

30TH INTERNATIONAL SYMPOSIUM BRIDGES 2025

24-25 April 2025, Courtyard by Marriott hotel, Brno

24. 4. 2025 – Thursday – 1st day of the symposium

08.00 Registration of participants

Foyer of the Marriott hotel

PLATINUM 1+2+3

I. Bridge structures in the Czech Republic – construction, administration and maintenance

Chair: Wangler Dana, Ryjáček Pavel

09:00 – 09:45 Opening ceremony of the 30th International Symposium Bridges 2025 - presentation of honorary awards, Bridge Work 2023 45 min.

09:45 – 09:55 **Opening speech of the SFDI** 10 min.
Ing. Zbyněk Hořelica , State Transport Infrastructure Fund

09:55 – 10:05 **Opening speech by the ŘSD** 10 min.
Ing. Radek Mátl, Directorate of Roads and Motorways of the Czech Republic

10:10 – 10:20 **Opening performance by the Czech Railways** 10 min.
Railway Administration, state organization, General Directorate

10:25 – 11:05 **Customs Valley Viaduct , HS2 High -Speed Railway , UK** 40 min.
George Kapos , Rendel Limited

11:05 – 11:35 **Under-spanned bridges : a suitable solution for efficiency and sustainability** 30 min.
Aurelius Muttoni , Emeritus of the School Polytechnique Federal University of Lausanne

- 11:35 – 11:45 **Railway bridges** 10 min.
Ing. Milan Čermák, Railway Administration, state organization, General Directorate
- 11:45 – 11:55 **Current status and news on the issue of bridges of the Road and Highway Directorate of the Czech Republic** 10 min.
Ing. Jiří Hlavatý, Ph.D., Road and Highway Directorate of the Czech Republic
- 12:00 – 1:00 PM **LUNCH** 60 min.
- 13:00 – 14:00 **Panel discussion** 60 min.
Mgr. Martin Kupka, Ministry of Transport of the Czech Republic

Parallel section from 2:00 PM

PLATINUM 1+2+3

IV. Bridges in the Czech Republic – projects and implementations Chairman: Slánský Bohuslav, Vítek Jan

- 14:00 – 14:20 **CONSTRUCTION OF A SUSPENSION BRIDGE OVER THE LABEVY PARDUBICÍCH NEAR FÁBLOVKA – COMPLETION** 20 min.
Dr. Petr Vítek, Hochtief CZ
- 14:20 – 14:40 **Design and implementation of the repair of the Barrandov Bridge in Prague** 20 min.
Ing. Milan Šístek, FEng ., Ing. Jan Mukařovský, Ing. Jakub Heřman, Ing. Ondřej Matoušek, prof. Ing. Jan L. Vítek, CSc. FEng ., doc. Ing. Lukáš Vráblík, Ph.D., Valbek , spol. sro, CTU in Prague
- 14:40 – 14:55 **Barrandovský Bridge, complete reconstruction, Prague 4 and 5. Diagnostic survey and monitoring of the bridge during reconstruction** 15 min
Ing. Jan Borový, Ing. Tomáš Klier, Pontex, spol s.r.o.
- 14:55 - 15:15 **Reconstruction of the Barrandov Bridge** 20 min.
Ing. Ladislav Nový, PORR as
- 15:15 – 15:35 **Development of prestressed strip structures** 20 min.
Prof. Ing. Jiří Stráský, DSc ., Stráský, Hustý a partneři sro
- 15:35 – 15:55 **Reconstruction of the Dr. Edvard Beneš Bridge in Štěchovice** 20 min.
Ing. Aleš Meister , Ing. Tomáš Landa, Ing. Filip Řehoř, Ph.D., TUBES spol. s ro, PRAGOPROJEKT, as

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III. Bridges in the Czech Republic – science and research Chairmen: Hvízdal Václav,
Podlipný Petr

14:00 – 14:20 **High-strength fine-grained weldable steels and their properties** 20 min.
Ing. Radim Pachlopník , Ing. Jakub Jurča, Ing. Michal Baštinský , Ing. Petr Eliáš, VÍTKOVICE STEEL, as

14:20 – 14:40 **Contradiction in designing the anchoring of noise barriers** 20 min.
Ing. Daniel Mikeš, Ing. Jan David, Hilti ČR spol. s ro

14:40 – 14:55 **Findings from diagnostics, recalculation and rectification of the cable-stayed bridge on the Southern Link in Prague** 15 min.
Prof. Ing. Pavel Ryjáček , Ph.D., Ing. Jan Pozdíšek , Ph.D., Faculty of Civil Engineering, Czech Technical University in Prague, Stráský, Hustý a partneři sro

14:55 – 15:15 **A new method for designing 3D discontinuity areas in bridge structures** 20 min
Ing. Pavlína Lakatosová , Ph.D., Ing. Lukáš Bobek, Ing. Jaromír Kabeláč, Ph.D., Ing. Pavel Kaláb, Ph.D., IDEA StatiCa sro, BUT Faculty of Civil Engineering

15:15 – 15:30 **Monitoring of pillar deformations during the construction of a new bridge on the D35 motorway near Opatovce using gradual extension technology** 15 min.
Ing. Tomáš Klier, Ing. Magdaléna Boháčová, Ing. Tomáš Míčka, Pontex sro

15:30 – 15:45 **Use of drones and machine learning for the evaluation of bridge defects and failures** 15 min.
prof. Ing. Pavel Ryjáček , Ph.D., doc. Ing. Rudolf Urban, Ph.D., Milan Rollo , Martin Urban, Faculty of Civil Engineering, Czech Technical University in Prague, Rollo , AgentFly Technologies sro, Eyedea Recognition , sro

15:45 – 16:00 **Prestressed concrete – protection of reinforcement against corrosion** 15 min.
Prof. Ing. Jan L. Vítek, CSc., FEng ., Faculty of Civil Engineering, Czech Technical University in Prague

PLATINUM 1+2+3

II. Bridges in Brno Chairman: Nováček Jan, Wangler Tomáš

16:00 – 16:15 **Footbridge Velodrome in Brno** 15 min.
Ing. Jan Nováček, Ph.D., Ing. Daniel Hibš , Prof. Ing. Jiří Stráský, DSc ., Stráský, Hustý and partners sro

16:15 – 16:35 **Reconstruction of the Otakar Ševčík Bridge over Ostravská Street in Brno** 20 min.

Petr Novotný, Ing. Matej Čačáný, Ing. Erika Pijáčková, Ing. Jiří Zahrada, Ing. Ondřej Doubek, OHLA ŽS, as

16:35 – 16:50 **I/42 Brno VMO Rokytova – Mosty via Maloměřice marshalling yard** 15 min.

Ing. Vladimír Engler, Ing. Jan Mukařovský, Ing. Ondřej Matoušek, Valbek, spol. sro

16:50 – 17:05 **I/42 Tomkovo náměstí and I/42 Rokytova** 15 min.

Ing. Vojtěch Michálek, Martin Šťáva, FIRESTA- Fišer, reconstruction, construction as, Metrostav DIZ sro

17:05 – 17:20 **Bridges over Tomkovo Square in Brno** 15 min.

Ivo Ondříček, Ing. Ondřej Doubek, OHLA ŽS, as

17:20 – 17:40 **Implementation and conservation of bridges on the D49, section 4901 Hulín – Fryšták**

Ing. Michal Kunc, Skanska as

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III. Bridges in the Czech Republic – science and research Chairmen: Chmelík Jiří, Mařík Pavel

16:00 – 16:20 **Selected problems in the analysis and modeling of the retractable nose** 15 min.

Ing. Petr Nečesal, Ing. David Marván, Ing. Eliška Kafková, PIS Pechal, sro, Dlubal Software sro

16:20 – 16:35 **Risks of hidden degradation of wooden bridges and possibilities for increasing their service life** 20 min.

Ing. Lukáš Velebil, Ph.D., doc. Dr. Ing. Jakub Dolejš, Ing. Petr Ptáček, Ph.D., prof. Ing. Pavel Ryjáček, Ph.D., Faculty of Civil Engineering, Czech Technical University in Prague, UCEEB, Czech Technical University in Prague

16:35 – 16:50 **"Parametric modeling of large steel bridges for the purposes of production and technical documentation"** 15 min.

Ing. David Šedlbauer, Ph.D., ALLCONS Industry s.r.o

16:50 – 17:05 **Current knowledge on failures of seamless sprayed polymer waterproofing** 15 min.

Ing. Vítězslav Vacek, CSc., prof. Ing. Pavel Ryjáček, Ph.D., Ing. David Zeman, Klokner Institute, Czech Technical University in Prague

17:05 – 17:20 **Condition of bridges after the flood in the Jesenické region** 15 min.

Ing. Vladimír Puda, Stráský, Hustý and partners sro

17:20 – 17:40 **Sustainability in construction** 20 min.

Ing. Petr Martínek, Ing. David Svoboda, Ph.D., Ing. Jana Bauerová, Ph.D., Sika CZ, sro

25. 4. 2025 – Friday – 2nd day of the symposium

Opening of the 2nd day of the symposium

PLATINUM 1+2+3

IV. Bridges in the Czech Republic – projects and implementations Chairmen: Teichman Miroslav, Zbraněk Petr

08:30 – 08:45 **Reconstruction of railway bridges under Vyšehrad, current state of preparation** 15 min.

Ing. Jiří Krouský , Railway Administration

08:45 – 09:00 **Reconstruction of the bridge at km 48.289 on the Podlešín – Slaný line, Podlešín viaduct** 15 min.

Ing. Matěj Mikšovský, Ing. Daniel Novotný, TOP CON SERVIS sro

09:00 – 09:20 **Railway arch bridge Červená over VD Orlík – designer's view**

20 min

Ing. Jakub Göringer , Ph.D., SUDOP PRAHA as

09:20 – 09:40 **Construction of the reinforced concrete arch bridge Červená** 20 min

Ing. Petr Sýkora, Milan Špička, Roman Šimáček, Metrostav TBR as

09:40 – 09:55 **Reconstruction of the bridge at km 5.703 of the Čelákovice – Neratovice line – new railway bridge over the D10 motorway** 15 min.

Ing. Ondřej Lojík , Ph.D., Ing. Tomáš Hejtmánek, TOP CON SERVIS sro, EUROVIA CZ as

09:55 – 10:10 **Electrification of the line incl. PEÚ Brno - Zastávka u Brna, 2nd stage SO 04-19-10 T.ú . Střelice - Tetčice , bridge at km 5.610** 15 min.

Ing. Radim Bílek, Ing. Radek Vévoda, FIRESTA-Fišer, reconstruction, stavby as

10:10 – 10:25 **Return tram loop – Brno Pisárky** 15 min.

Ing. Květoslav Rušar , Ing. Kryštof Poukar , Ing. Gabriela Šoukalová, Rušar mosty, sro

10:25 – 10:40 **Reconstruction of the Branický Bridge** 15 min.

Ing. Jakub Tožička , Metrostav TBR as

10:40 – 11:00 **Bridge on the D55 over the Moravia – Napajedla** 20 min.

Ing. Libor Kožík , Ing. Gabriela Šoukalová, Ondřej Kubíček, Petr Štásta , Dalibor Václavík, FIRESTA-Fišer, reconstruction, construction as

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III. Bridges in the Czech Republic – science and research Chairperson: Březnická Pavla, Podlipný Václav

08:30 – 08:45 **Modeling durability and corrosion in nonlinear calculations of reinforced concrete bridge structures** **15 min.**

Jan Červenka, Jiří Rymeš, Mohamad Ahmad, Libor Jendele, Červenka Consulting sro

08:45 – 09:05 **Practical experience with indirect measurement of deflections during static load tests** **20 min.**

Ing. Karel Karmazín, Ing. Tomáš Dejmek, Ing. Petra Chlopčíková, Ing. Petra Tichá Ph.D., Ing. Martin Krejcar, CSc., INSET sro

09:05 – 09:20 **Differential load test of two precast elements I73** **15 min.**

Ing. Jiří Zahrada, Ing. Igor Suza, Ing. Matej Čáčany, Petr Novotný, OHLA ZS as

09:20 – 09:40 **Highways D5 and D8 - study of the expansion of large bridges** **20 min.**

Ing. Václav Hvizdal, Ing. Filip Bláha, Ing. Petr Komanec, Ing. Martin Blatský, Ing. Václav Kvasnička, Pontex sro

09:40 – 10:00 **Bridge Design Optimization using BIM: Case Study of a Post-Prestressed Chamber Beam Support Structure** **20 min.**

Ayhan Akray, M.Sc., Ing. Martin Kovač, Allplan Česko s.r.o

10:00 – 10:15 **Innovative prefabricated elements from UHPC** **15 min.**

Ing. Jan Prchal, Ph.D., Ing. Jan Marek, Ing. Milan Holý, Ph.D., Ing. Jiří Prchlík, Ing. Adam Čítek, Ing. Jan Mourek Ph.D., KŠ PREFA sro, Klokner Institute, Czech Technical University in Prague

10:15 – 10:30 **Prediction of corrosion losses in bridges made of weathering steels and design allowances for wall and flange thicknesses based on long-term measurements in the Czech Republic** **15 min.**

doc. Ing. Miroslav Sýkora, Ph.D., Ing. Kateřina Kreislová, Ph.D., doc. Ing. Jana Marková, Ph.D., SVÚOM Prague, Klokner Institute, Czech Technical University

10:30 – 10:45 **Continuous monitoring system for cast-in-place concrete bridge structures** **15 min.**

doc. Ing. Lukáš Vráblík, Ph.D., FEng., Ing. Radim Šifta, Ph.D., CTU in Prague, Faculty of Civil Engineering, NETWORK GROUP, sro

10:45 – 11:00 **Parametric modeling of bridge structures at VRT Velká Bíteš – Brno** **15 min.**

Ing. Jakub Zíma, Ing. Lukáš Procházka, Ing. Milan Kalný, Pontex, spol. s ro

PLATINUM 1+2+3

IV. Bridges in the Czech Republic – projects and implementations Chair: Dubšík Vladimír, Procházková Zuzana

- 11:00 – 11:20 **Bridge No. 105 – 048c in Týn nad Vltavou** 20 min.
Ing. Vít Hoznour , Ing. Dávid Kuczik , Ing. Adam Grman , Ing. Lucia Miroškovná , Ing. Jozef Babuliak , Sagasta sro
- 11:20 – 11:30 **Bridge No. 105 – 048c in Týn nad Vltavou** 10 min.
Bc. Marcel Návojský , Vojtěch Hvězda, Stavby mostů as
- 11:30 – 11:50 **Road II/262 Dobranov – Česká Lípa, reconstruction of bridge no . 262-004 including road** 20 min.
Ing. Vít Šťastný, SaM silnice a mosty as
- 11:50 – 12:05 **Bridges “ Elbebrücke Wittenberge ” and “EÜ Oder”** 15 min.
Ing. David Franc, PIS PECHAL, sro
- 12:05 – 12:20 **Kačerov Bridge** 15 min.
Ing. Petr Nehasil, Ing. Dalibor Gregor, Mott MacDonald CZ, spol. s ro, Excon , as
- 12:20 – 12:35 **Paradise Garden Bridge** 15 min.
Ing. Daniel Šindler, Ph.D., Ing. Tomáš Lindtner , Ing. Ondřej Ehrengbeger , Josef Nejedlík , Pontex sro, STRABAG as
- 12:35 – 12:55 **Pedestrian bridge at ŽST Pardubice, main station .** 20 min.
Ing. Filip Andrš, CH&T Pardubice
- 12:55 – 13:15 **Unique technology for building a bridge on the D35 through Mikuleč** 20 min.
Ing. Jan Kabelka, MI Roads as
- 13:15 – 13:30 **Bridge construction technology on the Nové Paka bypass** 15 min.
Ing. Kamil Šeiner , PORR as

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IV. Bridges in the Czech Republic – projects and implementations – parallel section
Chairmen: Kácal Petr, Chmelík Jiří

- 11:00 – 11:15 **Value engineering creation with steel sheet pile bridge abutments** 20 min.
Daniel Neto , ArcelorMittal Sheet Peeling
- 11:15 – 11:30 **Network arch bridges with hot- rolled section – a review of an innovative and economical solution for bridge infrastructure** 10 min.
Dr. Mike Tibolt , Ing. Wojciech Ochojski , ArcelorMittal Steligence
- 11:30 – 11:50 **OMO road safety systems, new type of guardrail ZMS4-A3.0/ H2** 20 min.
Ing. Jaroslav Číhal, Mgr. Roman Nepraš, STAVBY OMO sro

- 11:50 – 12:10 **Bridges on D4 – implementation in the form of PPP** 15 min.
Ing. Pavel Mařík, Milan Svoboda MBA, Stavby mostů as
- 12:10 – 12:30 **Bridge closures, transition elements for high-speed lines up to 360 km/h in Germany** 15 min
Dipl. -Ing. Tristan Mölter , DB Netz AG, Dipl. -Ing. Rainer Roos , Cirmon sro
- 12:30 – 12:45 **New bridge Klášter Hradiště nad Jizerou on road II/268** 15 min.
Ing. Petr Kubica, Ondřej Kryštof, Ing. Jakub Sicha , Ing. Ondřej Doubek, OHLA ŽS, as
- 12:45 – 13:00 **Bridges on the D35 Old Town – Mohelnice DSP BIM** 20 min.
Ing. Jiří Kašpárek, Ph.D., PUDIS as
- 13:00 – 13:15 **Experiences from the reconstruction of historical arch bridges in Březnice and Zbečno** 20 min.
Ing. David Dvořáček, Ing. Kamil Pejchal, Pontex , spol. s ro
- 13:15 – 13:30 **Bridges on the construction site I/33 Jaroměř – bypass** 15 min.
Ing. Tomáš Militký , Ing. Ondřej Šabata, Ing. Martin Sedmík, Ing. Ondřej Strouhal, Michal Černohub , Valbek , spol. s ro, Metrostav Infrastructure as
- 13:30 – 13:40 **Conclusion of the 30th Symposium BRIDGES 2025** 10 min.
- 13:40 – 14:30 **LUNCH** 50 min.