



INTERNATIONAL CONFERENCE
„SCIENCE-INDUSTRY-SOCIETY NEXUS FOR SUSTAINABLE REGIONS“
12 - 14 JUNE 2025



Conference, organized by
University “Prof. Dr. Assen Zlatarov” – Burgas, REPUBLIC OF BULGARIA
and
Trakya University – Edirne, REPUBLIC OF TURKEY

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International Conference
Science-Industry-Society Nexus for Sustainable Regions
 12 - 14 JUNE, 2025

PROGRAMME

12.06.2025 / THURSDAY		
12:00 - 14:00		REGISTRATION AND WELCOME COFFEE
CONFERENCE OPENING CEREMONY		
14:00 - 14:10	Main Hall	<i>Bridging Science, Industry and Society: Universities as Engines of Innovation and Sustainable Regional Growth</i> PROF. HRISTO BOZOV, MD, PhD – Rector of Burgas State University “Prof. Dr. Assen Zlatarov”, Republic of Bulgaria
14:10 - 14:20		<i>The Importance of Academic Collaborations in Regional Sustainable Development</i> PROF. MUSTAFA HATIPLER, MD, PhD – Rector of Trakya University, Edirne, Republic of Turkiye
14:20 - 14:40		Greetings from official guests
PLENARY SESSION		
14:40 - 15:05	Main Hall	<i>Overview of Scientific and Research Activities at Burgas State University</i> – Assoc. Prof. Svetlana Zheleva, Vice Rector for Scientific Affairs of Burgas State University “Prof. Dr. Assen Zlatarov” <i>BlueGrowth Collabs: Achievements and Partnership Outcomes with Trakia University</i> – Assoc. Prof. Svetlana Zheleva, Vice Rector for Scientific Affairs of Burgas State University “Prof. Dr. Assen Zlatarov”
15:00 - 15:25		<i>LIFE WaterOil Project – A Success Story of the Real-Life Science–Industry–Society Nexus</i> – Venelin Marinov, Project Office Manager “Sustainable Development&LUKOIL REACH CENTRE” at LUKOIL Neftohim Burgas
15:25 - 15:50		<i>Burgas - European Capital of Culture</i> – Ruska Boyadzhieva, “BURGAS - 2032” Foundation
15:50 - 16:00		First Day Closing Remarks
16:00		NETWORKING COCKTAIL

13.06.2025 / FRIDAY						
CHEMISTRY, CHEMICAL TECHNOLOGIES, BIOTECHNOLOGIES AND ENVIRONMENTAL CHALLENGES			COMPUTER SYSTEMS AND TECHNOLOGIES		ECONOMIC GROWTH AND TOURISM	
9:30 - 9:50	Conference Room 310	Direct Synthesis of Graphene by Using Combined Electrolysis and Ultrasonic Methods D. Georgiev, I. Markovska, F. Yovkova, S. Kozarev	Conference Room 301	The Role of Artificial Intelligence in Auditing Processes and Its Effectiveness in Fraud Detection Aysun Atagan Çetin	Conference Room 303	CityRoaster: Revolutionizing Urban Tourism with Sustainable Exploration K. Muravova, S. Sotirov,
9:50 - 10:10		Ecological Technology for Conversion of Waste Biomass to Nanoporous Carbons B. Tsyntsarski, I. Stoycheva, B. Petrova, P. Dolashka, A. Kosateva, N. Petrov		Image Recognition with Deep Learning: From a Basic CNN Model to Hybrid AI Systems D. Stoyanov, S. Sotirov		The Innovation Wave: Boosting Competitiveness in Tourism S. Mirchova
10:10- 10:30		Synthesis and Physicochemical Characterization of Rhodium(III) Hydrogen Selenite K. Todorova, V. Georgieva, S. Zheleva		ChillMe: Mental Health Artificial Intelligence Voice Assistant K. Muravova, S.Sotirov		Application of Digital Technologies in the Food Industry in Bulgaria S. Ahmedova
10:30-10:50		Sustainable Valorization of End-of-Life Tires into Functional Carbon Materials: A Comparative Study of Pretreatment and Activation Pathways S. Mileva, L. Gonsalvesh, V. Georgieva, I. Tankov		From Data to Insight: An Intuitionistic Fuzzy Clustering Framework for Evaluating School Performance in Bulgaria P. R. Petrov, V. Bureva		Türkiye-Bulgaria Relations within the Context of Western Hemisphere Özdemir Akbal
10:50-11:10		BET surface area analysis of carbon adsorbent from peach stones using the Autosorb iQ-MP B. Petrova, I.Stoycheva, B. Tsyntsarski, A.Kosateva, N. Petrov, P. Dolashka		Intelligent Control of Programmable Drones: An Intuitionistic Fuzzy Approach for Synchronous Coordination Zh. Atanasova, D. Drosev, M. Peychev, E. Sotirova, V. Georgieva, S. Sotirov		
11:10-11:30	Coffee Break/Poster Sesion		Coffee Break/Poster Sesion		Coffee Break/Poster Sesion	

		CHEMISTRY, CHEMICAL TECHNOLOGIES, BIOTECHNOLOGIES AND ENVIRONMENTAL CHALLENGES		CONTEMPORARY EDUCATIONAL APPROACHES		HEALTHCARE OF THE FUTURE
11:30-11:50		Air dose rate analysis and its relation with temperature and humidity S Nedkova, P. Atanasova		Designing Chemistry Education in Conditions of Educational Experimentation Hr. Zhecheva, D. Memov		Functional Recovery and Quality of Life Trajectories in Bulgarian Cancer Survivors: A 6-Month Follow-Up Study H. Bozov, G. Peykov, G. Gelov, K. Panayotov, J. Papathanasiou, I. Bivolarski
11:50-12:10		Assessment of the relation between terrestrial background radiation and air dose rate S Nedkova, P. Atanasova		Inclusive Digital Transformation in Special Education: Challenges and Opportunities in the European Context K. Damyanov, M. Zamfirov		Rehabilitation Outcomes in Sarcoma and Soft Tissue Sarcoma Survivors: A Multicenter Observational Study in Bulgaria J. Papathanasiou, H. Bozov, K. Panayotov, A. Angelini, P. Ruggieri, I. Kazmukov
12:10-12:30		Study of Composite Materials as Adsorbents for Wastewater Treatment A. Georgieva, G. Peeva, R. Koleva, K. Panayotova, M. Valchanova, M. Karaivanova		Establishing the Level of Development of Sociolinguistic Competencies of Students in Primary School Age According to Their Teachers T. Valeva		Childhood Trauma in the Context of Violence: Policies, Practices, and Gaps in Child Protection in Bulgaria D. Videva
12:30-12:50		Investigation of Color Removal by Chitosan in Wastewater from Denim Fabric Production Nilgün Becenen		A Study of the Relationship Between Music and Mathematics as a Factor in the Development of Key and Professional Competencies in Preservice Teachers K. Dimitrova, D. Gonsalvesh		New Biogenic Ag-Nanoparticles from the Cornu Aspersum Mucus and Rapana Venosa Hemolymph with Potential Application in Medicine A. Stankova, L. Velkova, S. Atanasova-Vladimirova, B. Rangelov, M. Todorova, P.
12:50-13:10		Water Quality Dynamics in the Ropotamo River Basin: A Baseline Study for Environmental Management H. Yemendzhiev, Y. Mersinkova, Y. Zdravkov, M. Hamanova, G. Peykova		A Study of Teachers' Attitudes Toward the Use of Games in the Educational Process in Preschool and Primary School Age D. Yaneva		Experiences of Deaf People in Surgical Clinics Sevim Akbal
13:10-13:50		Lunch Break/Poster Sesion		Lunch Break/Poster Sesion		Lunch Break/Poster Sesion

		CHEMISTRY, CHEMICAL TECHNOLOGIES, BIOTECHNOLOGIES AND ENVIRONMENTAL CHALLENGES		CONTEMPORARY EDUCATIONAL APPROACHES		HEALTHCARE OF THE FUTURE
13:50-14:10		Utilization Of Various Waste Materials Into Useful Products With Application In Environmental Protection I. Stoycheva, B. Petrova, B. Tsyntsarski, A. Kosateva, N. Petrov, P. Dolashka		Educational Approaches to Learning Geometric Transformations in Preschool and Primary Education K.Dimitrova		Language Diversity in Clinical Communication: Implications for Healthcare S. Nikolova
14:10-14:30		Two-Parameter Isotherm Study of Cd(II) Adsorption onto Vine Rods-Derived Biochar V. Georgieva, S. Syuleyman, L. Gonsalvesh, S. Genieva		The Nudge Theory Applied to Lifelong learning, Upskilling and Professional Development A. Kirova		Biological Components and Biogenic Nanoparticles from The Mucus of the Garden Snail Cornu Aspersum as Antimicrobial Agents P. Dolashka, M. Todorova, V. Petrova, B. Rangelov, S. Atanasova-Vladimirova, E. Pisareva, M. Kermedchiev, L. Velkova, A. Stankova, A. Dolashki
14:30_14:40		Health Risk Assessment of Inhaled PM2.5 Heavy Metals: Seasonal and Age-Specific Variability in an Urban Area of Bulgaria L. Gonsalvesh, V. Georgieva, H. Mutlu, S. Naydenova, E. Hristova		Perceptions of Future Teachers about Environmental Education at the Primary Level V. Hristova		A Conceptual KPI Framework for Assessing AI-Driven Resource Optimization and Quality of Care in Hospice Management: Integrating Performance Metrics to Guide AI Adoption in Geriatric Palliative Care Settings S. Bogoslovov
14:40-15:00		Seasonal Variability and Source Identification of PM2.5 Heavy Metals in the Urban Atmosphere of Burgas L. Gonsalvesh, V. Georgieva, H. Mutlu, S. Naydenova, E. Hristova		Designing motivational aspects of science education Hr. Zhecheva, Esma Hussein		Profile of Blood Donors in the City of Burgas over the Last 5 Years L. Jelyazkova, V. Gonchev, T. Zlatanova
15:00-15:20		Eco-Friendly Alkyd Resins Based on Canola Oil Fatty Acids N. Todorov		Contemporary Educational Approaches and Pedagogical Practices Niovi-Christina Poulitsidoua		
15:30 - 16:30		Poster Sesion		Poster Sesion		Poster Sesion
19:00	CONFERENCE GALA DINNER					

13.06.2025 / FRIDAY		
POSTER SESION		
CONFERENCE VENUE LOBBY	1	The Use of Laccases in Industry with a Green Chemistry Perspective - Ali Koçyiğit and Sultan Kübra Toker
	2	Enhanced Levorin Biosynthesis Through Co-Cultivation of <i>Streptomyces levoris</i> with Yeasts - Hyusein Yemendzhiev
	3	Theoretical Characterization and NLO Potential of $\text{Rb}_2\text{Co}(\text{SeO}_3)_2$: Insights from DFT and QTAIM Analyses - Tsvetelina Yotova and Romyana Yankova
	4	Characterization of Asphaltenes from Different Crude Oils - Anife Veli, Radoslava Nikolova, Zilya Mustafa, Sonya Mileva, Lenia Gonsalvesh, Ivaylo Tankov
	5	Aliphatic des-A-triterpenoids of Maritza Iztok Basin - Maya Stefanova and Zlatka Milakovska
	6	In Silico Assessment of Skin Sensitization Potential of Polyphenolic Metabolites from <i>Sideritis syriaca</i> Using QSAR ToolBox - Georgi Russev, Venelin Dzhogov, Lenia Gonsalvesh
	7	Comparison of the decolorization of synthetic dyes with different catalyst and microbial degradation - Nadezhda Shukova, Nadia Armenova, Adriana Gigova, Ognian Dimitrov, Mariela Dimtrova, Ljutzkan Ljutzkanov, Elena Razkazova-Velkova
	8	Sulfur and its compounds as a renewable energy source and for obtaining valuable components - E. Razkazova-Velkova, N. Shukova, S. Stefanov, D. Uzun, N. Armenova, L. Ljutzkanov
	9	Chemical and Biophysiological Processes Accompanying Patients with Obstructive Sleep Apnea Syndrome (OSAS) In Group Therapies at Hospice "St. Anna" - Stoyanka Petkova-Georgieva
	10	Kinetic models for biodiesel production by treatment spent coffee grounds from vending machines - Dobromir Yordanov, Zilya Mustafa, Milena Dimitrova, Galina Yordanova
	11	Ash and sulfur in the mudstone-lignite sequences from Troyanovo-3 Mine (Mini Maritsa Iztok EAD) - Georgi Vladislavov, Zlatka Milakovska, Maya Stefanova

12	Potential Toxic Behavior of Porphyrins from Petroleum and Petroleum Products - Yana Koleva, Elisaveta Todorova-Koynova, Asen Kolev, Yordanka Tasheva
13	Application of In Silico Methods for Assessing the Biological Activity of Porphyrins From Petroleum and Petroleum Products - Yana Koleva, Elisaveta Todorova-Koynova, Asen Kolev, Yordanka Tasheva
14	Extraction of Microplastics from Marine Sediment in Burgas Bay, Black Sea - Sevdalina Turmanova, Yancho Hristov, Dimitrina Kiryakova, Emilia Ivanova, Plamena Atanasova, Ganka Kolchakova, Antoniya Ilieva, Elena Mollova, Aleksandar Dimitrov, Nikola Todorov, Galina Grigorova
15	Study and Analysis of the Interfacial Area in the Rectification of Two-Component Mixtures in the Presence of an Anti-Foaming Agent - Mariana Karaivanova, Adriana Georgieva
16	Preliminary Results on the Ultra-Trace Analysis of Methylmercury and Inorganic Mercury in Seawater Using Isotope Dilution GC-ICP-HRMS - Veronika Ivanova, Andriana Surleva, Veronika Ivanova
17	Hydrogen Supply Chain Adapted for the Republic of Bulgaria Based on Environmental, Economic, and Social Criteria - Evgeniy Ganev, Elisaveta Kirilova, Venko Beschkov, Rayka Vladova
18	Synthesis and Study of Mullite Ceramic Pigments Obtained by Sol-Gel Technology - Tsvetan Dimitrov, Mariela Minova, Miluvka Stancheva, Tsvetalina Ibrevva
19	Kinetic Study of the Pyrolysis of Chitosan-Zeolite Composite - Kristina Zafirova, Dilyana Zvezdova
20	Comparative Study of the Textural Properties of Chitosan, Zeolite and Their Composite Membrane - Kristina Zafirova, Lenia Gonsalvesh, Dilyana Zvezdova
21	Scientific researches on natural product as bioadditive component - Yordanka Tasheva, Blagovesta Midyurova, Alexander Dimitrov
22	Investigation of Publishing Activity Data using Intercriteria Analysis - Gabriela Hristova, Veselina Bureva, Stanislav Popov, Deyan Mavrov
23	Opportunities For Overcoming Seasonality In Bulgarian Tourism - Zlatina Karadzhova, Albena Yanakieva

24	Affective Forecasting in Pedagogy Students: Expectations Versus Reality - Penka Valcheva
25	Protection of Children with Disabilities from Violence at Home, at School, on the Street, in The Community - Maria Dishkova, Ana Burieva, Yordanka Mavrodieva, Georgi Yanev
26	Stimulating the Development of Green Competences in Preschool Age - Blaga Dimova
27	Evaluating Pedagogical Effectiveness of Teaching Methodologies in Healthcare Management Education: An exploratory study - Sotir Bogoslovov
28	Emotional Regulation Skills In The Pedagogical Process - Gergana Avramova-Todorova
29	Innovative Model for Assessment and Prevention of Mental Health at Work in Healthcare in the post-COVID period - Teodora Dimitrova, Tsvetelina Tarpomanova, Antoaneta Tsvetkova, Yana Tosheva, Anna Todorova, Mariya Ivanova
30	Clinical Laboratory In Support Of Emergency Medicine – Hypofibrinogenemia In Emergency Departments – Pathogenesis And Laboratory - Stoyanka Tancheva, Dilyana Zvezdova
31	The Laboratory to Help in the Diagnostics of Rare Clinical Syndromes – Haemolytic Uremic (HUS) syndrome - pathogenesis and laboratory - Stoyanka Tancheva, Dilyana Zvezdova
32	The Laboratory To Help In The Diagnostics Of Rare Clinical Syndromes Bernard – Souler's (BSS) Syndrome – Pathogenesis And Laboratory - Stoyanka Tancheva, Dilyana Zvezdova
33	The Role of Electronic Sports in the Social and Academic Engagement of University Students - Dobrin Perev
34	Optimization Process of Bioethanol Production from Spent Coffee Grounds Using <i>Aspergillus oryzae</i> -Dobromir Yordanov, Galina Yordanova, Milena Dimitrova, Zilya Mustafa
35	Assessment of Three-Parameter Adsorption Isotherms for Cd(II) Uptake by Biochar Derived from Vine Rods - Velyana Georgieva, Syuleyman Syuleyman, Lenia Gonsalvesh, Svetlana Genieva

36	Redesigning ESP Learning through Partial Flipping: A Pedagogical Experiment in Higher Education – Galina Koteva
37	Analysis of The Impact of Distance Learning on the Quality of Education in Medical Specialties - Y. Sabev, V. Gontchev, T. Zlatanova
38	Phase Analysis and Color Characteristics of Co, Cu, and Ni-Doped Ceramic Pigments - Fila Yovkova, Adriana Georgieva, Mariela Minova, Irena Markovska, Margarita Georgieva
WINNERS OF THE 2025 CHEMFEST HIGH SCHOOL SCIENTIFIC PROJECT COMPETITION	
	Biofuels -Yanitsa Miroslavova Tsvetkova, Pavlena Diyanova Stoyanova, Desislava Staykova-Marinova
	Bioplastics – A Path to a More Sustainable Future - Mihail Bozhilov, Viktoria Miltiyadova
	Biodegradable Plastic from Eggshells - Aylin Shakir, Elif Tahirova, Anastasiya Andonova, Asya Taneva, Dimitrina Mircheva, Rumen Bostandzhiev
	Waste is not garbage – We sort it to live green - Danaya-Maria Ivanova, Margarita Nikolova, Siana Karakasheva, Simona Trichkova, Elitsa Neykova, Natalia Toneva, Petya Valkova, Maya Georgieva
	Chemical Analysis of Bisphenol A in Food Containers and Potential Health Risks - Bozhidar Slavov, Viktor Stoychev, Hristo Gyuzelev, Umut Beshem, Bozhidar Todorov, Dimitar Petrov, Dimitrina Krasteva

14.06.2025/SATURDAY

10:00-13:00

Special Event: Visit to the **Blue Growth Research Center, UNiTe Center of Excellence and Clean&Circle Center of Competence** Laboratories at **Burgas State University “Prof. Dr. Assen Zlatarov”**