



RZESZOW UNIVERSITY
OF TECHNOLOGY



Cracow University
of Technology



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PROGRAMME

The 11th European Scientific Conference
on Steel and Composite Structures

EUROSTEEL 2026

September 16-18, 2026, Cracow, Poland

EUROSTEEL 2026 – DAY 1 16.09.2026

Opening Ceremony

Day 1
Date: 16 September
8:45 – 9:15
Room: Kraków 1 / 2

Outstanding Paper Awards

Day 1
Date: 16 September
9:15 – 9:30
Room: Kraków 1 / 2

Industry Session

Green Circular Construction

Day 1
Date: 16 September
9:30 – 11:30
Room: Kraków 1 / 2

Time	Title	Authors
9:30-9:40	Introduction: <i>Green Circular Construction</i>	Bernhard Hauke
9:40-10:00	Keynote: <i>Future proofing buildings with circularity</i>	Alicja Kuczera
10:00-10:20	Keynote: <i>From hull to building: ship steel as a solid case of circular economy in practice</i>	Dominik Kulczynski
10:20-10:40	Keynote: <i>Structural reuse to reduce environmental impact</i>	Pim Peters
10:40-11:00	Keynote: <i>Demolition and reconstruction of an industrial building through reuse of structural steel elements - Only steel can do this</i>	Peter Zeman
11:00-11:30	Discussion, Q&A	Markus Knobloch + Keynote speakers

Keynote lecture

Chairperson: **Kim Rasmussen**

Day 1

Date: **16 September
12:00 – 12:30**

Room: **Kraków 1 / 2**

Time	Title	Speaker(s)
12:00-12:30	How innovative joints enable the widespread use of demountable and reusable modular steel structures	Luis da Silva

Keynote lecture

Chairperson: **Katarzyna Rzeszut**

Day 1

Date: **16 September
12:30 – 13:00**

Room: **Kraków 1 / 2**

Time	Title	Speaker(s)
12:30-13:00	AI-Driven Assessment of Existing Steel Structures	Alper Kanyilmaz

Parallel Session PS-1a

Cold-formed structures 1/8

Chairpersons: **Marian Giżejowski**
Markus Kettler

Day 1
Date: **16 September**
14:00 – 15:30
Room: **Kraków 1**

Time	Title	Authors
14:00-14:15	Torsional Characteristic of CFS Stacked Built-up sections (X-CALIBR [™] System)	Rezaeian Hooman Papangelis John
14:15-14:30	GBT-based buckling analysis of cold-formed steel battened built-up members under compression	Basaglia Cilmar Camotim Dinar Gonçalves Rodrigo
14:30-14:45	Comparison of post flexural-torsional buckling strength of CFS equal and unequal lipped angles based on experiments	Kothanath Chirayilkalam Aswathy M V Anil Kumar McCrum Daniel
14:45-15:00	STANDARDIZE - Developing Building Regulation Compliant Standardised Construction Details for Light-gauge Steel Offsite Panelised Residential Construction Building Systems	McCrum Daniel Hajdukiewicz Magdalena King Eoin Singh Ravikant Kothanath Chirayilkalam Aswathy Manohare Manish Susainathan John
15:00-15:15	A novel reusable cold-formed steel semi-rigid moment-resisting beam-to-column connection	Ibrahimov Kanan Jafarifar Naeimeh Bagheri Sabbagh Alireza
15:15-15:30	Four-point bending tests on thin-walled cold-formed members with open cross-sections	Bezas Marios-Zois Vermeylen Maxime Morch Helene Ginckels Koenraad Demonceau Jean-François

Parallel Session PS–1b

Bolted joints and connections 1/7

Chairpersons: **Katarzyna Rzeszut**
Sabatino Di Benedetto

Day 1
Date: **16 September**
14:00 – 15:30
Room: **Kraków 2**

Time	Title	Authors
14:00-14:15	Load-deformation behaviour of preloaded connections with friction shims under static and cyclic loads	Brune Bettina Kröger Lisa Schweyher Janik
14:15-14:30	Behaviour of Cold-formed Beam-to-Column Joints in Storage Rack Structure: Experimental Investigations	Vermeulen Maxime Bezas Marios-Zois Morch Hélène Ginckels Koenraad Demonceau Jean François
14:30-14:45	Steel joint ductility: coupling effect in adjacent T-stubs	Neutelers Arnaud Gillieaux Margaux Duchêne Laurent Latour Massimo Francavilla Antonella Demonceau Jean-François
14:45-15:00	Behaviour of adhered steel-to-steel connections in shear	Sullivan Kathleen Peterman Kara
15:00-15:15	Numerical performance of T-stubs with 4-Bolts in line	Monte Francesco Tartaglia Roberto Maddaloni Giuseppe
15:15-15:30	Bearing Capacity of Bolts against Thin-Walled Cold-formed Steel Plate	Zhang Zhijian Becque Jurgen Desnerck Pieter

Parallel Session PS–1c

Stability of cross-sections, members and frames 1/6

Chairpersons: **Mathias Euler**
Nicolas Boissonnade

Day 1
Date: **16 September**
14:00 – 15:30
Room: **Londyn 1**

Time	Title	Authors
14:00-14:15	Analytical Approach to Global Plastic Analysis of Beams Using the Plastic Zone Method	Sokol Leopold Sokół Tomasz
14:15-14:30	Residual Stresses measurements in HSS hot rolled shape and impact on the stability	Pisciottano Francesco Zanon Riccardo Leonetti Davide Piluso Vincenzo Liouville Nicolas
14:30-14:45	Optimizing the Imperfection Factor for Flexural Buckling Resistance of Equal-Leg Hot-Rolled Angles	Saufnay Loris Bezas Marios-Zois Demonceau Jean-François
14:45-15:00	Stabilizing effect of stiff load application on the lateral torsional buckling of steel beams	Romo-Leroux Ivan Genc Furkan Tankova Trayana
15:00-15:15	Linear Elastic Lateral-torsional buckling of corrugated web arches	Fernández-Lacabe David Lopez Claudio Serna Miguel
15:15-15:30	The Extended Polarization Approach for Modal Decomposition of Buckled Shapes	Sivananthasarma Lowhikan Becque Jurgen

Parallel Session PS–1d

Reuse and retrofitting of structural elements 1/6

Day 1

Date: **16 September
14:00 – 15:30**

Chairpersons: **Bertram Kuhn
Svetlana Kostic**

Room: **Londyn 2**

Time	Title	Authors
14:00-14:15	Digital geometry capture and stability-based reuse classification of structural steel	Gallagher Niamh Cui Ge Funari Marco Hajializadeh Donya Bompa Dan
14:15-14:30	Towards Reuse in Steel Construction: Assessing Material Properties across Europe	Bartsch Helen
14:30-14:45	Structural Reusability Assessment of Dismantled Steel Components	Hackstein Maurice Eyben Felix Bartsch Helen Feldmann Markus
14:45-15:00	Fundamental study on friction factor changes and reusability of damaged bolted joints after cyclic slippage	Sakura Ryo
15:00-15:15	Welding on historic bridge structures subject to fatigue stress	Cwienzek Lukas Sieber Lars Flederer Holger
15:15-15:30	Preparation for Reuse of Structural Steel: Emission Assessment and Strategies for Minimisation	Basileo Giulio Di Donato Danilo Ungureanu Viorel

Parallel Session PS–1e

**Machine learning in engineering design
and construction 1/2**

Day 1

Date: **16 September
14:00 – 15:30**

Chairpersons: **Ali Imanpour
Piotr Nazarko**

Room: **Paryż 1 / 2**

Time	Title	Authors
14:00-14:15	Machine Learning-Based Prediction of Structural Behaviour of Optimised Cold-Formed Steel Elements	Cosut Muhammed Mojtabaei Seyed Mohammad Shakeel Sarmad Hajirasouliha Iman
14:15-14:30	Strength prediction of circular and square CFDST columns using generalised machine learning models	Tang Jing-Pu Fang Zigeng Pandey Dr Madhup Wang Yong Wang Fangying
14:30-14:45	Predicting critical buckling stress of cold-formed channel section by machine learning	Yinchun Wang Wang Fangying Pandey Dr Madhup Zhou Hongpeng
14:45-15:00	Machine Learning-based prediction of temperature evolution in steel compartment fires	Aghabozorgi Pegah Couto Carlos Laím Luís Santiago Aldina
15:00-15:15	Explainable Ensemble Learning for Web-Crippling Resistance of Sigma Cold-Formed Steel Sections under Interior–Two–Flange Loading	Simwanda Lenganji Kannan Thushanthan Thrunavukkarasu Kajaharan Mohamed Sifan Poologanathan Keerthan Kamalaseelan Kajeentan Lingaretnam Jeyasutha Popo-Ola Sunday

Parallel Session PS–1f

Welded joints and connections 1/2

Chairpersons: **František Wald**
Ezio Cadoni

Day 1
Date: **16 September**
14:00 – 15:30
Room: **Rzym**

Time	Title	Authors
14:00-14:15	Acoustic Emissions based structural diagnosis technique for steel details	Andreotti Roberto Zanon Gabriele Di Filippo Rocco Bonelli Alessio Tondini Nicola Bursi Oreste S.
14:15-14:30	Influence of Cut Holes on the Fatigue Resistance of Crossbeam Connections in Bridge Construction	Brune Bettina Schäferhoff Moritz Schluffer Fabian Senk Burkhard
14:30-14:45	Stiffness Prediction of Externally Welded T-Joints with CHS Chords and Longitudinal Plates	Ajwad Ali Di Benedetto Sabatino Latour Massimo Rizzano Gianvittorio
14:45-15:00	Laser scanning-based assessment of geometrical imperfections in welded I-sections with varying flange fabrication processes	Kollár Dénes Horváth András Kövesdi Balázs Lebastard Maxime Bureau Alain
15:00-15:15	Heat treatment on butt-welded joints of steel material extracted from aged bridge members for improving their toughness	Hirohata Mikihiro Okada Youjin Chang Kyong-Ho
15:15-15:30	Hot Spot Stress Evaluation of Welded Cope Hole Using Multi-Scale FE Modelling	Mansi Ali Dunai Laszlo

Parallel Session PS-1g

Novel structural solutions 1/4

Chairpersons: **Oleksandr Shymanovskyi**
Jiří Lahodný

Day 1
Date: **16 September**
14:00 – 15:30
Room: **Warszawa 1**

Time	Title	Authors
14:00-14:15	Review of the design criteria of friction connections for moment resisting steel frames	Carlevaris Roberto MacRae Gregory Anthony Tartaglia Roberto D'Aniello Mario Landolfo Raffaele
14:15-14:30	Advanced Moment-Resisting Frame Systems Integrating FRP Profiles and Optimized Steel Gusset Plate Connections	Kontoni Denise-Penelope Ghamari Ali Rabenda Martyna Ilia Georgios
14:30-14:45	An innovative ductile steel connection for precast reinforced concrete frames	Kontoni Denise-Penelope Ghamari Ali Ince Gulhan Ilia Georgios
14:45-15:00	Evaluation of the Frame Expansion Effect in Self-Centring Beam-to-Column Subassemblies	Elettore Elena Roumieh Ali Latour Massimo Freddi Fabio Di Benedetto Sabatino Francavilla Antonella Bianca Gutierrez-Urzua Fernando Pieroni Ludovica Ramhormozian Shahab Simpson Barbara Barbosa Andre Rizzano Gianvittorio Grant Damian Ribeiro Filipe Correia Antonio
15:00-15:15	Repairable Steel Moment-Resisting Frames for Enhanced Seismic Resilience: Conceptual and Numerical Investigation	Elettore Elena Freddi Fabio Latour Massimo Francavilla Antonella Bianca Rizzano Gianvittorio
15:15-15:30	Effect of the End-Connection Stiffness on the Compressive Behaviour of Modular Steel Columns	Khan Kashan Chen Zhihua Daniel Tsavdaridis Konstantinos Abbas Danish

Parallel Session PS-1h

Seismic resistance, dynamics and vibration 1/4

Day 1

Date: **16 September
14:00 – 15:30**

Chairpersons: **László Gergely Vigh
Konstantinos Skalomenos**

Room: **Warszawa 2**

Time	Title	Authors
14:00-14:15	Novel methodology suitable for damping coefficient assessment in steel frame buildings	Falborski Tomasz
14:15-14:30	Numerical Analysis of Frame Action in Steel-Concrete Composite Frames for Seismic Testing	Wortmann Leander Winkler Rebekka Knobloch Markus
14:30-14:45	Seismic response of resilient EBFs equipped with innovative reversible short links	Latour Massimo D'Aniello Mario Kanyilmaz Alper Lettier Annarosa Menghini Alessandro Mirzaie Bahram
14:45-15:00	Influence of Geometric and Material Parameters on the Behaviour of Steel and Composite Plate Shear Walls	Čurković Ivan Skejić Davor Lukačević Ivan

Parallel Session PS–1i

Eurocode and international design codes 1/3

Chairpersons: **Enrique Mirambell**
Sandor Adany

Day 1
Date: **16 September**
14:00 – 15:30
Room: **Warszawa 3**

Time	Title	Authors
14:00-14:15	Evaluation of Shear Buckling Resistance for numerical model-based design of slender plated structures	Radwan Mohammad, Kövesdi Balázs
14:15-14:30	A Preliminary Study on Targeted Collapse Mechanisms for Moment-Resisting Frames	Maglio Maria Montuor Rosario Nastri Elide Piluso Vincenzo
14:30-14:45	Influence of elastomeric or rigid rail bedding on the local stresses in crane runway girders	Zauchner Paul Kettler Markus Unterweger Harald
14:45-15:00	Strain limit in high-strength steel joint analysis	Golubiatnikov Kirill Wald František Vild Martin
15:00-15:15	Gusset-plate behaviour in chevron braced frames designed to Japanese and European seismic rules.	Cicia Massimo Lai Lilliann Okazaki Taichiro D'Aniello Mario Landolfo Raffaele
15:15-15:30	New Proposal for Simplified Interaction Formula $N\text{-}M_y\text{-}V_z$ in Doubly Symmetric I-Sections	Ludwig Christian

Parallel Session PS–1j

High-strength, stainless and other special steels 1/3

Chairpersons: **Sjors Van Es**
Itsaso Arrayago

Day 1
Date: **16 September**
14:00 – 15:30
Room: **Warszawa 4**

Time	Title	Authors
14:00-14:15	Load-bearing capacity of pre-strained high strength steel up to S960 – Component scale notched tensile tests	Meissner Mirco Bartsch Helen Feldmann Markus
14:15-14:30	Investigations on residual stresses and buckling resistance of welded HSS box columns	Penner Gerd Stroetmann Richard Hildebrand Jörg
14:30-14:45	Structural Assessment of Geopolymer Concrete-Filled Stainless Steel Tubular Columns	Pereira Ingrid Magalhaes Margareth Lima Luciano R.
14:45-15:00	Numerical analysis of stainless steel I-section columns with sinusoidal web openings	Ranisavljevic Maja Dobrić Jelena Jakovljević Isidora Filipović Aljoša Rossi Barbara
15:00-15:15	Bending Behaviour of Stainless Steel I-beams with Sinusoidal Corrugated Webs	Hajdú Gábor

Parallel Session PS-2a

Cold-formed structures 2/8

Chairpersons: **Marios-Zois Bezas**
Climar Basaglia

Day 1

Date: **16 September**
16:00 – 17:30

Room: **Kraków 1**

Time	Title	Authors
16:00-16:15	Effective area evaluation of double corrugated CFS profiles: FEM-based equivalent modelling	Gizatulin Ravil Casariego Pedro
16:15-16:30	Tests of Spliced Cold-formed Steel Built-up Columns	Tayaraninajjaran Emad Rasmussen Kim Khezri Mani
16:30-16:45	Numerical Modelling and Validation of Built-up Cold-formed Steel Members Assembled by Laser Welding	Cristian Antonio Ungureanu Viorel Both Ioan
16:45-17:00	Innovative side-framed lightweight steel system: experimental and analytical study	Shakeel Sarmad Benzo Pier Giovani Mojtabaei Mohammad Davison Buick Hajirasouliha Iman
17:00-17:15	Effects of cold-forming on SHS columns with comparable width-to-thickness ratios	Petukhovakaia Iuliia Saremi Pooya Lu Wei Puttonen Jari

Parallel Session PS–2b

Bolted joints and connections 2/7

Chairpersons: **Adam Philips**
Jorge Conde

Day 1
Date: **16 September**
16:00 – 17:30
Room: **Kraków 2**

Time	Title	Authors
16:00-16:15	Monotonic Response of European High-Strength Steel HR and HV Bolts Under Tension and Bending	Safaei Shayan Stratan Aurel D'Aniello Mario Landolfo Raffaele
16:15-16:30	Experimental testing of passing-through circular hollow section column-splice connections	Das Rajarshi Dragan Dan Degée Hervé
16:30-16:45	Experimental and Numerical Studies on Load-Bearing Behaviour of Small-Diameter Bolted Connections	Afzali Nariman Zeinou Erak Stranghöner Natalie
16:45-17:00	Parametric Study on Resistance of Gusset Plate Connections in Compression	Kuříková Marta Cabova Kamila Bartůšek Pavel Feber Nina Jandera Michal
17:00-17:15	Application of reversible friction dampers to beam-to-column joints with CFSTs	Di Benedetto Sabatino Esposito Ciro Francavilla Antonella Latour Massimo Rizzano Gianvittorio
17:15-17:30	A Simplified Approach to Evaluate Ultimate Strength and Deformation Capacity of Bolted T-Stubs tied to Rigid Bases	Francavilla Antonella Latour Massimo Démonceau Jean-François Neutelers Arnaud Rizzano Gianvittorio

Parallel Session PS–2c

Stability of cross-sections, members and frames 2/6

Chairpersons: **Sara Zoubek**
Peter Knoedel

Day 1
Date: **16 September**
16:00 – 17:30
Room: **Londyn 1**

Time	Title	Authors
16:00-16:15	Design of Cross-Sections for Local Buckling Based on a Mechanical Model	Becque Jurgen
16:15-16:30	Numerical and experimental investigation of tapered thin-walled steel beams and beam–columns. Analysis of numerical results	Illica Oriana Zanon Gabriele Couto Carlos Tondini Nicola
16:30-16:45	Elastic buckling and design of strengthened I-section steel columns	Quispe-Choquemamani Efrain Zhang Ruizhi Kyvelou Pinelopi Gardner Leroy
16:45-17:00	The impact of assembly errors on the highly strained roof structure of a large-area warehouse	Wierzbicki Krzysztof
17:00-17:15	Comparative Assessment of Steel Truss Typologies for Industrial Buildings	Quishpe Otacoma Carlos Garcia-Troncoso Natividad Arellano Mike Bompa Dan
17:15-17:30	Numerical investigation on the influence of lateral bracings on the stability behaviour of castellated beams	Betken Julian Winkler Rebekka Knobloch Markus

Parallel Session PS–2d

Steel-concrete composite structures 1/7

Chairpersons: **Renata Obiala**
Luis Calado

Day 1
Date: **16 September**
16:00 – 17:30
Room: **Londyn 2**

Time	Title	Authors
16:00-16:15	Shear load resisting capacity in CFST columns with headed stud connectors	Debnath Partha
16:15-16:30	Numerical Study of a Demountable Shear Connector for Composite Steel–Concrete Structures	Bassil Lina Bouchair Abdelhamid Durif Sebastien El Tawil Khaled
16:30-16:45	Experimental investigations on Concrete-Filled Double Steel Tube Columns	Grimaldi Elisa Knobloch Markus
16:45-17:00	Filler beam decks with steel-fibre reinforce concrete: Bending stiffness for serviceability limit state	Zanon Riccardo Schäfer Markus Ruiz Gonzalo La Rosa Ángel De Wolf Sébastien
17:00-17:15	Precast composite beams with partially embedded composite dowels for efficient bridge engineering	Rittich Nils Wolters Kevin Feldmann Markus Janiak Till Classen Martin
17:15-17:30	Experimental Assessment of Stud Replacement Methods and Their Influence on Chord Plate Fatigue	Knefelkamp Sascha Dürr Andre Bucak Ömer

Parallel Session PS–2e

Reuse and retrofitting of structural elements 2/6

Chairpersons: **Bernhard Hauke**
Tom Molkens

Day 1
Date: **16 September**
16:00 – 17:30
Room: **Paryż 1 / 2**

Time	Title	Authors
16:00-16:15	Proposal and Demonstration of Methods for Steel Reuse	Mori Yuito Kashima Wataru
16:15-16:30	Shear Capacity and Stress Transfer in Demountable Steel–Concrete Connections with Burring Shear Connectors	Kusumoto Ayana Tanaka Teruhisa Sakai Junichi
16:30-16:45	Experimental and numerical evaluation of novel SSD-DYB bracing system for retrofitting of steel structures	Asgarkhani Neda Kazemi Farzin Lasowicz Natalia, Jankowski Robert
16:45-17:00	Experimental Investigation of Demountable Truss Joints of Rectangular Hollow Sections using Self-drilling Screws	Ma Zhongcheng Al-Maisari Abdullah Santos Newton Lev Antimonik Georgiev Georgi
17:00-17:15	Reuse of strands of the cable stayed Normandie bridge	Beyer André Louedec Ludovic Le Fabry Nicolas
17:15-17:30	Effect of surface preparation and adhesive type on CFRP–steel bridge joints.	Boutar Yasmina Ryjacek Pavel Hovorka Josef Jarolím Tomáš Montalbano Antonino Tichá Petra

Parallel Session PS–2f

Welded joints and connections 2/2

Chairpersons: **Gianvittorio Rizzano**
Mikihito Hirohata

Day 1
Date: **16 September**
16:00 – 17:30
Room: **Rzym**

Time	Title	Authors
16:00-16:15	FE parametric study of circular Reduced Web Section (RWS) connections subjected to cyclic loading	Bayat Meysam Tsavdaridis Konstantinos Alonso Andres
16:15-16:30	Form-fit: Laser cut integrated snap-fit connections for thin built-up cross-sections	Moussavi Seyed Mobin Lienhard Julian
16:30-16:45	Mesh-Independent Strain Method for FE Assessment of Steel Joints	Freire Ribeiro Fernando Conde Jorge Ljubinkovic Filip Simoes da Silva Luis
16:45-17:00	Evaluation of welded bridge hangers using 3D surface scans	Betz Kai Weidner Philipp Ummenhofer Thomas
17:00-17:15	Experimental and Numerical Investigation of CHS Reinforced Joints Using Laser Cutting Technology	Pedro José Oliveira Ajwad Ali Latour Massimo Calado Luis

Parallel Session PS-2g

Novel structural solutions 2/4

Chairpersons: **Wioleta Barcewicz**
Elena Elettore

Day 1
Date: **16 September**
16:00 – 17:30
Room: **Warszawa 1**

Time	Title	Authors
16:00-16:15	New Smetana hall - moving temporary roof above the courtyard of the Litomyšl castle	Zeman Tadeáš Valach Jiří Lukeš Miloslav Janata Vladimír
16:15-16:30	Improving performance of large-span framed structure using amplified-deformation braces with steel curved dampers	Hsu Hsieh-Lung Chen Sen-Wen
16:30-16:45	Finite element modelling of geometric imperfections using point cloud scans	Wang Shihang Kim Useok Rakhee Richa Dutta Yeaser Zubayer Alshammari Saleh Disha Dilruba Jahan Naw Jacknetson Blum Hannah
16:45-17:00	Material Mechanisms of Nanometallic Multilayer Post-Weld Treatment Maximizing Fatigue Strength	Fazel Mohammad Sarafrazian Saeid Seidelmann Maren Rutner Marcus
17:00-17:15	Optimal tensioning sequence for single pylon cable-stayed bridges, built on scaffolding	Van Bogaert Philippe De Pauw Bart De Backer Hans
17:15-17:30	Effect of the Slant of Edge Girders on Single-Span Steel Road Bridges	Van Bogaert Philippe De Pauw Bart De Backer Hans

Parallel Session PS–2h

Seismic resistance, dynamics and vibration 2/4

Day 1

Date: **16 September
16:00 – 17:30**

Chairpersons: **Robert Jankowski
Amilibia Jon Larrañaga**

Room: **Warszawa 2**

Time	Title	Authors
16:00-16:15	Numerical Investigation of the Welded-Plate Rod-Connected Flexural Yielding Damper	Dursun Süleyman Topkaya Cem
16:15-16:30	Component Testing of Welded-Plate Flexural Yielding Dampers for Concentrically Braced Frames	Dursun Süleyman Topkaya Cem
16:30-16:45	Performance Assessment of Buckling-Restrained Braced Frames Subjected to Near-Field Earthquake	Venposh Raina Yadav Deepak
16:45-17:00	Seismic Retrofitting of a Pre-code Five-storey R/C Building with an Innovative Induction Hardened Steel Exoskeleton	Floku Vladimir Leni William Barbagallo Francesca Marino Edoardo Skalomenos Konstantinos
17:00-17:15	Influence of corrosion extension on the flexural cyclic behaviour of steel elements	Farivar Rad Amir Houshang Castro José Miguel

Parallel Session PS–2i

Eurocode and international design codes 2/3

Chairpersons: **Esther Real**
Melina Bosco

Day 1
Date: **16 September**
16:00 – 17:30
Room: **Warszawa 3**

Time	Title	Authors
16:00-16:15	On reliability of simple spring systems	Adany Sandor Akchurin Damir Schafer Benjamin
16:15-16:30	Partial safety factor calibration for finite element design of steel and steel-concrete composite bridge girder sections	Martinolli Stefan Taras Andreas
16:30-16:45	Evaluating Theoretical Moments of I-section Beams Under Buckling Mode Transitions via Numerical Analysis	Al-Lawati Hussain Aalia Al Ghaithi Aalaa Al Kindi Manahil Al Haddabi Reem Al Barhi
16:45-17:00	Seismic demand on CBF columns designed according to European and Canadian standards	Gnazzo Massimino Mahmoudi Bardia D'Aniello Mario Imanpour Ali Landolfo Raffaele
17:00-17:15	On the Shear Force Capacity of Sinusoidal Corrugated Web Girders	Hajdú Gábor Pasternak Hartmut Robra Jörgen
17:15- 17:30	Improved Method for the Design of Intermediate Transverse Stiffeners in Steel Plate Girders	Nascimento Sérgio Pedro José Oliveira Kuhlmann Ulrike

Parallel Session PS-2j

High-strength, stainless and other special steels 2/3

Chairpersons: **Ibai Ulacia**
Manuela Cabrera

Day 1
Date: **16 September**
16:00 – 17:30
Room: **Warszawa 4**

Time	Title	Authors
16:00-16:15	A modified constraint-based resistance model for HAZ failure in welded HSS T-joints	Rust Brian Stroetmann Richard
16:15-16:30	Evaluation Techniques for Patina Characterization in Weathering Steel: A Comprehensive Review	Muzaffer Shazia Mohammad Al-Emrani
16:30-16:45	Experimental and numerical investigation of the post-fire fracture behaviour of H500 stainless steel.	Pan Zhichang Quan Chunyan Cashell Katherine Lapira Luke
16:45-17:00	Behaviour of Stainless Steel Bolted Angle Cleats in Bending with Application to Column Removal Scenario	Li Weiran Li Arrayago Itsaso Theofanous Marios Afshan Sheida
17:00-17:15	Change in mechanical properties and toughness of SBHS steel post-elevated temperature exposure	Maglica Martin Jiang Feng Hirohata Mikihiro Jarmai Karoly

Steel Design Awards

Day 1
Date: **16 September**
17:45 – 18:45
Room: **Kraków 1**

EUROSTEEL 2026 – DAY 2 17.09.2026

Keynote lecture

Chairperson: **Leroy Gardner**

Day 2
Date: **17 September**
8:30 – 9:00
Room: **Kraków 1**

Time	Title	Speaker(s)
08:30-09:00	Existing Steel Structures in the USA: Evaluation, Rehabilitation and Reuse	Roberto Leon

Keynote lecture

Chairperson: **František Wald**

Day 2
Date: **17 September**
9:00 – 9:30
Room: **Kraków 1**

Time	Title	Speaker(s)
09:00-09:30	Effect of fatigue/creep loading conditions on the behaviour of selected steel grades and their subsequent reuse potential	Zbigniew Kowalewski

Parallel Session PS–3a

Cold-formed structures 3/8

Chairpersons: **Luigi Fiorino**
Kara Peterman

Day 2
Date: **17 September**
9:30 – 11:00
Room: **Kraków 1**

Time	Title	Authors
09:30-09:45	Data-driven moment-rotation formulation of slender cold-formed steel beams subjected to local buckling	Hosseinnia Amirali Mojtabaei Seyed Mohammad Shaheen Mohamed Jesus Andre Hajirasouliha Iman
09:45-10:00	Experimental investigation on novel cold-formed steel built-up section stub columns using an interlocking design	Zhan Ke-Jiang Li Shuai Chan Tak Ming Young Ben
10:00-10:15	Effect of End Distance on the Performance of Cold-Formed Steel Bolted Connections at Elevated Temperatures	Madheswaran Ranjithkumar Madhavan Mahendrakumar
10:15-10:30	Experimental Study on Cold-Formed Steel Properties at Elevated Temperature	Madheswaran Ranjithkumar Madhavan Mahendrakumar
10:30-10:45	Local buckling performance of thin-walled steel flexural members under axial and rotational restraint at elevated temperatures	Singh Ravikant McCrum Daniel Samanta Avik
10:45-11:00	Numerical Study of Trapezoidal Sheeting Moment-Resisting Lap Connections	Machačová Dominika Jandera Michal Casafont Miquel

Parallel Session PS–3b

Bolted joints and connections 3/7

Chairpersons: **Rajarshi Das**
Viktor Budaházy

Day 2
Date: **17 September**
9:30 – 11:00
Room: **Kraków 2**

Time	Title	Authors
09:30-09:45	Behaviour of Bolted Double Split-Tee Web Connections in Planar Beam-to-Column Joints	Seyoum Lemma Melaku Simoes da Silva Luis Rebello Carlos
09:45-10:00	Yielding behaviour of friction-type bolted joint with combining staggered and grid arrangements	Ashiya Kazuha Sakura Ryo Yamaguchi Takashi
10:00-10:15	Simplified beam grid model of the face plate component in I-beam to concrete-filled tubular column joints	Santos Ana Francisca Simoes da Silva Luis Seyoum Lemma Melaku Conde Jorge
10:15-10:30	Comparison of Tests and Design Methods for Eccentrically Connected Gusset Plates in Compression	Bartůšek Pavel Jandera Michal Cabova Kamila Feber Nina Kuřiková Marta
10:30-10:45	Load bearing capacity of bolted connections made of carbon and stainless steel in oversized round holes and slotted holes	Jungbluth Dominik Stranghöner Natalie
10:45-11:00	Hierarchical validation of bolted lap joints of CFS portal frames in finite element method	Budziński Rafał

Parallel Session PS–3c

Stability of cross-sections, members and frames 3/6

Chairpersons: **Richard Stroetmann**
Nicola Tondini

Day 2
Date: **17 September**
9:30 – 11:00
Room: **Londyn 1**

Time	Title	Authors
09:30-09:45	Numerical studies on back-to-back double-angle struts in compression	Kettler Markus Zauchner Paul Unterweger Harald
09:45-10:00	Experimental investigation of the behaviour of square hollow steel sections subjected to freezing water	Snela Małgorzata Górecki Marcin Pietras Daniel
10:00-10:15	Residual stress measurements on wide flange hot rolled sections cold bent about the weak axis	Leonetti Davide Snijder H.H. (Bert) Pisciottano Francesco Zanon Riccardo Marcinczak Krzysztof Lorenc Wojciech
10:15-10:30	Elastic stability of cellular members	Lebastard Maxime Bureau Alain
10:30-10:45	Improved brace design for the stability of steel trusses using the reduced stiffness method	Zwoliński Tadeusz Dmowska-Michalak Izabela

Parallel Session PS–3d

Steel-concrete composite structures 2/7

Chairpersons: **Ivan Lukačević**
Markku Heinisuo

Day 2
Date: **17 September**
9:30 – 11:00
Room: **Londyn 2**

Time	Title	Authors
09:30-09:45	Nonlinear Simulation of Load Distribution in Long Stud Connector Rows	Kugler Nina Jaist Benedikt Mensing Martin
09:45-10:00	Planning and Construction of The New Gänstor Bridge	Sweers Bastian Klähne Thomas Tutko Anna Ripke Henry Roth Timo
10:00-10:15	Assessment of Design Provisions for High-Strength Concrete-Encased Steel Slender Columns in Fire	Li Jie Medall Martos David Espinós Ana Romero Manuel L.
10:15-10:30	Numerical Modelling of Post Fire Behaviour of CFST Columns	Bursać Milan Kostic Svetlana
10:30-10:45	Data-Driven Modelling of Composite Recycled Aggregate Concrete-Filled Steel Tube Columns	Nikolić Jelena Tošić Nikola Murcia–Delso Juan Kostic Svetlana
10:45-11:00	Cyclic behaviour of stainless steel-concrete compo-site joints using blind bolts	Li Yinglei Lei Mei Zhao Xiao Lin

Parallel Session PS–3e

Reuse and retrofitting of structural elements 3/6

Chairpersons: **Zhiyuan Fang**

Day 2

Date: **17 September
9:30 – 11:00**

Room: **Paryż 1 / 2**

Time	Title	Authors
09:30-09:45	Experimental testing of large-scale clamped connections: a case study	Molkens Tom
09:45-10:00	Study of demountable Post-Tensioned floor system: a step towards circular construction	Guha Ankiparna Di Benedetto Sabatino Latour Massimo Rizzano Gianvittorio Freddi Fabio Argentoni Alessio Di Nunzio Giuseppe
10:00-10:15	Building and Circular Economy. Reuse of steel components in construction industry in Italy	Morganti Renato Di Donato Danilo Tosone Alessandra Bellicoso Alessandra Abita Matteo Ciammitti Laura Panepucci Alessia Rea Simone
10:15-10:30	Existing Steel Structures in Italy: Analysis for Reuse	Morganti Renato Ciammitti Laura Tosone Alessandra Bellicoso Alessandra Di Donato Danilo Abita Matteo Panepucci Alessia Rea Simone
10:30-10:45	Integrated Robotic Approach for Assembly and Disassembly of Bolted Systems in Composite Buildings	Santos Carlos Rebelo Carlos Simoes da Silva Luis Sabari Sree
10:45-11:00	Increased Imperfections in Tubular Truss Members due to Service and Ultimate Loading	Szalai Viktor Ciutina Adrian Stratan Aurel Ungureanu Viorel

Parallel Session PS-3f

**Welded joints
+ Stability and plasticity in plates and shells**

Chairpersons: **Paulo Vila-Real**

Day 2

Date: **17 September
9:30 – 11:00**

Room: **Rzym**

Time	Title	Authors
09:30-09:45	Impact of Undercut and Lack of Penetration on the Design Static Resistance of Butt-Welded Connections	Mouradian Kevin Beyer André Couchaux Maël
09:45-10:00	Strength prediction of connections with Concrete Filled Steel Tubes and axially loaded passing plates	Di Benedetto Sabatino Esposito Ciro Francavilla Antonella Couchaux Maël Latour Massimo Rizzano Gianvittorio
10:00-10:15	Calculation example for determining the Load-Bearing Capacity for Plate Buckling using GMNIA	Schönfeld Larissa Ludwig Christian
10:15-10:30	Graphical method for determination of plastic resistance from MNA analysis	Ślowski Kamil
10:30-10:45	Experimental and numerical study of steel shear wall for retrofitting of steel structures	Lasowicz Natalia Asgarkhani Neda Kazemi Farzin Tomaszewska Agnieszka Bera Alicja Kowalski Jakub
10:45-11:00	Positive effect of tension stress on buckling resistance of stiffened steel webs under shear stress	Aarsen Mark Blankendaal Matthijs Hylkema Bjorn Tankova Trayana Veljkovic Milan

Parallel Session PS–3g

Novel structural solutions 3/4

Chairpersons: **Maciej Chrzanowski**
Konstantinos Tsavdaridis

Day 2
Date: **17 September**
9:30 – 11:00
Room: **Warszawa 1**

Time	Title	Authors
09:30-09:45	Numerical and Neural Network Investigation of a New Dual Self-centering Energy Dissipation Device	Kamperidis Vasileios Bompa Dan Chliveros Georgios Paraskeva Themelina Kalfas Konstantinos Bellos John
09:45-10:00	Finite Element Modelling of Demountable Truss Joints with Rectangular Hollow Sections and Self-Drilling Screws	Ma Zhongcheng Silwal Shekhar Santos Newton Al-Maisari Abdullah
10:00-10:15	Cast Steel Node Solutions for Complex Structural Connections	Binder Justin Pazdon Jennifer Anna Wei Fei
10:15-10:30	Experimental Investigation of Structural Steels with Through-Thickness Strength Variation	Zwain Mustafa Collins Thomas Theofanous Marios Skalomenos Konstantinos
10:30-10:45	Self-Interlocking Planar Connections for Reusable Swift-Constructed Structures	Liao Jiacong Li Shuai Chan Tak Ming Young Ben
10:45-11:00	Field Application of a Nanometallic Multilayer Coating for Fatigue Life Extension of Steel Bridge Welds	Hausig Malte Seidelmann Maren Rutner Marcus

Parallel Session PS–3h

Seismic resistance, dynamics and vibration 3/4

Day 2

Date: **17 September
9:30 – 11:00**

Chairpersons: **Rebekka Winkler
Shahab Ramhormozian**

Room: **Warszawa 2**

Time	Title	Authors
09:30-09:45	Optimization of 3D industrial buildings through variation of geometry and bracing systems	Quihspe Otacoma Carlos Garcia-Troncoso Natividad Arellano Mike Bompa Dan
09:45-10:00	Seismic Response of Moment-Resisting Steel and Composite Multi-Story Buildings	Quihspe Otacoma Carlos Garcia-Troncoso Natividad Muñoz Guillermo Arellano-Suarez Mike Bompa Dan
10:00-10:15	Seismic resilience design of steel bridge using pushover analysis	Nsengimana Jean Pierre Vigh Laszlo Gergely
10:15-10:30	Improved Eurocode-based design of tall buildings with braced core and outrigger systems	Bandara Lansakara Jayasundara Mudiyansele, Dimopoulos Christoforos Freddi Fabio Karavasilis Theodoros
10:30-10:45	Seismic Response Analysis of a 3-story Steel MRF Coupled with Pressurized Sand Dampers	Kalfas Konstantinos N. Chy Intekhab U.A. Kamperidis Vasileios
10:45-11:00	Seismic Response of Steel Concentrically Braced Frames of Conventional Construction Category	Mohammadesmaeili Mehrnaz Imanpour Ali

Parallel Session PS–3i

Eurocode and international design codes 3/3

Chairpersons: **Martin Vild**
Gábor Hajdu

Day 2
Date: **17 September**
9:30 – 11:00
Room: **Warszawa 3**

Time	Title	Authors
09:30-09:45	Influence of the loading protocol on the cyclic response of HSS members under biaxial bending.	Bosco Melina Caragliano Marco Castro José Miguel Cerqueira Elisa L. D'Aniello Mario Rossi Pier Paolo
09:45-10:00	Assessment of the chord rotation capacity domain of hollow section members	Caragliano Marco Bosco Melina D'Aniello Mario Landolfo Raffaele Rossi Pier Paolo
10:00-10:15	Compliance Control Aligned with ISO 37301 for Metallic and Organic Coatings and Thickness Tolerances: A Governance Framework for Design Inputs in EN 14509 and EN 1090 Products	De Beukelaer Michel Wawrzynowicz Adam
10:15-10:30	Effect of residual stresses on flexural buckling behaviour of T-section columns	Ye Zhanning Theofanous Marios Skalomenos Konstantinos Bock Marina
10:30-10:45	Development of the new DAST Guideline 033 for the Use of Cast Steel in Construction	Mott Marcel Ummerhofer Thomas
10:45-11:00	Design of cellular beams at elevated temperature according to the second generation of Eurocode	Glorieux Antoine Couto Carlos Vila Real Paulo

Parallel Session PS–3j

High-strength, stainless and other special steels 3/3

Day 2

Date: **17 September
9:30 – 11:00**

Chairpersons: **Jelena Dobrić
Hans De Backer**

Room: **Warszawa 4**

Time	Title	Authors
09:30-09:45	Numerical modelling and design of hybrid carbon-stainless steel bolted T-stubs in tension	Albanna Abdunnasser Cabrera Manuela Yuan Huanxin Li Weiran Afshan Sheida Skalomenos Konstantinos Theofanous Marios
09:45-10:00	Experimental study of fixed-ended cold-formed stainless steel unequal-leg angle columns	Kayser Ada Sarquis Fernando Rocha de Lima Luciano Rodrigues Ornelas
10:00-10:15	Influence of Strain Rate and Temperature on the Mechanical Behaviour of Armour Steels	Cadoni Ezio Forni Daniele
10:15-10:30	Mesoscale modelling of void growth and fracture initiation in steel	Rahnavard Rohola Craveiro Helder Simoes da Silva Luis
10:30-10:45	Investigation of the failure modes of ultra high strength steel bolted connections at elevated temperatures	Athanasopoulos Antonios Pantousa Daphne Mistakidis Euripidis

Parallel Session PS-4a

Cold-formed structures 4/8

Chairpersons: **Natalia Korcz-Konkol**
Daniel McCrum

Day 2
Date: **17 September**
11:30 – 13:00
Room: **Kraków 1**

Time	Title	Authors
11:30-11:45	Shear Behaviour of Screw Fasteners in Cold-Formed Steel Stud-to-Sheathing Connections	Panchamoorthy Karmugilan Madhavan Mahendrakumar
11:45-12:00	Failure Mechanisms and Shear Capacity of Cold-Formed Steel Shear Walls with Plywood Sheathing under Cyclic Loading	Panchamoorthy Karmugilan Madhavan Mahendrakumar
12:00-12:15	Initial Geometric Imperfections in FEM Models of Rack Uprights: Modal Shapes vs. Roll-Forming Defects	Alberdi Beñat Elguezabal Jon Larrañaga Jon Ulacia Ibai
12:15-12:30	Web crippling performance of perforated Modular Construction Optimised beams under ITF loading	Lifsey Jack Sifan Mohamed Poologanathan Keerthan Gunalan Shanmuganathan Kannan Thushanthan Kajaharan Thirunsvukkarasu Higgins Craig
12:30-12:45	Structural performance benefits of Modular Construction Optimised beams compared with conventional Cold-formed steel sections	Lifsey Jack Sifan Mohamed Poologanathan Keerthan Gunalan Shanmuganathan Rahman Muhammad Navaratnam Satheeskumar Higgins Craig
12:45-13:00	Modified Strip Model for Analysis of High Capacity Cold-formed Steel Shear Walls	Alshamsi Ghaith Xu Lei

Parallel Session PS-4b

Bolted joints and connections 4/7

Chairpersons: **Beatrice Faggiano**
Ryo Sakura

Day 2
Date: **17 September**
11:30 – 13:00
Room: **Kraków 2**

Time	Title	Authors
11:30-11:45	Extending Component-Based Models to Full-Range Behaviour of Steel Joints	Golea Tudor Bodson Romain de Ville de Goyet Vincent Demonceau Jean-François
11:45-12:00	Feasibility Assessment of Bearing-type Bolted Lap Connections in S960 Steel	Ogrin Anita Zoubek Sara Moze Primoz
12:00-12:15	Development of new design recommendations for structural steel joints under M-N	Archambeau Loïc Golea Tudor Weynand Klaus Demonceau Jean-François
12:15-12:30	Numerical and Experimental Analysis of Residual Stresses in S235 Structural Steel Elements Cut Using Fiber Laser and Different Assist Gas	Olmez Hasan Zanon Gabriele Brugnonli Marco Vanin Mattia Bursi Oreste S.
12:30-12:45	Next-Generation Steel Inter-Modular Connections: A Comparative Review and Design Matrix	Kamalaseelan Kajeenthan Lifsey Jack Rajanayagam Heshachanaa Poologanathan Keerthan Lingaretnam Jeyasutha Suntharalingam Thadshajini Upasiri Irindu Thusanthan Kannan
12:45-13:00	Proposed method of bolt tightening for seismic friction-sliding connections	Ramhormozian Shahab Clifton Charles

Parallel Session PS-4c

Stability of cross-sections, members and frames 4/6

Chairpersons: **Carlos Couto**
Paul Zauchner

Day 2
Date: **17 September**
11:30 – 13:00
Room: **Londyn 1**

Time	Title	Authors
11:30-11:45	Global Buckling Design of Sway-Sensitive Steel Portal Frames According to Eurocode	Vaszilievits-Somjen Balint Szalai Jozsef White Donald
11:45-12:00	O.I.C.-design of rectangular and square hollow structural shapes	Echeverri Loaiza Mariana Aleseyedan Mina Boissonnade Nicolas
12:00-12:15	Application of different welding cost calculations for a stiffened column optimisation	Jarmai Karoly Mago Nandor
12:15-12:30	Residual stresses in hot-rolled I-sections	Dissanayake Lahiru Nuwanga Yang Jiachi Walport Fiona Gardner Leroy
12:30-12:45	Refined finite element modelling of tapered steel portal frames	Bernard Baptiste Couchaux Maël Charrier Laurent

Parallel Session PS-4d

Steel-concrete composite structures 3/7

Chairpersons: **Leopold Sokol**
Martin Mensinger

Day 2
Date: **17 September**
11:30 – 13:00
Room: **Londyn 2**

Time	Title	Authors
11:30-11:45	Concrete flange contribution to the resistance of corrugated web girders – Experimental and numerical studies	Pap Tibor Jäger Bence
11:45-12:00	Research and design of novel demountable steel-concrete composite beams	Király Krisztián Dunai Laszlo Calado Luis Kocsis András Balázs
12:00-12:15	Axial compression response built-up cold form sections infilled with rubberised concrete	Sifan Mohamed Garcia-Troncoso Natividad Dafchaci Parsa Bompa Dan
12:15-12:30	Finite Element evaluation of demountable connectors for steel concrete composite floors	Guha Ankiparna Idiart Facundo Di Benedetto Sabatino Latour Massimo Rizzano Gianvittorio Freddi Fabio
12:30-12:45	Demountable shear connectors for automated prefabricated steel-concrete composite systems	Gomes Nuno Craveiro Helder Simões Rui Rebelo Carlos Shunmugam Sree Simoes da Silva Luis
12:45-13:00	Experimental tests on prefabricated demountable steel-concrete composite beams	Gomes Nuno Craveiro Helder Simões Rui Rebelo Carlos Shunmugam Sree Simoes da Silva Luis

Parallel Session PS–4f

Stability and plasticity in plates and shells 1/1

Chairpersons: **Michal Jandera**
Christian Ludwig

Day 2
Date: **17 September**
11:30 – 13:00
Room: **Rzym**

Time	Title	Authors
11:30-11:45	Structural Design of Access Openings in Penstocks	Ecker Alexander Unterweger Harald Langwieser Martin
11:45-12:00	Structural response of steel girders with diagonal stiffeners under shear	Zoubek Sara Ljubinkovic Filip Martins Joao
12:00-12:15	Investigation of the effect of local loading at the openings of Castellated Beams	Haas Benedikt Kurz Wolfgang
12:15-12:30	Improved Shear Buckling Resistance Model for High Strength Steel Plate Girders	Pedro José Oliveira Nascimento Sérgio
12:30-12:45	Influence of reality-based imperfections on buckling behaviour of steel bridge web panels under bending and shear stress	Sultangirova Ainaz Diener Michael Brune Bettina Knobloch Markus
12:45-13:00	Experimental study of flexural–torsional buckling in large-scale welded cylinders	Cabrera González Juan Garcia-Guzman Lorenzo Alonso-Arias Antonio Rocha-Jacome Cristian

Parallel Session PS-4g

Novel structural solutions 4/4

Chairpersons: **Dénes Kollár**
Hsieh-Lung Hsu

Day 2
Date: **17 September**
11:30 – 13:00
Room: **Warszawa 1**

Time	Title	Authors
11:30-11:45	Experimental and Numerical Assessment of the Spider Intermodular Joint for Modular Steel Buildings	Aguayo Ricardo Conde Jorge Santos Ana Francisca Andrade David Ljubinkovic Filip Simoes Da Silva Luis Sree Sabari Shunmugam
11:45-12:00	O.I.C.-based design of coupled instabilities in channel sections under compression	Mefande Wack Morane Chloe Chhoeng Oudom Boissonnade Nicolas Tremblay Robert
12:00-12:15	Generalized Beam Theory and Ritz method for Buckling analysis of Thin-Walled Composite Beams with Unsymmetric Layups	Kharghani Navid Mittelstedt Christian
12:15-12:30	Timber-concrete composite slab tests with novel steel nail plates shear connectors	Dachin Cristina Novák Tomáš Mečár Jakub
12:30-12:45	A new approach to Modular Industrial Construction	Santos Filipe Silva Tania Gonçalves Eduardo
12:45-13:00	Rethinking Fatigue Design: Extending Service Life of Welded Assemblies and Reducing CO ₂ in Construction via Nanometallic Multilayers	Rutner Maryam Shokri Nima Rutner Marcus

Parallel Session PS-4h

Seismic resistance, dynamics and vibration 4/4

Day 2

Date: **17 September**

11:30 – 13:00

Chairpersons: **Tomasz Falborski**
Christoforos Dimopoulos

Room: **Warszawa 2**

Time	Title	Authors
11:30-11:45	Verification of Seismic Braced Frame Connections Using the Component-Based Finite Element Method in Accordance with AISC Provisions	Mahamid Mustafa Bhosale Satyam Vild Martin
11:45-12:00	Evaluation of Component-Based Finite Element Method for Seismic Bracing Connections in Buckling-Restrained Braced Frames designed according to AISC Provisions	Mahamid Mustafa Bhosale Satyam Vild Martin
12:00-12:15	Seismic Performance of Chevron Braced Steel Structure: Case Study of the Kahramanmaraş Earthquake	Örgev Ahmet Vatansever Cuneyt
12:15-12:30	Shake Table Tests on Steel Frames with Semi-Rigid Ductile Connections	Balaskas Georgios Hoffmeister Benno
12:30-12:45	Airborne Sound Insulation Prediction of Metal-Faced Sandwich Panels (EN 14509) Using Coupled Vibro-Acoustic FE Simulations	Wawrzynowicz Adam Jenta Arkadiusz Wójcik Michał

Parallel Session PS-4i

**Machine learning in engineering design
and construction 2/2**

Day 2

Date: **17 September
11:30 – 13:00**

Chairpersons: **Paweł Kossakowski
Muhammed Cosut**

Room: **Warszawa 3**

Time	Title	Authors
11:30-11:45	Machine Learning-Based Assessment of Manufacturing Tolerances on the Initial Stiffness of Boltless Beam-to-Upright Joints	Calispa Marcelo Larrañaga Jon Elguezabal Jon Santamaria David Ulacia Ibai
11:45-12:00	Machine Learning for Column Web Panel in Transverse Compression Component	Hajdarević Amina Vild Martin Müller Andreas Cakir Tamer
12:00-12:15	Data-driven model for estimating seismic performance capacity of masonry-infilled steel structures	Asgarkhani Neda Kazemi Farzin Milani Gabriele Jankowski Robert
12:15-12:30	Seismic performance assessment of dual system incorporating MRF and BRBF using dynamic ensemble machine-learning model	Kazemi Farzin Asgarkhani Neda Jankowski Robert
12:30-12:45	Image-based detection of structural elements in 2D steel hall floor plans for automated BIM modelling	Tomczyk Natalia Prokop Anna Borowiec Artur Licholai Rafał Nazarko Piotr

Parallel Session PS-4j

Fire engineering 1/2

Chairpersons: **Dinu Florea**
Senbin Huang

Day 2
Date: **17 September**
11:30 – 13:00
Room: **Warszawa 4**

Time	Title	Authors
11:30-11:45	DSM-Design of Uniformly Bent CFS Beams against Distortional and Global Failures at Elevated Temperatures	Sian das Neves Natan Landesmann Alexandre Camotim Dinar
11:45-12:00	Comparative fire performance of steel and timber purlins	Bahr Oliver
12:00-12:15	Full-scale fire test in a single-storey hall	Cabova Kamila Kuříková Marta Židlický Břetislav Rušarová Simona Wald František Mareš Jiří
12:15-12:30	Experimental Study on Thermal Response of Thin-Walled Uprights Subjected to Radiative Heat Flux	Kowalski Wojciech Malendowski Michał Szymkuc Wojciech Krasuski Adam
12:30-12:45	Behaviour of protected and unprotected bolted lap joints at elevated temperatures	Pantousa Daphne Kazakidis Dimitrios Mistakidis Euripidis
12:45-13:00	Real-Time Hybrid Fire Simulation on Steel Frames: Coupling Strategy and Parameter Effects	Yarema Yurii Winkler Rebekka Alawieh Hussein Knobloch Markus

SPECIAL SESSION 1 (1)

Steel, timber (-concrete) hybrid structures 1/6

Case studies: Shear walls and diaphragms

Day 2

Date: **17 September
14:00 – 16:00**

Chairpersons: **José Henriques
Erica Fischer**

Room: **Londyn 1**

Time	Title	Authors
14:00–14:20	From Pavillon “Petite Maison” to Design for Reuse and Guidelines for Steel-Timber Composite Beams	Odenbreit Christoph Bogdan Teodora
14:20-14:40	Timber–Steel Hybrid Structures for Sustainable and Circular Construction	Kossakowski Paweł Bakalarz Michał Marcin
14:40-15:00	Recent Advances in Steel-FRP Composite Systems for Strengthening Timber Structures	Dygas Justyna Kossakowski Paweł
15:00-15:20	New sport hall of Stade Charles Auray in Paris: a steel-timber hybrid structure	Riccardo Zanon Champain Benoit Roche Yann Levignat Joan
15:20-15:40	Nonlinear Modelling of a Steel-Timber Diaphragm with Nailed Connections	Akanji Sebastian Phillips Adam Thomas Della Fischer Erica
15:40-16:00	Comparative Study of Optimally Designed Hybrid Steel-Timber Coupled Shear Wall Systems	Hayashida Kazuma Loss Cristiano Miyazu Yuji

SPECIAL SESSION 2 (1)

High-strength steel connections for circular construction 1/2

Chairpersons: **Luis Simões da Silva**
Aurel Stratan

Day 2

Date: **17 September**
14:00 – 16:00

Room: **Londyn 2**

Time	Title	Authors
14:00–14:20	Adaptable, demountable and reusable HSS connections. Design, cost and life cycle analysis – Introduction	Bernabeu Alejandro
14:20–14:40	CONNECT4C Reusable adaptable moment-resisting connection: concept and analysis	Conde Jorge Ljubinkovic Filip Jankovic Neda Simões da Silva Luis
14:40–15:00	Innovative column splice for reusability – an analytical design method for complex loading	Neutelers Arnaud Vermeulen Maxime, Duchêne Laurent Demonceau Jean-François
15:00–15:20	Cost and life-cycle analysis of structural steel system designed for reusability	Timilsina Sushil Mela Kristo Ljubinkovic Filip Conde Jorge Alves Tiago Bernabeu Alejandro Gervásio Helena Simões da Silva Luis
15:20–15:40	Experimental and numerical investigations on the T-stub joint component made of S690 & S960 steel grades	Neutelers Arnaud Vermeulen Maxime Duchêne Laurent Demoncea Jean-François

SPECIAL SESSION 3 (1)

Innovative and sustainable applications of thin-walled and sandwich structures 1/2

Chairpersons: **Jörg Lange**
Monika Chuda-Kowalska

Day 2
Date: **17 September**
14:00 – 16:00
Room: **Warszawa 2**

Time	Title	Authors
14:00–14:20	Numerical Investigation of Warping Torsion in Multi-Span Sandwich Panels	Weber Johannes Janczyk Kevin Kuhnhenne Markus
14:20-14:40	Innovative design concepts and functionalization of sandwich panels: Insights from the MuSan network	Ciupack Yvonne Rädel Felicitas Steineck Sonja Schardt Annalena Pradhan Eric Man, Lange Jörg
14:40-15:00	Creep of the sandwich panels in the context of experimental research and advanced modelling methods	Pozorska Jolanta
15:00-15:20	The influence of the complex mechanical state of the core on the local instability of the sandwich panel facing	Pozorski Zbigniew
15:20-15:40	Sandwich panel with glass laminated facings subjected to blast wave load	Studziński Robert Sumelka Wojciech Malendowski Michał Gajewski Tomasz Kwiatkowski Konrad Wróblewski Tomasz Sielicki Piotr

SPECIAL SESSION 4 (1)

Pre-stressed steel structures 1/1

Chairpersons: **Vladimír Janata**
Dalibor Gregor

Day 2
Date: **17 September**
14:00 – 16:00
Room: **Warszawa 3**

Time	Title	Authors
14:00–14:20	Prestressed Steel Structures, Design, Construction	Janata Vladimír Lukeš Miloslav Gregor Dalibor Lahodný, Jiří Beran Jindřich Včelák Jan
14:20-14:40	Long Span Roofs created by Pre-stressed Beam String Structures, Case Studies	Janata Vladimír Včelák Jan Beran Jindřich Gregor Dalibor Lukeš Miloslav
14:40-15:00	Roof Structures Suspended on Prestressed Steel Tendons, Case Studies	Jermoljev David Janata Vladimír Včelák Jan Beran Jindřich
15:00-15:20	Bowstring Lattice Trusses with Prestressed Tendons in Long Span Roof of Hangar	Lukeš Miloslav Janata Vladimír Gregor Dalibor Lahodný Jiri
15:20-15:40	Prestressed Composite Steel–Concrete Structures, Case Studies	Gregor Dalibor Janata Vladimír Včelák Jan Lukeš Miloslav
15:40-16:00	Fire behaviour of I-section steel beams strengthened by prestressed WAAM high strength steel	Wu Kaidong

SPECIAL SESSION 5 (1)

Innovative aluminium structures for sustainable and lightweight construction 1/2

Chairpersons: **Evangelia Georgantzia**
Vincenzo Piluso

Day 2
Date: **17 September**
14:00 – 16:00
Room: **Warszawa 4**

Time	Title	Authors
14:00–14:20	Macrostructural and Mechanical Evaluation of Butt-Welded AW-6082 Aluminium Alloy Connections	Valčić Anđelo Čudina Ivan Skejić Davor Garašić Ivica
14:20-14:40	Equivalent Width-to-Thickness Ratio of Square Aluminium Alloy Profile with Stiffening Ribs	Sato Atsushi Lettieri Annarosa
14:40-15:00	Experimental Study of Imperfections in Longitudinally Welded AW-5083-H321 Aluminium Alloy Members	Čudina Ivan Garašić Ivica Lukačević Ivan Skejić Davor Štefok Mislav Valčić Anđelo
15:00-15:20	Post-fire cross-sectional behaviour of aluminium alloy irregular rectangular hollow section stub columns	Cheng Wen Kang Chen Sun Yao
15:20-15:40	Methods and Opportunities for a More Reliable Design of Aluminium Structures	Skejić Davor Dokšanović Tihomir Čudina Ivan Valčić Anđelo
15:40-16:00	Cyclic quasi-static testing of aluminium hollow section beam members	Georgantzia Evangelia

POSTER SESSION

		Day 2
		Date: 17 September
		14:00 – 16:00
<i>Chairpersons:</i>	Marcin Górski	Room: Paryż 1 / 2
	Edyta Bernatowska	

Title	Authors
Axial compression behaviours of planar and c-shape continuous column-supported steel walls in modular steel buildings	Khan Kashan Chen Zhihua Daniel Tsavdaridis Konstantinos Abbas Danish
Experimental investigation on the seismic performance of partially encased composite beams in prefabricated structures	Khan Kashan Yang Kejia Chen Zhihua Daniel Tsavdaridis Konstantinos Abbas Danish
Artificial intelligence in structural analysis – using the MLP artificial neural network to determine the failure modes of bolted angle connections	Bernatowska Edyta Wojnar Andrzej Wojnar Maksymilian
FEA Study of the Degree of Shear Connection in Prefabricated Ultra-Shallow Slabs (PUSS) Under Bending	Alali Ahmed Tsavdaridis Konstantinos
Stability and failure mechanism of a cold-formed steel compression element with a partially built-up cross-section	Deniziak Patryk
Study of the stability loss of plate girder with variable web thickness	Gordziej-Zagórska Małgorzata
Cold-formed steel beam profiles for lightweight modular floor systems: A numerical study	Ahmed Farhan Gkantou Michaela Nikitas Georgios Ferentinou Maria Bras Ana Riley Mike
Axial load capacity of grouted inter-modular connections for modular steel buildings: An experimental investigation	Ahmed Farhan Gkantou Michaela Nikitas Georgios Ferentinou Maria Bras Ana Riley Mike
Bearing capacity of columns made of various types of stainless steel grades when exposed to fire.	Maślak Mariusz Kuras Piotr Pazdanowski Michał
Glued connection between steel structure and sandwich panels - an analytical approach	Górski Marcin
Investigations on the tensile load capacity of thread-fixed one-side bolt connections in steel construction	Paetow Henri Kraus Matthias
Experimental Investigation of Dimpled Screw Connections in Thin-Walled Cold-Formed Steel Sheets	Krolo Paulina Lukačević Lazar Palijan Ivan
Elastic buckling of monosymmetric I-shaped section beam-columns under unequal end moments	Giżejowski Marian Barszcz Anna Maria Wójcik-Grząba Izabela
Study on plate girders with an innovative Y-shape web geometry	Migda Wojciech

POSTER SESSION

Day 2

Date: **17 September**
14:00 – 16:00

Chairpersons: **Marcin Górski**
Edyta Bernatowska

Room: **Paryż 1 / 2**

Metal Corrosivity in the Mediterranean Climate: Early Results from Field Studies	Latour Massimo Cuccurullo Valeria Di Benedetto Alessandro Scarfato Paola Francavilla Antonella Fabbrocino Francesco Rizzano Gianvittorio Candela Laura D'Amato Luigi Fiani Margherita
Experimental and numerical validation of a steel covering model using modal analysis and impact tests	Zabojcz Paweł Obara Paulina Szaniec Waldemar Radoń Urszula
Behaviour analysis of innovative steel pedestrian bridges using prestressed strings	Juozapaitis Algirdas Dabrila Povilas Sandovič Giedrė Beivydas Edmundas
Dynamic response of suspended roof structure - Case study	Ranisavljevic Maja Bošković Matija Milojević Marija Dobrić Jelena
Effect of base-connection design on residual drifts of seismically designed steel moment-resisting frames	Falborski Tomasz Song Biao Kanvinde Amit
Numerical methods as non-destructive, indirect tool in assessment of post-fire properties of Q&T steels	Król Paweł
Testing of steel bolted T-stub end-plate joints with spherical washers subjected to tension	Maślak Mariusz Kołat Karol Pazdanowski Michał Stankiewicz Marek Zajdel Paulina Kowalik Jakub Żwirek Jakub
Performance evaluation of demountable and reusable steel column base	Gluhović Nina Spremić Milan Jakovljević Isidora Filipović Aljoša Dobrić Jelena
Reducing column-face demands in circular Reduced Web Section (RWS) connections	Bayat Meysam Tsavdaridis Konstantinos Alonso Andres
Optimization of metal cladding perforation and bending load capacity of sandwich panels	Pozorski Zbigniew Frąckiewicz Piotr Jakimowicz Marzena

SPECIAL SESSION 1 (2)

Steel, timber (-concrete) hybrid structures 2/6

Structures under Fire and Seismic Actions

Day 2

Date: **17 September**

16:30 – 18:00

Chairpersons: **Zanon Riccardo**
Giacomo Iovane

Room: **Londyn 1**

Time	Title	Authors
16:30–16:45	Double-lap shear tests on steel-timber glued connections at elevated temperatures	Vigneri Valentino Rohrbach Simon Vuffray Aurélien Taras Andreas
16:45-17:00	The fire performance of joint between DELTABEAM® and timber slabs	West Salla-Mari Peltonen Simo
17:00-17:15	Sustainable Hybrid Steel-Timber Beams with Demountable Shear Connectors: Ambient and Fire Tests	Mora Paúl Lapuebla-Ferri Andrés Espinós Ana Romero Manuel
17:15-17:30	Seismic timber concentric braced frames with steel link: design and analysis	Iovane Giacomo Faggiano Beatrice
17:30-17:45	Seismic performance evaluation of timber-steel hybrid framed structures	Iovane Giacomo Landolfo Raffaele Faggiano Beatrice
17:45-18:00	Experimental Investigation of Timber Buckling-Restrained Braces under cyclic loading	Pahlavannejad Tabarestani Nima Hicks Stephen James Gonçalve Rodrigo de Moura

SPECIAL SESSION 2 (2)

High-strength steel connections for circular construction 2/2

Day 2

Date: **17 September
16:30 – 18:00**

Chairpersons: **Jean Francois Demonceau
Massimo Latour**

Room: **Londyn 2**

Time	Title	Authors
16:30–17:00	Behaviour and analysis of adaptable beam-to-column joints with long slotted holes	Silva de Carvalho Adriano Bogdan Teodora Demonceau Jean-François Odenbreit Christoph
17:00-17:15	Characterization of column web in compression component in high-strength steel for reusable joints	Ljubinković Filip Conde Jorge Ribeiro Fernando Freire Simões da Silva Luis
17:15-17:30	Experimental investigations on the bearing capacity of plates made of High Strength Steel	Vermeulen Maxime Neutelers Arnaud Duchene Laurent Odenbreit Christoph Decarvalho Adriano Bogdan Teodora Demonceau Jean-François
17:30-17:45	Characterization of long bolts in shear	Janković Neda Ljubinković Filip Conde Jorge Simões da Silva Luis

SPECIAL SESSION 3 (2)

Innovative and sustainable applications of thin-walled and sandwich structures 2/2

Chairpersons: **Zbigniew Pozorski**
Robert Studziński

Day 2
Date: **17 September**
16:30 – 18:00
Room: **Warszawa 2**

Time	Title	Authors
16:30–16:45	Torsion in Sandwich Panels due to Secondary Functional Layer	Pradhan Eric Rädel Felicitas Ciupack Yvonne Lange Jörg
16:45-17:00	Shear capacity of three claps blind rivet connection in sandwich roof panel	Guo Yongchang Chybiński Marcin Studziński Robert
17:00-17:15	Methodology for Experimental and Numerical Studies of Thin-Walled Elements Interacting with Sandwich Panels	Ciesielczyk Katarzyna Studziński Robert
17:15-17:30	Effective Mechanical Properties of Perforated Steel Facings in Acoustic Sandwich Panels	Chuda-Kowalska Monika Malendowski Michał Pozorski Zbigniew
17:30-17:45	Influence of Temperature and Cell Gas Composition on PU Sandwich Panels	Steineck Sonja Rädel Felicitas Ciupack Yvonne Lange Jörg

SPECIAL SESSION 5 (2)

Innovative aluminium structures for sustainable and lightweight construction 2/2

Chairpersons: **Maria Maglio**
Rosario Montuori

Day 2
Date: **17 September**
16:30 – 18:00
Room: **Warszawa 4**

Time	Title	Authors
16:30–16:50	Design of extruded and welded aluminium I-sections	Attiogbe Kokou Hoang Duong Ngoc Boissonnade Nicolas
16:50-17:10	Advancements in Aluminium as a Structural Material for Vehicular Bridges	Rico Pablo Amiri Maryam Boissonnade Nicolas
17:10-17:30	Post-fire response of aluminium alloy square and rectangular hollow sections under compression	Cabrera Manuela Bock Marina Gkantou Michaela Theofanous Marios
17:30-17:50	Experimental studies of aluminium ring lock scaffolding joint	Pieńko Michał

Parallel Session PS–5e

Stability of cross-sections, members and frames 5/6

Day 2

Date: **17 September
16:30 – 18:00**

Chairpersons: **Maxime Lebastard
Morane Chloé Mefande Wack**

Room: **Paryż 1 / 2**

Time	Title	Authors
16:30-16:45	An interaction formula method for buckling design of steel angles bolted through one leg at their ends	Antonodimitraki Sofia Vayas Ioannis Maesschalck Jan Demonceau Jean-François
16:45-17:00	Local Buckling Strength and Plastic Deformation Capacity of H-Shaped Steel Columns under Different Directional Bending at Member Ends	Kawaguchi Yoshihiro Osman Rorsina Sato Kosuke
17:00-17:15	Buckling of corroded steel columns	Feng Qixian, Theofanous Marios Mahdavi pour Mohammad Ali Jowhari Mghadam Shima Dirar Samir Faramarzi Asaad Kookalani Soheila Parn Erika Brilakis Ioannis
17:15-17:30	Quantifying Lateral Support of Steel Girders Directly Connected to Trapezoidal Sheeting	Bampatsikos Minoas Vasileios Thanopoulos Pavlos
17:30-17:45	Investigation of the Vierendeel Mechanism in steel cellular beams	Vidoti da Silva Luana Mesquita Luís Lopes Nuno

Parallel Session PS–5g

Fatigue and fracture 1/5

Chairpersons: **Harald Unterweger**
Guo-Qiang Li

Day 2
Date: **17 September**
16:30 – 18:00
Room: **Warszawa 1**

Time	Title	Authors
16:30-16:45	Fatigue of weldments with welding defects – defect sizing, crack nucleation and crack growth rate	Maljaars Johan Goto Denis Khan Danish Malschaert David Slot Henk
16:45-17:00	A Numerical and Experimental Study on Fatigue Life of HFMI-treated Welded Cover Plates in Steel Bridges	Noghabi Mohammad Mohammad Al-Emrani
17:00-17:15	Improving Fatigue Resistance of Hollow Section Joints through Optimized Weld Design of Gusset Plates	Dürr Andre Knefelkamp Sascha Winkler Matthias Herion Stefan Ladendorf Philipp
17:15-17:30	Fatigue strength of welded noise-reduction elements of modular expansion joints for road bridges	Schubert Lara-Sophie Euler Mathias
17:30-17:45	Re-evaluation of the Fatigue Resistance of Weathering Steel Members	Lochte-Holtgreven Stephan Jungen Jan-Willem Mathwig Micha
17:45-18:00	An Experimental Method for Capturing Cyclic Deformation with Large Elastoplastic Strain Exceeding $\pm 50\%$ in Structural Steel	Getahun Solomon Haile Tamura Hiroshi Hirao Kensho Saleem Aleena Jamil Aqsa

Parallel Session PS-5i

3D printing and additive manufacturing 1/5

Chairpersons: **Trayana Tankova**
Qui-Yun Li

Day 2
Date: **17 September**
16:30 – 18:00
Room: **Warszawa 3**

Time	Title	Authors
16:30-16:45	An experimental approach on the load-bearing capacity of thin steel sheets reinforced using WAAM	Grebner Philipp Waldschmitt Benedikt Rädel Felicitas Ciupack Yvonne Lange Jörg
16:45-17:00	A novel optimised additively manufactured connection for hybrid semi-rigid lightweight steel framing	Xie Chuandong Bagheri Sabbagh Alireza Bakhshivand Ehsan Iorio Ornella
17:00-17:15	Linking geometry characteristics and structural properties of mild steel plates manufactured by wire arc additive manufacturing	Rittich Nils Bartsch Helen Feldmann Markus Mierzwa Max Sharma Rahul Kellerwessel Johannes
17:15-17:30	Discrete Shape Optimization of Wire-Arc Additively Manufactured Metal Sheet for Digitally Fabricated Composite Slab	Laghi Vittoria Aslan Beytullah Babovic Neira Savino Elisabetta Gasparini Giada
17:30-17:45	Application of Topology Optimization in the Design of Steel Connections for Additive Manufacturing.	Gil Beatriz Goñi Rufino Lagos Rodrigo
17:45-18:00	Influence of Surface Topography on Stress Concentration and Fatigue Performance of DED-Arc HSLA Steel	Müggenburg Marc Vogts Stefan Thiele Klaus Unglaub Julian

EUROSTEEL 2026 – DAY 3 18.09.2026

Keynote lecture

Chairperson: **Marian Giżejowski**

Day 3
Date: **18 September**
8:30 – 9:00
Room: **Kraków 1**

Time	Title	Speaker
08:30-09:00	Steel reuse in seismic areas in Japan	Taichiro Okazaki

SPECIAL SESSION 1 (3)

Steel, timber (-concrete) hybrid structures 3/6 Shear connectors – Part 1

Chairpersons: **Isidora Jakovlevic**
Valentino Vigneri

Day 3
Date: **18 September**
9:00 – 10:30
Room: **Londyn 1**

Time	Title	Authors
09:00-09:15	CIRCOMP reversible shear connection for steel-timber composite beams: short- and long-term behaviour	Henriques José Maerten Ellen Willems Pibbe De Ligne Liselotte Degée Hervé
09:15-09:30	CIRCOMP reversible shear connection for steel-timber composite beams: pull-out resistance	Maerten Ellen Willems Pibbe De Ligne Liselotte Degée Hervé Henriques José
09:30-09:45	CIRCOMP reversible shear connection for steel-timber composite beams: short- and long-term behaviour under varying hygroscopic conditions.	Willems Pibbe Maerten Ellen Degée Hervé Henriques José De Ligne Liselotte
09:45-10:00	Advancing sustainable construction: Developing shear connections for reusable steel–timber composite floors	Jakovljević Isidora Spremić Milan Stojči Dimitrije Popović Marko Glišović Ivan Todorović Marija
10:00-10:15	Load-slip response and reuse potential of shield anchor bolt connectors in steel-timber composite floors	Bompa Dan Kariuki Mark Ntanda Thabang Ungureanu Viorel Elghazouli Ahmed
10:15-10:30	Experimental Evaluation of Steel-Timber Hybrid Beams with Self-Tapping Screws	Fischer Erica Laughery Detlef Phillips Adam Miyamoto Byrne

Parallel Session PS–6a

Cold-formed structures 5/8

Chairpersons: **Luciano Lima**
Qiu-Yun Li

Day 3
Date: **18 September**
9:00 – 10:30
Room: **Kraków 1**

Time	Title	Authors
09:00-09:15	Pre-Test Evaluation of Ground Motion Sequence Effects on a Ten-Story Cold-Formed Steel Framed Building	Eladly Mohammed Zhang Zhidong Zhang Jiachen (Charlie) Singh Amanpreet Speicher Matthew S. Hutchinson Tara C. Schafer Benjamin
09:15-09:30	Experimental Study of Cold-formed Steel Screw Connections Failing in Block Shear	Le Hoang Vu Pham Cao Hung Jones Paul Clayton Trevor Eckermann Mark
09:30-09:45	Experimental Study of Cold-Formed Steel Floor Joists under Serviceability Limit State	Zhang Ruilin Pham Cao Hung Jones Paul Clayton Trevor Eckermann Mark
09:45-10:00	Cleat angle behaviour in C-shaped purlin-to-rafter connections: experimental study and design considerations	Chandragiri Hari Narayana Madhavan Mahendrakumar
10:00-10:15	Residual stress impact on structural performance of cold-formed steel channel sections	Panditaray Alok Madhavan Mahendrakumar Muvvala Gopinath
10:15-10:30	Experimental Investigation of Cold-formed Steel Built-up Closed Columns using Frictional Interlocking	Sivakumar Harish Madhavan Mahendrakumar

Parallel Session PS–6b

Bolted joints and connections 5/7

Chairpersons: **Primož Može**
Piotr Iwicki

Day 3
Date: **18 September**
9:00 – 10:30
Room: **Kraków 2**

Time	Title	Authors
09:00-09:15	Explicit FE Modelling of Cold-formed Steel K-Joints using Dimpled Screwed Connections	Zhang Ruilin Pham Cao Hung Le Hoang Vu Jones Paul Clayton Trevor Eckermann Mark
09:15-09:30	Slip Coefficients of High Strength Bolted Double-Shear Friction Joints with Slotted Holes	Yamamoto Kohei Sato Kosuke Haginoya Manabu Taguchi Takashi
09:30-09:45	Experimental Study on Bolted Connections in Corrugated Steel Plates	D'Addesa Vito Fiorino Luigi Fiorillo Antimo Maddaloni Gennaro Landolfo Raffaele Prota Andrea
09:45-10:00	Experimental study on bolted lap joints locally strengthened by heat treatments	Kastiza Pelagia Skalomenos Konstantinos Theofanous Marios Papaelias Mayorkinos
10:00-10:15	Numerical modelling and Eurocode-based design of induction-hardened single-bolt connections governed by bearing failure	Kastiza Pelagia Raumoo Abhishek Theofanous Marios Skalomenos Konstantinos

Parallel Session PS–6d

Steel-concrete composite structures 4/7

Chairpersons: **Anna Derlatka**
Krisztián Király

Day 3
Date: **18 September**
9:00 – 10:30
Room: **Londyn 2**

Time	Title	Authors
09:00-09:15	An Inverse Stepped Beam Method for Bending Stiffness Estimation of Modular Buildings	Moore Hollie Broderick Brian Hickey John Fitzgerald Breiffni
09:15-09:30	Design of cold-formed steel-lightweight concrete composite beam	Rahnavard Rohola Craveiro Helder Simões Rui A.
09:30-09:45	Hybrid elements and composite dowel shear connections in arch bridges: <i>Early Implementations and Lessons Learned</i>	Sęk Radosław Lorenc Wojciech
09:45-10:00	Digital Image Correlation for Experimental Study of CFST Beams under Bending	Soltanalipour Milad Ferrer Miquel Álvarez Felipe Marimon Xavier Bové Oriol
10:00-10:15	Cold-formed Steel-Concrete Composite Beams with corrugated web in bending – Finite element approach	Rajić Andrea Lukačević Ivan Čurković Ivan
10:15-10:30	Push-out tests of innovative shear connection in CFS-concrete beams with corrugated web	Lukačević Ivan Čurković Ivan Rajić Andrea Žuvelek Vlaho Bartolac Marko

Parallel Session PS–6e

Reuse and retrofitting of structural elements 4/6

Chairpersons: **Florentia Kavoura**
Danilo Di Donato

Day 3
Date: **18 September**
9:00 – 10:30
Room: **Paryż 1 / 2**

Time	Title	Authors
09:00-09:15	Determination of Fracture Toughness JC in Existing Structures Using Small Specimens	Van Es Sjors Slot Henk
09:15-09:30	Reuse System for Composite Beams Consisting of Steel Beams and Divided Slabs with Deck Plates	Hanayama Taiki Tanaka Teruhisa Kusumoto Ayana Sakai Junichi
09:30-09:45	Modular Steel Infill Panels as Energy-Dissipating Fuses for Existing RC Frames	Bampatsikos Minoas Vasileios Thanopoulos Pavlos
09:45-10:00	Restoring corroded steel members for circularity via Wire Arc Additive Manufacturing-Based repair	Zhang Cheng Liu Haixin Wang Yixun
10:00-10:15	Experimental Investigation on Steel Frame Subassemblies with DISC beam-to-column connection	Li Jiyuan Han Xiaozhou Chan Tak Ming
10:15- 10:30	Performance assessment of reversible friction materials: Preliminary tests	Francavilla Antonella Latour Massimo Rizzano Gianvittorio

Parallel Session PS–6f

Robustness and impact loading 1/1

Chairpersons: **Alessia Campiche**
Aldo Milone

Day 3
Date: **18 September**
9:00 – 10:30
Room: **Rzym**

Time	Title	Authors
09:00-09:15	Fuse-Based Segmentation in Steel Frame Structures: Preliminary Results from a Full-Scale Collapse Test	Marin Lorenzo Setiawan Andri Buitrago Manuel Adam Jose M.
09:15-09:30	Simplified dynamic analysis of structures exhibiting catenary actions under column removal.	Dimopoulos Christoforos
09:30-09:45	Robustness of Metal Building Roof Corners under Tornado-Induced Internal Pressure Variations	Wang Shihang Wu Xinyang Zuo Delong Blum Hannah
09:45-10:00	Response of hybrid carbon-stainless steel bolted extended end-plate connections at high loading rates	Cabrera Manuela Mahdavi pour Mohammad Ali Li Weiran Afshan Sheida Theofanous Marios
10:00-10:15	Development and Fragility-Based Validation of a Blast Design Methodology for Smart and Conventional Steel MRFs	Elqudah Sara Muhammad Vigh Laszlo Gergely
10:15-10:30	Influence of standoff distance on the blast resistance of light steel-based facades	Dinu Florea Neagu Calin Senila Roland Onea Andreea

Parallel Session PS–6g

Fatigue and fracture 2/5

Chairpersons: **André Dürr**
Stefanie Röscher

Day 3
Date: **18 September**
9:00 – 10:30
Room: **Warszawa 1**

Time	Title	Authors
09:00-09:15	High-cycle fatigue performance of fillet welds in bridges	Ramhormozian Shahab Houshmand Sarvestani Alireza Karpenko Michail Taheri Hafez Clifton Charles Coleman Liam Dong Pingsha Chen Zhan
09:15-09:30	Numerical fatigue strength investigation of wire and arc additive manufactured (WAAM) specimens based on 3D-scans and implicit gradient model	Shojai Sulaiman Moshayedi Hessamoddin Braun Moritz Ghafoori Elyas
09:30-09:45	Temperature Effects on the Mechanical Behaviour of Low-Carbon Alloyed Pipeline Steel	Aruwan Florence Blankenhagen Jakob Abankar Mohammad Mensing Martin Torgersen Jan
09:45-10:00	Fatigue Behaviour of Slip-Resistant Connections Including Manufacturing Effects	Aljomaa Mohammad Stranghöner Natalie Schröder Markus Glienke Ralf Kalkowsky Florian Flügge Wilko
10:00-10:15	Ultra-low-cycle fatigue behaviour of butt-welded joint of S690QL high-strength steel	Chen Mei-Ling Wang Yan-Bo Li Guo-Qiang
10:15-10:30	Comparative Study on the High-Cycle Fatigue Performance of Bolted Steel Joints Produced Using Different Laser Cutting Technologies	Olmez Hasan Zanon Gabriele Marelli Stefano Bursi Oreste S. Brugnolli Marco Vanin Mattia

Parallel Session PS–6h

AI in design and assessment of steel structures 1/2

Chairpersons: **Kamil Słowiński**
Andreas Müller

Day 3
Date: **18 September**
9:00 – 10:30
Room: **Warszawa 2**

Time	Title	Authors
09:00-09:15	Digital Visual Testing and Machine Learning-Based Prediction of Fatigue Strength in Circumferential Welded Joints of Offshore Monopiles	Braun Moritz Beiler Marten Melucci Martín Leonel Wang Xiru Schubnell Jan Von Borstel Thomas
09:15-09:30	B-WIM System Development for a Railway Bridge based on simulated data	Barbély László Joó Attila
09:30-09:45	AI-Driven Optimization and Surrogate Modelling Framework for Predicting Steel Joint Behaviour.	Milicevic Aleksa Ljubinkovic Filip Santos Ana Francisca Simoës da Silva Luis
09:45-10:00	AI-assisted reliability assessment of steel structures: methodology and application	Ljubinkovic Filip Silva de Carvalho Adriano Conde Jorge Freire Ribeiro Fernando Simoës da Silva Luis
10:00-10:15	Transfer learning for the assessment of bolted steel joints employing mechanical models and ANNs	Silva de Carvalho Adriano Ljubinkovic Filip Bogdan Teodora Odenbreit Christoph

Parallel Session PS-6i

3D printing and additive manufacturing 2/5

Chairpersons: **Abdel Hamid Bouchair**
Beatriz Gil

Day 3
Date: **18 September**
9:00 – 10:30
Room: **Warszawa 3**

Time	Title	Authors
09:00-09:15	World's First Hybrid WAAM steel 3D Truss – An Imperial-MX3D Demonstrator	Hu Tong Liao Lisha Meng Xin Kyvelou Pinelopi Macorini Lorenzo Gardner Leroy
09:15-09:30	Electropolishing and Nanometallic Multilayer Redefine Fatigue Resistance of C+N Stainless Steel Manufactured via Laser Powder Bed Fusion (PBF-LB/M)	Falah Mohsen Barmeyer Simon Blankenhagen Jakob Radlbeck Christina Mensing Martin Rutner Marcus
09:30-09:45	Tensile properties of wire arc additively manufactured normal strength steels	Nitawaki Masashi Sagawa Takayuki Weber Ben Meng Xin Gardner Leroy
09:45-10:00	Steady state tests of wire arc additively manufactured steel coupons at elevated temperatures	Liao Peishi Cai Yancheng
10:00-10:15	Structural behaviour of short wire arc additively manufactured (WAAM) walls printed on circular hollow section steel profiles	Gilliar-Schönenberger Lionel Arthur Heydarinouri Hossein Taras Andreas Silvestru Vlad-Alexandru
10:15-10:30	Experimental Characterization of Wire Arc Additively Manufactured Rods and Intersecting Rods	Arrè Lidiana Alagheband Mahan Laghi Vittoria Trombetti Tomaso Silvestri Stefano Gasparini Giada Palermo Michele

Parallel Session PS–6j

Fire engineering 2/2

Chairpersons: **Euripidis Mistakidis**
Manuel Romero

Day 3
Date: **18 September**
9:00 – 10:30
Room: **Warszawa 4**

Time	Title	Authors
09:00-09:15	Structural response of a single-storey hall under localized fire exposure	Židlický Břetislav Cabova Kamila Kuříková Marta Rušarová Simona Mareš Jiří Wald František
09:15-09:30	Effect of heating rate on elevated-temperature tensile behaviour of structural steel	Cabova Kamila Šejna Jakub Wald František Mózer Vladimír Szymkuc Wojciech Malendowski Michał Jakowiak Tomasz
09:30-09:45	Thermal analysis of steel connections subjected to fire action: comparison between calculation methodologies	Bola Rita Vila Real Paulo Lopes Nuno
09:45-10:00	Transient Buckling of CHS Steel Columns under Localised Induction Heating - A Novel Experimental Method	Coleman Blake Skalomenos Konstantinos Sharifi Soroosh
10:00-10:15	Stainless steel I-sections in fire: Behaviour and deformation based design	Zhang Congding Kucukler Merih Xing Zhe
10:15-10:30	Optimum design of steel columns for fire safety using swarm intelligence	Jarmai Karoly Clifton Charles Shrivastava Mayank

SPECIAL SESSION 1 (4)

Steel, timber (-concrete) hybrid structures 4/6

Shear connectors – Part 2

Chairpersons: **Ana Espinos**
Jie Yang

Day 3

Date: **18 September**
11:00 – 12:30

Room: **Londyn 1**

Time	Title	Authors
11:00-11:15	Nonlinear simulations of steel-timber shear connections	Chira Alexandru Nseir Joanna Bompa Dan
11:15-11:30	Numerical simulation and parametric study of ply-wood-cold formed steel composite floor members	Sifan Mohamed Chira Alexandru Bompa Dan
11:30-11:45	Experimental Study on the Compressive Performance of Timber Connections with Steel Caps and Burring Plates	Sunachi Mizuho Tanaka Teruhisa
11:45-12:00	Interlocking connection for a hybrid steel-timber floor system	Ehrenlechner Christoph Mensing Martin
12:00-12:15	Analytical and numerical assessment of a novel slab-to-slab connection in steel-timber composite joints	Turgut Alper Degée Hervé Henriques José
12:15-12:30	Numerical investigation on Steel-Timber-Concrete Composite connections (STCC)	Bouvier Baptiste Couchaux Maël Martin Pierre-Olivier Hjiaj Mohammed

Parallel Session PS–7a

Cold-formed structures 6/8

Chairpersons: **Atilla Joó**
Cao Hung Pham

Day 3
Date: **18 September**
11:00 – 12:30
Room: **Kraków 1**

Time	Title	Authors
11:00-11:15	Seismic Performance of LWS Strap-Braced Walls under the New prEN1998-1-2 Provisions	Prota Alessandro D'Addesa Vito Fiorino Luigi Landolfo Raffaele
11:15-11:30	Experimental tests of cold-formed compression elements designed as members of transmission towers	Barcewicz Wioleta Wierzbicki Stanisław Gizejowski Marian Labocha Sławomir
11:30-11:45	Load-carrying capacity of cold-formed lipped channel members subjected to axial compression through the web	Kobashi Tomoki
11:45-12:00	Finite Element Modelling and Tolerance Assessment of Speed-Lock Beam-to-Upright Joints	Santamaria David Elguezabal Jon Oyanguren Aitor Larrañaga Jon Ulacia Ibai

Parallel Session PS–7b

Bolted joints and connections 6/7

Chairpersons: **Ivan Ćurković**
Kamila Cabova

Day 3
Date: **18 September**
11:00 – 12:30
Room: **Kraków 2**

Time	Title	Authors
11:00-11:15	Influence of Lubrication on High-Strength Friction Grip Bolts: Bolt Tightening	Tran Thu Ha Ramhormozian Shahab Yan Zhenduo Clifton Charles MacRae Gregory Anthony
11:15-11:30	Performance and structural efficiency of demountable joints in reusable steel moment frames	Jakovljević Isidora Dobrić Jelena Gluhović Nina Spremić Milan
11:30-11:45	Partial-strength stainless steel end-plate moment connections	Mirzaie Abar Bahram D'Aniello Mario Landolfo Raffaele
11:45-12:00	Numerical model-based design of bolted shear connections – bearing resistance	Budaházy Viktor Kövesdi Balázs Dunai Laszlo
12:00-12:15	Reliability of the Component-Based Finite Element Method for Plate Tensile Rupture in Welded and Bolted Connections	Vild Martin Denavit Mark Wald František Taras Andreas
12:15-12:30	Structural Performance of Hybrid Bonded Bolted Joints under Complex Shear Loading	Boretzki Jakob Albiez Matthias Mantik Justus Glienka Ralf Evers Tobias Vallée Till Ummenhofer Thomas

Parallel Session PS-7d

Steel-concrete composite structures 5/7

Chairpersons: **Fangying Wang**
Hollie Moore

Day 3
Date: **18 September**
11:00 – 12:30
Room: **Londyn 2**

Time	Title	Authors
11:00-11:15	Flexural and Shear Behaviour of Lightweight Concrete-Infilled Hollow Flange Cold-Formed Steel Beams	Sifan Mohamed Nagaratnam Brabha Poologanathan Keerthan Thamboo Julian Thirunavukkarasu Kajaharan Kannan Thushanthan Muhammad Rahman
11:15-11:30	Flexural Performance of Lightweight Concrete-Infilled Hollow Flange Cold-Formed Steel Beams with Web Openings	Sifan Mohamed Nagaratnam Brabha Poologanathan Keerthan Thamboo Julian Thirunavukkarasu Kajaharan Kannan Thushanthan Kanthasamy Elilarasi
11:30-11:45	Ductility assessment of new tubular perfobond shear connector	Souza Keila da Silva Andre Henriques José Lima Luciano R. Rodrigues Monique
11:45-12:00	Axial Compressive Behaviour of Double Skin Concrete-Filled Steel Tubular Columns	Bansal Supriya Yadav Deepak
12:00-12:15	Concrete Filled Square Hollow Sections Under Transverse Force	Atutis Mantas
12:15-12:30	Numerical investigation of the behaviour of demountable composite steel-CLT-concrete floors	Kachouh Lara

Parallel Session PS–7e

Reuse and retrofitting of structural elements 5/6

Day 3

Date: **18 September
11:00 – 12:30**

Chairpersons: **Małgorzata Snela
Yasmina Boutar**

Room: **Paryż 1 / 2**

Time	Title	Authors
11:00-11:15	Design for reuse in steel modular construction	Nguyen Tung Parmentier Vincent
11:15-11:30	Development of a Demountable and Reusable Interlocking I-beam to CHS column Connection	Li Jiyuan Han Xiao-Zhou Chan Tak Ming
11:30-11:45	Circular building and new regulatory scenarios: the possibility of reusing steel components	Morganti Renato Bellicoso Alessandra Tosone Alessandra Di Donato Danilo Abita Matteo Ciammitti Laura Panepucci Alessia Rea Simone
11:45-12:00	Strengthening of old mild steel structures with welded-on fine-grained structural steels	Stroetmann Richard Homeyer Malte Uhlig Marvin Hoefer Kevin Hensel Jonas
12:00-12:15	Investigation on the structural performance of a swift-constructed demountable coupler	JIANG Mingjie Chen Peng Guo Jiachen Chan Tak Ming

Parallel Session PS–7f

**Robustness and impact loading + Fire engineering
+ Long span and spatial structures**

Chairpersons: **Oliver Bahr**
Meini Su

Day 3
Date: **18 September**
11:00 – 12:30
Room: **Rzym**

Time	Title	Authors
11:00-11:15	Cable Net Roof Structure over the Open-Air Theatre Auditorium	Shymanovskij Oleksandr
11:15-11:30	Robustness and Seismic Performance of Reduced Beam Section Connections under New Eurocode Provisions	Tartaglia Roberto Monte Francesco Rassati Gian Andrea Maddaloni Giuseppe
11:30-11:45	Progressive collapse resistance of composite steel-concrete structures following local damage due to fire	Dinu Florea Neagu Calin Constantinescu Andreea Demonceau Jean-François
11:45-12:00	Experimental study on post-fire resistance of thin-walled steel plate girders	Woźniczka Piotr Zajdel Paulina Kuraś Piotr Mikołajczyk Miłosz Przychodzień Hubert
12:00-12:15	Fire resistance of trapezoidal sheeting connected to a concrete beam	Chovanec Aleš Jandera Michal Lopes Nuno
12:15-12:30	Analysis of high-rise buildings equipped with innovative section-eccentric outrigger belt trusses	Diamantis Panos-Petros Zhang Jinfang Pnevmatikos Nikos Skalomenos Konstantinos

Parallel Session PS-7g

Fatigue and fracture 3/5

Chairpersons: **Paulina Krolo**
Moritz Braun

Day 3
Date: **18 September**
11:00 – 12:30
Room: **Warszawa 1**

Time	Title	Authors
11:00-11:15	Fatigue Behaviour of a Modular Wind Turbine Tower Connection: A Numerical Study	Mohammadi Tekantappeh Jafar Mendez Morales Mariela Rebelo Carlos
11:15-11:30	On Local Stress Distributions in Impact-Loaded Offshore Steel Substructures	Jungen Jan-Willem Lochte-Holtgreven Stephan
11:30-11:45	Increasing the service life of structures using the HFMI treatment and weathering steels	Štěpán Jakub Ryjacek Pavel Kepka Jr. Miloslav Minich Radovan Pešta Jan
11:45-12:00	Multiaxial fatigue testing on welded cruciform joints with biaxial loading	Steinhoff Simon Röscher Stefanie Winkler Rebekka Knobloch Markus
12:00-12:15	Fatigue of Saumblech connection in closed box girders	Schaake Mareike Clobes Mathias
12:15-12:30	New Findings on the Fatigue Strength of large-size Bolting Assemblies of the Diameter M56 subjected to Normal Stress	Hinrichs Jonas Glienke Ralf Wegener Fritz Hagemann Melanie Schwarz Mathias Flügge Wilko
12:30-12:45	Fatigue performance of crossbeam-to-stiffener welded details adopted in OSD bridges	Milone Aldo Troncone Cristina Landolfo Raffaele

Parallel Session PS-7h

Bridge construction and structural design 1/3

Chairpersons: **Balazs Kovesdi**
Povilas Dabrila

Day 3
Date: **18 September**
11:00 – 12:30
Room: **Warszawa 2**

Time	Title	Authors
11:00-11:15	Modelling of Cyclic Elasto-Plastic Behaviour of Structural Steels and Its Application to Seismic Performance Evaluation for Steel Bridge Piers	Tamura Hiroshi Komuro Masato Miyazaki Yasuhiro Tanaka Kenta
11:15-11:30	Fatigue stress cycles in service at a steel railway bridge – measuring data versus numerical calculations	Unterweger Harald Derler Christoph
11:30-11:45	Lifting points – a review of current solutions and requirements for bridge steel girders lifting in the UK.	Krok Tomasz
11:45-12:00	The strategic railway bridge crossings in Czechia – evaluation of the assessments results	Ryjacek Pavel Hovorka Josef
12:00-12:15	New Sava Bridge in Belgrade – Bridge Superstructure – Design and execution aspects	Jacovic Slobodan Xin Li Kukaras Danijel Kajevic Elvir Marković Zlatko Vujicic Jovana Mandic Mirjana Ristic Vule
12:15-12:30	Old Sava Bridge in Belgrade – Removal of the Bridge Superstructure – Design and execution aspects	Jacovic Slobodan Xin Li Kukaras Danijel Kajevic Elvir Etényi Zsolt Vujicic Jovana Mandic Mirjana Ristic Vule

Parallel Session PS-7i		
3D printing and additive manufacturing 3/5		Day 3
<i>Chairpersons:</i> Marcus Rutner Chuandong Xie		<i>Date:</i> 18 September 11:00 – 12:30
		<i>Room:</i> Warszawa 3

Time	Title	Authors
11:00-11:15	Structural Behaviour of Lattice Cells Under Compressive Loading Enabled by WAAM	Alagheband Mahan Arrè Lidiana Silvestri Stefano Laghi Vittoria Palermo Michele
11:15-11:30	On developing a computational framework for adapting and strengthening steel profiles for reuse through wire arc additive manufacturing	Ortiz Fabricio Taras Andreas Silvestru Vlad-Alexandru
11:30-11:45	Wire Arc Additively Manufactured Sandwich Panels: From Parametric Design to Fabrication	Alagheband Mahan Arrè Lidiana Dieste José Antonio Laguía Alberto Palermo Michele
11:45-12:00	FE Simulation of WAAM for carbon steels: Thermal analysis methodology and a new model for the heat source	Gkatzogiannis Stefanos Gantes Charis
12:00-12:15	Advancing Modular Construction with 3D-Printed Steel Connections: Sustainable High-Performance Inter-Module Joints	Lingaretnam Jeyasutha Kamalaseelan Kajeenthan Poologanathan Keerthan Lifsey Jack Suntharalingam Thadshajini Rajanayagam Heshachanaa Popo-Ola Sunday
12:15-12:30	Structural and environmental performance of hybrid hot rolled-WAAM steel I-section beams	Gardner Leroy Yang Jiachi Kyvelou Pinelopi

Parallel Session PS-7j		
Sustainability assessment and design 1/3		Day 3
<i>Chairpersons:</i> Břetislav Židlický André Beyer		<i>Date:</i> 18 September 11:00 – 12:30
		<i>Room:</i> Warszawa 4

Time	Title	Authors
11:00-11:15	LCA of Steel Frames in Different Range of Recycled Content	Örgey Zeynep
11:15-11:30	Practical Truss Layout Optimisation with Connection Penalisation	Dalton Daniel Becque Jurgen
11:30-11:45	Simultaneous Topology, Shape and Size Optimisation of 2D Trusses with Practical Constraints	Hawkins William Dalton Daniel Becque Jurgen
11:45-12:00	Functional downcycling in reused structural steel: implications for life cycle and circularity assessment	Cascone Francesco Cashell Katherine Galasso Carmine
12:00-12:15	Environmental and circularity assessment of optimized long-span steel structures	Karmacharya Nitesh Yang Jie Matias de Paula Filho José Humberto

SPECIAL SESSION 1 (5)

Steel, timber (-concrete) hybrid structures 5/6 Joints and Beams

Day 3

Date: **18 September**

13:30 – 15:00

Chairpersons: **Christoph Odenbreit**
Dan Bompa

Room: **Londyn 1**

Time	Title	Authors
13:30-13:45	Extending the Component Method to Hybrid Steel-Timber Joints: A Benchmarking Case Study	Buchholz Lea Kuhlmann Ulrike Knobloch Markus
13:45-14:00	Experimental evaluation of self-drilling dowels and densified wood dowels as connectors under shear and withdrawal for steel-timber composite beams	Weiser Robby Unglaub Julian Thiele Klaus
14:00-14:15	Structural Behaviour of Preco Slim Floor Beam with Timber-Concrete Slabs	Yang Jie Balaskas Georgios Hoffmeister Benno Wolters Kevin Zanon Riccardo Bello Micael Obiala Renata Profico Francesco
14:15-14:30	Steel-timber-concrete composite shallow floor beam: Large-scale Experimental beam tests	Ahmad Adil Démonceau Jean-François Yang Jie Bogdan Teodora Odenbreit Christoph
14:30-14:45	Design of Steel-CLT Composite Beams: Bending Capacity and Stiffness	Pimentel Ricardo Craveiro Hélder D. Simões Rui Simões da Silva Luis Rahnavard Rohola
14:45-15:00	Steel-Timber Composite Beams with Laminated Veneer Lumber Slabs: Toward Sustainable Structural Solutions	Bogdan Teodora Syndikus Lisa Odenbreit Christoph

Parallel Session PS–8a

Cold-formed structures 7/8

Chairpersons: **Leroy Gardner**
Tomoki Kobashi

Day 3
Date: **18 September**
13:30 – 15:00
Room: **Kraków 1**

Time	Title	Authors
13:30-13:45	Progressive collapse vulnerability of industrial steel pallet racks: a numerical investigation	Montuor Rosario Ferraioli Massimiliano Mandara Alberto Simoncelli Marco Pastore Marina Nastri Elide
13:45-14:00	Application of bonded carbon fiber fabrics to reinforce cold-formed steel profiles	Rzeszut Katarzyna Dybizbanski Maciej
14:00-14:15	Shear capacity of single triple-claw blind rivet connection in sandwich roof panel	Guo Yongchang Chybiński Marcin Studziński Robert
14:15-14:30	Design aspects of cold-formed steel portal frame connections	Becque Jurgen Mojtabaei Seyed Mohammad Zhang Zhijian Hajirasouliha Iman
14:30-14:45	Experimental and Analytical Investigation of Structural Behaviour in Three-Span Trapezoidal Sheeting	Semko Volodymyr

Parallel Session PS–8b

Bolted joints and connections 7/7

Chairpersons: **Antonella Francavilla**
Anita Ogrin

Day 3
Date: **18 September**
13:30 – 15:00
Room: **Kraków 2**

Time	Title	Authors
13:30-13:45	Numerical study of steel beam-to-column connections retrofitted by shape memory alloy bolts	Kazemi Farzin Asgarkhani Neda Fragiadakis Michalis Jankowski Robert
13:45-14:00	A Design Aid for Steel Concentrically Braced Frame Connections	Bashady Hana Imanpour Ali
14:00-14:15	Influence of Surface Roughness and Rust on the Sliding Behaviour of Asymmetric Friction Connection (AFC)	Ramhormozian Shahab Clifton Charles

Parallel Session PS–8d

Steel-concrete composite structures 6/7

Chairpersons: **Nauzika Kovacs**
Mantis Atutis

Day 3
Date: **18 September**
13:30 – 15:00

Room: **Londyn 2**

Time	Title	Authors
13:30-13:45	Stiffness Evaluation of Headed Studs Under Cyclic Loading for Design of Flexible Composite Girder with Precast PC Slab	Nakamura Tetsumi Imagawa Yusuke Fujimoto Takamasa Ishikawa Toshiyuki Ohgaki Kazuo
13:45-14:00	Study on Application of Clothoid-Shaped Composite Dowels for Portal Frame Bridges in Japan	Kitagawa Iori Sawamura Naoto Imagawa Yusuke Ohya Osamu
14:00-14:15	Study on the Shear Strength of Perfobond Strip Subjected to Thermal History	Aoki Yu Hoshikawa Fubuki Imagawa Yusuke Ohya Osamu
14:15-14:30	Experimental Study on Fatigue Behavior of Composite Girder Subjected to Thermal History	Okada Hikaru Yoshida Takuto Imagawa Yusuke Ohya Osamu
14:30-14:45	Static Push-out Test of Headed Studs with Precast PC Slab for Design of Flexible Composite Girder	Imagawa Yusuke Nakamura Tetsumi Fujimoto Takamasa Ohgaki Kazuo Ishikawa Toshiyuki Okubo Nobuhito Chou Kiyoshi
14:45-15:00	Buckling Resistance of Concrete-Encased Composite Columns with Heavy Hot-Rolled Profiles	Anwaar Omer Dang Van Hoi Candeias Miguel Yang Jie Obiala Renata Schäfer Markus Fu Qiuni

Parallel Session PS–8e

Reuse and retrofitting of structural elements 6/6

Chairpersons: **Krzysztof Wierzbicki**
Thanh-Tung Nguyen

Day 3
Date: **18 September**
13:30 – 15:00

Room: **Paryż 1 / 2**

Time	Title	Authors
13:30-13:45	Partial factors for the cross-section resistances of hot-rolled members with corrosion	Masoomzadeh Mohsen Beyer André Couchaux Maël
13:45-14:00	Reuse of structural steelwork: best practice and experimental findings	Molkens Tom Van Rymenant Patrick Roels Staf Saelens Dirk Verhetsel Tim
14:00-14:15	Strengthening of Steel Structural Members with The Effect of Preloading and Imperfections	Szafran Jacek Kaszukska Paulina Juszczak-Andraszyk Klaudia
14:15-14:30	Experimental investigation on the shear behaviour of a demountable steel plate connection applied for re-using existing slabs	Lyu Manqi Guo Jiachen Chan Tak Ming
14:30-14:45	Correlation of Hardness Test Methods with Tensile Properties of Structural Steels	Xiao Yi Fang Zhiyuan Htet Wai Myo Lim James Andisheh Kaveh

Parallel Session PS-8f

Long span and spatial structures 1/1

Chairpersons: **Monika Matuszkiewicz**
Edyta Bernatowska

Day 3
Date: **18 September**
13:30 – 15:00

Room: **Rzym**

Time	Title	Authors
13:30-13:45	Reliability index evaluation in the safety analysis of spatial truss domes: study on an extended database	Potrzeszcz-Sut Beata Dudzik Agnieszka
13:45-14:00	Structural Design of Exoskeleton Structure of The Bus Terminal in Rijeka	Mitrović Saša Lukačević Lazar Palijan Ivan
14:00-14:15	Design Considerations for Reconfigurable Lightweight Spatial Structures: An Overview of Numerical and Experimental Investigations	Gkatzogiannis Stefanos Phocas Marios C. Christoforou Eftychios G.
14:15-14:30	A high-accuracy numerical model of long-span spatial structures with as-true geometry based on a self-developed MASM method	Zhao Xi Xiao RuoHan Hu Wenhui Su Meini
14:30-14:45	Influence of member density on the collapse load of steel lattice domes	Kolakkattil Ranjith
14:45-15:00	Numerical investigations on the effect of member arrangement on the load resistance of single-layer cylindrical shells	Kolakkattil Ranjith

Parallel Session PS-8g

Fatigue and fracture 4/5

Chairpersons: **Pelagia Kastiza**
Mathias Clobes

Day 3
Date: **18 September**
13:30 – 15:00
Room: **Warszawa 1**

Time	Title	Authors
13:30-13:45	Fatigue Assessment of Existing Steel Railroad Bridges Details: A Comparative Study of European Guidelines	Braatz Anne Unglaub Julian Thiele Klaus
13:45-14:00	Assessing Brittle Fracture Risk in Bridge Bearings: Results from Large-Scale Component Tests	Hoyer Natalie Kuhn Bertram
14:00-14:15	Fatigue Verification of Bearing Type Connections in Steel Structures using a Modified Nominal Stress Approach	Kalkowsky Florian Glienke Ralf Schröder Markus Flügge Wilko Schwerdt Daniela Aljomaa Mohammad Stranghöner Natalie
14:15-14:30	Fatigue Resistance of Structural Elements with Holes subjected to Normal Stress - Proposal for Revision of EN 1993-1-9 under Consideration of the Material Strength	Schröder Markus Glienke Ralf Kalkowsky Florian Schwerdt Daniela Flügge Wilko Aljomaa Mohammad Stranghöner Natalie
14:30-14:45	Fatigue tests on welded crane runway-typical constructional details with different undercut depths	Winkler Matthias Dürr Andre Euler Mathias
14:45-15:00	Fatigue Behaviour of EN 1.4062 Lean Duplex Stainless Steel with Crevice Corrosion in Seawater	Ali Usman Hassanzadeh Mohammad Larché Nicolas Dewil Raf Rossi Barbara

Parallel Session PS–8h

Bridge construction and structural design 2/3

Chairpersons: **Ulrike Kuhlmann**
Péter Hegyi

Day 3
Date: **18 September**
13:30 – 15:00

Room: **Warszawa 2**

Time	Title	Authors
13:30-13:45	New Danube Bridge at Mohács, Hungary	Pál Gábor Sule Attila
13:45-14:00	Trevor Basin Bascule Bridge: Design of a Steel Moveable Footbridge in a UNESCO World Heritage Site	Alfaras Calvo Pere Van Hagen Paul
14:00-14:15	Cold bending of a steel section about the weak axis – full-scale test	Marcinczak Krzysztof Lorenc Wojciech Zanon Riccardo Ochojski Wojciech

Parallel Session PS–8i

3D printing and additive manufacturing 4/5

Chairpersons: **Sulaiman Shojai**
Yvonne Ciupack

Day 3
Date: **18 September**
13:30 – 15:00
Room: **Warszawa 3**

Time	Title	Authors
13:30-13:45	Intelligent Additive Manufacturing for improved Fatigue strength: influence of the process parameters	Tankova Trayana Zhu Carlos Elbamby Hagar Pinto Monteiro Kaike Andrade David Simoed da Silva Luis
13:45-14:00	Influence of Component Geometry and Process Parameters on Mechanical Performance of WAAM Carbon Steel Tubes	Pinto Monteiro Kaike Zhu Carlos Simoed da Silva Luis Tankova Trayana
14:00-14:15	Assessment and Modelling of Material Overlap in Wire Arc Additive Manufacturing	Zhu Carlos Pinto Monteiro Kaike Tankova Trayana Branco Ricardo Simoed da Silva Luis
14:15-14:30	Unmatched Fatigue Performance of machined 316L Laser Powder Bed Fusion (PBF-LB/M) Specimen through Nanometallic Multilayers	Falah Mohsen Spalek Niclas Braun Moritz Sheikhi Shahram Rutner Marcus
14:30-14:45	Local buckling behaviour of stainless steel cross-sections strengthened by WAAM	Xing Zhe Zhao Chunlin Wu Kaidong
14:45-15:00	Reducing Uncertainty in WAAM Thermal Modelling Through Profilometer-Based Calibration	Joshy Rahul Tankova Trayana Veljkovic Milan

Parallel Session PS-8j

Sustainability assessment and design 2/3

Chairpersons: **Francesco Cascone**
Joanna Zięba

Day 3
Date: **18 September**
13:30 – 15:00

Room: **Warszawa 4**

Time	Title	Authors
13:30-13:45	Linking Circularity Metrics with Life-Cycle Assessment for a Temporary Bridge in Portugal	Matias de Paula Filho José Humberto Simoes da Silva Luis Obiala Renata Gervasio Helena
13:45-14:00	Balancing Embodied Carbon and Cost in Composite Plate Girder Bridges Using Parametric Models	De Backer Hans Outtier Amelie
14:00-14:15	Case study Assessment of Standard, Tailored and Form-Fit Steel Elements	Von der Weth Sarah Moussavi Seyed Mobin Lienhard Julian
14:15-14:30	Modular Construction in the Context of Railway Stations	Rzeszut Katarzyna Siewczyńska Monika
14:30-14:45	Sustainability limit state for steel industrial buildings	Janković Milena Ljubinkovic Filip Gervasio Helena Simoes da Silva Luis

SPECIAL SESSION 1 (6)

Steel, timber (-concrete) hybrid structures 6/6 Beams

Chairpersons: **Ricardo Pimentel**
Teodora Bogdan

Day 3
Date: **18 September**
15:30 – 17:15

Room: **Londyn 1**

Time	Title	Authors
15:30-15:45	Contact force distribution between clt-slab and steel beam in slim-floor construction	Colombage Rishwa Aspila Aku Pajunen Sami Mela Kristo Heinisuo Markku
15:45-16:00	Thermo-Mechanical Behaviour of Steel–Timber Composite Beams: A Numerical Analysis	Guo Yining Lapira Luke Maluk Cristian Cashell Katherine A.
16:00-16:15	Numerical and strain-controlled bending capacities of reusable steel-LVL composite beams	Syndikus Lisa Bogdan Teodora Odenbreit Christoph
16:15-16:30	Experimental study of steel timber hybrid beams made of cold-formed steel section	Legrand Théo Durif Sébastien Sauvat Nicolas Bouchair Abdelhamid
16:30-17:00	Numerical analysis of laminated veneer lumber beams with steel flat bar inserts	Bakalarz Michał Marcin
17:00-17:15	Evaluation of Steel – timber composite floor mechanical behaviour	Zaafouri Saleh Jaafari Chaimaa Durif Sébastien Jurkiewicz Bruno Audebert Maxime Bouchair Abdelhamid

Parallel Session PS–9a

Cold-formed structures 8/8

Chairpersons: **Kim Rasmussen**
Benjamin Schafer

Day 3
Date: **18 September**
15:30 – 17:00

Room: **Kraków 1**

Time	Title	Authors
15:30-15:45	Experiments on cold-formed steel sheathing-to-frame connections under angled shear loading	Liu Xinxin Rasmussen Kim Khezri Mani
15:45-16:00	Tests on cold-formed steel semi-rigid joints	Panda Ansuman Guo Xi Kyvelou Pinelopi Gardner Leroy
16:00-16:15	Experimental Investigation on High-Strength Cold-Formed Steel Columns	Dias Martins André Alfredo Lazzari João Gonçalves Rodrigo Peres Nuno
16:15-16:30	Stub column tests of cold-formed steel channel sections with different stiffeners	Zhan Ke-Jiang Li Shuai Chan Tak Ming Young Ben
16:30-16:45	Proposal for the Revision of the European Assessment Document for Steel Components in Pallet Racking Systems	Campiche Alessia Franco Annalisa Occhiuzzi Antonio

Parallel Session PS–9b

Steel-concrete composite structures 7/7

Chairpersons: **Markus Knobloch**
Yusuke Imagawa

Day 3
Date: **18 September**
15:30 – 17:00

Room: **Kraków 2**

Time	Title	Authors
15:30-15:45	Experimental and Numerical Investigation of Steel-Concrete Composite Shear Walls	Anwaar Omer Candeias Miguel Burgan Bassam Cooper Max King Charles Gerlach Lutz Manny Agemar
15:45-16:00	Modelling of interface behaviours in steel-concrete composite slabs with deep-profiled steel sheeting	Zhang Yufei Kavoura Florentia Veljkovic Milan
16:00-16:15	Fatigue Strength of Repair-Welded Headed Studs - Background and Approaches of Current Research	Heckelsmüller Paul Volz Michael
16:15-16:30	Numerical Investigation of Slab-Column Connection Concept for High-Performance Composite Columns	Schwendner Constantin Albrecht Franziska Mensinger Martin Ameri Shaghayegh Zehfuß Jochen
16:30-16:45	Novel Test Setup to Examine High Cycle Fatigue of Headed Studs for Uniaxial and Multiaxial Loading	Jaist Benedikt Ciolek Andreas Ltaief Malik Thomas Nadine Mensinger Martin

Parallel Session PS–9d

Stability of cross-sections, members and frames 6/6

Chairpersons: **Marcin Górski**
Bálint Vaszilievits-Sömjén

Day 3
Date: **18 September**
15:30 – 17:00

Room: **Londyn 2**

Time	Title	Authors
15:30-15:45	Out-of-plane stability design of stainless steel beams by GMNIA with strain limits	Lin Hongui Quan Chunyan Walport Fiona
15:45-16:00	Numerical Evaluation of the Mechanical Behaviour of Scaffold Anchor	Ramezantitkanloo Amin
16:00-16:15	Load-bearing capacity of trusses with lateral bracing	Iwicki Piotr Korcz-Konkol Natalia
16:15-16:30	Structural Performance of Tapered Steel Members under Elevated Temperature	Koca Ramazan Kovandova Jana Wald František
16:30-16:45	Compression design of built-up members suffering from major/minor axes coupled instabilities	Chhoeng Oudom, Mefande Wack Morane Chloe Tremblay Robert Boissonnade Nicolas

Parallel Session PS–9e

AI in design and assessment of steel structures 2/2

Chairpersons: **Michał Jurek**
Fangying Wang

Day 3
Date: **18 September**
15:30 – 17:00

Room: **Paryż 1 / 2**

Time	Title	Authors
15:30-15:45	Development of an AI-Based Damage Detection System Including Classification Thresholds for Steel Structure Defects	Müller Tobias Wenzel Stefan Dürr Andre
15:45-16:00	Explainable Boosting Machines for Web-Crippling Resistance Prediction of Cold-Formed Sigma Sections under End-Two-Flange Loading	Simwanda Lenganji Kannan Thushanthan Thrunavukkarasu Kajaharan Mohamed Sifan Poologanathan Keerthan Kamalaseelan Kajeenthana Lingaretnam Jeyasutha Popo-Ola Sunday
16:00-16:15	Analysis of the reinforced concrete slab using the digital twin developed based on artificial neural network	Derlatka Anna Lacki Piotr Niemi-Maźniak Judyta Lacki Michał
16:15-16:30	Deep Learning based optimization of I-shaped Knee Joint Connections	Cakir Tamer Müller Andreas Taras Andreas Vild Martin
16:30-16:45	A Comparison of Deep Generative Models for Inverse Design of Steel Frames	Niemiec Tomasz Słoński Marek

Parallel Session PS-9f

Special structures 1/1

Chairpersons: **Jacek Szafran**
Hannah Blum

Day 3
Date: **18 September**
15:30 – 17:00

Room: **Rzym**

Time	Title	Authors
15:30-15:45	Innovative Metal Brackets for Load Transfer and Thermal Optimisation in Liner Trays	Brune Bettina Peper Kira Hachul Helmut Müller Bastian
15:45-16:00	Post buckling stability of tank walls with big radial imperfections.	Knoedel Peter Wacker Tobias
16:00-16:15	Buckling analysis and lightweight design for ultra-long composite blades of wind turbines	Zhang Xiaoming Dai Shenglin Chaudhary Saud Ur Rehman Su Meini
16:15-16:30	Influence of joint stiffness on the ultimate load capacity of silo columns	Rejowski Karol Iwicky Piotr
16:30-16:45	Identification of Steel Ropes Parameters Applied for Measuring Mast Guys Based on Experimental Tests	Pigoń Renata Matuszkiewicz Monika Piątkowski Michał Krystosik Przemysław Krystosik Dorota

Parallel Session PS–9g

Fatigue and fracture 5/5

Chairpersons: **Florian Kalkowsky**
Michał Pazdanowski

Day 3
Date: **18 September**
15:30 – 17:15
Room: **Warszawa 1**

Time	Title	Authors
15:30-15:45	Detection and propagation of short cracks in riveted old steel structures	Sieber Lars Steinhausen Ralf
15:45-16:00	Numerical study of hot-spot stresses in single-sided welded T-Joints for fatigue assessment of offshore foundations	Vogts Stefan Unglaub Julian Thiele Klaus
16:00-16:15	Challenges for local strain measurements in crane runway girders near transverse stiffeners	Kettler Markus Brantweiner Peter Zauchner Paul Unterweger Harald
16:15-16:30	Alternating current potential drop method for measuring fatigue crack growth on small CT-specimens	Malschaert David Dekker Raymond Reinton Elise Popovic Vera Veljkovic Milan
16:30-16:45	Mechanically fastened noise reduction elements of modular expansion joints for road bridges	Faridian Mobin Euler Mathias
16:45-17:00	The Axial Loading Fatigue Performance of Q690D High-Strength Steel CHS-CHS T-joint	Zong Liang Liu Heng

Parallel Session PS–9h

Bridge construction and structural design 3/3

Chairpersons: **Pavel Ryjáček**
Hiroshi Tamura

Day 3
Date: **18 September**
15:30 – 17:00

Room: **Warszawa 2**

Time	Title	Authors
15:30-15:45	Assessing the Reliability of Steel Girder Bridges for All-Terrain Crane Crossings	Elgammal Mohamed Abtahi Shaghayegh
15:45-16:00	Temporary monitoring system on the pedestrian cable bridge in Sátorajkaújhely, Hungary – a case study	Hegyí Péter Kövesdi Balázs Dunai László Rózsa Szabolcs Égető Csaba Turák Bence
16:00-16:15	Capacity of Longitudinal Stiffener Ribs of Orthotropic Bridge Decks under Wheel Loads and Axial Force	Kleppe Svein-Rune Aalberg Arne
16:15-16:30	Acceptance criteria for butt welds in thick bridge plates	Hinrichs Jan Volz Michael

Parallel Session PS–9i

3D printing and additive manufacturing 5/5

Chairpersons: **Stefanos Gkatzogiannis**
Kaidong Wu

Day 3
Date: **18 September**
15:30 – 17:00

Room: **Warszawa 3**

Time	Title	Authors
15:30-15:45	Testing of Additively Manufactured Stainless Steel Tapered Circular Hollow Section Stub Columns	Xu Jing Li Qiu-Yun Young Ben
15:45-16:00	Refined Finite Strip Formulation with Material Anisotropy in Elastic Buckling Analysis of WAAM-strengthened Steel Cross-sections	Liang Anrui Gao Wen-Long Chen Liang Liu Si-Wei
16:00-16:15	Process and welding parameter studies on influencing continuous welding for Wire Arc Additive Manufacturing	Waldschmitt Benedikt Grebner Philipp Ciupack Yvonne Lange Joerg
16:15-16:30	Post-Fire Tests of WAAM ER316 Stainless Steel	Huang Senbin Cai Yancheng Deng Xiaowei

Parallel Session PS-9j

Sustainability assessment and design 3/3

Chairpersons: **Helena Gervásio**
Amelie Outtier

Day 3
Date: **18 September**
15:30 – 17:00

Room: **Warszawa 4**

Time	Title	Authors
15:30-15:45	A probabilistic static-dynamic analysis of a plane frame structure	Kubicka Katarzyna
15:45-16:00	Numerical Assessment of Photovoltaic Supports with Rainwater Harvesting	Gomes Ana Amaral Cláudia Arrais Flávio
16:00-16:15	Assessment of the performance of a reusable modular building	Tomicioli Maria Clara Andrade David Braga Eduardo Santos Ana Francisca Ljubinkovic Filip Conde Jorge Janković Milena Simoes da Silva Luis
16:15-16:30	Application of instrumented indentation test for reclaimed steel elements used in construction	Masoomzadeh Mohsen Mauvoisin Gerard Beyer André Bartier Olivier Couchaux Maël
16:30-16:45	Life Cycle Assessment Of An Industrial Hall Considering Different Construction Methods.	Ahmed Mahmoud Schäfer Markus Obiala Renata Matias de Paula Filho José Humberto

Closing Ceremony

Day 3
Date: **18 September**
17:15 – 17:45

Room: **Kraków 1**