











The 11th International Conference on

BRIDGES IN DANUBE BASIN

New trends in design, construction, assessment, monitoring and rehabilitation of large and medium span bridges

Munich / Germany, November 20 and 21, 2024





Technical University of Munich TUM School of Engineering and Design Chair of Concrete and Masonry Structures | Chair of Metal Structures

WEDNESDAY, 20. NOVEMBER 2024

	Excursion	
	Munich – Nuremberg - Munich	
07:00	Departure	
	Meeting point: Technical University of Munich Building N6 Theresienstraße 90 80333 Munich	
from 09:30	Extradosed bridge AK Nuremberg East BW3-1 Overfly	
	Guided tour of the construction site, presentation, coffee and snacks	
from 12:00	Bridge Unterrieden	
	Guided tour of the construction site, presentation, snacks	
from 14:45	City tour Nuremberg	
until 18:30	Arrival Munich	
19:30 – 21:30	Welcome reception at Technical University of Munich	

THURSDAY, 21. NOVEMBER 2024

	Plenary Session	
	Plenary room (Martin Mensinger)	
08:15 – 08:25	Opening	
	Prof. DrIng. Martin Mensinger, Technical University of Munich	
08:25 – 08:55	Actual trends in design, construction and monitoring of large-span bridges	
	Pipenbaher, Marjan	
08:55 - 09:00	Short break to switch rooms	

	Cable bridges	Bridges
	Plenary room (Jiri Strasky)	Guardini Library (Marjan Pipenbaher)
09:00 – 09:15	A new landmark in the making: the 4th Danube Bridge in Linz	The new Bechlingen Viaduct in the course of the motorway A 45
	Widmayer, Mathias	Schramm, Nicholas
09:15 – 09:30	B15, Bridge over the mangfall river and canal - implementation of a	Design of the Danube bridge at Mohács
	cable-stayed bridge in the Rosenheim clay	Pál, Gábor
	Donner, Jacqueline	
09:30 - 09:45	Budapest New Danube Bridge – A	The New Gänstor Bridge
	Creative And International Collaboration	Sweers, Bastian
	Metters, Edmund	
09:45 – 10:00	Balanced cantilever camber control of Paks-Kalocsa extradosed Danube bridge superstructure	Tuned Mass Dampers for Vibration Control of Footbridges from an Architectural Point of View
	Kisbán, Sándor	Kucera, Jiri
10:00 – 10:15	Design of Zemplen 723 – the new world record pedestrian catenary	New Bridges across the Danube and Sava River in Serbia
	bridge in Sátoraljaújhely	Stipanic, Bratislav
	Gondár, Peter	
10:15 – 10:30	Robinson bridge, the newest landmark of Budapest	New bridge over the sava river on the location of old sava bridge in
	Pál, Gábor	belgrade – bridge superstructure
		Jaćović, Slobodan
10:30 - 11:00	Coffee break	

	Loads and extraordinary actions on bridges	Research and Development
	Plenary room (Ivanka Topurova)	Guardini Library (Zlatko Marković)
11:00 – 11:15	New design methods for trapezoidally corrugated web girders	Innovative applications of headed bars in bridges Bujnak, Jan
	László, Dunai	
11:15 – 11:30	Internal Pressure Induced Load on Single-sided Fillet Welds of Small- sized Box Girders	Hot-Dip Galvanizing in Bridge Construction
	Ltaief, Malik	Firan, Mirabela
11:30 – 11:45	Development of object-specific load-models by monitoring for the "Donau-Wald-Brücke" at Winzer	Analysing the shear behavior of old post-tensioned bridges with real sized beam elements
	Burkhart, Andreas	Thoma, Sebastian
11:45 – 12:00	Some proposals for the military load capacity assessment of existing road bridges	Strengthening of Innbrücke Egglfing-Obernberg
	Hajós, Bence	Keil, Florian
12:00 – 12:15	Design and 3D CFD simulation of river piers of New Danube Bridge in Budapest, Hungary	New research developments in the assessment of the damping factor of railway bridges
	Kolozsi, Péter	Stollwitzer, Andreas
12:15 – 12:30	Advantages of integral abutments for seismic design of bridges	Correlation of the fatigue strengths of wire and rope in full locked coil ropes (FLC)
	Topurova, Ivanka (Poster Presentation)	Rittich, Nils
12:30 – 14:00	Lunch break	

	Railway bridges	Monitoring of bridges
	Plenary room (Martin Mensinger)	Guardini Library (Jan Bujnak)
14:00 – 14:15	Assessment of the safety against fatigue failure of riveted railway bridges based on fracture mechanics Riedel, Thomas	Interdisciplinary research towards application of new ultrasonic methods for improved structural health monitoring - Concept, objectives and first results of the DFG FOR 2825 research group applied to the monitoring of the Gänstor Bridge
		Jägle, Eva
14:15 – 14:30	Large infrastructure projects – the challenging road to an optimal	System Identification with Coda Waves at the Gänstorbrücke in Ulm
	design	Grabke, Stefan
	Radulescu, Christian-Valentin	
14:30 – 14:45	Reconstruction of the Southern connecting railway bridge	Advanced Monitoring Systems for Bridge Infrastructures: Integrating 6D Sensors and Low-Cost High-
	Gàbor, Szabó	Precision GNSS
		Windl, Roman
14:45 – 15:00	Sustainable High-Speed Railway Bridge Construction over the	Monitoring and assessment of 100 year old Alzbrücke Seebruck
	Danube-Tisa-Dunav Canal	Mader, Julius
	Čučković, Milena	
15:00 – 15:15	Railway bridges over Dunav-Tisa- Dunav (DTD) channel as part of the	Highway Traffic Monitoring using Bridge Weigh-in-Motion
	high-speed railway design Belgrade-Budapest, section Novi Sad-Subotica-State Border	Nowak, Marcel
	Luković, Zoran	
15:15 – 15:45	Coffee break	

	Pridge Analysis & Design Methods	Duidae construction methods
	Bridge Analysis & Design Methods	Bridge construction methods
	Plenary room (Oliver Fischer)	Guardini Library (Edward Petzek)
•	Discussion issues regarding three- dimensional modeling for analysis of bridges	LT-bridge construction method for the material-saving and fast construction of post-tensioned concrete bridges
	Topurova, Ivanka	Untermarzoner, Franz
16:00 – 16:15	Design and construction of bridges on Morava Corridor	Incremental Launching of Bridge over the Sava River at Sremska
	Milutinovic, Goran	Raca
		Stipanic, Bratislav
16:15 – 16:30	Dimensioning concept for integral composite bridges with sheet-pile	The construction of the new Kalocsa-Paks Danube bridge
	abutments	Wunderlich, Istvan Peter
	Rittich, Nils	
16:30 – 16:45		Road bridge over the Sava river near Sremska Raca
		Čolić, Biljana
16:45 – 16:55	Short break to switch rooms	
	Plenary Session	
	Plenary room (Oliver Fischer)	
16:55 – 17:25	Progressively Erected Bridges	
	Jiri Strasky	
17:25 – 17:30	Closing	
	Prof. DrIng. Oliver Fischer, Technical University of Munich	
from 18:00	Conference dinner at Technical University of Munich	