

# ORGANIZERS



Kutahya Dumlupinar University



National Technical University of Ukraine  
"Igor Sikorsky Kyiv Polytechnic Institute"

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# ADVANCED RESEARCH WORKSHOP



Holiday Inn Istanbul old city, an IHG Hotel, Turkey  
Website: <https://www.hiistanbuloldcity.com/>

Contact person:  
Umran Ercetin  
Tel: +90 533 356 69 43  
E-mail: [umran.ercetin@dpu.edu.tr](mailto:umran.ercetin@dpu.edu.tr)

Website of the ARW: <https://natosp.dpu.edu.tr/>  
E-mail: [natosp@dpu.edu.tr](mailto:natosp@dpu.edu.tr)

# CRITICAL INFRASTRUCTURES PROTECTION IN RESPONSE TO TERRORIST ATTACKS

23-25 October 2023  
**DELEGATE HANDBOOK**



*This activity is supported by:* The NATO Science for Peace and Security Programme

# EVENT PROGRAMME

## 23 October

**08:00 – 10:00** Participants' arrival

**10:00 – 10:15** Rector

Kutahya Dumlupinar University, Turkey

Welcome speech and Opening of the Event

**10:15 – 10:30** Rector

Rzeszow University of Technology, Poland

Welcome speech

**10:35 – 10:50** Ministry of Ecology and Natural Resources of the Republic of Azerbaijan, Azerbaijan

Welcome speech

**11:00- 11:15** Consultant of Ukraine

**11:20 – 12:00** PhD. Umran Ercetin

Kutahya Dumlupinar University, Turkey "Prediction of the effects of explosions on structures using commercial software programs"

**12:00 – 13:00** Lunch

**13:00 – 13:40** Prof. Natalia Zuiavska

National Technical University of Ukraine "Igor Sikorsky Kyiv Polytechnic Institute", Ukraine. "Computer simulation of the effect of an explosion on critical objects infrastructure "

**13:50 – 14:30** Universities at war: staying resilient under terrorist attacks (Moderators: Umran Ercetin, Olha Demydenko) Brainstorming activity

**14:40 – 15:20** Dr. Sci., Prof. Svitlana Shytikova National Erasmus + Office in Ukraine, Ukraine

Resilient people and education in cooperation with international partners

**15:30-16:00** Coffee Break

**16:00 – 16:40** PhD. Olha Demydenko and PhD. Olga Bocovets Igor Sikorsky Kyiv Polytechnic Institute

Psychological rehabilitation of persons suffered from terrorist attack and military actions (Ukrainian university case): challenges and solutions

**16:40—17:00** Facilitation session 1

**18:00** Welcome reception (MUKELLEF RESTAURANT @KARAKOY)

## 24 October

**09:00 – 09:30** Interaction of participants

**09:30 – 10:20** Prof. Ali Kahriman & Selim Caner

Okan University, Turkey "Effects of explosions on structures and the environment"

**10:30 – 11:10** PhD. Azer Shukurov

Deputy Chairman of the Board of Directors Ministry of Ecology and Natural Resources of the Republic of Azerbaijan, Azerbaijan

"Environmental impact assessment of blasting operations"

**11:20 – 12:00** Prof. Piotr Koszelnik, Prof. Dominik Strzałka Rzeszow University of Technology, Poland

"Potential hazards for the critical infrastructure in Poland"

**12:00 – 13:00** Lunch

**13:00 – 13:40** Prof. Jarosław Sęp

Rzeszow University of Technology, Poland

"Risks analysis for the objects of critical infrastructure"

**13:50 – 14:30** PhD. Olha Demydenko and PhD. Olga Bocovets Igor Sikorsky Kyiv Polytechnic Institute

"Mental health and psychological support, and team motivation in the face of threats from terrorism and military operations"

**14:40-15:20** Rui Cordeiro, Portugal

**15:30 – 16:00** Coffee break

**16:00 – 16:40** Piotr Grzybowski Rzeszow University of Technology, Poland

**16:50 – 17:30** Round table "Implementation of modern approaches for critical infrastructure protection in response to terrorist attacks. Best world practices and initiatives" (Moderators: Umran Ercetin, PhD Svitlana Shytikova)

**18:00** Istanbul city tour

## 25 October

**09:00 – 09:30** Interaction of participants

**09:30 – 10:10** PhD. Sergii Shlyk

Kremenchuk Mykhailo Ostrohradskyi National University, Ukraine "Resistance estimation of the critical infrastructure objects in hydropower engineering using computer simulation"

**10:20 – 11:00** Prof. Andrii Dreus

Oles Honchar Dnipro National University, Ukraine

"Computer simulation of heat exchange and gas-dynamic processes as a result of terrorist attacks"

**11:10 – 11:40** Prof. Mehmet Ugur Toprak

Kutahya Dumlupinar University, Turkey

"Building materials used in explosive environments"

**12:00 – 13:00** Lunch

**13:00 – 14:10** PhD. Olha Demydenko and PhD. Olga Bocovets Igor Sikorsky Kyiv Polytechnic Institute

Activities in small working groups (facilitation session 2)

**14:20 – 15:00** Closing remarks and award of Certificates of Participation

**15:00 – 17:00** Participants' departure