

CONFERENCE PROGRAM

INTERNATIONAL CONFERENCE

„CLEAN NATURE FOR HEALTH “

10 - 13 September 2023, Velingrad, Bulgaria

Sunday, 10th September 2023

16:00 – 18:00 REGISTRATION

Monday, 11th September 2023

09:00 – 10:30 REGISTRATION

10:30 – 10:35 WELCOME WORDS: Prof. DSc. Pavlina Dolashka

PRESENTATION OF THE OFFICIAL GUESTS

10:35 – 11:00

Chairman: Prof. Dr. Vanya Kurteva

- **KRASIMIR VALCHEV**, Chairman of the "Commission on Education and Science" in the Parliament
- **Prof. Dr. GALIN TZOKOV**, Minister of Education and Science, Republic of Bulgaria
- **Prof. DSc. GEORGI VAISILOV**, Executive Director and Head of the Executive Agency "Programme Education" (The Governing Body of OP " Science and Education for Smart Growth")
- **Prof. Dr. KOSTADIN KOSTADINOV**, adviser of the "Commission on Education and Science" in the Parliament of Republic of Bulgaria
- **GEORGI IVANOV**, Chief Expert at the Executive Agency "Programme Education"
- **MARIA DENIZOVA**, Chief Expert at the Executive Agency "Programme Education"
- **Dr. KOSTADIN KOEV**, mayor of Velingrad municipality
- **BISER MADZIROV**, mayor of Draginovo municipality
- **Dr. ILZA POPOVA**, Director, Specialized Hospitals for Rehabilitation-Velingrad
- **ANNI PETKOVA**, Director, SS "Stoyan Zaimov", Pleven
- **KATYA TRIFONOVA**, Deputy Director, biology and health education teacher, SS "Stoyan Zaimov", Pleven

PRESENTATION OF THE SPONSORS OF THE CONFERENCE

Chairman: Prof. DSc. Pavlina Dolashka

11:00–11:10 "DIACHIM" JSc., Dr. Tanya Rasheva "Innovative solutions in ecology"

11:10–11:20 "LABIMEX" PLC, Maria Angelova, "Sample preparation - basis of accurate analysis"

11:20–11:30 "AQUACHIM" PLC, Dr. Lydia Mihaylova, "Contemporary laboratory solutions for a clean environment and health"

11:30–11:40 "ALEKS 1977" Ltd., Assoc. Prof. Dr. Aleksandar Dolashki, "When science meets business"

11:40–11:50 „T.E.A.M.“ Ltd., Konstantin Doktorov, "Microplastic pollution: a global scientific effort"

11:50–12:00 CC "Clean&Circle", Prof. Yana Topalova, "R&D&Inno achievements and perspectives of Clean&Circle"

12:00–12:10 NNP "BioActivMed", Prof. Pavlina Dolashka, "„Clean nature for health"

12:10–12:25 Assist. Alexander Dushkov, "Investigating the *in vitro* antitumor and antiproliferative potential of an *Amanita muscaria* (L.:Fr.) Hook - extract against lung and prostate cancer cell lines"

12:25–13:45 LUNCH BREAK

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SESSION 1. PLENARY LECTURES “ECOLOGY”:

Chairmen: Prof. DSc. Yana Topalova and Assoc. Prof. Dr. Roumiana Zaharieva

13:45–14:00	Prof. Dr. Valentin Nenov , “Utilization of phosphorus from wastewater and sludge”
14:00–14:15	Assist. Petar Petrov , “Mineral water and plant extracts - healing properties and potential”
14:15–14:30	Assoc. Prof. Dr. Ivanka Stoycheva , “Development of a zero-waste method of processing organic waste into useful products”
14:30–14:45	Assist. Prof. Dr. Aleksandrina Kostadinova-Slaveva , “Obtaining a soil improver through on site composting”
14:45–15:00	Assist. Dr. Savina Brankova , “Opportunities to reduce the carbon footprint of office activities and tourism”
15:00–15:15	Assist. Prof. Dr. Elena Geleva , “Assessment of the content of uranium and polonium radionuclides in drinking water from southern Bulgaria”
15:15–15:30	Assoc. Prof. Dr. Roumiana Zaharieva , “Buildings in the sustainable development context”
15:30–16:00	COFFEE BREAK

SESSION 2. PLENARY LECTURES “ECOLOGY”:

Chairmen: Prof. Dr. Valentin Nenov and Prof. Dr. Nartzislav Petrov

16:00-16:15	Prof. Dr. Eng. Andrei Sarbu , “Molecularly imprinted polymers preparation and their use for environment and health - own results”
16:15–16:30	Assoc. Prof. Dr. Irina Schneider , “Bioaugmentation during composting of garden waste”
16:30–16:45	Prof. Dr. Boyko Tsyntsarski , “Conversion of water purification sludge into carbon adsorbent and energy”
16:45–17:00	Assist. Prof. Dr. Mihaela Belouhova , “5 Years Center of Competence Clean&Circle - Fluorescence techniques based contributions to environmental biotechnologies”
17:00–17:15	Assist. Prof. Dr. Angelina Kosateva , “Applications of Raman spectroscopy for solving environmental problems”
17:15–17:30	M.Sc. Selin Kyuchyuk , “Core-Sheath and Core/Double-Sheath composite fibers prepared by single-spinneret electrospinning”

SESSION 3. POSTER PRESENTATION “ECOLOGY”:

Chairmen: Prof. Dr. Boyko Tsyntsarski and Assoc. Prof. Dr. Ivanka Stoycheva

17:30–17:35	P1. Dr. Teodor Sandu , “Hybrid bead materials based on acrylic copolymer”
17:35–17:40	P2. Sorin-Viorel Dolana, Daiana-Georgiana Mitrea , “Novel polyurethanes based on recycled PET and natural feedstock polyols for wooden artifacts protective coating”
17:40–17:45	P3. Assoc. Prof. Dr. Alexander Kroumov , “An innovative system of photobioreactors for the realization of the biorefinery concept”
17:45–17:50	P4. Assist. Prof. Dr. Martin Stefanov , “Sensitivity of photosynthesis in <i>Zea mays</i> L. and <i>Sorghum bicolor</i> L. under salt stress”
17:50–17:55	P5. Assist. Prof. Dr. Hristina Lazarova , “Photodegradation of methylene blue and crystal violet by Zr-titano silicates”
17:55–18:00	P6. PhD. St. Magdalena Bogdanova-Angelova , “Influence of the tourism industry on the environment based on the quantity and quality of wastewater in the region of Sunny Beach, Bulgaria”
18:00–18:05	P7. Assist. Prof. Dr. Ivaylo Yotinov , “Adaptation of key biofilm communities in a constructed wetland for mixed urban wastewater treatment”

18:05–18:10	P8. Assoc. Prof. Dr. Yovana Todorova , “Non-thermal plasma treatment to prevent biofilm formation and to control mature biofilm growth”
18:10–18:15	P9. Assist. Prof. Dr. Dessislava Gerginova , “Needles as novel bioindicators for pollution monitoring – an NMR study”
18:15–18:20	P10. Assoc. Prof. Dr. Ganka Chaneva , “Phycoremediation alleviates arsenate toxicity in maize plants”
18:20–18:25	P11. Assoc. Prof. Dr. Gloria Issa , “Nanostructured TiO ₂ /Mn _x O _y mixed catalysts for enhanced hydrolysis of DNA-model phosphodiester: impact of Ti/Mn ratio”
18:25–18:30	P12. Prof. Dr. Albena Alexandrova , “Microplastics in fish and shellfish from the Bulgarian Black Sea coastal zone”
18:30–18:35	P13. Georgi Georgiev , “Carbon materials for sensors in medicine and environmental application”
18:35–18:40	P14. Assist. Prof. Dr. Plamena Marinova-Dragozova , “Surface-wave-sustained argon plasma torch for reducing leachate toxicity”
18:40–18:45	P15. Prof. Dr. Dimitar Tonev , "Investigation of the natural radioactivity of mineral waters"
18:45–18:50	P16. Chemist Verzhinia Variyska , "Study of the atmospheric radioactivity in Bulgaria for the period 2019-2022"
20:00 – 23:00	OFFICIAL DINNER

Tuesday, 12st September 2023

SESSION 4. PLENARY LECTURES “HEALTH”:

Chairman: Prof. Dr. Reni Kalfin and Prof. Dr. Lyubka Tancheva

09:30 – 09:45	Prof. Dr. Reni Kalfin , “Natural products for health: prevention and treatment of experimental Parkinson’s disease with standardized <i>Helix aspersa</i> extract”
09:45 – 10:00	Prof. Dr. Lyubka Tancheva , “Neuroprotective mechanisms in the action of standardized extract of <i>Helix aspersa</i> in experimental model of Alzheimer’s type dementia <i>in vivo</i> ”
10:00 – 10:15	Ventseslav Atanasov , “Proteomic analysis of rat cortex and hippocampus in scopolamine-induced dementia of the Alzheimer type using snail extract as a neuroprotective agent”
10:15 – 10:30	Prof. Dr. Stoyan Shishkov , “Antiviral Activity of Extract from <i>Astragalus Glycyphyllos</i> L. against replication of human Coronavirus 229E and Simplex virus human alpha type 1 and 2 applied alone and in combination with Acyclovir”
10:30 – 10:45	Dr. Momchil Kermedchiev , “Natural and surgical approach in the treatment of difficult to heal and chronic wounds”
10:45– 11:00	Dr. Veronika Tsankova-Kermedchieva , “Analysis of biologically active substances from natural origin used in ophthalmology”
11:00– 11:30	COFFEE BREAK

SESSION 5. PLENARY LECTURES “HEALTH”:

Chairmen: Prof. DSc. Hristo Najdenski and Prof. Dr. Albena Alexandrova

11:30– 11:45	Assist. Prof. Dr. Ionica Deliu , “Antimicrobial and cytotoxic activities of extracts from <i>Aconitum toxicum</i> Rchb”
11:45– 12:00	Corr. Memb. Prof. DSc. Hristo Najdenski , “Antimicrobial resistance as a global health threat in the new century”
12:00 – 12:15	Assoc. Prof. Dr. Maya Zaharieva , “Antibacterial effects of combinations of snail mucus with clinically administered antibiotics”

12:15 – 12:30	Assoc. Prof. Dr. Ventsislava Petrova , “Green synthesis and characterization of Cu and Zn nanoparticles with antimicrobial properties”
12:30 – 12:45	Prof. Dr. Albena Alexandrova , “Microplastics: review of current knowledge of sources, fates and effects on ecosystem and human health”
12:45 – 14:15	LUNCH BREAK
SESSION 6. PLENARY LECTURES "HEALTH": Chairmen: Prof. DSc. Iva Ugrinova and Assoc. Prof. Dr. Ventsislava Petrova	
14:15 –14:30	Assoc. Prof. Dr. Ani Georgieva , “Assessment of the immunomodulating and anticancer activity of hemocyanins isolated from garden and marine snails in a myeloid tumor model”
14:30 –14:45	Assoc. Prof. Dr. Ivan Iliev , “Safety test BALB 3T3 NRU assay for research of natural substances”
14:45 –15:00	Assist. Dimitar Kaynarov , “Bioactive compounds with antitumor activity from marine and garden snail against bladder carcinoma and mechanism of action”
15:00 –15:15	Prof. DSc. Iva Ugrinova , “Innovative approaches in combating drug resistance in cancer treatment: from ferrocene derivative of camphor to micellar delivery systems”
15:15 –15:30	Assoc. Prof. Dr. Galina Radeva , “Soil Microbiome - a reservoir of soil health microorganisms”
15:30– 16:00	COFFEE BREAK
SESSION 7. PLENARY LECTURES "HEALTH": Chairman: Prof. Dr. Svetlozara Petkova and Prof. Dr. Reneta Toshkova	
16:00 –16:15	Assist. Alexander Tzintzarov , “Isolation, separation and purification of phytochemicals from <i>Sambucus nigra</i> berries for biological activity analysis”
16:15 –16:30	Assoc. Prof. Dr. Lyudmila Velkova , “Bioactive compounds from the mucus of the garden snail <i>Helix aspersa</i> with antimicrobial activity”
16:30 –16:45	Prof. Dr. Nikolay Vassilev , “NMR Spectroscopy in drug discovery and development from natural products”
16:45 –17:00	Assist. Karina Marinova , “Water extract of chamomile as a reducing agent in the green synthesis of metal oxide nanoparticles”
SESSION 8. POSTER PRESENTATION "HEALTH": Chairmen: Assoc. Prof. Dr. Lyudmila Velkova and Prof. Dr. Nikolay Vassilev	
17:00 –17:05	P1. Assist. Prof. Dr. Todor Bogdanov , “Surface –wave-sustained plasma source for bio-medical applications”
17:05 –17:10	P2. Assoc. Prof. Dr. Radoslav Abrashev , “Oxidative stress as a mechanism of antifungal activity of protein fractions from <i>Rapana venosa</i> ”
17:10 –17:15	P3. Assist. Prof. Dr. Eng. Ivelina Tsacheva , “Lavender oil delivery systems based on mesoporous silicate-polymer nanocomposites”
17:15 –17:20	P4. Assoc. Prof. Dr. Elina Tsvetanova , “Oral treatment of mice with a combination of D-galactose and ethanol as a new aging model”
17:25 –17:30	P5. Assoc. Prof. Dr. Maya Zaharieva , “Antiviral activity of extracts obtained from <i>Oreganum vulgare</i> L. and <i>Scenedesmus</i> spp.”
17:35 –17:40	P6. Assist. Prof. Dr. Yana Ilieva , “Preliminary in vitro toxicology tests of antimicrobial extracts and compounds from two Hypericum species”

17:40 –17:45	P7. Assist. Dr. Mila Kaleva , “Antimicrobial resistance of <i>Escherichia coli</i> Isolated from pig farms in Bulgaria”
17:45 –17:50	P8. Assist. Prof. Dr. Kamelia Hristova-Panusheva , “The combined effect of pegylated graphene oxide nanoparticles loaded with bleomycin and near-infrared irradiation treatment on HepatoCellular Cancer Cells <i>In Vitro</i> ”
17:50 –17:55	P9. PhD. St. Trayana Kamenska , “Hemolytic Activity of GO based nanoparticles loaded with bleomycin and NIR irradiated as a marker of their hemocompatibility”
17:55–18:00	P10. Assoc. Prof. Dr. Maya Zaharieva , “Antibacterial activity of hydrogels loaded with oregano oil in combination with gentamicin or ciprofloxacin”
18:00–18:05	P11. Eng. Yulia Karaivanova , “Restorative effect of zeolite on brain acetylcholinesterase activity in rats with subchronic heavy metal intoxication”
18:05–18:10	P12. Assist. Karina Marinova , "Development of novel biological nanoparticles from the mucus of the garden snail <i>Cornu aspersum</i> as antimicrobial agents"
18:10–18:15	P13. Assist. Stefan Genchev , "The Bulgarian National Cyclotron Center and the benefit of public health”

Wednesday, 13st September 2023

SESSION 9. ROUND TABLE: "Business Plan for Sustainable Development of the Clean&Circle CC" Chairmen: Prof. DSc. Pavlina Dolashka and Prof. Dr. Nartzislav Petrov	
09:30-10:00	Prof. DSc. Pavlina Dolashka, “Business Plan for Sustainable Development of IOCCP-BAS, as a Partner of The Clean&Circle CC”
10:00-11:00	DISCUSSION
11:00 - 12:00	CLOSING REMARKS AND AWARDS

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