CONFERENCE PROGRAM

Day 1

8:30 - 09:00	Registration
09:00 - 9:15	**ICCECIP 2023 Opening Ceremony**
Tamás Vargha	
Deputy Minister of the Hungarian Ministry of Defence and a member of the Hungarian Parliament, Hungary	
Gábor Pozderka	
Commander of Hungarian Defence Forces Cyber Command, Hungary	
Prof. Zoltán Rajnai, PhD	
Dean of Bánki Donát Faculty of Mechanical and Safety Engineering, Óbuda University,	
Cyber Coordinator of Hungary Ministry of Interior, Hungary	
Plenary lectures	
Chairs:	**Lucia Figuli, PhD** *University of Žilina, Žilina, Slovak Republic*
	Prof. Zlatko Čović PhD *Subotica Tech - College of Applied Sciences, Serbia*
09:15 – 09:45	**Péter Holicza PhD** **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	**Colonel (GS) habil. Ing. Pavel Foltin, PhD** **Data-Driven Strategies for Enhancing Supply Chain and Transportation Infrastructure Resilience** *University of Defence in Brno, Czech Republic*
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	**Tünde Bonyai:** Critical infrastructures under the umbrella of NIS-2 *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	**Bence Tureczki:** 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	***Balogh Péter:*** 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	**Gábor Sinkó:** Al-Shabaab's Secret Service, the Amniyat (Somalia) *Óbuda University, Doctoral School on Safety and Security Sciences, Hungary*
14:15 – 14:30	**László Lőrincz**: ArtWork Protection *Óbuda University, 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:** 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	**Oroszi Eszter:** Measuring and evaluating the effectiveness of security awareness improvement methods *Ludovika University of Public Service, Hungary*
15:45 – 16:00	**Zlatko Covic:** Security testing of integrated web systems in the process of education of software engineers *Subotica Tech-College of Applied Sciences, Serbia*

16:00	***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	**Tímea Antal:** As many organizations, as many compliance solutions - special protection in practice *Óbuda University, Doctoral School on Safety and Security Sciences, Hungary*
15:15 – 15:30	**Attila Fodor:** Thermal Management Solutions to Optimize the Efficiency of Electric Bus Propulsion *Obuda University, Kando Kalman Faculty of Electrical Engineering, Budapest, Hungary*
15:30 – 15:45	**Réka Veronika Sallay:** EEG-based biometric identification using beta brainwaves with a new methodology *Óbuda University, Doctoral School on Safety and Security Sciences, Hungary*
15:45 - 16:00	**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*
16:00	**Day Closing**
18:00-22:00	**Gala Dinner**

Day 2	

Plenary lectures	
Chairs:	**Zoltán Nyikes PhD** *Milton Friedman University, Hungary*
	Prof. Valeriu Gabriel Ghica, PhD *National University of Science and Technology Bucharest, Romania*
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	**Robert C. Castel PhD** **Pending** *Israel National Parks Authority, Israel*
10:00 - 10:30	**Igor Fürstner PhD** **Pending** *Subotica Tech-College of Applied Sciences*
10:30 - 11:00	**Prof. Marcin Adamiak PhD** **Pending** *Faculty of Mechanical EngineeringLaboratory of Materials Research, Gliwice, Poland*
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	**Mariam Shbanah:** Development and testing of a new EMI shielding material

	Óbuda University, Doctoral School on Materials Sciences and Technologies, 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	**Bakhtyar Saleh Ahmmad:** Methodology for risk analysis in the design phase of high-rise buildings. *Óbuda University, Doctoral School on Safety and Security Sciences, Hungary*
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	**Nada El Yasmine Aichaoui:** Enhancing Safety and Efficiency: Human-Cobot Interaction in Critical Infrastructure *Óbuda University, Doctoral School on Safety and Security Sciences,Hungary*
11:45- 12:00	**Bárkányi Pál:** Expert proof of crimes against the information system *Milton Frieman University, Hungary*
12:00 - 12:15	**Michal Miške:** Using advanced technologies for the protection of critical infrastructures *University of Žilina, Slovak Republic*
12:15 - 12:30	**Simon János:** Supply Chain Management Using Automatic Guided Vehicle Systems in Smart Factory *University of Szeged, 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*** **Fábián Réka PhD,** *Óbuda University, Hungary* **Emilian Ceuca PhD**, *University of Alba Iulia, Romania*
14:00-14:15	**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*
14:15 -14:30	**Béla Bődi:** Assessment of the application of PCA rework at large manufacturers *Óbuda University, Doctoral School on Materials Sciences and Technologies, Hungary*
14:30 – 14:45	**László Mónus:** Safety technological testing of the compound bow structure *Óbuda University, Doctoral School on Materials Sciences and Technologies, Hungary*
14:45 – 15:00	**Lama Mkanna:** Microstructural Analysis of High-Strength Steel Post Gleeble Modelling *University of Dunaújváros, Hungary*
15:00 – 15:15	**János Kuti:** Flame-cutting experiences of wear-resistant high-strength steels *Óbuda University, Doctoral School on Materials Sciences and Technologies, Hungary*
15:15 - 15:30	**Enikő Réka Fábián:** Technological processes effect on lath martensitic material properties *Óbuda University, Hungary*
15:30 – 15:45	**Emilian Ceuca**: Minimizing Energy Losses in the Modern E-bikes by New Integrated Strategies for Adaptive Control *University of Alba Iulia, Romania*
15:45-16:00	**Technical Break**
	Section 4. B ***Physical Protection of Critical Infrastructure*** **Levente Dimén PhD,** *University of Alba Iulia, Romaniab* **László Tóth PhD,** *Óbuda University, Hungary*
14:00-14:15	**Róbert Stadler:** Review of the Polymer Friction Stir Welding

	Óbuda University, Doctoral School on Materials Sciences and Technologies, 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	**Arnold Őszi**: Advanced object recognition using drones *Óbuda University, Hungary*
15:00 – 15:15	**István Szávay** Protection against drones in industrial facilities *Óbuda University, Doctoral School on Safety and Security Sciences*
15:15 - 15:30	**Levente Dimén**: The Impact of Polluting Chemical Compounds Resulting From the Gases Exhausted by Road Vehicles in Urban Environment *University of Alba Iulia, Romania*
15:30 - 15:45	**András Pallagi:** The fundamental requirements of the defence zones of critical infrastructures *Obuda University Doctoral School on Safety and Security Sciences, Hungary*
15:45- 16:00	**Technical Break**
	Section 5. A ***Individual Security of Critical Infrastructure*** **Prof. Kornélia Lazányi PhD,** *Óbuda University, Hungary* **Péter Szikora PhD,** *Óbuda University, Hungary*
16:00 – 16:15	**Levente Durczy:** Hungarian legislations regarding cybersecurity *Obuda University, John von Neumann Faculty of Informatics*
16:15 – 16:30	**Rozália Szatmáry:** Trust and Security: How Trust in Autonomous Systems Shapes Decision-Making *Berzsenyi Dániel Secondary School, Hungary*
16:30 – 16:45	**Sára Szatmáry:** Quantum Computers and IT Security: Unlocking the Future, Exploring the Questions *Óbuda University, Hungary*
16:45 – 17:00	**Péter Szikora:** The impact of COVID-19 on adoption of self-driving cars *Óbuda University, Hungary*
17:00 – 17:15	**András Keszthelyi**: Some aspects of ethics in Info World

	Óbuda University, Hungary
17:15 – 17:30	**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*
17:30-17:45	**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*
16:00 – 16:15	**József Krenner:** The Relationship between Situational Crime Prevention and Road Safety. Defending against Environmental Threats. *Széchenyi István University of Győr*
16:15 – 16:30	**László Szalkai:** Preventing attacks on key installations or recapturing them by forced entry *Ludovika University of Public Service, Hungary*
16:30 – 16:45	**István Ember:** The possible impact of the proliferation of 3D printers on the protection of critical infrastructure *Ludovika University of Public Service, Hungary*
16:45 – 17:00	**Ákos Bunyitai:** Hand tools of unlawful mechanical breaching and forcible entry *Ludovika University of Public Service, Hungary*
17:00 – 17:15	**Ferenc Haraszti:** Galvanic corrosion in practice *Óbuda University, Hungary*
17:15 – 17:30	**Norbert Daruka:** Options for implementing explosion protection in critical infrastructure *Óbuda University, Hungary*
17:30-17:45	**Closing ceremony**