



PROGRAMME

OF

XIV NATIONAL CONFERENCE

WITH INTERNATIONAL PARTICIPATION

"NATURAL SCIENCES'2016"

VARNA

2016



ORGANIZING COMMITTEE

CHAIRMAN:

Prof. Dr. Dobromir Enchev, PhD, DSc – Dean of Faculty of Natural Sciences

MEMBERS:

Prof. Dr. Valerij Christov, PhD, DSc

Prof. Dr. Tsvetelva Ivanova, PhD

Prof. Dr. Sonya Dokova, PhD

Prof. Dr. Stela Dermandjieva, PhD

TECHNICAL SECRETARIES

Sevelina Stoyanova

Galya Marinova



30.09.2016 г.

12.00 – 19.00 Registration

01.10.2016 г.

8.00 – 9.00 Registration

9.00 – 9.30 Opening Ceremony

9.30 – Session Proceedings and Poster Session

10.30 – 11.00 Coffee Break

19.30 – Conference Dinner

02.10.2016 г.

9.30 – Closing Ceremony



SECTION

NANOSCIENCES, NEW MATERIALS AND TECHNOLOGIES

01. 10. 2016

Chairman: *Prof. Dr. Valerij Christov, PhD, DSc*

Secretary: *Assist.-Prof. Dr. Ismail Ismailov, PhD*

09:30-09:45

Gulsah Celik.

09:45-10:00

Descriptor Fingerprints and Their Application to Wine Clustering and Discrimination.

I. P. Bangov¹, M. N. Moskovkina¹, B. P. Stojanov².

¹*Konstantin Preslavsky University of Shumen, Faculty of Natural Sciences, Inorganic Chemistry Chair,*

²*Konstantin Preslavsky University of Shumen, Faculty of Mathematics & Informatics, Department of Computer Informatics, 115 Universitetska Str., Shumen 9712, Bulgaria, E-mail: ivan.bangov@gmail.com*

10:00-10:15

Thermodynamic Chemical Equilibrium Modeling of Geochemical Systems: Theory and Practice

Christomir Christov

Konstantin Preslavsky University of Shumen, Faculty of Natural Sciences, Department of Chemistry

10:15-10:30

Implementing Interactive Teaching Methods for 9th Grade

Organic Chemistry Classes

Ivaylo Traykov, Petinka Galcheva

Konstantin Preslavsky University of Shumen, Faculty of Natural Sciences, 115, Universitetska St, e-mail: pgalcheva@abv.bg

10:30-10:45

Physico-chemical properties of Cr or Co doped Bi₂Mo₂O₉

P. Petkova¹, G. Celik Gul², P. Vasilev¹, V. Altanyan¹ and Tz. Tzenkov¹

¹*Konstantin Preslavsky University of Shumen, Faculty of Natural Sciences, Department of Experimental Physics, 115 Universitetska street, 9700 Shumen, Bulgaria, E-mail: Petva232@abv.bg*

²*Department of Chemistry, Balıkesir University, Turkey*

Email: gulsahcelik@balikesir.edu.tr

10:45-11:00

Study of magnetic behavior of Co₃O₄

P. Petkova, V. Altanyan, Tz. Tzenkov

Konstantin Preslavsky University of Shumen, Faculty of Natural Sciences, Department of Experimental Physics, 115 Universitetska street, 9700 Shumen, Bulgaria, E-mail: Petva232@abv.bg



11:00-11:15

Synthesis of 4-Heteroatom-functionalized

Allenecarboxylates and Study of their Electrophilic Reactions

Ivaylo D. Parushev, Ivaylo K. Ivanov, Valerij Ch. Christov

Konstantin Preslavsky University of Shumen, Faculty of Natural Sciences

Department of Organic Chemistry & Technology, 115 Universitetska St., 9712 Shumen, E-

mail: parushev.chem@abv.bg

11:15-11:30

Synthesis and Cyclization of Phosphorylated 3-(b-Hydroxy)allenes with Protected and Unprotected Hydroxy Group

Hasan Hasanov, Bogdana Liubenova, Ivaylo Ivanov, Valerij Christov

Konstantin Preslavsky University of Shumen, Faculty of Natural Sciences

Department of Organic Chemistry & Technology

115 Universitetska str., 9712 Shumen

E-mail: hasi__@abv.bg

11:30-12:30

Coffee Break

Poster Section

Smart Foam

Dilyana Ivanova-Stancheva

Konstantin Preslavsky University of Shumen, Faculty of Natural Sciences, Shumen 9712, 115

Universitetska St., E-mail: d.ivanova@shu.bg

Fishlipids as a valuable sources of Polyunsaturated Fatty Acids

Albena Merdzhanova¹, Ivaylo Ivanov², Lyubomir Makedonski¹

¹*Medical University of Varna, Faculty of Pharmacy, Department of Chemistry, 55 Marin Drinov St., 9000 Varna, a.merdzhanova@gmail.com*

²*Konstantin Preslavsky University of Shumen, Faculty of Natural Sciences, Department of Organic Chemistry & Technology, 115 Universitetska str., 9712 Shumen*

Cyclization Reactions of Phosphorylated Vinylallenes

Ivaylo Ivanov, Valerij Christov

Konstantin Preslavsky University of Shumen, Faculty of Natural Sciences

Department of Organic Chemistry & Technology, 115 Universitetska str., 9712 Shumen, E-

mail: iivanov@shu.bg

Synthesis, Reactions of Electrophilic Cyclization of Phosphorylated a-Hydroxyallenes

Ismail Ismailov, Ivaylo Ivanov, Valerij Christov

Konstantin Preslavsky University of Shumen, Faculty of Natural Sciences

Department of Organic Chemistry & Technology, 115 Universitetska St., 9712 Shumen, E-

mail: ismail78@abv.bg

Antioxidant Activity and Phenolic Acids Pprofile of Six Edible Flowers

Nadezhda Petkova¹, Ivanka Petrova², Radka Vrancheva³, Ivan Ivanov¹

¹*Department of Organic Chemistry, University of Food Technologies, Plovdiv, Bulgaria*

²*Department of Catering and Tourism, University of Food Technologies, Plovdiv, Bulgaria*



³Department of Analytical Chemistry, University of Food Technologies, Plovdiv, Bulgaria, e-mail: petkovanadejda@abv.bg

Design of Inulin Esters with Potential Antimicrobial Activity

Gergana Gencheva¹, Nadezhda Petkova¹, Yulian Tumbarski², Panteley Denev¹

¹Department of Organic Chemistry, University of Food Technologies, Plovdiv, Bulgaria

²Department of Microbiology, University of Food Technologies, Plovdiv, Bulgaria, e-mail: petkovanadejda@abv.bg

Optimization of biologically active substances extraction process from *Potentilla reptans* L. aerial parts

Vyara Borisova Lincheva, Ivan Georgiev Ivanov

University of Food Technologies, Department of Organic chemistry, 26 Maritza Blvd., Plovdiv, 4002, Bulgaria

E-mail: ivanov_ivan.1979@yahoo.com

Implementing Interactive Teaching Methods for 9th Grade

Organic Chemistry Classes

Ivaylo Traykov, Petinka Galcheva

Konstantin Preslavsky University of Shumen, Faculty of Natural Sciences, 115, Universitetska St, e-mail: pgalcheva@abv.bg

Investigation of crystal structure of Pt(II) complex with pyridinyl sulfonamide

Nicolay Dodoff¹, Stanislav A. Donchev, Tamara Pajpanova

Konstantin Preslavsky University of Shumen, Faculty of Natural Sciences

Department of Inorganic Chemistry, 115 Universitetska St., 9712 Shumen, E-Mail: stanislav_7_2_@abv.bg

Covalent immobilization of antibodies on the QCM-resonator

M. P. Slavova^{1,2,3*}, R. T. Georgieva-Nikolova⁴, C. Cristov⁴, M. M. Nikolova⁵

¹Institute of Electrochemistry and Energy Sources, Bulgarian Academy of Science, Sofia, Bulgaria, E-Mail: mslavova@bas.bg

²Department of Machine Elements and Chemistry, Faculty of Transport Management, Todor Kableshev University of Transport, Sofia, Bulgaria

³Konstantin Preslavsky University of Shumen, Faculty of Natural Sciences

Department of Organic Chemistry & Technology, 115 Universitetska St., 9712 Shumen,

⁴Konstantin Preslavsky University of Shumen, Faculty of Natural Sciences

Department of Inorganic Chemistry and Chemical Education, 115 Universitetska str., 9712 Shumen, Bulgaria

⁵Middlesex University, School of Health and Education – London, United Kingdom

Comparative Screening of Total Phenolic Content, Reducing Power

and Antioxidant Activity in some Bulgarian Plants

Aneta Popova

Effect of temperature on the copigmentation interaction between strawberry anthocyanins and caffeic acid

Ivalina Petrova¹, Vasil Shikov², Vanya Gandova¹, Kiril Mihalev², Dimitar Dimitrov¹



01.09.2016г.

Section
Biomedicine and Quality of Life
And

Biodiversity, Bioresources and Ecology

Председател: Prof. Tsveteslva Ivanova, Ph.D.

Секретар: As. Masha Radoslavova

9,30-9,50 Berna Hristova, AsyaDragoeva, Vanya Koleva, ZheniDimitrova. Stevia rebaudiana (Bertoni) Bertoni – a linkage between healthy foods and disease prevention.

9,50-10,10 Asya Dragoeva, Zheni Dimitrova, Vanya Koleva, Lora Georgieva, Mihail Mihaylov. ALLELOPATHY IN SALVIA L. SPECIES.

10,10-10,30 Zheni Dimitrova, Maria Kaschieva, Virdzhinia Encheva Orchids in Bulgaria.

10,30-10,50 Krasimira Jeleva, Rositsa Davidova, Maria Boycheva. Diagnosis of knowledge of students for biotic factors of the education process in "Biology and health education", IX grade

10,50-11,10 Irena Mihova, Maria Boycheva, Rositsa Davidova. THE ROLE OF THE INTEGRAL APPROACH AND CROSS-CURRICULAR LINKS FOR INCREASING THE EFFECTIVENESS OF TEACHING BIOLOGY AND HEALTH EDUCATION IN 9TH GRADE

11,10-11,30 Svilen Raikov, Krasimira Tanova. Results of the study of excoriosis of grapevine / *Phomopsis viticola*/ in the region of the village of Dragoevo, the district of Shumen

11,30-11,50 Silviya Marinova, Maria Boycheva, Rositsa Davidova. INTERACTIVE METHODS AND THE POTENTIAL OF THEIR IMPLEMENTATION OF THE EDUCATION PROCESS IN "BIOLOGY AND HEALTH EDUCATION", VIII GRADE WITH THE PURPOSE OF HEALTH EDUCATION OF STUDENTS.

11,50-12,10 Mariyana Stiliyanova. UNCERTAINTY IN RIVER WATER

12,10-12,30 Mariyana Stiliyanova. IMPACT INDICATORS POLLUTING RIVER WATER



Poster section

01.09.2016r.

Biomedicine and Quality of Life

And

Biodiversity, Bioresources and Ecology

11.30 – 12.00

Председател: Prof. Tsvetelva Ivanova, Ph.D.

Секретар: As. Masha Radoslavova

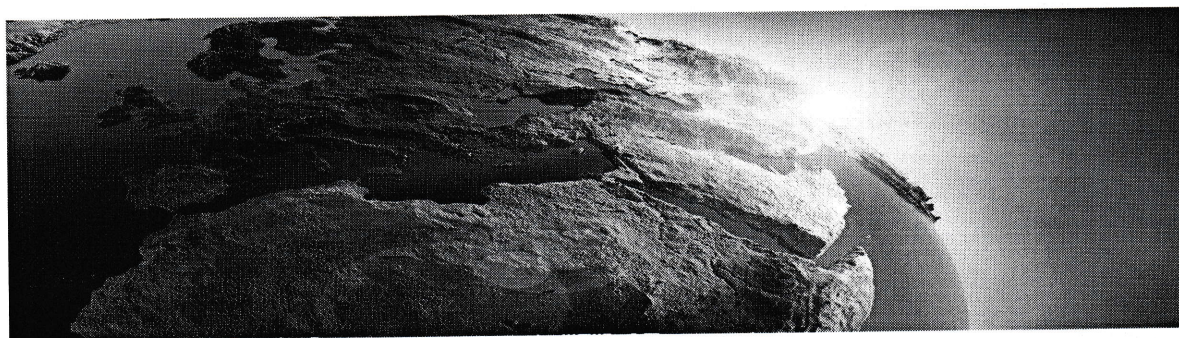
M. Rogova, Zh. Yordanova, D. Dragolova, M. Zhiponova, Ant. Pascaleva, Veneta Kapchina-Toteva. Comparative analyzes of some flavonoid compounds in *in vivo* and *in vitro* cultivated *Achillea thracica* Velen. Plants.

S.Ibrjamova, K. Tachev, R. Ivanov, Ignatova-Ivanova Ts. Investigation of the biotechnological parameters of a strain *Lactobacillus fermentum* S8, cultivated on different carbohydrates.

Yulian Tumbariski and Desi Vurgolomova. *Campylobacter jejuni* - a major causative agent of food intoxications (a review).

Masha Radoslavova, Ralitsa Andreeva. Research on the sleep duration of adolescent students at Secondary School "Chernorizets Hrabar" in the town of Veliki Preslav (Bulgaria).

Albena Alexandrova, Nikolay Zaekov, Lubomir Petrov, Borislav Bozhkov. Nutritional status in short-term overtraining boxers. National Sports Academy "Vassil Levski".



Section

Climate Changes, Risks and Natural Resources

1.10.2016

moderator: PROF. STELA DERMENDZHIEVA, PHD

11.00 - 11.15

Assoc. Prof. Rositsa VLADEVA, Ph.D.

*„Episkop Konstantin Preslavski” University of Shumen, Faculty of Natural Sciences,
Department “Geography and Methodology of Teaching Geography”, Bulgaria*

EXPECTATIONS FROM THE EDUCATIONAL REFORM OF THE GEOGRAPHY IN
SCHOOL

11.15 - 11.30

Prof. Stela DERMENDZHIEVA, Ph.D, PhD student Irena RADEVA

*“St. Cyril and St. Methodius” University of Veliko Tarnovo, Department „Geography”,
Bulgaria*

CLIMATE CHANGES, RISKS AND NATURAL RESOURCES - GEOGRAPHICAL
ASPECTS OF FORMATION OF SKILLS THROUGH THE APPLICATION OF IT
TECHNOLOGY

11.30 - 11.45

Prof. Stela DERMENDZHIEVA, Ph.D, PhD student Semra NEJDET

*„Episkop Konstantin Preslavski” University of Shumen, Faculty of Natural Sciences,
Department “Geography and Methodology of Teaching Geography”, Bulgaria*

CLIMATE CHANGE, RISKS AND NATURAL RESOURCES DIDACTIC ISSUES OF
EDUCATIONAL CONTENT GEOGRAPHY OF BULGARIA AND THE WORLD IN 9TH
AND 10TH GRADE



11.45 - 12.00

Prof. Atanas DERMENDZHIEV, PhD

"St. Cyril and St. Methodius" University of Veliko Tarnovo, Department „Geography”, Bulgaria

SOCIO-CULTURAL GEOGRAPHY - A SYSTEMATIC APPROACH AND POTENTIAL

12.00 - 12.15

Prof. Tzanko TZANKOV, Assoc. Prof. Svetla STANKOVA, PhD, Rosen ILIEV *"Neofit Rilski" – Blagoevgrad, Faculty of Mathematics and Natural Sciences, Department of Geography and Environment Protection, „Episkop Konstantin Preslavski" University of Shumen, Faculty of Natural Sciences, Department "Geography and Methodology of Teaching Geography", Bulgaria*

MORPHOSTRUCTURE OF THE SAKAR AND STRANDZHA MOUNTAINS

12.15 - 12.30

Assoc. Prof. Svetla STANKOVA, PhD, Prof. Tzanko TZANKOV, Gergana HRISTOVA *„Episkop Konstantin Preslavski" University of Shumen, Faculty of Natural Sciences, Department "Geography and Methodology of Teaching Geography", Bulgaria*

MORPHOSTRUCTURAL INVESTIGATION OF THE ELENA HILLS

12.30 - 12.45

Ivalena VULCHEVA-GEORGIEVA, PhD, Assoc. Prof. Svetla STANKOVA, PhD *„Episkop Konstantin Preslavski" University of Shumen, Faculty of Natural Sciences, Department "Geography and Methodology of Teaching Geography", Bulgaria*

GEOMORPHOLOGY, CONSTRUCTION AND DEVELOPMENT OF THE BATOVA LIMAN



**SECTION
TOURISM**

01. 10. 2016

Chairman: Professor Ph.D. Sonya Dokova

Secretary: Assistant Sevdjan Sabrieva

09:30-09:45

Възможности за развитие на алтернативни форми на туризъм в област Бургас

Professor Ph.D. Sonya Dokova

Bishop Konstantin Preslavski University of Shumen

Natural Sciences Faculty, Department of Tourism

E-mail: sonya_dokova@abv.bg

09:45-10:00

Развитие на поклоннически туризъм в Североизточен регион на България

Assoc. Prof. Ekaterina Keremidarska

Bishop Konstantin Preslavski University of Shumen

Natural Sciences Faculty, Department of Tourism

Email: e_keremidarska@abv.bg

10:00-10:15

Предназначение на туристическия бранд

Assoc. Prof. Dora Kabakchieva

Bishop Konstantin Preslavski University of Shumen

Natural Sciences Faculty, Department of Tourism

Email: dora_kabakchieva@shu.bg

11:15-12:30

Coffee Break

Poster Section

10:15-10:30

Cultural tourism in Varna Region – specifics and prospects for development

Assistant Sevdjan Sabrieva, assoc. prof. PhD Vanya Vasileva

Bishop Konstantin Preslavski University of Shumen

Natural Sciences Faculty, Department of Tourism

Email: sevcans@abv.bg

10:30-10:45

**Economic Activity, Employment and Unemployment of the Population
in Socio-Economic Territorial Distribution Shumen, Novi Pazar, Kaspichan and Veliki
Preslav During the 1992-2011 Period**

Assist. Prof. Ivaylo Vladev

Bishop Konstantin Preslavski University of Shumen

Natural Sciences Faculty, Department of Tourism

Email: i.vladev@abv.bg



10:45-11:00

Диагностика на соционическия темперамент на личността и създаване на психологически портрет на завършващите специалност "Туризм" в ШУ „Епископ К. Преславски“

Assist. Prof.Ph.D.Milena Stoyanova

Bishop Konstantin Preslavski University of Shumen

Natural Sciences Faculty, Department of Tourism

Email: stoyanovamilena@abv.bg