MAHEG

The Hungarian Welding Association (MAHEG)
invites you and your colleagues to the

33rd INTERNATIONAL WELDING CONFERENCE

CO-ORGANIZERS:
Hungarian Association of Welding and Material Testing (MHtE)
Budapest University of Technology and Economics (BME)

PARTNERS:
Hungarian Association for Nondestructive Testing (MAROVISZ)
Hungarian Steel Structure Association (MAGÉSZ)

LOCATION AND TIME:
Budapest, Hungary
Budapest University of Technology and Economics
18-19th of June, 2026

CHAIR OF THE CONFERENCE

Dr. Attila Farkas, president of MAHEG

A KONFERENCIA TÁRSELNÖKEI

Dr. László Gyura, director of MHtE
Dr. Szabolcs Szávai, president of MAROVISZ
Ferenc Aszman, president of MAGÉSZ
Dr. Imre Orbulov, dean of BME Faculty of Mechanical Engineering

PROGRAM COMMITTEE

Chair: Dr. Marcell Gáspár, executive committee member of MAHEG

Tagjai:

Dr. Attila Farkas
Dr. József Gáti
János Ilinyi
Dr. Tünde Kovács
Dr. Zsolt Kovács
Dr. Dénes Kollár
Csaba Kristóf
Zoltán Meiszterics
Dr. Kornél Májlinger
Dr. Béla Palotás
Dr. Judit Pap
Dávid Pammer
Dr. Ferenc Szigeti
Dr. Balázs Varbai
Dr. Zoltán Weltsch

ORGANIZING COMMITEE

Chair: Dr. Kornél Májlinger

Members:

Dr. Levente Katula
Dávid Kemény
Dr. Dénes Kollár
János Kuti
Gergely Simon
Orsolya Ugrainé Farkas

Address of the organizing committee:
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33rd International Welding Conference

Budapest University of Technology and Economics

18-19th of June, 2026, Budapest

9:00 Registration

10:00 Opening ceremony (chair: Dr. Kornél Májlinger)

Dr. Attila Farkas (MAHEG)

Prof Dr. Imre Orbulov (BME)

Dr. László Gyura (MHtE)

Luca Costa (IIW)

10:20 Awarding ceremony

10:50 Plenary session (chair: Dr. Kornél Májlinger)

10:50 Dr. Attila Farkas: How does MAHEG contribute to the development and sustainability of welding competence?

11:10 Dr. László Gyura: The role of MHtE in the development of national welding culture

11:30 Prof. Dr. Péter Szabó: Welding education and research at the Department of Materials Science and Engineering of BME

11:50 Opening of the Welding Technology Exhibition

12:30 Lunch

Parallel sessions

13:30 Session 1: Manufacturing and automation (chair: Prof. Dr. Tünde Kovács)

13:30 Attila Farkas: Application of artificial intelligence in the robotization of arc welding processes

13:50 Miklós Bognár, Péter Horvát: Robotization of welding at Bognár and Partners Ltd.

14:10 Péter Barabás, Dániel Ipoly: Production supervisory system for arc welding robot cells

14:30 Tamás Katona, Elek Bak, Ottó Kurgyis: Industrial application of offline robot programming in arc welding robot cells: production experience, technological advantages and limitations

14:50 László Gyura, Marcell Gáspár: Effect of flame straightening on the integrity of the structure

15:10 Szabina Lakos: Advanced process variants in the automatized welding

15:30 Ilker Olucak: Development trends in welding machines and modern drop transitions by Kolarc

13:30 Session 2: New trends in welding - I (chair: Prof. Dr. Marcell Gáspár)

13:30 Marcell Gáspár: The results of the COVE-WENDT project related to the sustainability and digitalization of welding

13:50 Adelaide Almeida, Wim Verlinde, Paula Queipo, Jens Kruse, Bethan Smith, Eujin Pei, Ulas Yaman, Jim Kingele: Advancing additive manufacturing qualifications for the aerospace and defence sectors: The role of the AILEEN centres of vocational excellence

14:10 Ana Luísa Marques, Ana Q. Barbosa, Georgia Kolyva: AR-enhanced modular competences for welding inspection supporting safe hydrogen pipeline transport and storage

14:30 Vlad-Ștefan Constantin, Adelina-Alina Han, Alin-Constantin Murariu, Ion-Aurel Perianu, Duma Iuliana, Popescu Radu-Nicolae: Factorial design-based optimization of spot fiber laser welding parameters for dissimilar Ni–Al joints

14:50 Boțilă Lia-Nicoleta, Alin-Constantin Murariu, Ion-Aurel Perianu, Duma Iuliana, Popescu Radu-Nicolae, Raia Angelo-Ovidiu Daniel, Valușescu Cristian-Ilie: Effects of single-pass submerged friction stir processing on the structure and mechanical properties of CuZn37 BRASS

15:10 Maciej Stec, Damian Janicki: Microstructure of in situ TiC-reinforced Ti-based composite coatings produced by laser cladding

15:30 Discussions

15:50 Coffee break

16:10 Session 3: Simulation and modelling (chair: Dr. László Gyura)

16:10 Károly Jármai: Design of welded structures using artificial intelligence

16:30 Marcell Gáspár, Judit Kovács, Johannes Sainio, Henri Tervo, Antti Kaijalainen: Weld properties with different compositions in S500ML shipbuilding steel

16:50 Ádám Pap, Ákos Meilinger, Marcell Gáspár: Physical simulation of the welding of pipeline steels

17:10 Áron Balázs, Marcell Gáspár: Welding technology analysis of P355NH pipeline steel by finite element modelling

17:30 Judit Kovács, János Lukács: Notch sensitivity of L450M pipeline steel and of the heat-affected zones of its welded joint

17:50 Dorián Hodonicki, Attila Szlancsik: Simulation of the mechanical properties of lead-free solder using finite element method

16:10 Session 4: New trends in welding - II (chair: Dr. Judit Pap)

16:10 Elchin Musayev, Marcell Gáspár: Review of hydrogen embrittlement phenomena in welded joints of pipelines

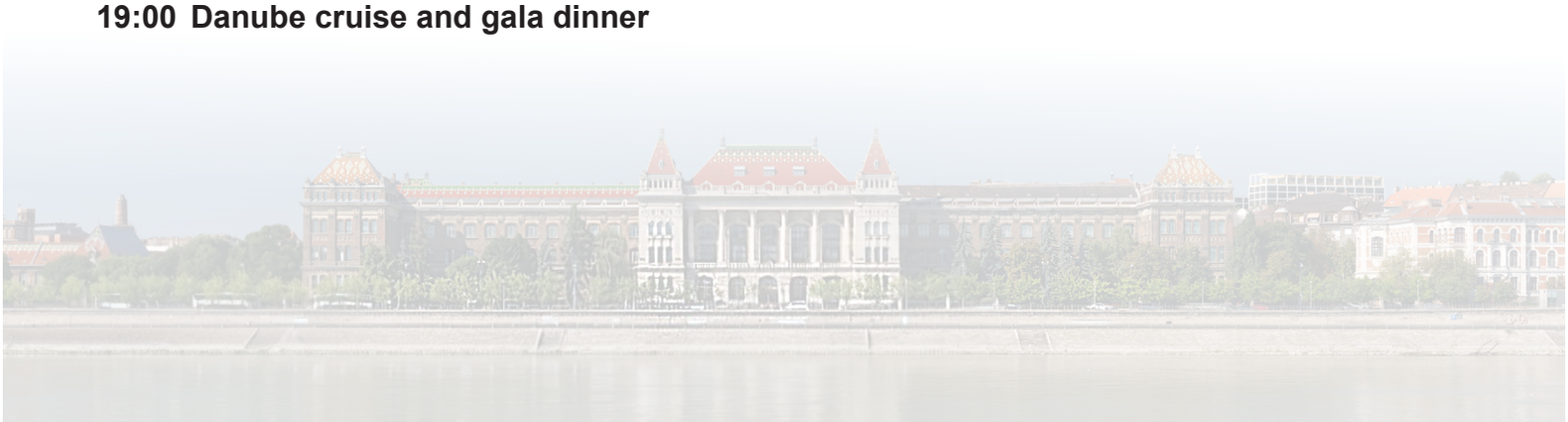
16:30 Ali Mansi, László Dunai: Fatigue assessment of welded cope hole bridge details by hot spot and notch stress analyses

16:50 András Horváth, Dénes Kollár, Balázs Kövesdi, Maxime Lebastard, Alain Bureau: Measurement and welding simulation of residual stresses in welded I-sections

17:10 Raghawendra P. S. Sisodia, Piotr Śliwiński, Mateusz Radon: Handheld laser welding of aluminium alloy lap joints: microstructural and mechanical characterization

17:30 Damian Janicki, Waldemar Kwaśny, Krzysztof Matus: Laser Metal Deposition of in situ NbC and (Nb,Ti)C-reinforced Inconel 625-based composites

19:00 Danube cruise and gala dinner



19.06.2026. Friday

8:40 Session 5: Laser technologies - I (chair: Dr. Zoltán Weltsch)

8:40 Gábor Halász, József Újvári: Parameters and shielding gases for handheld laser welding – Experimental experiences with different parameters and shielding gases

9:00 Béla Palotás, Károly Abaffy, János Kuti: Corrosion susceptibility of manual laser welded seams of austenitic stainless pipes to the influence of purging gases

9:20 Sándor Takács, Enikő Réka Fábián: Laser welding of 22MnB5 grade PH steels: effect of welding parameters on the microstructure and mechanical properties

9:40 Virág Simon, Csaba Breznay: Investigation of dissimilar laser welded joints of duplex and austenitic stainless steel plates

10:00 Csaba Breznay, Kornél Májlinger, Michał Landowski, Dariusz Fydrych: The effect of surface roughness during the welding of austenitic stainless steels

10:20 Miklós Berczeli, Péter Péczi-Kovács: Development of adhesive bonds using laser and plasma beam surface treatment

10:40 Coffee break

11:00 Session 6: Manifacturing, Health and safety (chair: Dr. Attila Farkas)

11:00 Csaba Kristóf: Risk management of welder’s inhalation exposition

11:20 Csaba Kővágó: Applicability of low-cost sensors and IoT systems for monitoring air quality in welding workshops

11:40 Benjamin Lanca: The silent killer in your workshop: Why our lungs should not be the filter

12:00 Benjamin Végh, István Borhy: Possibilities and experiences in repairing of welded aluminium tram structures

12:20 Barna Csata: Modern practice of submerged arc welding

11:00 Session 7: Related welding technologies (chair: Dr. Zsolt Kovács)

11:00 János Kuti, Enikő Réka Fábián, László Gyura, Gábor Halász: Thermal cutting of high-strength steels, heat-affected zone examination

11:20 József Gáti, Judit Pázmán, Róbert Stadler, János Kuti: Changes in the mechanical properties of polymer welded joints due to post-heat treatment

11:40 Miklós Berczeli, Péter Péczi-Kovács: Development of adhesive technology for modern materials in the vehicle industry

12:00 Gábor Kozsely, Gyula Medgyesi, Bernadett Stefán: Energetic consequences of arc nonlinearity during welding

12:20 András Molnár, Kristóf Németh: Investigation of the bonding and microstructure of NiCrBSi coatings prepared by high velocity oxygen fuel thermal spraying and mixed laser beam remelting to steel substrates

12:40 Lunch

13:30 Session 8: Laser technologies - II (chair: Dr. Dénes Kollár)

13:30 Dániel Csótó, Virág Simon: Robotic Laser Beam Welding – Application tests

13:50 Ferenc Hareancz, Gergely Juhász: Investigation of a carbide-reinforced cocfreni-based alloy layer produced by laser metal deposition

14:10 Márk Schnieder: Development and future of welding consumables for wear protection

14:30 Gergely Juhász, Ferenc Hareancz: Investigation and heat treatment of INCONEL 718 layers produced by laser cladding

14:50 Péter Riszt: Laser welded heating blade production at Körber Hungária

15:10 Csaba Kristóf: Experiences of the manual laser welding forum

15:30 János Rittinger Degree Thesis Application I.

15:40 János Rittinger Degree Thesis Application II.

15:50 János Rittinger Degree Thesis Application III.

16:00 Closing words (Dr. Attila Farkas)

The schedule for the conference presenters is as follows:

Abstract submission deadline*:	31st of January 2026
Decision on the acceptance of the abstract:	28th of February 2026
Submission of conference papers:	17th of April 2026

Application deadline for participants not giving presentations: June 1, 2026.
The conference papers, which are 6-10 pages long and conform to the template attached to the call, will be published in an electronic conference proceedings with an ISBN
number: (i) The scientific presentations, after review based on the recommendation of MAHEG, may be published in the Scientific Section of the Hungarian Welding Journal (Hegesztéstechnika), referred by the Hungarian Academy of Sciences, or in the Periodica Polytechnica Mechanical Engineering (Q3, IF=1.0), referred by Web of Science (WoS).

Venue of the event: Budapest University of Technology and Economics, Hungary, 1111, Budapest, Műegyetem rakpart 3. Information about accommodation options near the conference venue is available on www.maheg.hu.

Participation fee
The conference participation fee includes the electronic conference proceedings containing the publications, the program booklet containing the abstracts, meals and refreshments during the conference, the dinner combined with the planned Danube cruise, and the costs of organization. We also offer an optional early bird discount without dinner.

Participation fee of the conference:	129.000 +VAT HUF/person
For MAHEG, MAROVISZ, MAGÉSZ members, employees of member organizations of MAHEG and MHtE discounted participation fee	99.000+VAT HUF/person
under age 25 and above age 65, full-time students, PhD students without evening event (Danube cruise)*	29.000 +VAT HUF/person
under age 25 and above age 65, full-time students, PhD students with evening event (Danube cruise)*	69.000 +VAT HUF/person
Advertisement (in conference proceedings)	95.000+VAT HUF/adv.
Exhibition at the conference venue	250.000+VAT HUF
Exhibition combined with practical demonstration	400.000+VAT HUF

* if the individual member of MAHEG, MAROVISZ or MAGÉSZ.