

International Conference on Basic Sciences and Technology

August 28-31, 2025

Budapest/Hungary



PROGRAM BOOK



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28 August 2025	
13.30-...	Conference Registration
14.45-15.00	Opening Ceremony
15.00-15.20	Keynote Speech 1: " Increasing Innovation Capacity at Óbuda University - Tasks and Early Results " Dr. Peter Galambos - Obuda University, Hungary
15.20-15.40	Keynote Speech 2: " Artificial Intelligence in the Life Sciences Sector: An Integrated Matrix " Dr. Mehmet Ozaslan - Gaziantep University, Türkiye
15.40-16.00	Keynote Speech 3: " An Innovative Global Perspective: The PV Model in the Age of AI " Dr. Maria Susy Rogers - University of South Wales, U.K.
16.00-16.30	Coffee break
16.30-17.30	Poster Presentation
29 August 2025	
10.00-12.00	Session - Presentation
12.00-14.00	Lunch
14.00-15.30	Session - Presentation
15.30-16.00	Break
16.00-17.30	Session - Presentation
17.30-18.00	Session – Presentation
19.00-20.00	Gala Dinner

30 August 2025

10.00-12.00	Session - Presentation
12.00-14.00	Lunch
14.00-15.30	Session - Presentation
15.00-19.00	Budapest Walking Tour
16.00-17.30	Session - Presentation
17.30-19.00	Session - Presentation

31 August 2025

08.00-08.30	Closing Ceromony
08.30	Esztergom Tour

MEETING ROOM

POSTER SESSION: August 28, 2025 - Thursday 16.30-17.30

CHAIRS Oszkár Dobos, Biljana Chitkusheva Dimitrovska

ICBAST089 FAILURE FACTORS IN ARTIFICIAL INTELLIGENCE DEVELOPMENT AND INTEGRATION PROJECTS: A SYSTEMATIC LITERATURE REVIEW A SOCIO-TECHNICAL PERSPECTIVE BARRIERS
*Oszkár Dobos **

ICBAST047 SCADA MONITORING ON RADIO RELAYED STATION AT HYDRO MELIORATION SYSTEM SUPPORTED IN IOT NETWORK
*Goce Stefano, Biljana Chitkusheva Dimitrovska, Vlatko Cingoski, Maja Kukusheva Paneva **

ICBAST021 DEVELOPMENT OF A NEW XANTHENE–TRIPHENYLAMINE–INDANDIONE CONJUGATED FLUORESCENT COMPOUND AND ITS DETAILED CHARACTERIZATION
*Sait Malkonu *, Serkan Erdemir, Mehmet Oğuz*

ICBAST036 EVALUATION OF ANTIOXIDANT ACTIVITIES AND DETERMINATION OF THE ACUTE TOXICITY OF AQUEOUS EXTRACT OF PISTACIA LENTISCUS L
*Benzidane Nadia **

ICBAST08 INFLUENCE OF CALCIUM ON THE THERMAL OXIDATION OF CA-DOPED COO AND OF CAO-COATED COBALT
*Nacer Halem *, Zohra Halem*

ICBAST044 REMOTELY READ AND TRANSFER ENERGY METER PARAMETERS IN AN RF AND IOT NETWORK
*Biljana Chitkusheva Dimitrovska *, Goce Stefanov, Vlatko Chngoski, Todor Cekerovski*

ICBAST071 INFLUENCE OF ALUMINIUM ON THE CORROSION OF THE SINTERED NICKEL
*Halem Zohra *, Halem Nacer, Abrudeanu Mariora, Petot-Ervas Georgette*

* Corresponding author.

MEETING ROOM	
SESSION 1: August 29, 2025 - Friday 10.00-12.00	
CHAIRS	Erol Pehlivan, Hayati Akman
ICBAST038	TAGUCHI APPLICATION TO CUTTING BEHAVIOR OF STAINLESS STEELS <i>Yusuf Sahin *</i> , <i>Ahmet Saygin Ogunmus</i>
ICBAST050	SYNTHESIS, CHARACTERIZATION AND SELECTIVE FLUORIMETRIC DETECTION OF Al^{3+} BY A SCHIFF BASE DERIVED FROM 5-CHLORO-8-HYDROXYQUINOLINE <i>Önder Alici *</i> , <i>Maghan I Camara</i>
ICBAST076	EPICHLOROHYDRIN-CROSSLINKED NANO-TIO ₂ /PLUM KERNEL SHELL/CHITOSAN HYDROGEL BEADS FOR THE EFFICIENT REMOVAL OF HEXVALENT CHROMIUM FROM AQUEOUS SOLUTIONS <i>Şerife Parlayıcı, Erol Pehlivan *</i>
ICBAST075	THE SYNTHESIS OF MICROWAVE ASSISTED MELAMINE-SCHIFF BASES AND INVESTIGATION OF BRIDGED FE(III) METAL COMPLEXES <i>Ziya Erdem Koç *</i>
ICBAST072	SYNTHESIS OF FLUORESCENT CALIX[4]ARENE DERIVATIVES FOR THE DETECTION OF HG(II) / CR(VI), AND INVESTIGATION OF THEIR ANTIMICROBIAL PROPERTIES <i>Mustafa Yilmaz *</i> , <i>Ayşe Yildirim, Ahmet Uysal</i>
ICBAST05	STRENGTHENING HERITAGE: A REVIEW OF SUSTAINABLE CONSERVATION WITH ALKER AND SHOTCRETE IN TURKEY AND CYPRUS <i>Ayşe Pekrioglu Balkis *</i> , <i>Aya Ahmad, Abdullah Ekinci</i>
ICBAST077	COLORLED WHEATS FOR FUNCTIONAL FOOD CANDIDATES WITH ENHANCED NUTRITION <i>Hayati Akman *</i>
ICBAST052	ENHANCING ENERGY EFFICIENCY AND MITIGATING RISKS IN HYDROPOWER PLANTS USING DRONE AND AI TECHNOLOGIES: A CASE STUDY IN ERZURUM AND ERZINCAN, TURKEY <i>Öykü Alkan *</i>
* Corresponding author.	

MEETING ROOM

SESSION 2: August 29, 2025 - Friday 14.00-15.30

CHAIRS	Nora Mamulaishvili, Lali Kalandadze
ICBAST018	FABRICATION AND CHARACTERIZATION OF FEMNCO/NANOFIBER FOR RADAR ABSORBING MATERIAL BY ELECTROSPINNING <i>Kadir Asrın Sarı, Ümit Erdem, Uğur Sarı *</i>
ICBAST085	QUANTITATIVE REDUCTION OF LIGHT OIL LOSSES USING POLYMERIC MATERIALS <i>Nora Mamulaishvili *, Otar Janelidze</i>
ICBAST088	AUTOMATED PREDICTION OF SUDOKU PUZZLE DIFFICULTY USING CONVOLUTIONAL NEURAL NETWORKS <i>Majlinda Axhiu *</i>
ICBAST040	THE ROLE OF BIG DATA ANALYTICS IN REINFORCING THE BUSINESS SUSTAINABILITY OF ENTERPRISES <i>Mohamed Hamada *, Gehad Hamada</i>
ICBAST014	RELIABILITY ANALYSIS OF A GRAVITY ADDUCTION OF WATER SUPPLY SYSTEM: A CASE STUDY <i>Karima Bouzelha *, Hocine Hammoum, Melissa Rezki, Hafidh Belabes</i>
ICBAST034	INVESTIGATION OF RED BLOOD CELL MICROCIRCULATION USING THE DLVO THEORY <i>Lali Kalandadze *, Nugzar Gomidze, Mirian Kontselidze</i>
ICBAST013	REINFORCEMENT ANALYSIS OF A WATER TANK WALL BY EXTERNAL PRESTRESSING <i>Hammoum Hocine *, Karima Bouzelha, Amar Aliche</i>

* Corresponding author.

MEETING ROOM

SESSION 3: August 29, 2025 - Friday 16.00-17.30

CHAIRS	Hasan Öktem, Ayşe Aypay
ICBAST09	INVESTIGATION OF BURR HEIGHT FOR SHEET METAL PROCESS OF MEDIUM DUTY CASTERS IN INDUSTRIAL KITCHENS <i>Hasan Öktem *</i> , İlyas Uygur, Halit Karasungur
ICBAST080	TRANSFORMING THE CUSTOMER EXPERIENCE IN SUPER-APPS: AN ANALYSIS OF AGENTIC AI POTENTIAL THROUGH THE PASSO CASE STUDY <i>Mehmet Kutanoğlu *</i> , Erkut Baloğlu, Eren Çağlar, Ufuk Baş
ICBAST032	HOW DOES MOBILE LANGUAGE LEARNING APP FEEDBACK AFFECT LEARNING MOTIVATION AND PERSISTENCE? THE CASE OF DUOLINGO <i>Ayşe Aypay *</i> , Fatma Altınsoy
ICBAST031	HOW USERS DEAL WITH EXPERIENCES THAT UNDERMINE THE RELIABILITY OF PRODUCTIVE ARTIFICIAL INTELLIGENCE TOOLS (AI) <i>Fatma Altınsoy *</i> , Ayşe Aypay

* Corresponding author.

MEETING ROOM	
SESSION 4: August 29, 2025 - Friday 17.30-19.00	
CHAIRS	Merzoug Mohammed, Bourebia Mounira
ICBAST02	SEISMIC VULNERABILITY ASSESSMENT OF EXISTING BUILDINGS UNDER THE EFFECT OF GEOMETRIC CHARACTERISTICS <i>Akkouche Karim *</i>
ICBAST027	CATALYTIC SYNTHESIS OF LOW MOLECULAR WEIGHT ETHYLENE SERIES HYDROCARBONS FROM DIMETHYL ETHER <i>Gulmira Keldiyarova *</i>
ICBAST01	EFFECT OF DUNE SAND – CRUSHED RECYCLED CONCRETE SAND ON THE MECHANICAL PROPERTIES OF FIBER-REINFORCED MORTARS <i>Nacim Khelil *, Karim Akkouche, Amar Kahil, Aghiles Oubellil</i>
ICBAST03	EXPERIMENTAL ANALYSIS OF THE PUNCHING SHEAR BEHAVIOR OF CONCRETE SLABS REINFORCED WITH METAL AND POLYPROPYLENE FIBERS <i>Djamal Atlaoui *, Nacim Khelil, Karim Accouche, Amar Aliche</i>
ICBAST043	INFLUENCE OF WELDING PARAMETERS ON THE SURFACE CONDITION OF FRICTION STIRLAP WELD JOINTS <i>Merzoug Mohammed *, Miloudi Abdelkader, Benamara Nabil, Boulououar Abdelkader</i>
ICBAST048	IMPACT OF WORK HARDENING ON THE SURFACE ANISOTROPY AND MECHANICAL PROPERTIES OF A LOW-ALLOY STEEL <i>Bourebia Mounira *, Meddah Soumaya, Achouri Sihem, Bouhamla Khadidja, Oulabbas Amel, Ghennai Walid, Taleb Ahlem, Laouar Lakhdar, Remili Salah, Hadad Djalil</i>
ICBAST039	NUMERICAL STUDY OF CRACK GROWTH RETARDATION DUE TO OVERLOAD IN AN ALUMINUM ALLOY <i>Miloudi Abdelkader *, Miloudi Abdelkader, Benamara Nabil, Merzoug Mohamed, Boulououar Abdelkader</i>
* Corresponding author.	

MEETING ROOM	
SESSION 5: August 30, 2025 - Saturday 10.00-12.00	
CHAIRS	Mehmet Yilmaz, Erkut Yalcin
ICBAST060	EVALUATION OF DIFFERENT ADDITIVES ON MECHANICAL PROPERTIES AND PERFORMANCE OF HOT MIX ASPHALT USING MARSHALL STABILITY AND ITSM TESTS <i>Erkut Yalcin *, Sefa Utku Tiryaki</i>
ICBAST010	INVESTIGATION OF SHRINKAGE AND FLAMMABILITY PROPERTIES OF PA66 POLYMER AFTER INJECTION MOLDING <i>Oğuzhan Döner *, Orhan Kara, Hasan Öktem</i>
ICBAST066	INVESTIGATION OF FATIGUE PERFORMANCE OF HOT MIX ASPHALT MIXTURES MODIFIED WITH ELVALOY AND PHOSPHORIC ACID (PPA) AS AN ALTERNATIVE TO SBS POLYMER <i>Beyza Furtana-Yalcin *</i>
ICBAST062	A MODIFIED PEAK LOAD METHOD BASED ON THE TWO-PARAMETER MODEL IN CONCRETE FRACTURE <i>Ragip Ince *</i>
ICBAST061	DETERMINATION OF PHYSICAL PROPERTIES OF POLYMERIC AND DIFFERENT ADDITIVES ON BITUMINOUS BINDERS <i>Mehmet Yilmaz *, İsra Seza Deveci</i>
ICBAST065	CLASSIFICATION OF EARTHQUAKE-INDUCED ASPHALT CRACKS WITH A TRANSFER LEARNING-BASED HYBRID STRATEGY <i>Fatih Demir, Erkut Yalcin</i>
ICBAST063	A NOVEL SCB TEST FOR DETERMINING FRACTURE QUANTITIES OF BITUMINOUS COMPOSITES <i>Ragip Ince, B. Fatih Furtana *</i>
ICBAST083	QUANTIFYING UNCERTAINTY IN PROJECTED TEMPORAL VARIATIONS OF RESERVOIR RELEASES FOR CROP WATER REQUIREMENT <i>Zeynep Beril Ersoy *, Okan Fistikoglu, Umut Okkan</i>
ICBAST068	BIOLOGICAL FUNCTIONS AND THERAPEUTIC POTENTIAL OF OTULIN <i>Tuba Yalcin *</i>
ICBAST055	SYNTHESIS OF TRIPHENYLAMINE-BASED FLUORESCENT SENSORS FOR BIOGENIC AMINE DETECTION AND EVALUATION OF THEIR CYTOTOXIC POTENTIAL <i>Mehmet Oguz *</i>

MEETING ROOM	
SESSION 6: August 30, 2025 - Saturday 14.00-15.30	
CHAIRS	Victor Rizov, Vessela Petrova
ICBAST028	DEVELOPMENT OF BIG DATA CLUSTERING WITH APACHE SPARK <i>Bakhshali Bakhtiyarov, Aynur Jabiyeva *, Gunay Hasanova</i>
ICBAST023	INNOVATIVE TECHNOLOGIES FOR WASTE REDUCTION IN THE EXTRACTION AND PROCESSING OF CRITICAL RAW MATERIALS <i>Vessela Petrova *</i>
ICBAST046	INHOMOGENEOUS PLANAR STRUCTURE EXPERIENCING ROTARY MOTION: A LONGITUDINAL FRACTURE INVESTIGATION <i>Victor Rizov *</i>
ICBAST082	STUDY OF ENERGY EFFICIENCY OF A PROTOTYPE OF A HOUSEHOLD REFRIGERATOR WITH A BUILT-IN ADDITIONAL REFRIGERANT ACCUMULATOR <i>Slav Valchev *, Todor Arshinkov</i>
ICBAST022	CUTTING-EDGE GLOBAL TECHNOLOGIES FOR EXTRACTION AND PROCESSING OF CRITICAL AND STRATEGIC RAW MATERIALS: A REVIEW <i>Yoan Hristov *, Vessela Petrova</i>
ICBAST049	DESIGN OF S-BOXES BASED ON ALTERNATIVE IRREDUCIBLE POLYNOMIALS <i>Gulmira Shakhmetova *, Zhanat Saukhanova, Altynbek Sharipbay, Alibek Barlybayev, Sayat Raykul, Altay Khassenov</i>
ICBAST084	NEUTROSOPHIC $\alpha B^*G\alpha$ -FUNCTIONS IN NEUTROSOPHIC TOPOLOGICAL SPACES <i>Raja Mohammad Latif *</i>
ICBAST012	OPTIMIZATION OF UNDERWATER OPTICAL WIRELESS COMMUNICATION (UWOC) PERFORMANCE <i>Kandouci Chahinaz *</i>

ICBAST087	DEEP LEARNING-BASED CROP RECOMMENDATION USING SOIL AND ENVIRONMENTAL PARAMETERS <i>Fatma Özge Özkök *</i>
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* Corresponding author.

MEETING ROOM	
SESSION 7: August 30, 2025 - Saturday 16.00-17.30	
CHAIRS	Patrick Cerna, Kandouci Chahinaz
ICBAST074	INTEGRATING IOT AND REGRESSION MODELLING IN ASSESSING SWAMP PURIFICATION EFFICACY <i>Patrick Cerna *</i>
ICBAST030	MACHINE LEARNING-BASED CLASSIFICATION OF GEOLOGICAL STRUCTURES FROM MAGNETIC ANOMALY DATA: CASE STUDY OF NORTHERN NIGERIA BASEMENT COMPLEX <i>Ema Abraham *, Ayatu Usman, Ifunanya Amano</i>
ICBAST086	ANIoT-BASED WASTE MONITORING AND PAYMENT PLATFORM <i>Percy Okae *</i>
ICBAST024	EFFECT OF THE STRAIN RATE AND TEMPERATURE ON THE SHAPE MEMORY BEHAVIOR OF PMMA <i>Mohammed Nadhir Djamel Eddine Cherief*, Ilies Mohammed Amine Ghermaoui</i>

* Corresponding author.

MEETING ROOM	
SESSION 8: August 30, 2025 - Saturday 17.30-19.00	
CHAIRS	Aliche Amar, Ahmed Amine Aidouni
ICBAST057	ANTIBACTERIAL AND ANTIVIRULENCE EFFECTS OF SPINACIA OLERACEA ROOT EXTRACT AGAINST PSEUDOMONAS AERUGINOSA <i>Mohamed Ashraf*, Hesham Soliman, Amr Nassrallah</i>
ICBAST033	STUDY OF DYNAMICS OF SOME GLACIERS OF THE CAUCASUS USING THE OGGM MODEL <i>Teimurazi Davitashvili*, Dimitri Amilakhvari</i>
ICBAST042	ON THE MIXED-MODE CRACK PROPAGATION INCEMENT MANTLE OF THRUSING A REMESHNIG TECHNIQUE <i>Benamara Nabil*, Boulenouar Abdelkader, Miloudi Abdelkader, Merzoug Mohammed</i>
ICBAST081	THE POTENTIAL OF WEF NEXUS TO TACKLE CLIMATE CHANGE: JORDAN AS A CASE STUDY <i>Aiman Albatayneh*</i>
ICBAST015	DETERMINISTIC ANALYSIS OF THE SEISMIC BEHAVIOUR OF CYLINDRICAL STEEL STORAGE TANKS: A METHODOLOGICAL APPROACH BASED ON THE NEW OF ALGERIAN SEISMIC CODE (RPA 2024). <i>Aliche Amar*, Ider Ourdia, Hammoum Hocine, Bouzelha Karima, Guemmoun Mouloud, Atlaoui Damal</i>
ICBAST011	FIRST-PRINCIPLES STUDY OF THE DYNAMICAL, AND ELECTRONIC PROPERTIES OF β -ZNP AU HALF-HEUSLER COMPOUND <i>Ahmed Amine Aidouni*, Mounir Ould-Mohamed, Souheil Belbachir Souheil, Abdelkader Aissat</i>

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