## **CONFERENCE PROGRAM**

## Day 1

8:30 - 09:00	Registration
09:00 - 9:15	ICCECIP 2023 Opening Ceremony
	Tamás Vargha
Deputy Minister of the	he Hungarian Ministry of Defence and a member of the Hungarian Parliament, Hungary
	Gábor Pozderka
Comm	nander of Hungarian Defence Forces Cyber Command, Hungary
	Prof. Zoltán Rajnai, PhD
Dean of Bánki	Donát Faculty of Mechanical and Safety Engineering, Óbuda University,
C	yber Coordinator of Hungary Ministry of Interior, Hungary
	Plenary lectures
Chairs:	Prof. Kornélia Lazányi PhD Óbuda University, Hungary
	Prof. Valeriu Gabriel Ghica, PhD National University of Science and Technology Bucharest, Romania
09:15 – 09:45	Péter Holicza PhD Pending Deputy State Secretary for European Union Affairs and International Relations Ministry of Energy, Hungary
09:45 - 10:15	Prof. Alexis Rusinek PhD Pending University of Lorraine, France
10:15 - 10:45	Prof. László Kovács DSc The Role of Military in Cyber Security in Critical Infrastructure.  Ludovika University of Public Service, Hungary
10:45 - 11:00	Technical break
11:00 - 11:30	Prof. Valeriu Gabriel Ghica, PhD Some aspects of Li-ion battery recycling National University of Science and Technology Bucharest, Romania

11:30 – 12:00	Pavel Foltin, PhD  University of Defence in Brno, Czech Republic  Judit Nagy PhD  Corvinus University of Budapest  Data-Driven Strategies for Enhancing Supply Chain and  Transportation Infrastructure Resilience
12:00-12:30	Prof. Kornélia Lazányi PhD Are there still holes in the swiss cheese? - Exploring the Inherent Limits of Safety and the Human Factor Óbuda University, Hungary
12:30 – 13:30	Lunch break

	Section 1. A Cyber Security of Critical Infrastructure	
Chair:	Sándor Magyar PhD, Ludovika University of Public Service, Hungary	
	Katalin Szenes PhD, Óbuda University, Hungary	
13:30 – 13:45	Ciortea Elisabeta Mihaela: Analysis of Blockchain Integration from Manufacturing University of Alba Iulia, Romania	
13:45 – 14:00	Gergő Gyebnár: Attack Tactics, Techniques, and Procedures in Control Systems Black Cell Magyarország Kft., Hungary	
14:00 – 14:15	Altaleb Haya: 5G Infrastructure Standardization, Integration, and Industry 4.0 Applications in EU precisely Germany: A Comprehensive Overview Óbuda University, Doctoral School on Safety and Security Sciences, Hungary	
14:15 – 14:30	Kristóf Stölczer: Approach of by-design-risk-analysis on advanced engineered technologies cybersecurity Óbuda University Doctoral School on Safety and Security Sciences, Hungary	
14:30 – 14:45	<b>Bence Tureczki:</b> A blockchain-powered collaboration framework for advancing gait analysis and kinematic insights  Doctoral School of Applied Informatics and Applied Mathematics, John von Neumann Faculty of Informatics, Óbuda University, Hungary	
14:45 - 15:00	Technical Break	

	Section, 1. B Political and Individual Security of Critical Infrastructure
Chair:	Prof. János Besenyő, PhD, Óbuda University, Hungary
	Tibor Farkas, PhD, Ludovika University of Public Service, Hungary
13:30 – 13:45	Péter Balogh: Complex terrorist threats against critical infrastructure – patterns, trends and effects/characteristics University of Szeged, Ludovika University of Public Service, Hungary
13:45 – 14:00	Gabriella Ürmösné Simon - Éva Kovács: How are students of Critical Infrastructure Protection studies trained to speak the foreign language Óbuda University, Doctoral School on Safety and Security Sciences, Hungary
14:00 – 14:15	<b>Gábor Sinkó:</b> Al-Shabaab's Secret Service, the Amniyat (Somalia) Óbuda University, Doctoral School on Safety and Security Sciences, Hungary
14:15 – 14:30	Milica Sikimic: Police role in the security of critical infrastructure Óbuda University, Doctoral School for Safety and Security Sciences, Hungary
14:30 – 14:45	János Besenyő: Africa and the Russian-Ukrainian War Óbuda University, Donát Bánki Faculty of Mechanical and Safety Engineering, African Research Institute, Hungary
14:45 - 15:00	Technical Break
	Section 2. A Cyber security of Critical Infrastructure
	Prof. Zlatko Covic PhD, Subotica Tech-College of Applied Sciences, Serbia
	Laszlo Gogolák PhD, University of Szeged, Hungary
15:00-15:15	Pál Fehér-Polgár: The importance of the security consciousness of smartphone users after Strava Heatmap Óbuda University, Hungary
15:15 – 15:30	László Gogolák – János Simon: Supply Chain Management Using Automatic Guided Vehicle Systems in Smart Factory Department of Mechatronics and Automation, Faculty of Engineering, University of Szeged, Hungary
15:30 – 15:45	Eszter Oroszi: Measuring and evaluating the effectiveness of security awareness improvement methods  Ludovika University of Public Service, Hungary

15:45 – 16:00	<b>Péter Balogh</b> : Cyber threats to energy security – investigating the recent case of the Russian-Ukrainian conflict <i>University of Szeged, Ludovika University of Public Service, Hungary</i>
16:00 – 16:15	<b>Zlatko Covic:</b> Security testing of integrated web systems in the process of education of software engineers Subotica Tech-College of Applied Sciences, Serbia
16:15	Day Closing
	Section 2. B Individual Security of Critical Infrastructure
Chairs	András Keszthelyi PhD, Óbuda University
	Igor Fürstner PhD, Subotica Tech - College of Applied Sciences, Serbia
15:00-15:15	<b>Tímea Antal:</b> As many organizations, as many compliance solutions - special protection in practice <i>Óbuda University, Doctoral School on Safety and Security Sciences, Hungary</i>
15:15 – 15:30	Attila Fodor: Thermal Management Solutions to Optimize the Efficiency of Electric Bus Propulsion Óbuda University, Kando Kalman Faculty of Electrical Engineering, Budapest, Hungary
15:30 – 15:45	<b>Réka Veronika Sallay:</b> EEG-based biometric identification using beta brainwaves with a new methodology <i>Óbuda University, Doctoral School on Safety and Security Sciences, Hungary</i>
15:45 - 16:00	<b>Bakhtyar Saleh Ahmmad:</b> Methodology for risk analysis in the design phase of high-rise buildings. Óbuda University, Doctoral School on Safety and Security Sciences, Hungary
16:00 - 16:15	László Lőrincz: ArtWork Protection Óbuda University, Hungary
16:15	Day Closing
18:00-22:00	Gala Dinner

## Day 2

	Plenary lectures
Chairs:	Zoltán Nyikes PhD Milton Friedman University, Hungary
	Prof. Zlatko Čović PhD Subotica Tech - College of Applied Sciences, Serbia
09:00 - 09:30	Lucia Figuli PhD – Prof. Zdener Dvorak PhD Using advanced technologies for the protection of critical infrastructures University of Žilina, Faculty of Security Engineering, Žilina, Slovak Republic
09:30 - 10:00	Igor Fürstner PhD Pending Subotica Tech-College of Applied Sciences, Serbia
10:00 - 10:30	Prof. Marcin Adamiak PhD Optimizing the Properties of Cast Al-Li Alloys Silesian University of Technology, Poland
10:30 - 11:00	Vladimir Kavicky PhD University of Zilina, Slovak Republic Ladislav Pásztor Corvinus University of Budapest, Hungary The increase in the production of the defense industry in Central Europe and the risks arising from it
11:00-11:15	Technical break
Chairs:	Section 3. A Physical Protection of Critical Infrastructure
	Konstantyn Afanasenko, PhD, National University of Civil Protection of Ukraine, Ukraine Rusca Marcel PhD, University of Alba Iulia, Romania
11:15 - 11:30	Judit Pázmán: Comparative study of thermal ageing in reactor steels  University of Dunaújváros, Hungary
11:30- 11:45	Daria Dorosenko: Assessment of the consequences of the explosion of explosive mixtures in the room.  National University of Civil Protection of Ukraine, Ukraine

11:45- 12:00	Huszák Csenge: Root Cause Analysis: Tools for Unveiling Failures in Safety Critical Components – A Review Óbuda University, Doctoral School on Safety and Security Sciences, Hungary
12:00 - 12:15	Yaroslav Kalchenko: Estimation of emergency situations consequences on the oil refining facilities.  National University of Civil Protection of Ukraine, Ukraine
12:15 - 12:30	Volodymyr Oliinyk: Determining the parameters of oil spill fire National University of Civil Protection of Ukraine, Ukraine
12:30 - 12:45	Rusca Marcel: The Impact of Polluting Chemical Compounds Resulting From The Gases Exhausted By Road Vehicles in Urban Environment University of Alba Iulia, Romania
12:45 – 13:00	Konstantyn Afanasenko: Heat exchange parameters of the biogas complexes flare stack during the operation.  National University of Civil Protection of Ukraine, Ukraine
13:00 – 14:00	Lunch break
	Section 3. B Cyber Security of Critical Infrastructure
Chair:	András Tóth PhD, Ludovika University of Public Service, Hungary János Simon PhD, University of Szeged, Hungary
11:15 - 11:30	Pintér Róbert: Enhancing Software Security: Software Analysis with Valgrind tool Subotica Tech-College of Applied Sciences, Serbia
11:30- 11:45	<b>Nada El Yasmine Aichaoui:</b> Enhancing Safety and Efficiency: Human-Cobot Interaction in Critical Infrastructure <i>Óbuda University, Doctoral School on Safety and Security Sciences, Hungary</i>
11:45- 12:00	<b>Bárkányi Pál:</b> Expert proof of crimes against the information system <i>Milton Friedman University, Hungary</i>
12:00 - 12:15	Mariam Shbanah: Development and testing of a new EMI shielding material Óbuda University, Doctoral School on Materials Sciences and
	Technologies, Hungary

12:30 - 12:45	Abel Kamaga: Optimized Multi-cloud Service Orchestration in Cloud Computing Department of Electrical Electronics Engineering, Faculty of Engineering, Kyambogo University, Kampala, Uganda
12:45 – 13:00	András Tóth: Military 5G as a Critical Information Infrastructure Ludovika University of Public Service, Hungary
13:00 – 14:00	Lunch break
	Section 4. A  Physical Protection of Critical Infrastructure  Vladimir Kavicky, PhD University of Žilina, Slovak Republic  Emilian Ceuca PhD, University of Alba Iulia, Romania
14:00-14:15	<b>Béla Bődi:</b> Assessment of the application of PCA rework at large manufacturers <i>Óbuda University, Doctoral School on Materials Sciences and Technologies, Hungary</i>
14:15 -14:30	László Mónus: Safety technological testing of the compound bow structure Óbuda University, Doctoral School on Materials Sciences and Technologies, Hungary
14:30 – 14:45	Lama Mkanna: Microstructural Analysis of High-Strength Steel Post Gleeble Modelling University of Dunaújváros, Hungary
14:45 – 15:00	János Kuti: Flame-cutting experiences of wear-resistant high-strength steels Óbuda University, Doctoral School on Materials Sciences and Technologies, Hungary
15:00 – 15:15	Emilian Ceuca: Minimizing Energy Losses in the Modern E-bikes by New Integrated Strategies for Adaptive Control University of Alba Iulia, Romania
15:15 - 15:30	Technical Break
	Section 4. B  Physical Protection of Critical Infrastructure  Levente Dimén PhD, University of Alba Iulia, Romania  László Tóth PhD, Óbuda University, Hungary
14:00-14:15	Arnold Őszi: Advanced object recognition using drones Óbuda University, Hungary
14:15 -14:30	Amine Bendarma: Numerical Analysis Of The Dynamic Behavior Of Copper Alloy Under Dynamic Compression At High Strain Rates And Temperatures

	Laboratoire d'Innovation Durable et de Recherche Appliquée (L.I.D.R.A), Universiapolis, Agadir, Morocco
14:30 – 14:45	Hamza Bouchta: Thermodynamic Modeling of the Cerium-Tellurium binary System: Implications for the Protection of Critical Infrastructures Laboratoire d'Innovation Durable et de Recherche Appliquée (L.I.D.R.A), Universiapolis, Agadir, Morocco
14:45 – 15:00	<b>István Szávay</b> Protection against drones in industrial facilities Óbuda University, Doctoral School on Safety and Security Sciences
15:00 – 15:15	Levente Dimén: The Impact of Polluting Chemical Compounds Resulting From the Gases Exhausted by Road Vehicles in Urban Environment University of Alba Iulia, Romania
15:15 - 15:30	Technical Break
	Section 5. A  Individual Security of Critical Infrastructure  Prof. Kornélia Lazányi PhD, Óbuda University, Hungary Péter Szikora PhD, Óbuda University, Hungary
15:45 - 16:00	Levente Durczy: Hungarian legislations regarding cybersecurity Obuda University, John von Neumann Faculty of Informatics, Hungary
16:00 – 16:15	Rozália Szatmáry: Trust and Security: How Trust in Autonomous Systems Shapes Decision-Making Berzsenyi Dániel Secondary School, Hungary
16:16 – 16:30	<b>Sára Szatmáry:</b> Quantum Computers and IT Security: Unlocking the Future, Exploring the Questions <i>Óbuda University, Hungary</i>
16:30 – 16:45	<b>Péter Szikora:</b> The impact of COVID-19 on adoption of self-driving cars Óbuda University, Hungary
16:45 – 17:00	András Keszthelyi: Some aspects of ethics in Info World Óbuda University, Hungary
17:00 – 17:15	Szandra Anna Laczi: How has digital growth affected school-aged children's online safety?  Óbuda University, Doctoral School of Applied Informatics and Applied Mathematics, Hungary
17:15 -17: 30	Sanja Maravic Cisar: IoT Security for Critical Infrastructure: Challenges and Best Practices *Subotica Tech-College of Applied Sciences, **University of Criminal Investigation and Police Studies, Serbia
17:30-17:15	Closing ceremony

	Section 5. B Physical Protection of Critical Infrastructure
	Prof. Tamás Berek PhD, Ludovika University of Public Service, Hungary Norbert Daruka PhD, Óbuda University, Hungary
15:45 - 16:00	József Krenner: The Relationship between Situational Crime Prevention and Road Safety. Defending against Environmental Threats. Széchenyi István University of Győr, Hungary
16:00 – 16:15	László Szalkai: Preventing attacks on key installations or recapturing them by forced entry  Ludovika University of Public Service, Hungary
16:16 – 16:30	<b>István Ember:</b> The possible impact of the proliferation of 3D printers on the protection of critical infrastructure <i>Ludovika University of Public Service, Hungary</i>
16:30 – 16:45	<b>Ákos Bunyitai:</b> Hand tools of unlawful mechanical breaching and forcible entry <i>Ludovika University of Public Service, Hungary</i>
16:45 – 17:00	Ferenc Haraszti: Galvanic corrosion in practice Óbuda University, Hungary
17:00 – 17:15	Norbert Daruka: Options for implementing explosion protection in critical infrastructure  Óbuda University, Hungary
17:15-17:30	<b>Róbert Stadler:</b> Review of the Polymer Friction Stir Welding Óbuda University, Doctoral School on Materials Sciences and Technologies, Hungary
17:30 – 17:45	Closing ceremony