



THE 12th CMDR COE ANNUAL CONFERENCE ON CRISIS MANAGEMENT AND DISASTER RESPONSE

3rd INTERNATIONAL CONFERENCE ON ENVIRONMENTAL PROTECTION AND DISASTER RISKS

04 June – 06 June 2024

Conference Programme

EET / Sofia Local	04 June 2024
09:00 – 10:00	Registration & Welcome Coffee
10:00 – 10:20	<p>Opening of the Event</p> <ul style="list-style-type: none"> • <i>COL Orlin NIKOLOV, PhD, Director of CMDR COE</i> • <i>Assoc. Prof. Nina DOBRINKOVA PhD, BAS</i>
10:20 – 11:50	<p>Key Note Speakers/Discussion Panel <i>Moderator: COL Orlin NIKOLOV, PhD, CMDR COE Director</i></p> <ul style="list-style-type: none"> • <i>Assoc. Prof. Petya TRIFONOVA PhD, BAS, BGR</i> • <i>Chief Commissioner Alexander DZHARTOV, Director of the General Directorate of Fire Safety and Civil Protection, Ministry of Interior, BGR</i> • <i>Irina NOVAKOVA, NATO HQ</i> • <i>Ms. Swathi VEERAVALLI, Director for Climate Security and Adaptation in the National Security Council's Climate & Energy directorate in the White House, USA</i> • <i>Dr. Raed ARAFAT, Secretary of State, Head of Department for Emergency Situations, Ministry of Internal Affairs, ROU</i>

	<p>QA session</p> <p>https://cmdrcoe.org/</p> <p>Ask your lecturer</p> <p>Password: 000000</p>
11:50 – 12:00	Family Photo
12:00 – 13:00	Lunch Break – hosted by CMDR COE
	<u>In-Person Panel</u>
13:00 – 15:00	<p><u>Topic: Flooding and Wildfire</u></p> <p><i>Moderators:</i> <i>Assoc. Prof. Nina DOBRINKOVA PhD,BAS</i> <i>LTC Dimitrios DALAKOURAS, PhD, CMDR COE</i></p>
	<p><u><i>Panelists:</i></u></p> <p>Forest Fire Management in Türkiye <i>Assoc. Prof. Dr. Kadir Alperen COSKUNER, Ertugrul Bilgili</i></p> <p>Preliminary Results of Crown Fuel Load Estimation using Handheld Mobile Laser Scanning in Turkish Red Pine (<i>Pinus brutia Ten.</i>) Stands <i>Kadir Alperen Coskuner, Can Vatandaslar, Murat Ozturk, Ismet Harman, Uzay Karahalil, Tolga Berber, Esra Tunc Gormus and Ertugrul Bilgili</i></p> <p>Overview of the forest fires protection system in Romania <i>Adrian Lorent, Marius Petrila, Bogdan Apostol, Florin Capalb, Cristiana Marcu and Nicolae Ovidiu Badea</i></p> <p>Accessibility of Slovenian forests for firetrucks <i>Jaša Saražin</i></p> <p>Extreme hydrological events – floods in Bulgaria <i>Snezhanka Balabanova, Georgy Koshinchanov, Silviya Stoyanova, Vesela Stoyanova and Valeriya Yordanova</i></p>

	<p>Data accuracy challenges in wildland fire simulations <i>Assoc. Prof. Nina Dobrinkova PhD</i></p> <p>ICT tools optimizing field response in cases of natural hazards <i>Assoc. Prof. Nina Dobrinkova PhD</i></p> <p>QA session</p> <p>https://cmdrcoe.org/</p> <p>Ask your lecturer</p> <p>Password: 111111</p>
15:00 – 15:15	Coffee Break
15:15 – 17:30	<p><u>Topics:</u></p> <p>Natural and Human-Induced Hazard</p> <p>Disaster Medicine</p> <p>Risk Management and Assessment</p> <p>Air Pollution and Health</p> <p>Moderators:</p> <p><i>Assoc. Prof. Petya TRIFONOVA PhD, BAS</i></p> <p><i>Steve RECCA, PDC</i></p> <p><i>LTC Mihai ILIE, CMDR COE</i></p>
	<p><u>Panelists:</u></p> <p>Injured and Died in an Earthquake <i>Stefka Fidanova, Leonid Kirilov, Marcin Paprzycki and Veselin Ivanov</i></p> <p>Geomagnetic Models Versus Real Measurements – An Example from the Bulgarian Territory <i>Metodi Metodiev, Petya Trifonova and Ivaylo Radev</i></p> <p>Some lessons from the Kahramanmaras Earthquake Sequence of 2023 relevant to the Bulgarian construction practice for industrial buildings <i>Tzvetan Georgiev</i></p>

Fine particulates from agricultural bio-mass combustion

Franz Winter, Iliyana Naydenova, Ognyan Sandov and Tsvetelina Petrova

A Study on the Relationship Between Radon Volume Activity in the Surface Atmosphere and Seismic Activity in the Year 2022 Using METER.AC Open Network Data

Emil Oynakov, Atanas Terziyski and Irena Alexandrova

AI in Healthcare – the Pre-Hospital Medical Specialists’ Perception

Rostislav Kostadinov, Vasil Topalov, Mariya Georgieva, Svetoslav Georgiev and Yancho Madzharov

Fog forecast occurrence stochastic models development for Sofia NIMH station and Sofia Airport

Neyko Neykov, Anastasiya Stoycheva, Ilian Gospodinov, Nadya Neykova, Orlin Gueorguiev and Kiril Slavov

Investigation of the presence of cyanotoxins, nutrients and composition of phytoplankton communities in the Bistritsa dam in the period 2017-2020

Vera Pavlova, Mariya Mitreva, Vesela Georgieva, Krasimira Vasileva, Stanimira Arsova, Milena Rachinska, Antoaneta Lazarova and Tzveta Georgieva

QA session

<https://cmdrcoe.org/>

Ask your lecturer

Password: 222222

17:30 – 17:40

Wrap-up Day 1

	05 June 2024
	<u>Online Panel</u>
09:00 – 12:15	<p><u>Topic:</u> Natural and Human-Induced Hazard</p> <p><i>Moderators: Assoc. Prof. Petya TRIFONOVA PhD, BAS LTC Mihai ILIE, CMDR COE</i></p>
09:00 – 10:15	<p><u>Panelists:</u></p> <p><i>Environmental impact of the 7 June 2023 moderate earthquake in Plovdiv and Asenovgrad area, Bulgaria.</i> <i>Maria Chamati and Mariya Popova</i></p> <p><i>Multi-Hazard Event: Interconnected Occurrence of High Ozone, PM10, High Temperature, and Desert Dust Intrusion</i> <i>Hristina Kirova, Anastasiya Stoycheva and Emilia Georgieva</i></p> <p><i>Influence of local soil conditions on damages in Kahramanmaras during the 2023 Turkey Earthquake</i> <i>Nikolay Milev, Takashi Kiyota, Tetsuo Tobita, Juan Briones, Othon Briones, Ozer Cinicioglu, Gokce Tonuk and Seda Torisu</i></p> <p><i>Global changes and tourism in show caves in Bulgaria – hazards and relationships</i> <i>Petar Stefanov, Peter Nojarov, Karel Turek and Dilyana Stefanova</i></p> <p><i>Approaches for earthquake damage reduction of aged reinforced concrete structures in Bulgaria</i> <i>Vassil Kardjiev and Krasimir Boshnakov</i></p>
10:15 – 10:30	Coffee Break
10:30 – 12:15	<p><u>Panelists:</u></p> <p><i>Seismic retrofit of buildings in Bulgaria for efficient seismic risk reduction</i> <i>Krasimir Boshnakov, Vassil Kardjiev and Mihaela Kouteva-Guentcheva</i></p> <p><i>Risk assessment for the city of Veliko Tarnovo</i></p>

	<p><i>Dimitar Stefanov, Dimcho Solakov, Stela Simeonova and Plamena Raykova-Tsankova</i> Study of Short-term Effects of Air Pollution on Hospital Admissions in Bulgarian Cities Sofia, Plovdiv and Varna <i>Stoyan Georgiev, Angel Dzhambov and Reneta Dimitrova</i></p> <p>The broker roles in Conveying Emergency Information: an Investigation of the ‘7.20’ Henan flood <i>Bo Zhang, Zebin Zhao and Rui Cheng</i></p> <p>Preliminary results on measurement of Black carbon concentration in the ABL by aerological sounding <i>Georgi Tsekov and Elena Hristova</i></p> <p>An experimentally oriented approach in assessment and improving the seismic behaviour of a class of non-engineering designed and constructed buildings <i>Peter Pavlov and Radoslav Nikolov</i></p> <p>QA session</p> <p>https://cmdrcoe.org/</p> <p>Ask your lecturer</p> <p>Password: 333333</p>
12:15 – 13:15	Lunch Break
13:15 - 13:45	<p><u>Topic:</u> High-Performance Computing, M&S, GIS for environmental monitoring and AI</p> <p><i>Moderators: COL Kostadin LAZAROV, CMDR COE Assoc. Prof. Nina DOBRINKOVA PhD, BAS</i></p>
	<p><u>Panelists:</u></p> <p><i>Interseismic Monitoring via DInSAR Methodology in the Dzherman Fault Zone</i> <i>Dilyana Hristova</i></p> <p><i>Comparative analysis of topographic conditions for hydraulic flood modeling using different spatial resolution digital terrain models: A case study from the Ogosta River, Bulgaria</i> <i>Davis Dinkov and Desislava Hristova</i></p>

	<p>QA session</p> <p>https://cmdrcoe.org/</p> <p>Ask your lecturer</p> <p>Password: 444444</p>
13:45 – 15:15	<p><u>Topics:</u> Waste Management and Water Resources</p> <p><i>Moderators:</i></p> <p><i>Prof. Stefka FIDANOVA, D. Sc. BAS</i></p> <p><i>COL Kamen IVANOV, CMDR COE</i></p>
	<p><u>Panelists:</u></p> <p>Geophysical methods for optimizing mining waste management <i>Atanas Kisyov, Maya Tomova and Ivailo Koprev</i></p> <p>Intelligent Waste Management System: Deep Learning Enabled Sorting with Bin-Fill Sensor Integration <i>Aleksandar Petrovski, Marko Radovanovic, Aner Behlic, Kristijan Ilievski and Sofija Ackovska</i></p> <p>Risk assessment in integrated mining waste storage facility with geophysical methods <i>Atanas Kisyov</i></p> <p>SWAT model calibration, validation and parameter sensitivity analysis using SWAT-CUP, SUFI-2 for the watershed of the Rusenski Lom River, Bulgaria <i>Milena Mitova, Zy Rakotoarimanana, Milena Kercheva, Hiroshi Ishidaira</i></p> <p>Trends in the use of water resources in Bulgaria <i>Kalin Seymenov and Krasya Kolcheva</i></p> <p>QA session</p> <p>https://cmdrcoe.org/</p> <p>Ask your lecturer</p> <p>Password: 555555</p>
15:15 – 15:30	Wrap-up Day 2
19:30	Non-Hosted Dinner

	06 June 2024
	<u>In-Person Panel</u>
09:00 – 10:30	<p><u>Topic:</u> High-Performance Computing, M&S, GIS for environmental monitoring and AI</p> <p><i>Moderators: COL Kostadin LAZAROV, CMDR COE Assoc. Prof. Nina DOBRINKOVA PhD, BAS</i></p>
	<p><u>Panelists:</u></p> <p><i>HPDA service for estimating the brown bear (<i>Ursus arctos</i> L.) population in Bulgaria</i> <i>Todor Gurov, Emanouil Atanassov, Svetlozar Yordanov, Ruslan Serbezov, Silvi-Maria Gurova, Nikolai Spassov and Radoslav Stanchev</i></p> <p><i>Application of ICT in interactive learning environments in emergency situations</i> <i>Ava Chikurteva, Denis Chikurtev, Elena Blagoeva and Nina Bogdanova</i></p> <p><i>Leveraging Social Media data and Artificial Intelligence for improving earthquake response efforts</i> <i>Kalin Kopanov, Velizar Varbanov and Tatiana Atanasova</i></p> <p><i>Monitoring organic einkorn yields with Sentinel-2 data</i> <i>Milen Chaney, Bogdan Bonchev, Darina Valcheva and Lachezar Filchev</i></p> <p><i>Design Accelerograms Derivation for Dynamic Analysis of Retaining Walls</i> <i>Maria Topalska and Mihaela Kouteva-Guentcheva</i></p> <p>QA session</p> <p><u>https://cmdrcoe.org/</u></p> <p>Ask your lecturer</p> <p>Password: 666666</p>
10:30 – 10:45	Coffee Break

10:45 –12:00	<p><u>Topics:</u> Disaster Medicine Risk Management and Assessment</p> <p>Moderators: Assoc. Prof. Petya TRIFONOVA PhD, BAS Steve RECCA, PDC</p>
	<p><u>Panelists:</u></p> <p><i>Integration of a kinematic seismic early warning system to Bg-Alert – possibilities and difficulties</i> <i>Boyko Ranguelov, Garo Mardirossian, Petar Getzov, Nikolay Zagorski and Edelways Spassov</i></p> <p><i>Natural hazards of the Northern Bulgarian Black Sea coast – A review and new discoveries</i> <i>Boyko Ranguelov</i></p> <p><i>Climatology of Freezing Precipitation in Bulgaria</i> <i>Dimitar Nikolov, Tzvetan Dimitrov, Tania Marinova and Radoslav Evgeniev</i></p> <p><i>Effects of the Fault Parameters on the Focal Mechanism Solutions: A Case Study of the 1928 Chirpan and Plovdiv Earthquakes</i> <i>Lyuba Dimova and Reneta Raykova</i></p> <p>QA session</p> <p>https://cmdrcoe.org/</p> <p>Ask your lecturer</p> <p>Password: 777777</p>
12:00 – 13:00	Lunch Break – hosted by CMDR COE

13:00 – 13:45	<p><u>Topic:</u> Climate Change Challenges and Security Implications Moderators: Prof. Stefka FIDANOVA, D. Sc. BAS Boris Guenov, CMDR COE</p>
	<p><u>Panelists:</u> Remote Sensing of Climate Change Research Lachezar Filchev and Milen Chanev Preliminary Results from the Exploration of the Wind Model Windninja on the Local Scale over Bulgaria Tsvetan Dimitrov and Hristo Chervenkov QA session https://cmdrcoe.org/ Ask your lecturer Password:888888</p>
13:45 – 14:00	Wrap-up Day 3
14:15	End of the Conference