

Characterization and Engineering of Karst Aquifers



Provisional program of “A week with Karst” in “International Year of Caves and Karst”,
1 – 7 June 2021

CEKA 2021 – Special thematic session – Online conference “Karst: From Top to Bottom”

Day	Time (h)	Topic/Activity	Lecturer
Day 1¹ (1 June)	9–9.30AM	Opening ceremony	
	9.30 – 10.45 AM	Introductory note, program; Historical development of karstology and karst hydrogeology; Importance of karst and karst distribution worldwide; Geo-heritage sites; Dinaric karst	Z. Stevanović
	11 AM – 12.15	Carbonate and non-carbonate rocks: mineralogy, depositional environments, classifications	D. Milovanović
	12.15-1 PM	Chemical factors of karstification; Role of tectonics	D. Milovanović
	2–2.45 PM	Porosity and permeability of karstic rocks; Karstification process and its features: Surface and subsurface karst landforms	Z. Stevanović
	3 – 4 PM	Groundwater circulation in karst: recharge, flow types and directions, discharge	Z. Stevanović
Day 2 (2 June)	9 – 10.15 AM	Methods in karst hydrogeology – an overview; geology, remote sensing, geophysics, water points inventory, groundwater tapping, hydrogeological properties and field tests	Z. Stevanović
	10.15 – 11.30 AM	Methods in karst hydrogeology – climate, hydrology, springs hydrograph analysis and stochastic models	V. Ristić Vakanjac
	11.45 AM – 1 PM	Methods in karst hydrogeology – geomorphology, speleology, speleo diving, exploratory drilling, hydrogeology maps, GIS modeling, database	S. Milanović
	2-2.45 PM	Problems related to construction of dams, reservoirs and other structures in karst	P. Milanović
	3–4 PM	Investigation, design, corrective measures in dams functioning – global experience	P. Milanović
Day 3 (3 June)	9-10.15 AM	Specific research methods to identify and prevent leakage from reservoirs in karst	S. Milanović
	10.15- 11.45 AM	Water resources cycle in karst; Surface-groundwater interaction; Feasibility studies and engineering design; Environmental impact assessment	O. Bonacci I. Andrić
	12-1 PM	Transboundary aquifers: problems, solutions and experiences	N. Kukurić
	2-4 PM	<i>DVD movies “Karst” and “Karst of Montenegro” “Trebišnjica- the largest sinking river of Europe”. “Protecting the karst: Forgotten species”</i>	

¹ Time is CET (Central European Time, Paris, Budapest)

Day 4 (4 June)	9-10.30 AM	Characterization of karst aquifers; Groundwater budget; Specific regime of karstic groundwater (quantity, quality); Safe yield; Aquifer control and sustainability	Z. Stevanović
	10.30 – 11.30 AM	Karst aquifer vulnerability – assessment and visualization; Sanitary protection zones and measures	V. Živanović
	11.45 - 1 PM	Quality dynamics at karst springs. A challenge for drinking water supplies. Isotopic methods in karst, GW ageing	Lj. Vasić
	2 – 3.15 PM	Modeling of karst aquifers – conceptualization for numeric models, software, EPM, CFP, case studies	N. Krešić
	3.30 – 4.30	Stochastic modeling of karst hydrogeological systems and water resources assessment: Challenges and solutions	I. Jemcov
Day 5 (5 June)	10 AM - 5 PM	<i>Special Session - Lecturing by Distinguished Guests</i> <i>12 Invited Lectures - members of the Karst Commission and/or former CEKA course lecturers provide lectures on various topics (30' each)</i>	Augusto Auler, Jianhua Cao, Francesco Fiorillo, Derek Ford, Nico Goldscheider, Chris Groves, John Gunn, Hervé Jourde, Attila Kovács, Peter Malik, Bartolomé Navarro, Abe Springer
Day 6-7 (6 -7 June)	9 AM - 5 PM	Online Multidisciplinary Conference for young karst researchers and professionals “Karst: From Top to Bottom” <i>(Details and topics posted at web site http://www.karst.edu.rs/en/index.html).</i> <i>Attendance: free of charge;</i> <i>Abstract: 1 page, to be published in the Books of Abstracts;</i> <i>Time for presentation 15 minutes; Authors of high-quality presentations would be invited to prepare paper for publishing in SI Journal “Carbonates and Evaporites” or some of Serbian geological journals;</i> <i>Conference is especially devoted to younger and talented karst researchers, preferably, but not limited for age under 40.</i>	Call for Abstracts – Open from 1 February; Deadline for abstract submission – 30 April; Abstracts acceptance – 15 May
		Closing session, concluding remarks, issuing of certificates	Z. Stevanović, S. Milanović

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Note: In case of improved health conditions and removal of travel restrictions the 3-day field trip starting from 9 June, will be organized to the Montenegro karst (Durmitor and Skadar Lake basin) with rafting and boating, and visit of remarkable karst sites.

Web site of CEKA 2021 and Karst Conference: <http://www.karst.edu.rs/en/index.html>