



SOUTH-WEST
UNIVERSITY
·NEOFIT RILSKI·

66 "IVAN MIHAILOV" STR.
2700 BLAGOEVGRAD



PROGRAM

Fifth International Scientific Conference
FMNS-2013

12 - 16.06.2013, Blagoevgrad, BULGARIA

Patronized by
Prof. Ivan Mirchev, DSc
Rector of the South-West University
<http://www.swu.bg>

ORGANIZING COMMITTEE:

Honorary Chairman: Prof. Ivan Mirchev, DSc, Rector of the
SOUTH-WEST UNIVERSITY "NEOFIT RILSKI"

Chairman: Assoc. Prof. Stefan Stefanov, PhD,
Dean of the Faculty of Mathematics&Natural Sciences

Members:

Ilia Giudjenov, South-West University "Neofit Rilski", Bulgaria
Ivan Trenchev, South-West University "Neofit Rilski", Bulgaria
Ivanka Stankova, South-West University "Neofit Rilski", Bulgaria
Konstantin Tufekchiev, South-West University "Neofit Rilski", Bulgaria
Luben Mihov, South-West University "Neofit Rilski", Bulgaria
Mitko Stoev, South-West University "Neofit Rilski", Bulgaria
Stanko Shtrakov, South-West University "Neofit Rilski", Bulgaria
Valentin Hristov, South-West University "Neofit Rilski", Bulgaria
Grigor Iliev, South-West University "Neofit Rilski", Bulgaria
Vasilisa Pavlova, Regional Educational Inspectorate-Blagoevgrad, Bulgaria

PROGRAM COMMITTEE:

Honorary Chairman: Prof. Kiril Chimev, DrSc

Members:

MATHEMATICS AND INFORMATICS

Adrian Borisov, South-West University "Neofit Rilski", Bulgaria
Boris Novikov, Kharkov National University, Ukraine
Donco Dimovski, University "St. St. Cyril and Methodius", Macedonia
Georgi Totkov, Plovdiv University "Paisii Hilendarski", Bulgaria
Ilinka Dimitrova, South-West University "Neofit Rilski", Bulgaria
Jörg Koppitz, University of Potsdam, Germany
Krasimir Yordzhev, South-West University "Neofit Rilski", Bulgaria
Oleg Mushkarov, Bulgarian Academy of Sciences, Bulgaria
Peter Boyvalenkov, Bulgarian Academy of Sciences, Bulgaria
Peter Milanov, South-West University "Neofit Rilski", Bulgaria
Sava Grozdev, Bulgarian Academy of Sciences, Bulgaria
Slavcho Shtrakov, South-West University "Neofit Rilski", Bulgaria
Vasilisa Pavlova, Regional Educational Inspectorate-Blagoevgrad, Bulgaria

COMPUTER SYSTEMS AND ENGINEERING

Albrecht Zur, University of Kiel, Germany
Aleksey Bubenchikov, Tomsk State University, Russia

Boris Tudjarov, TU- Sofia, Bulgaria
Dimitar Dimitrov, South-West University "Neofit Rilski", Bulgaria
Hubert Roth, University of Siegen, Germany
Janos Botzheim, Tokyo Metropolitan University, Japan
Kiril Boyanov, Bulgarian Academy of Sciences, Bulgaria
Miglena Doncheva, University of Dornbirn, Austria
Naoyuki Kubota, Tokyo Metropolitan University, Japan
Paul Borza, Transilvania University of Brasov, Romania
Shigeru Aomura, Tokyo Metropolitan University, Japan

PHYSICS AND TECHNOLOGIES

Aleksy Patrin, TU-Koszani, Poland
Alexander Popov, Bulgarian Academy of Sciences, Bulgaria
Anna Majchrzycka, West Pomeranian University of Technology, Poland
Anton Antonov, South-West University "Neofit Rilski", Bulgaria
Bekbolat Nusupbekov, Karaganda State University, Kazakhstan
Fatih Onur Hocaoglu, Afyon Kocatepe University, Turkey
Jordan Stamenov, South-West University "Neofit Rilski", Bulgaria
Panayiotis Frangos, National Technical University of Athens, Greece
Socrates Kaplanis, Technological Educational Institute of Patra, Greece
Svetlana Karstina, Karaganda State University, Kazakhstan
Vitezslav Benda, Technical University of Prague, Czech republic

CHEMISTRY

David Havlichek, Charles University in Prague, Czech republic
Evgeny Golovinsky, Bulgarian Academy of Sciences, Bulgaria
Kenzhebek Rustembekov, Karaganda State University, Kazakhstan
Stefan Manev, South-West University "Neofit Rilski", Bulgaria
Tazhbayev Yerkeblan, Karaganda State University, Kazakhstan
Tzenka Milkova, South-West University "Neofit Rilski", Bulgaria
Zhivko Velkov, South-West University "Neofit Rilski", Bulgaria

GEOGRAPHY, ECOLOGY AND ENVIRONMENT PROTECTION

Ivan Drenovski, South-West University "Neofit Rilski", Bulgaria
Krasimir Stoyanov, South-West University "Neofit Rilski", Bulgaria
Maria Shishmanova, South-West University "Neofit Rilski", Bulgaria
Michail Michailov, South-West University "Neofit Rilski", Bulgaria
Sergey Il'itch Pryakhin, Volgograd State Social-Pedagogical University, Russia
Todor Nikolov, Bulgarian Academy of Sciences, Bulgaria
Tzanko Tzankov, South-West University "Neofit Rilski", Bulgaria

Secretariat:

Stanko Shtrakov, South-West University "Neofit Rilski", Bulgaria
Dimitar Manolev, South-West University "Neofit Rilski", Bulgaria

GENERAL TOPICS:

Mathematics

Informatics

Computer Technologies

Geography, Ecology and Environment Protection

Physics and Technology

Chemistry

Methodology in Education

Workshop - Renewable Energy Technologies

Sessions

13:30 – 15:00

15:30-17:00

University Conference Center “Bachinovo”

Welcome Party

20:00 13.06.2013

University Conference Center “Bachinovo”

Conference Dinner

20:00 14.06.2013

University Conference Center “Bachinovo”

Program Overview

Registration (12.06.2013)

13:00 – 18:30

University Conference Centre "Bachinovo"

Registration (13.06.2013)

08:00 – 10:30

University Conference Centre "Bachinovo"

Opening Ceremony

10:00 – 10:15

Central Auditorium of Conference Center
Chairman: Assoc. Prof. Stefan Stefanov, PhD

Plenary Report (13.06.2013)

10:15 – 11:00;

Central Auditorium of Conference Center
"Information Evolution and Man"
(Човекът и информационното развитие)
Acad. Kiril Boyanov

Plenary Report (13.06.2013)

11:15-12:00

"НАУЧНОПОПУЛЯРНИТЕ ПРОИЗВЕДЕНИЯ – В ПОМОЩ
НА ОБРАЗОВАНИЕТО ПО ПРИРОДНИ НАУКИ"

Acad Evgeny Golovinsky

Plenary Report (14.06.2013)

10:00-10:45

"Mathematical competitions in Bulgaria -
development and perspectives"

Prof. Peter Boyvalenkov

Round Table (14.06.2013) 10:45 – 13:00

Energy and sustainable development

Section: Mathematics
Hall 11

Thursday, June 13	
Chairman: Assoc. Prof. Slavcho Shtrakov	
13:30-13:45	On categorical semigroups Andrey Kostin, Boris Novikov
13:45-14:00	Bootstrap with cycled blocks in stationary time series Lorenc Ekonomi, Lorena Margo, Eljona Milo, Edlira Donefski, Ilir Palla
14:00-14:15	Structural description of generalized $(m + k, m)^-$ rectangular bands, Valentina Miovska, Dončo Dimovski
14:15-14:30	Free ternary semicommutative groupoids Vesna Celakoska-Jordanova
14:30-14:45	Intrinsic shape of unstable attractors Martin Shoptrajanov
14:45-15:00	Jackknife with re-blocks in time series with weak dependence, Lorenc Ekonomi, Lorena Margo, Eljona Milo, Edlira Donefski, Ilir Palla
Coffee break	
Chairman: Prof. Boris Novikov	
15:30-15:45	Congruences and reduction systems in stable varieties Slavcho Shtrakov, Jörg Koppitz
15:45-16:00	Bootstrap Confidence Intervals for the Fractional Difference Parameter in ARFIMA Model Argjir Butka, Gjergji Capollari
16:00-16:15	Description of (4,2)-equivalences Marzanna Seweryn-Kuzmanovska, Dončo Dimovski
16:15-16:30	On $(3, 2, \rho)$ -K-metrizable spaces Tomi Dimovski, Dončo Dimovski
16:30-16:45	On the weighted $(W(b); \gamma)$ – diaphony of the generalized Van der Corput sequence, Vesna Dimitrievska Ristovska. Vassil Grozdanov, Stanislava Stoilova
16:45-17:00	INTRINSIC SHAPE BASED ON \mathcal{E} -CONTINUITY AND ON CONTINUITY UP TO A COVERING ARE EQUIVALENT (II) N. Shekutkovski, Z. Misajleski
17:00-17:15	Inner inverses in rings with involution and applications, Biljana Nacevska

Section: Mathematics
Hall 11

Friday, June 14	
Chairman: Assoc. Prof. Vasil Grozdanov	
13:30-13:45	The maximal subsemigroups of the semigroup of all partial order-preserving isometries Ilinka Dimitrova
13:45-14:00	Systems of difference equations as a model for the Lorentz system Biljana Zlatanovska,
14:00-14:15	Structure Of a Fuzzy Gamma Module R. Sadeghi
14:15-14:30	EQUATION OF THE FUNCTIONING OF AN AIRCRAFT AND HIS A CRASH FUNCTION Nikolay Petrov, Krasimir Yordzhev, Stancho Pavlov
14:30-14:45	New derivative-free nonmonotone line search methods for unconstrained minimization Filip Nikolovski, Irena Stojkovska
14:45-15:00	ONE EXAMPLE OF ANALYTIC FUNCTION ON THE UNIT DISC Ljupco Nastovski, Petar Sokoloski
Coffee break	
Chairman: Peter Boyvalenkov	
15:30-15:45	ABOUT THE CENTER OF GRAVITY OF ZEROES OF POLYNOMIALS Dimiter Stoichkov Kovachev, Valentin Mihailov Lishkov,
15:45-16:00	On a mathematical model of cancer invasion Boiana Garkova
16:00-16:15	Investigation of the regions of stability of Gear's Implicit m-Step Methods, Anka Markovska,
16:15-16:30	Proximate Fundamental Group Nikita Shekutkovski, Aneta Velkoska
16:30-16:45	On the weighted $(W(b); \gamma)$ – diaphony of the generalized Zaremba-Halton net, Vassil Grozdanov, Dora Mavrodieva
16:45-17:00	Prime numbers in the subsets of a set Adili Arto, Beta Dhorì, Milo Eljona
17:00-17:15	Randomly indexed central order statistics Aneta Gacovska, Elisaveta Pancheva

Section: Informatics
Hall 8

Thursday, June 13 (Informatics and Computer technologies)	
Chairman: Prof. Peter Milanov	
13:30-13:40	Tools Selection for Design and Development of an Expert System for Social Area Domain Irena Atanasova, Jiři Křupka
13:40-13:50	Impacts of Moodle on electrical engineering courses: opportunities and challenges Vasilija Sarac, Tatjana Atanasova-Pacemska, Sanja Pacemska, Dragan Minovski
13:50-14:00	Entertaining problems in the teaching computer programming, Mariya Palahanova
14:00-14:10	Analysis of the human resources of the food subsectors through benchmarking Miglena Trencheva, Metodi Traykov, Ivan Trenchev
14:10-14:20	On Detecting Noun-Adjective Agreement Errors in Bulgarian Language Using GATE Nadezhda Borisova, Grigor Iliev, Elena Karashtranova
14:20-14:30	A Model for HP Folding Prediction using Variable Size of Lattice, IvanTodorin
14:30-14:40	Optimization of Homology modeling of the δ -opioid receptor by Molecular Operating Environment Fatima Sapundzhi
Coffee break	
Chairman: Assoc Prof. Krasimir Yordzhev	
15:30-15:40	VARIABLE NEIGHBORHOOD SEARCH BASED ALGORITHM FOR UNIVERSITY COURSE TIMETABLING PROBLEM Velin Kralev, Radoslava Kraleva
15:40-15:50	Impacts of Moodle on electrical engineering courses: opportunities and challenges Vasilija Sarac, Tatjana Atanasova-Pacemska, Sanja Pacemska, Dragan Minovski
15:50-16:00	Application of Matlab/Simulink in hybrid stepper motor modeling Vasilija Sarac, Slobodan Pesic
16:00-16:10	Online generation of psychological tests Gergana Praskova, Ivan Petrov, Krasimir Yordzhev, Ivelina Peneva

Section: Computer technologies
Hall 9

Thursday, June 13 (Informatics and Computer technologies)	
Chairman: : Prof. Boris Tudjarov	
13:30-13:45	Multi-modal Perception for Human-friendly Robot Partners with Smart Phones based on Computational Intelligence Naoyuki Kubota, Yuichiro Toda, Janos Botzheim, Boris Tudjarov
13:45-14:00	A Survey of Intelligent Tutoring and Affect Recognition for Mobile Devices, Malinka Ivanova
14:00-14:15	FPGA Based Mixed-Signal Circuit Novel Testing Techniques Sotirios Poulos, Vassilios Vassios, Dimitrios Papakostas, Valentin Hristov
14:15-14:30	Vulnerability issues on research in WLAN encryption algorithms WEP WPA/WPA2 Personal Lazaridis Ioannis, Poulos Sotirios, Veloudis Simeon
14:30-14:45	Investigation of aggregation with fragments retransmission with losses in wireless networks, Valentin Hristov, Firas Ibrahim, Bzar k. h, Hussan, Kiril Slavkov
14:45-15:00	Simulation of aggregation mechanism with fragments retransmission, Valentin Hristov, Bzar k. Hussan, Firas Ibrahim, Gergana Kalpachka
Coffee break	
Chairman: Assoc. Prof. Valentin Hristov	
15:30-15:45	Improving network management with Software Defined Networking, Pavel Dzhunev
15:45-16:00	Microprocessor System for Non-Invasive Measurement of Blood Glucose Ljudmila Taneva, Antoaneta Daskalova
16:00-16:15	Speed testing of Sliding spectrum analysis Emil Frenski, Dimitar Manolev
16:15-16:30	Survey paper on wireless network applications implemented on FPGA Sotirios Poulos, Angel Popov
16:30-16:45	Experimental studies of the web server defenses against TCP SYN Flood attacks Nina Sinyagina, Stela Ruseva
	On DSP's Performance versus General Purpose Processors Dimitar Manolev, Vencislav Petrov

Section: Computer technologies
Hall 9

Friday, June 14	
Chairman: Assoc. Prof. Stanko Shtrakov	
13:30-13:40	Improvement of forwarding process with multiple network links Valentin Hristov, Oleg Panagiev, Firas Ibrahim
13:40-13:50	Laboratory course development for teaching discipline PLD programming Valeri Vachkov, Ivo Angelov, Petar Manoilov
13:50-14:00	Simulation of aggregation mechanism with fragments retransmission Valentin Hristov, Bzar k. Hussan, Firas Ibrahim, Gergana Kalpachka
14:00-14:10	EXPERIMENTAL PLATFORM FOR MEASURING THE PARAMETERS OF MAGNETIZATION OF A TRANSFORMER IN A QUASI-STATIC TRANSITIONAL REGIME Vasil Milovanski, Krasimir Stoyanov, Stefani Milovanska
14:10-14:20	Bachelor Degree Education in the Department of Computer Systems and Technologies of South-West University Iliya Tinyokov, Stanko Shtrakov, Emil Radev, Valeri Ivanov
14:20-14:30	Mission critical radio systems.Status and trends in Bulgaria Alexey Stefanov
14:30-17:00	<i>10th anniversary of Department of Computer Systems and Technology</i>

**Section: Chemistry
Hall 3**

Thursday, June 13	
Chairman: Prof. Mario Mitov	
13:30 13:45	NEW ADAMANTANE ANALOGUES - SYNTHESIS AND ANTIVIRAL ACTIVITY, KIRIL N. CHUCHKOV, RUMEN K. GEORGIEV, GALYA IVANOVA, ANGEL S. GALABOV AND IVANKA G. STANKOVA
13:45 14:00	QUANTUM-CHEMICAL CALCULATION OF O-H BOND DISSOCIATION ENTHALPY IN FLAVONES MARIA VAKARELSKA-POPOVSKA, ZHIVKO VELKOV
14:00 14:15	BIOLOGICAL ACTIVITY OF ADAMANTANE ANALOGUES MAYA CHOCHKOVA, BOYKA STOYKOVA, NADYA NIKOLOVA, LUBOMIRA NIKOLAEVA-GLOMB, GALYA IVANOVA, TSENKA MILKOVA
14:15 14:30	SYNTHESIS AND IR-SPECTRAL CHARACTERIZATION OF DIPEPTIDE THREONYL-METHIONINE T. DZIMBOVA, A. BUZGOVA, A. CHAPKANOV
14:30 14:45	SYNTHESIS AND STRUCTURAL CHARACTERIZATION OF Jane Bogdanov
14:45 15:00	GENERATION AND SELECTION OF LIKELY ACTIVE CONFORMERS OF METAL COMPLEXES WITH AMINO ACID (PHENYLALANINE), VIKTORIA TRIFONOVA, NENKO HALACHEV, KRASIMIR VASILEV, YANA KOLEVA
Coffee break	
	Chairman: Assoc. Prof. Petko Mandjukov
15:30 15:45	SYNTHESIS AND DEOXYGENATION OF 1,1'-DIARYL-2,2'-SPIROBIINDAN-1,1'-DIOLS, JANE BOGDANOV
15:45- 16:00	HEAVY METAL COMPLEXES WITH THE AMINO ACID PHENYLALANINE, VIKTORIYA TRIFONOVA, NENKO HALACHEV, KRASIMIR VASILEV, YANA KOLEVA
16:00- 16:15	PRELIMINARY STUDY ON THE KINETICS OF THE REACTION BETWEEN ANTIOXIDANTS AND TEST RADICAL – DPPH B. REKARSKA, G. HRISTOV, S. STANIMIROV, Zh. VELKOV, P. MANDJUKOV, B. RADOEV
16:15- 16:30	THE EFFECT UNDER EXPLORATION PROPERTIES AT USE OF LOW OCTANE COMPONENT FOR OBTAINING OF CONTEMPORARY GASOLINE YORDANKA TASHEVA, ANTON PALICHEV
15:50- 16:00	THE POTENTIAL RISK OF PETROLEUM PROPYL MERCAPTAN IN THE ENVIRONMENT YORDANKA TASHEVA, YANA KOLEVA
16:00- 16:15	Mineralogical composition of atmospheric dust in Pilsen studied by X-ray powder diffraction, David Havlicek

**Section: Chemistry
Hall 3**

Friday, June 14	
Chairman: Assoc. Prof. ZHIVKO VELKOV	
13:30 13:45	INVESTIGATION OF THE MOLECULAR MECHANISMS OF HEPATOTOXICITY OF SOME DRUGS IN THE THERAPY OF AUTISM, DIANA ANGELOVA, SVETLANA GEORGIEVA, YANA KOLEVA
13:45 14:00	PROBABLE HEPATOTOXIC ACTIONS OF THE METABOLITES OF SOME DRUGS IN THE THERAPY OF AUTISM DIANA ANGELOVA, SVETLANA GEORGIEVA, YANA KOLEVA
14:00 14:15	NIW AND NIMO ELECTRODEPOSITS AS CATHODE MATERIALS FOR MICROBIAL ELECTROLYSIS CELL ELITSA CHORBADZHIYSKA, MARIO MITOV, YOLINA HUBENOVA, LORI NALBANDIAN
14:15 14:30	<i>AB INITIO</i> STUDY OF PD-AU ELECTRODEPOSITS AS ANODIC CATALYST FOR DIRECT BOROHYDRIDE ELELCTROOXIDATION GEORGI HRISTOV, ELITSA CHORBADZHIYSKA, ANTIGONI EVDOLU, LORI NALBANDIAN, NINA DIMCHEVA, YOLINA HUBENOVA, MARIO MITOV
14:30 14:45	POSSIBILITY FOR SIMULTANEOUS ELECTRICITY GENERATION AND BIOREMEDIATION BY USING <i>CANDIDA MELIBIOSICA</i> YEAST IN BIOFUEL CELL YOLINA HUBENOVA, DANAIL GEORGIEV, MARIO MITOV
14:45 15:00	LONG-TERM OPERATION OF SEDIMENT FUEL CELLS USING RIVER SEDIMENTS AND SOIL, Ivo BARDAROV, YOLINA HUBENOVA, MARIO MITOV, ALEXANDER POPOV
Coffee break	
Chairman: Assoc. Prof. Mitko Stoev	
15:30 15:45	EXTRACTION METHODS FOR SPECIATION AND QUANTIFICATION OF CR (III) AND CR (VI) FROM AQUEOUS SOLUTION, PETRANKA PETROVA, MAYA CHOCHKOVA, IRINA KARADJOVA, IVANKA DAKOVA
15:45- 16:00	STEREOELECTROCHEMISTRY OF CALIX[4]ARENES PAVEL VOJTISEK, JANA KLIMENTOVA, ALAN LISKA AND JIRI LUDVIK
16:00- 16:15	DISTRIBUTION OF LEAD IN SELECTED ANIMAL ORGANS AND TISSUES IN PROBISTIP AND ITS SURROUNDINGS SNEZANA STAVREVA-VESELINOVSKA, JORDAN ZIVANOVIK
16:15- 16:30	APPLICATION OF VIBRATIONAL SPECTROSCOPY IN CHARACTERIZATION OF MOLECULAR CRYSTALS FOR NON-LINEAR OPTICS, IVAN NEMEC
16:30 16:45	TRANSITION METAL CHROMITE NANOPARTICLES IN SILICA MATRIX. THEIR STABILITY, STRUCTURE AND MAGNETIC PROPERTIES. Jiri Plocek

Section: Physics
Hall 4

Thursday, June 13 (Physics)	
Chairman: Assoc. Prof. Luben Mihov	
13:30-14:15	ENERGY AND ENVIRONMNT I.N.STAMENOV Plenary Report
14:15-14:30	STUDY OF ^8He NUCLEI VIA NUCLEAR TRACK EMULSION R. ZH. STANOEVA, D. STOILOV
14:30-14:45	SURFACE CHARGE DISTRIBUTION FOR NON-SYMMETRICAL CONDUCTING BODY P.A. POLYAKOV, N.E. RUSAKOVA, Yu.V. SAMUKHINA, I. GIUDJENOV, M.A., TASSEV
14:45-15:00	ELIMINATION OF SINGULARITIES IN CURRENT DENSITY DISTRIBUTION PROBLEMS FOR PLAIN CONDUCTORS WITH SHARP CORNERS, T.N. GERASIMENKO, P.A. POLYAKOV, I. GIUDJENOV, M.A. TASSEV
Coffee break	
Chairman: Prof. Lubomir Pavlov	
15:30-15:45	ELECTRIC PULSE METHOD OF ROCK CRUSHING NUSSUPBEKOV B.R., STOEV M., KHASENOV A.K., BEISENBK A.ZH.
15:45-16:00	DEVELOPMENT OF ELECTRO-HYDRAULIC PULSE TECHNOLOGY OF DRILLING WELLS FOR INSTALLATION OF HEAT EXCHANGE ELEMENTS OF HEAT PUMPS K. KUSAIYNOV, N.N.SHUYUSHBAEVA, J.A.KUZHUHANOVA, B.A.AHMADIEV.
16:00-16:15	INVESTIGATION FUNCTIONAL ASYMETRY OF THE BRAIN THROUGH MESUREMENT OF ENERGY SPECTRUM OF WATER (ANTONOV'S METHOD) Stoyan Vezenkov, Krasimir Damov, Anton Antonov
16:15-16:30	IMPROVED FOUR PHOTON MIXING METHOD FOR OPTICAL FIBRE'S PARAMETERS CONTROL LUBEN MIHOV IVANOV, LUBOMIR MILCHEV KOVACHEV
16:30-16:45	COMPARATIVE STUDY ON CARBON NITRID THIN FILMS OBTAINED BY CVD AND PVD MECTHODS P. PETROV, D.DECHEV, N.IVANOV,V.KRASTEV
16:45-17:00	FPGA DEVELOPMENT BOARD FOR APPLICATIONS IN COSMIC RAYS PHYSICS IVO ANGELOV, SVETLA DIMITROVA, KRASIMIR DAMOV

Section: Physics
Hall 4

Friday, June 14	
Chairman: Assoc. Dimitrina Kerina	
13:30-13:45	POSSIBILITY FOR MEASUREMENT OF SMALL CHANGES OF LIQUID'S REFRACTIVE INDEX, RELATED TO THE CHANGES IN LIQUID'S CONCENTRATIONS LUBEN IVANOV, DIMITAR MANOLEV, DARINA KAISHEVA
13:45-14:00	EFFECT OF PARAMETRIC PROCESSES ON THE STIMULATED RAMAN SCATTERING IN FIBERS L.I.Pavlov, D.N.Kaisheva, L.M.Kovachev
14:00-14:15	EFFICIENT FREQUENCY-DOUBLER FOR ULTRAVIOLET LASER SPECTROSCOPY OF NEW NUCLEI AND IONS D.N.Kaisheva, L.I.Pavlov
14:15-14:30	ИЗСЛЕДВАНЕ ДЕЙСТВИЯТА НА ХОРАТА И ПОСЛЕДИЦИТЕ ОТ ЗЕМЕТРЕСЕНИЯТА В РАЙОНА НА ПЕРНИК ПРЕЗ 2012 ГОДИНА ЛЮБОМИР ДИРЕКОВ

Section: Geographic environment and resources
Hall 7

Thursday, June 13 (Geographic environment and resources)	
Chairman: Assoc. Prof. Krasimir Stoyanov	
13:30-13:45	TEMPERATURE ANOMALIES IN BULGARIA IN NOVEMBER 2010 AND 2011 IVAN DRENOVSKI, PENKA KASTREVA
13:45-14:00	ГЕОЭКОЛОГИЧЕСКИЙ АНАЛИЗ ГЕОЭКОСИСТЕМ ВОЛГОГРАДСКОГО ПОВОЛЖЬЯ НА ОСНОВЕ ЭКОЛОГО-ГЕОГРАФИЧЕСКОГО РАЙОНИРОВАНИЯ СЕРГЕЙ ПРЯХИН, ИВАН ДРЕНОВСКИ, ИВАН БУРЦЕВ
14:00-14:15	ГЕОЭКОЛОГИЧЕСКИЕ ПОСЛЕДСТВИЯ НЕФТЕГАЗОДОБЫЧИ В ПРЕДЕЛАХ ВОЛГОГРАДСКОЙ ОБЛАСТИ СЕРГЕЙ ПРЯХИН, ИВАН ДРЕНОВСКИ
14:15-14:30	3D MODELLING WITH OPEN SOURCE OR COMMERCIAL SOFTWARE PENKA KASTREVA, GALINA BEZINSKA
14:30-14:45	TERRITORIAL CHANGES OF THE DEGREE OF HYDROCHEMICAL CONTAMINATION ALONG RUSE LOM RIVER EMIL ZDRAVKOV, NELLY HRISTOVA
14:45-15:00	TREATMENT OF EXPIRED PESTICIDES STEFKA TSEKOVA, VESELINA DALGACHEVA
Coffee break	
Chairman: Assoc. prof. Ivan Drenovski	
15:30-15:45	THE WEAKEST REGIONS IN THE EUROPEAN UNION, THE MOST VULNERABLE IN THE NATIONAL SPACE MARIA SHISHMANOVA
15:45-16:00	ENVIRONMENTAL PECULIARITIES AND LOCAL CONDITIONS IN OSHTAVSKA STREAM BASIN MICHAIL AS. MICHAILOV, BORISLAV LAZAROV, GORAN HRISTOV
16:00-16:15	TOWARD THE DEVELOPMENT OF ECOSYSTEM SERVICES IN BLAGOEVGRAD DISTRICT MICHAIL AS. MICHAILOV, NIKOLINKA ATANASOVA, GORAN HRISTOV, MARIA PAZVANSKA, BORISLAV LAZAROV, MARGARITA DIMITROVA
16:05-16:30	SMALL AND MEDIUM ENTERPRISES AND THEIR IMPACT ON THE ENVIRONMENTAL SITUATION IN BULGARIA EMILIA PATARCHANOVA, NIKOLINKA ATANASOVA, GORAN HRISTOV, MARIA PAZVANSKA, BORISLAV LAZAROV, PLAMEN STOYANOV

Section: Ecology and environment protection
Hall 7

Friday, June 14 (Ecology and environment protection)	
Chairman: Assoc. Prof. Michail Michailov	
13:30-13:45	PRESENT DAY SMALL GLACIERS ON THE BALKAN PENINSULA EMIL GACHEV, KRASSIMIR STOYANOV
13:45-14:00	CLIMATIC CONTROLS OVER THE RECENT DEVELOPMENT OF SMALL GLACIERS ON THE BALKAN PENINSULA KRASSIMIR STOYANOV, EMIL GACHEV
14:00-14:15	PRODUCTIVE CHARACTERISTICS OF SOILS IN THE MUNICIPALITY OF YASTREBOVO, STARA ZAGORA DISTRICT BOYKO KOLEV
14:15-14:30	A conceptual viewpoint on the urban periphery. Craiova, Romania as a case study Cristina Sosea
14:30-14:45	LOCALIZATION OF FIRES IN LANDFILLS AND ILLEGAL DUMPSITES VESELINA DALGACHEVA, MARIA ATANASOVA, GORAN HRISTOV, LUYBEN ELENKOV
14:45-15:00	Fostering economical growth in a cross-border region between Bulgaria and FYROM through developing Web Geo-Services Lyubka Pashova, Penka Kastreva, Bashkim Idrizi
Coffee break	
Chairman: Assoc. Prof. Boyko Kolev	
15:30-15:45	ACCIDENTS AT THE TRANSPORT OF DANGEROUS GOODS ON ROAD IN THE TERRITORY OF BULGARIA LUYBEN ELENKOV, VESELINA DALGACHEVA, BORISLAV LAZAROV
15:45-16:00	Radical ideas in ecology Nikolai Mihailov
16:00-16:15	Zoogeography, protection and conservation status of the herpetofauna in the city of Blagoevgrad Alexander Pulev, Lidia Sakelarieva
16:15-16:30	Biogeography Division of Bulgaria, Alexander Pulev, Krasimir Stoyanov, Galina Bezinska, Lidia Sakelarieva

**Section: Methodology in Education
Conference Hall**

Thursday, June 13	
Chairman: Assoc. Prof. Penka Bozarova	
13:30-13:45	CHEMISTRY EXPERIMENTS IN SCHOOL AND INTERACTIVE WHITEBOARD, VELICHKA DIMITROVA, ILIANA ATANASOVA
13:45-14:00	Prime numbers in the subsets of a set Adili Arto, Beta Dhorì, Milo Eljona
14:00-14:15	PRACTICAL APPLICATION ASPECT OF PROFESSIONAL COMPETENCES OF FUTURE TEACHERS SVETLANA ANGELOVA
14:15-14:30	HARMFUL FOOD ADDITIVES – A HANDBOOK FOR THE USER SIMEON MANOV, VELICHKA DIMITROVA, STEFAN MANEV
14:30-14:45	INTERACTIVE LEARNING IN PROGRAMMED TEACHING OF THE SUBJECT “BASED OF NATURE SCIENCE” AT FACULTY OF EDUCATIONAL SCIENCE– R MACEDONIA SNEZANA STAVREVA-VESELINOVSKA, SONJA PETROVSKA
	Coffee break
Chairman: Assoc. Prof. Velichka Dimitrova	
15:00-15:15	SOME PECULIARITIES OF TEACHING PHYSICS AT THE NATURAL SCIENCES AND MATHEMATICS HIGH SCHOOLS IN BULGARIA AND SWITZERLAND VIOLETA VAKOVA, SAMUEL BYLAND
15:15-15:45	THE SCIENTIFIC ESSAY AS A METHOD OF TEACHING PHYSICS AND ASTRONOMY IN THE SECONDARY SCHOOL, GEORGI MALCHEV
15:45-16:00	COMPILATION AND APPROBATION OF AN ELECTRONIC ENGLISH-BULGARIAN DICTIONARY OF BILINGUAL TEACHING IN CHEMISTRY AND ENVIRONMENTAL PROTECTION Yuliana Terziyska
16:00-16:15	ИНТЕГРИРАН УРОК ПО ХИМИЯ И ОПАЗВАНЕ НА ОКОЛНАТА СРЕДА И ИНФОРМАЦИОННИ ТЕХНОЛОГИИ, STEFKA MIHAYLOVA
16:15-16:30	ТЕМАТА ЗА РАСИТЕ– ВЪЗМОЖНОСТ ЗА ПОВИШАВАНЕ ИНТЕРЕСА И МОТИВАЦИЯТА НА УЧЕНИЦИТЕ, MARIYA TODOROVA VESELINSKA
16:30-16:45	ИНФОРМАЦИОННИТЕ ТЕХНОЛОГИИ В ПОМОЩ НА УЧИТЕЛЯ ПО ХИМИЯ И ОПАЗВАНЕ НА ОКОЛНАТА СРЕДА, ALEKSANDRA SHEKERLIYSKA