Serbia
[4]Faculty of information technology, Alfa University, Serbia

Classification of rice grains using image processing and machine learning techniques

Ozan AKI, Aydın Güllü, Erdem Uçar
Trakya University

A turkish word recognition system, isolated and speaker dependent, developed for smart home appliances

Adem Cicek[1], Ozgul Salor – Durna[2]
[1]*Department of Electrical Electronics Engineering, Cankiri Karatekin University*
[2]*Department of Electrical Electronics Engineering, Gazi University*

Software for monitoring cisco IP service level agreement

Delyan Genkov
Technical University Gabrovo, Bulgaria

Naïve bayes and wrapper method in medical diagnostic process

Jasmina Đ. Novakovic*,AlempijeVeljovic**, Angelina Njegus***
Belgrade business school, Higher education institution for applied science, Belgrade, Serbia
** *Faculty of technical science Cacak, University of Kragujevac, Cacak, Serbia*
*** *Singidunum University, Belgrade, Serbia*

Level crossing rate of ratio of product two Nakagami-M random variables and nakagami-m random variable

Goran Petkovic[1], Danijel Djosic[2], Vladeta Milenkovic[3], Dragan Radenkovic[3], Ivana Dinic[3]
[1]*Serbian Army for Forces General Staff, Serbia*
[2]*Faculty of Natural Science and Mathematics, University of Pristina, Serbia*
[3]*Faculty of Electronic Engineering, University of Nis, Serbia*

MATHEMATICS AND INFORMATICS

On a conforming-nonconforming finite element algorithm

Andrey Andreev, Milena Racheva
Technical University of Gabrovo, Bulgaria

Aplication of hybrid psogsaalgorithm for three stage supply chain network optimization

Milena Jevtić[1], Nenad Jovanović[2], Jordan Radosavljević[2]
[1]Technical Faculty in Bor, University of Belgrade, Bor, Serbia
[2]Faculty of Technical Sciences, University of Priština in Kosovska Mitrovica, Serbia

Distributed evolutional model for music composition by human-computer interaction

Todor Balabanov
Institute of Information and Communication Technologies - Bulgarian Academy of Sciences

LARGE-ARCSIN PG(2,37)

Rumen Daskalov[1], Elena Metodieva[1], Nikola Kamburov[2]
[1]Department of Mathematics, Technical University of Gabrovo, Bulgaria
[2]Department of Mathematics, University of Arizona, USA

LARGE-BLOCKING SETSIN PG(2,37)

Rumen Daskalov[1], Elena Metodieva[1], Nikola Kamburov[2]
[1]Department of Mathematics, Technical University of Gabrovo, Bulgaria
[2]Department of Mathematics, University of Arizona, USA

Construction of the new codes and linear codes

Plamen Hristov
Technical University of Gabrovo, Bulgaria

DESIGN OF MACHINES AND INSTRUMENTS

Chairmen: **Prof. Galya Duncheva, Ph.D., Sen. Assist. Prof. Angel Anchev, Ph.D.**
Building **№ 1, Hall 1114**
Beginning: **13.00 h.**

Study of click-clack mechanism
Boyan Stoychev
Department of Engineering Mechanics at Technical University of Gabrovo, Bulgaria

Rotors winding mechanism
Boyan Stoychev
Department of Engineering Mechanics at Technical University of Gabrovo, Bulgaria

Construction skeletal line of section blade of centrifugal pump using conformal image
Nikolay Perenovski
University of Mining And Geology "St. Ivan Rilski", Sofia, Bulgaria

Verification strength calculations of loaded elements of forcing centrifugal fans
Nikolay Perenovski, Zhivko Iliev, Antoaneta Yaneva
University of Mining And Geology "St. Ivan Rilski", Sofia

Objectıve evaluatıon of subjectıve opınıons ın engıneerıng desıgn and works of art
Stoyan Stoyanov[1], Nikolay Angelov[2]
[1]University of Chemical Technology and Metallurgy - Sofia, Bulgaria
[2]Technical University – Sofia, Bulgaria

Investigation of the spur gears indexes accuracy change by their making
Mark Kane
Belorussian National Technical University, Minsk

Examining the springback of stainless steel sheets bended by using different punch radius
Ali IŞIKTAŞ[1], İrfan AY[2], Fatih BALIKOĞLU[2]
[1]Namık Kemal University
[2]Balıkesir University

Cleaning the surfaces of details by water jet rotors head
Salenko A.F., Poznyakov P.B., Studinskiy V.A., Yatsina N.N., Lashko E.E
Kremenchuk Mykhailo Ostohradskyi National University, Ukraine

TECHNOLOGIES IN MECHANICAL ENGINEERING

Chairmen: **Prof. Todor Kuzmanov, Ph.D., Assoc. Prof. Hristo Metev, Ph.D.**
Building **№ 1, Hall 1110**
Beginning: **13.00 h.**

Study of the wear resistance of bainitic cast iron with different carbide phase

G. Rashev[1], V. Todorov[1], S. Savov[2]
[1]Technical University of Gabrovo, Bulgaria
[2]Technical College – Lovech, Bulgaria

The Application of Liquid CO_2 into the Die Casting Mould Tempering System

Iva Novakova, Martin Seidl, Jaromir Moravec
Technical University of Liberec, Faculty of Mechanical Engineering, Department of Engineering Technology, Czech Republic

Determination of the coefficient of efficiency of the gearbox zomax D1

Stefan Stoychev
Technical College – Lovech, Bulgaria

Analysis methods of design of arrangements for the establishment of the preparations for machining

Marin Raev, Hristo Metev, Yosif Mitev
Technical University of Gabrovo, Bulgaria

Utilization of numerical simulation for grain size determination in haz of steel 18Cr12NiNb

Jaromír Moravec[1], Iva Nováková[1], Jiří Sobotka[1], Marek Slováček[2]
[1]Technical University of Liberec, Czech Republic
[2]Mecas ESI, Czech Republic

Structure and properties of complex boride coatings obtained on metals and alloys in different physics - chemical conditions

Chernega S.[1], Poliakov I.[1], Krasovsky M.[2], Yordanka Atanasova[3]
[1]National Technical University of Ukraine "Kiev Polytechnic Institute", Department of metal science and heat treatment,Ukraine, Kiev
[2]Frantsevich Institute for Problems of Materials Science NAS of Ukraine
[3]Gabrovo, Bulgaria, Technical University of Gabrovo

FEM study of aluminum chip extrusion

Önder AYER
Trakya University

Treatment of ammonia wastewater by ultrasound.
Part II: The influence of ultrasound energy On ammonia removal

Nicoleta Matei (Ciobotaru)[1], Dan Scarpete[2]
[1]"Dunarea de Jos" University of Galati, Faculty of Engineering and Agronomy, Braila, Romania
[2]"Dunarea de Jos" University of Galati, Faculty of Engineering, Galati, Romania

Choice of optimal drying method
Narkulova K.T., Safarov J.E., Sultanova Sh.A.
Tashkent State Technical University

Dialectics of high forging alloys AL-ZN-MG-CU in terms of sensitivity to stress corrosion cracking
S.Chernega S.[1], E.Abolikhina [2]
[1]National Technical University of Ukraine "Kiev Polytechnic Institute", Kiev, Ukraine
[2]State Enterprise «Antonov», Kiev, Ukraine

Strength and cost analysıs of staınless steel uses ın the multıplace hyperbarıc chambers
M. Tahir ALTINBALIK[1], Tolga KABAK[2]
[1]TrakyaUniversity, Engineering Faculty
[2]Barotech A.Ş.

A case study of design and application of kanban control system at a company
M. Tahir ALTINBALIK[1], Ümit RODOPLU[2]
[1]Trakya University, Engineering Faculty
[2]Pakkens A.Ş.

Residual stressdistribution and parametersof real structurein thick sheets due to metal active gas and laser welding
K. Kolařík [1], N. Ganev[1]
[1] CTU in Prague, Department of Solid State Engineering, Faculty of Nuclear Sciences and Physical Engineering, Czech Republic

Influence press force on the mechanical properties iron-phosphorus powder material
Ivelina Todorova
Technical University of Gabrovo, Bulgaria

Laser marking technology - present and future
Yordanka Angelova
Technical University of Gabrovo, Bulgaria

Factors ınfluencıng laser markıng of some ındustrıal materials - I Part: factors related to the materıal
Yordanka Angelova
Technical University of Gabrovo, Bulgaria

Application and optimization sheet metal cutting and forming dies
Cenk MISIRLI, Isik CETINTAV, Baris KESGIN
Trakya University

TECHNOLOGIES IN TEXTILE PRODUCTION

Chairmen: Assoc. Prof. Krasimir Drumev, Ph.D., Sen. Assist. Prof. Borislav Stoyanov, Ph.D.
Building: № 2A, Hall 2501
Beginning: 13.00 h.

About fundamental engineering courses and contemporary students

Sonya Vachinska
Technical University of Varna, Bulgaria, Bulgaria

Study vapor permeability sewing articles

Daniel Angelov[1], Mariel Penev[2], Krasimir Drumev[2]
[1]Technical College – Lovech, Bulgaria
[2]Technical University of Gabrovo, Bulgaria

MECHATRONICS, METROLOGY AND QUALITY MANAGEMENT

Chairmen: Assoc. Prof. Dimitar Dichev, D.Sc., Assoc. Prof. Dimcho Pulov, Ph.D.
Building: № 2, Hall 2415
Beginning: 13.00 h.

Study of interferometry method for calibration of gauge blocks

Stepanka Dvorackova

Technical University of Liberec, Faculty of Mechanical Engineering, Department of Manufacturing and Assembly, Czech Republic

Analytical studies for checking structure elements engine parts (piston head)

Flaviu KMEN, Silviu MACUTA

Dunarea de jos University of Galati, Romania

Choice of cutting tools for turning with high-pressure cooling of medical stainless steel

Miroslav Radovanović

University of Niš, Faculty of Mechanical Engineering, Serbia

Selection of metallic biomedical materials

Miroslav Radovanović[1], Milan Radovanović[2]

[1]*University of Niš, Faculty of Mechanical Engineering, Serbia*
[2]*University of Niš, Faculty of Sciences and Mathematics, Serbia*

Multicriteria choice of optimal values of process parameters for abrasive water jet cutting carbon steel

Miroslav Radovanović

University of Niš, Faculty of Mechanical Engineering, Serbia

Control Insect dermatitis in athletes

Valentin Ivanov Valtchev

Department of Physiology and Biochemistry NSA, Sofia, Bulgaria

Control Tinea capitis in athletes

Valentin Ivanov Valtchev

Department of Physiology and Biochemistry NSA, Sofia, Bulgaria

Evaluation of the accuracy and operational characteristics of linear positioning stages

Iskra Garnyovska

Technical University of Sofia, Bulgaria

Research work of rechargeable fuel - injection system "common rail"

Genadi Cvetanov, Silvia Golemanova, Katia Ralcheva

Technical University of Gabrovo, Bulgaria

Kinematic synthesis of variable speed drive shaft

Genadi Cvetanov, Silvia Golemanova
Technical University of Gabrovo, Bulgaria

Review of design methods for gears variators

Genadi Tsvetanov, Ivan Georgiev
Department of Machine and Precision Engineering, Technical University of Gabrovo

The history for the antikythera mechanism

Andreas Pournaras
Department of Machine and Precision Engineering, Technical University of Gabrovo

The structure and function of the mechanism of antikythera

Andreas Pournaras
Department of Machine and Precision Engineering, Technical University of Gabrovo

Detection of nanovibrations on the objects

Mikhail Prokofiev
National Technical University of Ukraine "KPI"

Comparative analysis of methodologies for rotary motors sizing

Dimitar Diakov, Iskra Garnyovska
Technical University of Gabrovo, Bulgaria

Dynamic characteristics of linear acuator of the mechatronic system of testing machines of "MECHATRONIK TF 1000/10"

Milutin Živković
High Technical Mechanical School, Trstenik, Serbia

Functional characteristics of the mechatronic system of testing machines "MECHATRONIC TF 1000/10"

Milutin Živković
High Technical Mechanical School, Trstenik, Serbia

Analysis of methods for determination of optimal assymetric tooth profile of harmonic drive

Emiliyan Bojilov
Technical University of Gabrovo, Bulgaria

Key aspects in the design of gear with minimum number of teeth

Miroslava Docheva Nencheva
Technical University – Gabrovo, Bulgaria

Kinematics of delta-robot designed for three-coordinate measuring system

Dimitar Dichev, Aleksandar Donchev, Hristofor Koev
Technical University of Gabrovo, Bulgaria

Development of a system for coordinate measurement of geometrical parameters

Dimitar Dichev, Aleksandar Donchev, Hristofor Koev
Technical University of Gabrovo, Bulgaria

HYDRAULICS, PNEUMATICS AND HEAT ENGINEERING

Chairmen: Assoc. Prof. Hristo Hristov, Ph.D., Sen. Assist. Prof. Valentin Petkov, Ph.D.
Building: № 1, Hall 1300
Beginning: 13.00 h.

Approximate method of calculating the effect of temperature difference on the work the system hydrodrive

Alona Murashchenko[1], Aleksandr Gubarev[1], Oleg Yakhno[1], Bachir Hoggas[2]
[1]*National Technical University of Ukraine «Kyiv Polytechnic Institute», Kyiv, Ukraine*
[2]*Algeria*

On the peculiarities of liquid's behavior in the locked capacities of gear pumps

Serhiy STAS[1], Dmytro KOSTIUK[2], Oleh YAKHNO[2]
[1]*Fire Safety Academy, Ukraine,*
[2]*Kiev Politechnical Institute, Ukraine*

Determination of stabilization time and temperature of heat balance of hydraulic drive systems with one operation mode

Hanpantsurova Oksana, Gubarev Aleksandr
National Technical University of Ukraine «Kyiv Polytechnic Institute», Kyiv, Ukraine

The computer-aided analysis of plexi glass hydraulic cylinders

Aytaç MORALAR, Soner ÇELEN, Semih ŞAHİN
Namık Kemal University, TURKEY

Experimental investigation static characteristic of proportional pneumatic directional flow control valve

Georgy Iliev, Hristo Hristov, Angel Anchev
Technical University of Gabrovo, Bulgaria

ECONOMICS AND FINANCE

Determination of performance basic numerical inflow of applications of agricultural machinery in agro sector

Nataliya Mihova Stoyanova
University of Agribusiness and Rural Development/Plovdiv, Bulgaria

Financial management of medium enterprises of the republic of Serbia and appreciation hterogeneous risk in order to optimize

Slobodan Popovič, Aleksandar Majstorović[1], Jugoslav Aničić[3], Dušan Aničić[4], Ranko Mijić[5], Mira Vidaković[6]
JKP Gradsko Zelenilo Novi Sad, Internal Auditor Enterprise,
[1]*Univerzity Union Nikola Tesla, Fakulty for Real Estate Menagement,Belgrade*
[3]*Faculty of entrepreneurial bussiness, Univerzity Union - Nikola Tesla, Belgrade,*
[4]*DSN Consalting, Beograd*
[5]*College of Economics and Statistics Prijedor, Bosnia*
[6]*Faculty of management, Serbia*

Significance of financial management building land on the real estate market in Serbia

Aleksandar Majstorović[1], Slobodan Popović[2], Jugoslav Aničić[3], Dušan Aničić[4], Ranko Mijić[5]
[1]*Univerzity Union Nikola Tesla, Fakulty for Real Estate Menagement,Belgrade*
[2]*JKP Gradsko Zelenilo Novi Sad, Internal Auditor Enterprise*
[3]*Faculty of entrepreneurial bussiness, Univerzity Union - Nikola Tesla, Belgrade*
[4]*DSN Consalting, Beograd*
[5]*College of Economics and Statistics Prijedor, Bosnia*

Methodology for measuring social signals of consumers in Bulgaria

Antoniya Lazarova
European higher school of economics and management – Plovdiv, Bulgaria

Pilot study of consumer receptivity regarding the use of the methodology for measuring social signals

Antoniya Lazarova
European higher school of economics and management – Plovdiv, Bulgaria

The responsibility of banks in improving the standard of living in the Republic of Serbia

Jasna Markovic[1], Jelena Toskovic[1], Slobodan Popovic[2], Jovana Adzic[1]
[1]*University Edukons, Faculty of bussines economy, Sremska Kamenica, Serbia*
[2]*JKP"Gradsko zelenilo", Novi Sad, Serbia*

The audit of the financial statements – a guarantee of their authenticity

Stefka Ivanova
St. Cyril and St. Methodius University of Veliko Turnovo, Bulgaria

Specific features of construction activity and their influence on the organization of its accounting

Stefka Ivanova
St. Cyril and St. Methodius University of Veliko Turnovo, Bulgaria

SWOT- analysis in marketing researches

Vasyl H. Gerasymchuk
National Technical University of Ukraine "Kyiv Polytechnic Institute"

Interdepence of doing business indicators on real economic indicators – case of five ex Yu countries

Goran Balotic, Jelena Micic
University of East Sarajevo

Entrepreneurial environment in southeast Europe – case study of nine countries

Jelena Micic, Predrag Mlinarevic
University of East Sarajevo

Democracy and economic progres - delusion or proven causality: case of transitional countries

Predrag Mlinarevic, Goran Balotic
University of East Sarajevo

Problems and prospects for the economic growth of the Bulgarian economy

Dobrin Ganchev
Technical University of Gabrovo, Bulgaria

Comparison of payment card market in Serbia with markets in South Eastern Europe and EU regions

Slobodan Obradović[1], Nenad Subotić[2], Milan Mijalković[1], Siniša Ilić[3], Dragoslav Perić[4]
[1]VISER Belgrade, Serbia
[2]Asseco South Eastern Europe
[3] Technical Faculty of Kosovska Mitrovica
[4]VIPOS Valjevo, Serbia

Factors affecting the condition and development of the labour market

Kameliya Tsanova
Technical University of Gabrovo, Bulgaria

Transfer pricing in transactions between related entities

Nenad Mihailović[1], Snežana Ljubisavljević[2], Momčilo Vasiljević[1], Ivana Mijailović[1], Radovan Kastratović[3]
[1]Valjevo Business School of Applied Studies
[2]Faculty of Economics Kragujevac
[3]Business Research Institut MBA

New financial report forms in the Republic of Serbia (valid since 2014) – the starting point for transfer pricing reports control

Nenad Mihailović[1], Snežana Ljubisavljević[2], Momčilo Vasiljević[1], Gorana Đurđević[1], Sanja Radovanović[1]

[1]Valjevo Business School of Applied Studies
[2]Faculty of Economics Kragujevac

Interconnection of business strategy with information technologies

Anastasiia Prokofieva[1], Ovod Valentina[2]

[1]National Aviation University of Ukraine
[2]Kiev Electromechanical College

Payment in systems for electronic shopping

Boncho Aleksandrov[1], Nina Sinygina[2], Gergana Kalpachka[2]

[1]Technical University, Gabrovo, Bulgaria
[2]Souht West University Neofit Rilski, Blagoevgrad

Mediation – an opportunity for conflict resolution

Svetla Panayotova[1], Jürgen Gemeinhardt[2]

[1]Technical University of Gabrovo, Bulgaria
[2]High School Schmalkalden, Germany

Review of different research approaches in economic security quantification

Rima Tamošiūnienė[1], Corneliu Munteanu[2]

[1]Mykolas Romeris University, Vilnius, Lithuania
[2]Academy of Economic Studies from Moldova, Chişinău, Republic of Moldova

Analysis of global competitiveness of the western Balkan countries

Tamara Sarić

Faculty of Organizational Sciences, Belgrade, Serbia

Techniques for time management and effectiveness self-discipline

Svetla Panayotova

Technical University of Gabrovo, Bulgaria

Institutional analysis of the national patent activity in Bulgaria for the period 2001-2014

Rumyana Ivanova Georgieva

Technical University of Gabrovo

SMEs accounting information systems – current state and prospects

Vesela Dimova

Technical University of Gabrovo, Bulgaria

ORGANIZATION AND MANAGEMENT

Chairmen: Assoc. Prof. Daniela Dimova, Ph.D., Sen. Assist. Prof. Petko Naydenov,Ph.D.
Building: № 6, Hall 6007
Beginning: 13.00 h.

Repair and technical services offered in the agro sector
Nataliya Mihova Stoyanova
University of Agribusiness and Rural Development/Plovdiv, Bulgaria

Aspects of quality management in the function of it projects
Nebojsa Denic, Vesna Stevanović, Savić Milan
Faculty of Information Technology, Belgrade, Serbia

Possible aspects of the application of intelligent systems in business enterprises in Serbia
Nebojsa Denic, Momir Milic, Boban Spasic
Faculty of Information Technology, Belgrade, Serbia

Collaboration capability as prerequisite to successful networked innovations
Svetoslav Dimkow
Teccthnical University – Sofia, Faculty of management, Bulgaria

Business performance improvement through dynamic virtual enterprises formation
Svetoslav Dimkow
Teccthnical University – Sofia, Faculty of management, Bulgaria

Knowledge management as a factor of the innovative development of forestry
I.Ye. Yarovaya
Sumy National Agrarian University (Ukraine)

The concept of social marketing in the system of sustainable development of organizations
E.V. Mishenin[1], E.A. Lavrov[2], N.V. Mishenina[2], H.A. Mishenina[2]
[1]Ukrainian Academy of Banking
[2]Sumy State University (Ukraine)

Staff performance appraisal and its effect on the employees' labour activity
Ventsislava Nikolova-Minkova
Technical University of Gabrovo, Bulgaria

Innovative approaches in project managment of software development process
Zivorad Vasic[1], Slobodan Obradovic[1], Milica Jevremovic[1], Minka Yordanova[2], Milos Vasic[3]
[1]The School of Electrical and Computer Engineering of Applied Studies, Belgrade
[2]Technical University of Gabrovo, Bulgaria
[3]Avnet Atech Ascendant, Belgrade

Factors giving effect on the activities of the organization

Minka Miteva Yordanova
Technical University of Gabrovo, Bulgaria

Multi-criteria approach for selecting the best location for cruise station in branicevo district

Nada Damljanović[1], Miodrag Žižović[2], Dragan Turanjanin[3], Mališa Žižović[4]
[1]University of Kragujevac Faculty of Technical sciences, Čačak, Serbia
[2]University Singidunum, Belgrade, Serbia
[3]College of Business, Blace, Serbia
[4]University Singidunum, Belgrade, Faculty of Business, Valjevo, Serbia

Multi-criteria analysis of touristic offer in munipacility blace

Dragan Turanjanin[1], Julka Kuzmanović-Cvetković[2], Neđeljko Deretić[3], Mališa Žižović[4]
[1]College of Business, Blace, Serbia
[2]National Museum of Toplica, Prokuplje, Serbia
[3]Belgrade Business School, Belgrade, Serbia
[4]University Singidunum, Belgrade, Faculty of Business, Valjevo, Serbia

Management of social component in process of diversification of enterprise risks

Alexander Kraychuk[1], Marina Panko[2]
[1]Rivne State University of Humanities, Rivne, Ukraine
[2]Uzhgorod Trade and Economic Institute Kyiv National University of Trade and Economics, Uzhgorod, Ukraine.

Features of innovation infrastructure of postindustrial society

Anna Kniazevych[1], Igor Britchenko[2]
[1]Rivne State University of Humanities, Rivne, Ukraine
[2]Uzhgorod Trade and Economic Institute Kyiv National University of Trade and Economics, Uzhgorod, Ukraine

Identify marketing risks in project management

Veryana Boeva
Technical University of Gabrovo, Bulgaria

SOCIAL SCIENCES AND HUMANITIES

Chairmen: Assoc. Prof. Lilyana Rusanova, Ph.D., Assoc. Prof. Anton Antonov, Ph.D.
Building: № 1, Hall 1209
Beginning: 13.00 h.

Instruments for improving the effectiveness of work in employment services

Valentin Terziev[1], Ekaterina Arabska[2]
[1]Ruse Universiy "Angel Kanchev", Bulgaria
[2]University of agribusiness and rural development/Plovdiv, Bulgaria

Planning and implementation of programs and measures on labor market

Valentin Terziev[1], Ekaterina Arabska[2]
[1]Ruse Universiy "Angel Kanchev"
[2]University of agribusiness and rural development/Plovdiv, Bulgaria

Project control in social programming

Evgeniy Stoyanov
University of agribusiness and rural development – Bulgaria

Project portfolio management in social programming

Evgeniy Stoyanov
University of agribusiness and rural development – Bulgaria

Remuneration for the damages caused by invalid and illegal administrative acts

Ivan Ruschev
Sofia University „St. Kliment Ohtridski", Bulgaria

On some issues concerning the liability for damages according to art. 1 of the law of state and municipality responsibility and to art. 49 of the law of contracts and obligations

Ivan Ruschev
Sofia University „St. Kliment Ohtridski", Bulgaria

The issues of teaching the social science and the humanities in technical higher educational establishments

Lesya HORENKO
Fire Safety Academy, Ukraine

Correlation between educational background, age, success in the ranking process and an expected degree of success for applicants in the dual degree program "Production technology and organisation pto"

Hagen H. Hochrinner, Julius J. Hochrinner
University of applied sciences FH Joanneum GmbH

Development of self-control through the ability to integrate the possibility of mobile technologies

Silviya Stoyanova-Petrova, Nadezhda Kafadarova, Nevena Mileva
Plovdiv University "Paisii Hilendarski", Bulgaria

Optimization of information in multimedia presentations for educational purposes to improve the quality of perception
Natalia Ostapchuk, Serhey Kraychuk
Rivne State University of Humanities, Rivne, Ukraine

State of the healthcare system in Gabrovo municipality– an assessment based on swot – analysis
Ivanka Soyanova - Todorova
Technical University of Gabrovo, Bulgaria

Positive motivation to the profession as subject to successful adaptation of future psychologist
S.M. Sochenko, B.S. Kolomiets
Kremenchuk Mykhailo Ostrohradskyi National University, Ukraine

EDUCATIONAL TECHNOLOGIES

Chairmen: Assoc. Prof. Emil Indzov, Ph.D., Sen. Assist. Prof. Tsanka Zlateva, Ph.D.
Building: № 6, Hall 6210
Beginning: 13.00 h.

Modeling of mental stability in handball students
Mariana Rohleva
University of Architecture, Civil Engineering and Geodesy, Bulgaria

Influence of Anthropometric Indicators on the Distribution of Posts between Handball Students
Mariana Rohleva
University of Architecture, Civil Engineering and Geodesy, Bulgaria

Impact of active ageing learning community on young and seniors
Irena Pavlova Rashkova, Tsvetelina Petrova Petrova
Technical University of Gabrovo, Bulgaria

On the difficulties of learning foreign languages
Nadezhda Slavova
Technical University of Gabrovo, Bulgaria

Some ways of translating English phrasal verbs into Bulgarian
Nadezhda Slavova
Technical University of Gabrovo, Bulgaria

A comparative analysis of professional qualifications in the construction sector
Tsvetelina Petrova[1] , Irena Rashkova[1], Galina Mihneva[2]
[1]Technical University of Gabrovo, Bulgaria
[2]Gabrovo Chamber of Commerce and Industry, Bulgaria

Linking E-learning systems with youtube
Petar Milić[1], Gabrijela Dimić[2], Dejan Rančić[1], Kristijan Kuk[3]
[1]University of Niš - Faculty of Electronic Engineering, Niš, Serbia
[2]School of Electrical and Computer Engineering of Applied Studies, Belgrade, Serbia
[3]Department of Informatics and Computing, University of Criminalistic and Police Studies, Belgrade

Applying a version control system in software engineering classroom
Vladimir Vujović
Faculty of Electrical Engineering, East Sarajevo, B&H

Technical university of Varna teaching on technical documentation and engineering graphics
Sonya Vachinska
Technical University of Varna, Bulgaria

Model of training technological disciplines inengineering at the technical university of Gabrovo

Stefan Kartunov
Technical University of Gabrovo, Bulgaria

Information technologies in the methodology of teaching solfeggio

Ivana Milošević
Conductor of the Nis Chamber Choir, Niš, Serbia

New technologies for web based learning

Borivoje Milošević, Danica Milošević, Srđan Jovković
College of Applied Technical Sciences, Nis, Serbia

Self-reported vocabulary strategy use of university students at vocational school

Pınar Çankaya
Namık Kemal University

PHYSICS

Chairmen: Sen. Assist. Prof. Nikolay Angelov, Ph.D., Sen. Assist. Prof. Plamen Danailov, Ph.D.
Building: № 1, Hall 1406
Beginning: 13.00 h.

The atmosphere and solar lightning interaction

Metin Saltik[1], Margreta Vasileva[2], Mustafa Denktaş[1]
[1]Sakarya University
[2]Technical University of Varna

Impact of global atmospheric circuit on electrical charge

Metin SALTIK, Adem ÇALIŞKAN, Adem ONAT
Sakarya University

Energy saving cnf (GNF)/cement matrix composite under static load and enviroment conditions

Varbinka Valeva, Jordanka Ivanova, Ana Yanakieva
Institute of Mechanics, Bulgarian Academy of Sciences

Interface delamination of smart joint without/with gap at static load and environment influence

Varbinka Valeva, Jordanka Ivanova
Institute of Mechanics, Bulgarian Academy of Sciences

Some of properties TIO_2 nanoparticles and energy applications

Mirjanić D.Lj.[1], Pelemiš S[2]
[1]Academy of Sciences and Arts of Republic of Srpska, B&H
[2]Faculty of Technology, University of East Sarajevo, B&H

Thermal behaviour of adhesively bonded bi-material structure - effect of material properties and geometry

Gergana Nikolova
Institute of Mechanics, Bulgarian Academy of Sciences

A study of daily and seasonal variations of Radon-222 and radon progeny concentrations in atmospheric air

Nina Arhangelova, Maria Pencheva, Rusalia Mateva
Shumen University

Classification of laser sources widely used in medicine

Daniela Nedeva, Nikolay Angelov
Technical University of Gabrovo

Modern communication technologies in the process of research in physics with application in higher education

Nadezhda Kafadarova, Silviya Stoyanova - Petrova
Plovdiv University „Paisii Hilendarski"

Study of concentrations of some chemical elements in medicinal plants collected from shumen plateau

Nina Arhangelova[1], Seniha Salim[1], Rusalia Mateva[1], Daniela Nedeva[2], Zheni Dimitrova[1]
[1]Shumen University
[2]Technical University of Gabrovo

Calorimetric research of modified partially crystalline polymer objects

Valentin Velev[1], Pencho Kyurkchiev[1], Nina Arhangelova[1], Rusalia Mateva[1], Neli Sotirova[1], Daniela Nedeva[2], Hristo Hristov[1]
Konstantin Preslavsky University, Shumen
Technical University of Gabrovo

Influence of the impulse energy onto laser marking process of samples of structural steel

Nikolay Angelov
Technical University of Gabrovo

Influence of power densiity for laser marking by evaporation onto samples of structural steel

Nikolay Angelov
Technical University of Gabrovo