



**PROGRAM**  
**OF**  
**NATIONAL CONFERENCE**  
**"NATURAL SCIENCES 2024"**  
**(NCNS2024)**



**SHUMEN**  
**2024**



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Prof. Dimcho Zahariev, PhD  
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The program is preliminary and may undergo corrections and additions during the course of the conference.



**27 September 2024**

**14:00 – 16:00 Registration – Rectory, floor 3, auditorium 307**

**28 September 2024**

**8:00 – 8:50 Registration – Rectory, floor 2, Auditorium 202**

**9:00 – 9:10 Opening Ceremony – Auditorium 202**

### **PUBLIC LECTURE**

**9:10 – 9:30** Assoc. Prof. Lyubomira Veleva PhD, „**Scanning transmission electron microscopy (STEM) applications in biology, chemistry and physics**“, *Shumen University “Konstantin Preslavski”*

### **FIRST SESSION**

Moderator: **Prof. Tsveteslava Ivanova, Ph.D**

Auditorium: **202 (Rectorate)**

**9:30 – 9:40** Stefan Valkov, Georgi Kotlarski, Maria Ormanova, Borislav Stoyanov, **Electron-beam surface treatment of high-damping alloys**, *Institute of electronics “Acad. Emil Djakov”, Bulgarian Academy of Sciences*

**9:40 – 9:50** Emilia Stoimenova, Ivan Minkov, Albena Jordanova, Asya Tsanova, Vishnya Stoyanova, Ivo Grabchev, **Surface interaction between synthesized dendrimers and model lipid membranes**, *Sofia University “St Kliment Ohridski” - Faculty of Medicine*

**9:50 – 10:00** Silvia Mladenova, Viliana Chieva, Engyul Kichukova, **The impact of the COVID-19 pandemic on the body nutritional status of children and adolescents from the Western Rhodopes region, Bulgaria**, *Plovdiv University “Paisii Hilendarski”*

**10:00 – 10:10** George Alexandrov, **Biological diversity - endangered animal species and the impact of climate change on them**, *SU “Hristo Botev” - city of Ruse*

**10:10 – 10:20** Stanislav Ivanov, **Impact of integrated plant protection on yields and sustainability of agricultural crops**, *Shumen University “Konstantin Preslavski”*

**10:20 – 10:30 Coffee Break – Rectory, floor 2, Auditorium 202**

**10:30 – 10:40** Stefany Toshkova, Polina Todorova, Sevginar Ibrjamova, Darina Buchvarova, Nikolay Natchev, Tsveteslava Ignatova-Ivanova, **Comparison of Black Sea fish Safrid and Zargan regarding the type and number of microplastics**, *Shumen University “Konstantin Preslavski”*

**10:40 – 10:50** Lidiya Taneva, Dimcho Zahariev, Dimitar Doychev, **Enviromental status dependency of tje aquatic vegetation from biogenic elements in the “Dolna Luda Kamchia” PA.**, *Shumen University “Konstantin Preslavski”*



**10:50 – 11:00** Ivan Popov, **Ground and surface water in Northeast Bulgaria, *The Unit of scientists - Varna, section "Sea science and technologies"***

**11:00 – 11:10** Milen Penerliev, **Sustainable Development, Pandemics, and Tourism - Intersections, *Shumen University "Konstantin Preslavski"***

**11:10 – 11:20** Iliyana Peneva, **Physics and astronomy lesson with Artificial Intelligence, *Vasil Drumev primary school Varna***

**11:20 – 11:30** Seliha Lyoteva, Martin Stoyanov, Asya Dragoeva, Zheni Dimitrova, Vanya Koleva, **A preliminary ethnobotanical survey on the use of medicinal plants for COVID-19 in Bulgaria, *Shumen University "Konstantin Preslavski"***

**11:30 – 12:30 Lunch – Rectory, floor 3**

### POSTER SESSION

**12:30 – 13:10 Rectory, floor 3**

**P1** Elena Dzhambazova, Dimo Angelov, Borislav Assenov, Daniela Pechlivanova, **Naloxone-reversible antinociception induced by angiotensin 1-7 and its analogues, *Sofia University St. Kliment Ohridski, Faculty of Medicine, Bulgarian Academy of Sciences, Institute of Neurobiology***

**P2** Borislav Assenov, Paraskevas Pakataridis, Iliana Sorotou, Filippos Chelmiss, Elena Dzhambazova, Daniela Pechlivanova, **Can blocking of angiotensin-converting enzyme type 2 modulate motivational behavior and nociception in mice, *Sofia University St. Kliment Ohridski, Faculty of Medicine, Bulgarian Academy of Sciences, Institute of Neurobiology***

**P3** Turhan Tahir, Dimitar Vasilev, **Black rot of grapes *Guignardia bidwellii* (Ell. Viala Ravaz) In the area of the city of Burgas under the conditions of integrated plant protection, *Shumen University "Konstantin Preslavski"***

**P4** Radostina Vasileva-Tcankova, Leman Hasanova, **Renewable energy. Renewable energy sources. Renewable energy in the home, *Shumen University "Konstantin Preslavski"***

**P5** Radostina Vasileva-Tcankova, Leman Hasanova, **The Future of Renewable energy. Green energy. Environmental assessment, *Shumen University "Konstantin Preslavski"***

**P6** Avgustina Danailova, Svetozar Stoichev, Nikolay Kalaydzhiev, Elena Zlatareva, **Pearson's correlation coefficient as an indicator for development of pathological conditions, *Institute of Biophysics and Biomedical Engineering, BAS, Sofia, Bulgaria, Multiprofile Hospital for Active Treatment in Neurology and Psychiatry "Sveti Naum", Sofia***



**P7** Hasan Hasanov, Ismail Ismailov, Ivaylo Parushev, Husein Halil, Serkan Mumun, Yordanka Ivanova, Ivaylo Iliev, Ivaylo Ivanov, Valerij Christov, **Cyclization Reactions of Phosphorylated Hydroxyallenes**, *Shumen University "Konstantin Preslavski"*

**P8** Stoyan Karakashev, Dilyana Ivanova - Stancheva, Irina Yotova, Stanislav Donchev, **Inorganic salts as chemical foam suppressors**, *Shumen University "Konstantin Preslavski"*

**P9** Fatme Padikova, Georgi Kotlarski, Borislav Stoyanov, Maria Ormanova, Vladimir Dunchev, Stefan Valkov, **Synthesis, structure and properties of titanium borides and carbides prepared mean electron beam technologies**, *Academician Emil Djakov Institute of Electronics, Bulgarian Academy of Sciences, Technical University of Gabrovo*

**P10** Georgi Kotlarski, Fatme Padikova, Maria Ormanova, Stefan Valkov, **Wire arc additive manufacturing of aluminum alloy components in the cold arc pulse mode**, *Institute of electronics "Acad. Emil Djakov" - BAS, Technical University – Gabrovo*

**P11** Karamfil Kalchev, Yanko Yordanov, Ivaylo Ivanov, Ismail Ismailovlov, **Study of inhibit tyrosinase activity by phosphorylated hydroxyallenes**, *Shumen University "Konstantin Preslavski"*

**P12** Daniela Nedeva, **Methods of obtaining titanium carbide coatings by electron beam technologies**, *Technical University Gabrovo*

**P13** Daniela Stoeva, Maria Ormanova, Georgi Kotlarski, Dimitar Dechev, Nikolay Ivanov, Stefan Valkov, Valentin Mateev, Iliana Marinova, **Electrical impedance characteristics of TiO<sub>2</sub> coated Cu electrodes**, *Institute of electronics "Acad. Emil Djakov" - BAS, Technical University Gabrovo, Institute of Robotics - BAS*

**P14** Klaida Doichinova, Plamena Pavlova, **The debate as an interactive method for increasing the health-sexual competences of students**, *Shumen University "Konstantin Preslavski"*

**P15** Nina Arhangelova, Seniha Salim, Reneta Velizarova, Daniela Nedeva, Lyubomira Veleva, **Investigation of radiological parameters in *Capsella bursa-pastoris* L.**, *Shumen University "Konstantin Preslavski", Technical University of Gabrovo*

**P16** Teodora Dimova, Tatyana Dimitrova, Dimitrina Radeva, **Radiation status of soils from park "Kyoshkove"**, *Shumen University "Konstantin Preslavski"*, *Научни ръководители: Assoc. Prof. Nina Arhangelova, PhD; Seniha Salim, PhD*

**P17** Vasil Vasilev, **Application of integrated plant protection in agriculture**, *Shumen University "Konstantin Preslavski"*



**P18** Kiril Valkanov, Marko Ivanov, Teodora Koynova, Tsveteslava Ivanova-Ignatova, Vanya Koleva, **Notes on the hemolytic activity of Heloderma exasperatum venom**, *Shumen University "Konstantin Preslavski"*

## SECOND SESSION

Moderator: **Assoc. Prof. Zheni Dimitrova, PhD**

Auditorium: **202 (Rectorate)**

**13:10 – 13:20** Albena Jordanova, Anelia Kostadinova, Tanya Topuzova-Hristova, Emilia Stoimenova, Asya Tsanova, Galya Staneva, Ivo Grabchev, **Destabilizing effects of newly synthesized dendrimers after interaction with fibroblasts**, *Sofia University "St. Kliment Ohridski"*

**13:20 – 13:30** Klara Kostadinova, **Medical geography of Bulgaria**, *VTU "St. St. Kiril and Metodi"*

**13:30 – 13:40** Vanya Vsileva, Dora Kabakchieva, Sevdzhan Sarieva, **Evaluation of the tourist functions of protected areas: A case study of Shumen Plateau Nature Park**, *Shumen University "Konstantin Preslavski", DIQCE - Varna*

**13:40 – 13:50** Stoyna Ilieva, **Project-based training on the topic "Light. Physical, physicochemical and physcobiological aspects, problems and solutions"**, *Vocational High school of Economics "Dr. Ivan Bogorov" (Varna)*

**13:50 – 14:00** Yonka Nikolova, **Mutual teaching geography class- practice**, *OU "Sv. Kl. Ohridski", Novi Pazar*

**14:00 – 14:10** **Coffee Break – Rectory, floor 2, Auditorium 202**

## PLENARY SESSION

**14:10 – 14:30** Stanimira Deleva, Angel Ivanov, **Cave Age 2.0 Sustainable and Efficient Monitoring of Caves Using High-TechTools and Citizen Science**, *National Museum of Natural History, Bulgarian Academy of Sciences, Speleoclub Burgas-NEPIAST NGO*

**14:30 – 15:00** prof. Natalia Dushkina, **Structural colors, origins and applications**, *Millersville University, Millersville, USA*

## THIRD SESSION

Moderator: **Prof. Dora Kabakchieva, PhD**

Auditorium: **202 (Rectorate)**

**15:00– 15:10** Radka Tomova, Svetla Asenova, Bisera Atanasova, Rodina Nestorova, Mariana Nikolova, Miglena Slavova, **Correlation and regression analysis of bone density, levels of biogenic elements and radical scavenging activity of serum in patients with reduced bone density**, *Medical University - Pleven, Medical University of*



*Sofia, Rheumathology Center "Saint Irina", Department of Mental Health, Social Work and Integrative Medicine, Middlesex University, London, United Kingdom, Institute of Electrochemistry and Energy Sources, BAS, Bulgaria*

**15:10– 15:20** Yordanka Eneva, Stoyana Ilieva, **My paths to a healthy lifestyle**, *Medical University "Prof. Dr. Paraskev Stoyanov" Varna, Association "I Can, I Know, I Create"*

**15:20– 15:30** Nidelina Petkova, Dilyana Ivanova-Stancheva, Stoyan Karakashev, **Thinning kinetics of foam films stabilized with cationic and anionic surfactant and tracking the ion specific effect of foam films by addition of inorganic electrolyte**, *Shumen University "Konstantin Preslavski"*

**15:30– 15:40** Gratsiela Yordanova, Dimitar Doychev, Lidiya Taneva, **Lutra lutra monitoring along the Luda Kamchia River**, *Shumen University "Konstantin Preslavski"*

**15:40– 15:50** Sevdzhan Sabrieva, **Protected areas in the Burgas Black Sea region - current state and prospects for tourism development**, *Shumen University "Konstantin Preslavski", DIQCE - Varna*

### **PUBLIC LECTURE**

**15:50 – 16:10** Assoc. Prof. Sevdzhan Sabrieva, PhD, „**Protected areas in the Rila - Pirin - current state and prospects for tourism development**“, *Shumen University "Konstantin Preslavski"*

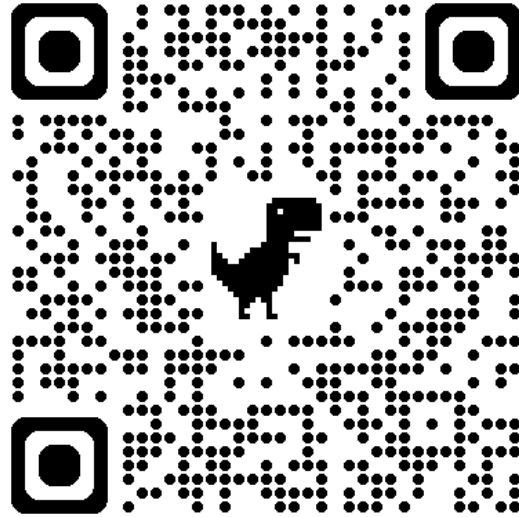
**16:10 – Closing Ceremony**

**Auditorium: 202 (Rectorate) of XXII NATIONAL CONFERENCE "NATURAL SCIENCES 2024"**

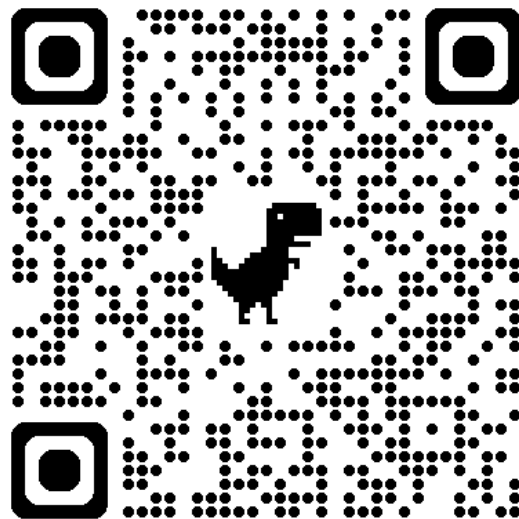
**19:00 – Conference Dinner**



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