



INVITATION

TO THE

27th HUNGARIAN FOUNDRY DAYS

13 – 15 October 2023

HERCEGHALOM, Hungary

HOTEL ABACUS****
Gesztenyés street 3
www.abacus.hu

2.

The scope of the conference is to present an analysis of the technical and economic status and provide an outlook on the future of the Hungarian foundry industry.

Conference sites

Plenary, technical/scientific, and informational presentations Milton Keynes Hall I-II-III

Concert and Traditional Foundry Men Evening Party Milton Keynes Hall I-II

Professional exhibition
The lobby of Hotel ABACUS****

Plant tours (10.30 13 October 2023)

Busch-Hungária Kft., Győr Weiss Manfréd Vasművek Kft., Budapest

After the plant tours lunch is offered for all conference participants at Hotel ABACUS**** from 12.30 until 15.30

Accommodation and boarding during the conference is at Hotel ABACUS****

Parking possibilities are at Hotel Abacus and around the hotel at the free outdoor parking places

The official languages of the conference are English and Hungarian All presentations will be interpreted in Hungarian or English

3. PROGRAM ON FRIDAY, 13. October 2023

10³⁰- 12³⁰ **Plant tours**

Arriving individually to the pre-selected companies by no later than 10:15 a.m. Parking is available at the site. Please register with the local representative prior to the tour. The tours start at 10:30 a.m. and are guided in Hungarian.

1. Busch-Hungária Kft., Győr

9027 Győr, Martin utca 1.
Program Coordinator:
Bajnok Judit
Head of Secretariat
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2. Weiss Manfréd Vasművek Kft., Budapest

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After the plant tours lunch is offered for all conference participants at Hotel ABACUS**** starting at 12:30 until 15.30.

Arrival: individually, free parking is available around the Hotel.

4. PROGRAM ON FRIDAY, 13. October 2023

1000-1900 Registration - At the lobby of Hotel Abacus****

Opening ceremony of the Exhibition at the Lobby of the Hotel Opening speech: **Dr. Anna Szombatfalvy**, Vice-president of the Hungarian Mining and Metallurgical Society

EXHIBITORS ALU-ÖNTŐ Kft. (H)

AUSTIN AI EUROPE Kft. (H)

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TPLUST s.r.o. (SK)

TP TECHNOPLUS Kft. (H)

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5. PROGRAM ON FRIDAY, 13. October 2023		
1000-1900 Registration - At the lobby of Hotel Abacus****		
1230 – 1530 Lunch at Hotel Abacus		
1345 – 1500 Extraordinary General Assembly of the Association of Hungarian Foundries		
15 ¹⁵ Opening ceremony of the Exhibition		
16 ⁰⁰ – 16 ⁰⁵ Opening of the Conference, János Szalai, President, Association of Hungarian Foundries		
16 ⁰⁵ – 16 ¹⁰ Dr. Pál Hatala, President, Hungarian Mining and Metallurgical Society		
16 ¹⁰ – 16 ¹⁵ Zsuzsanna Csizmadia, Mayor of Herceghalom		
16 ¹⁵ – 16 ⁴⁰ Vaclav Jacko, Foseco: Foseco- Your Partner in Sustainable Growth		
16 ⁴⁰ – 17 ⁰⁰ Dr. János Erdélyi, University of Miskolc: University Education of Foundry Sciences		
$17\underline{^{00}} - 18\underline{^{30}}$ Forum, Round-table discussion		
 Gergely Fábián, Secretary, Ministry for Economic Development Dr. Diána Ürge-Vorsatz, Physicist, Vice-Chair of IPCC's Working Group III. 		
Zsolt Szalóczy, Physicist, Futurologist Mántan Bonk, Matallymiat, Ovynan of the Martin Matale Kft		
 Márton Penk, Metallurgist, Owner of the Martin Metals Kft. László Livo, Mining Engineer, Energetic consultant Moderator: Gábor Zelei, Geophysicist, Executive Secretary General of the Association of Hungarian Foundries 		
$18^{30} - 19^{45}$ Diner		
2000 – 2030 Winetasting (Daróczi Wine Shop, www.darvin.hu)		
2030 – 2200 Cultural program (NADENe Band)		
The official languages of the conference are English and Hungarian All presentations will be interpreted in Hungarian or English		

PROGRAM ON SATURDAY, 14. October 2023 $09^{\underline{00}} - 12^{\underline{35}}$ Informational and professional presentations Chairman: Dr. Pál Hatala Conference Room: Milton Keynes Hall I - II Lai Ally, L.K. Machinery Ltd: LK Die Casting Machines Sam Wainwright, Inductotherm Europe Ltd: Induction Melting $09\underline{30} - 10\underline{00}$ Applications for the Aluminum Industry 2023 Jerome Honorio, FONDAREX S.A: Innovation on High Vacuum $10^{\underline{00}} - 10^{\underline{30}}$ Technology for Giga Castings 10<u>30</u>-10<u>45</u> **Break** Chairman: Dr. György Fegyverneki 1045-1105 József Szabó, Hungarian Standardization Board, Foundry Standards News 1105-1135 Gábor Kaposi, Voestalpine High Performance Metals Hungary Kft.: Uddeholm AM Dievar - Solution to Applications that Require High Toughness 1135 -1205 Dr. Sándor Lukács, Wieland Kupral Kft.: CARO® piston and lubrication system for high pressure die casting 1205 – 1235 **Dr. Dániel Molnár, University of Miskolc:** Technology Development of Multi-Layered Cast Structures 12^{35} Lunch

7. PROGRAM ON SATURDAY, 14. October, 2023		
0900-1225	Informational and professional presentations Chairman: Dr. Sándor Lukács Conference Room: Milton Keynes Hall III	
09 <u>00</u> 09 <u>30</u>	Ferenc Nyirő, Kontron Hungary Kft.: How Gets the Dragon, the Shark, and the Bear to the Industry?	
$09^{\underline{30}} - 09^{\underline{50}}$	Szalai Attila, Fémvirág Bt.: Foible, Chance or Need? Sustainable Development Objectives in the Foundry	
0950-1010	Dr. János Erdélyi, University of Miskolc: Mechanical Properties of High-Pressure Die Casting Alloys	
10 10 - 10 35	Break	
	Chairman: Dr. Richard Pintér	
$10^{35} - 10^{55}$	István Babos, Öntőgépszerviz Kft.: Energy Efficient Solutions of the Foundry Industry	
10 ⁵⁵ -11 ¹⁵	Dr. Tibor Kulcsár, András Török, Metal Shredder Kft.: Innovative Methods of the Complex Utilization of Electronic Wastes	
11 ¹⁵ -11 ⁴⁵	Majercsák László - Tamás Szabó, Grimas Kft.: Industrial Materials Testing – More than 30 years of Experience	
11 ⁴⁵ –12 ⁰⁵	Dr. Henrietta Hudák, Dr. László Varga, University of Miskolc: Investigation of the Permeability and Strength Property of Mold and Core Sand Mixtures Based on a New Type of Qualification Method	
$12^{05} - 12^{25}$	Kristóf Bodnár, Feintool System Parts Tokod Kft.: Investigation of Casting Technological Parameters of Rotor Die-Castings	
12 35	Lunch	
T	he official languages of the conference are English and Hungarian All presentations will be interpreted in Hungarian or English	

PROGRAM ON SATURDAY, 14. October 2023 Registration - At the lobby of Hotel Abacus**** $14^{30} - 17^{45}$ Informational and professional presentations Chairman: Dr. János Erdélyi Conference Room: Milton Keynes Hall I-II $14^{30} - 15^{00}$ Kovařík Martin, SAND TEAM spol. s.r.o: GEOPOL® - inorganic binder system 15<u>00</u> –15<u>30</u> **Ondrej Fazekas, Vesuvius:** SMARTT - Innovative process for rotary degassing of Aluminum melts 1530 – 1600 Martin Freyn, Vesuvius Moravia: Specific metallurgical aspects at the Al casting production 16<u>00</u> –16<u>15</u> **Break** Chairman: Zoltán Kéri $16^{15} - 16^{45}$ Eliska Adamkova, FOSECO: Foseco Products Help Reduce Hygiene and Environmental Risks in the Foundry Jernej Šumečnik, PSR d.o.o.: Finishing of Castings in Times of $16^{45} - 17^{15}$ Laboure Shortage - Automatic Grinding Tomas Brincil, Vesuvius: Maximal Application of Kalpur Systems $18^{\underline{00}} - 19^{\underline{45}}$ Diner Traditional Foundry Men's Evening Party 20^{00} Location: Milton Keynes Hall I – II The official languages of the conference are English and Hungarian

All presentations will be interpreted in Hungarian or English

9. PROGRAM ON SATURDAY, 14. October 2023		
0830-1900	Registration - At the lobby of Hotel Abacus****	
14 ³⁰ -17 ³⁵	Section of the University of Miskolc Chairman: Dr. Anna Szombatfalvy Conference Room: Milton Keynes Hall III.	
1430-1450	Zoltán Kéri: Melt Treatment of Die Casting Alloys	
14 ⁵⁰ –15 ¹⁰	Nóra Biró, Dr. Dániel Molnár, Dr. György Fegyverneki: The Fingerprint of Aluminum Melts	
15 ¹⁰ –15 ³⁰	Levente Bogoly, Dr. Tamás Mende, Dr. György Fegyverneki, Gábor Gyarmati: Investigation of the Effect of Different Grain Refining Fluxes and Master Alloy Addition on the Melt Quality	
15 ³⁰ –15 ⁵⁰	Ákos Szécsényi, Gábor Gyarmati: Development of a New Method for the Qualification of Aluminum Alloy Ingots	
15 ⁵⁰ –16 ¹⁵	Break	
	Chairman: Dr. Dániel Molnár	
$16^{15} - 16^{35}$	Kornél Szuromi, Dr. János Erdélyi: The Influence of the Structure and Technology on the Quality of Pressure-tight Castings	
16 ³⁵ –16 ⁵⁵	Gábor Gyarmati: Interactions of Ti-containing Compound Particles and Oxide Inclusions of Liquid Aluminum Alloys	
$16^{55} - 17^{15}$	János Szalai, Dr. Dániel Molnár: Technology Examination of Wear- resistant Iron Castings	
17 ¹⁵ -17 ³⁵	Dávid Halápi: Segregation simulation study of metal powders in additive manufacturing technology	
17 <u>35</u>	Closing speech	
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PROGRAM ON SUNDAY, 15. October 15. Registration - At the lobby of Hotel Abacus**** $09\underline{00} - 11\underline{00}$ Section of the University of Miskolc $10^{\underline{00}} - 12^{\underline{00}}$ Chairman: Dr. László Vigh Conference Room: Milton Keynes Hall III. Péter Szabó, PRACTILUB Professional Zrt.: Modernization of $09\underline{00} - 09\underline{20}$ StrikoWestofen Under the Aegis of Energy Efficiency $09\underline{20} - 09\underline{40}$ Árpád Pataki, Szegedi Öntöde Kft.: The Greatest Innovation of the Szegedi Öntöde Ltd Márk Sáfrányos, Fémalk Zrt.: Increasing the Efficiency of Jet Cooling $09^{40} - 10^{00}$ in High Pressure Dies $10^{\underline{00}} - 10^{\underline{20}}$ Break Chairman: Gábor Zelei $10^{20} - 10^{40}$ Sándor Kovács, University of Miskolc: Analysis of 3D printed steel products 10^{40} – 11^{00} Dániel Kiss, MAGYARMET Finomöntöde Kft.: The Effect of Sintering Temperature and Time on the Properties of Ceramic Shells 11⁰⁰-11²⁰ Viktor Nyeste, Hanon Systems Hungary Kft.: Physical Metallurgical Aspects of Local Squeezing 11²⁰–11⁴⁰ Csaba Walczer, Péter Szilágyi, Márk Kerékgyártó, Wieland eTraction **Systems Kft.:** Production of zero prosity rotor by HPDC $11^{40} - 12^{00}$ Balázs Sándor, University of Miskolc: Production and Processing of Semi-Solid Aluminum Alloy Using High-Pressure Die Casting Technology Closing session, closing speech 12^{00} Chairman: János Szalai, President, Association of Hungarian Foundries Conference Room: Milton Keynes Hall I – II 12^{35} Lunch

KEY EVENT SPONSORS

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EVENT SPONSORS

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The first **Hungarian Foundry Days** took place in April 1959, and the conference has been held in 12 Hungarian cities, 27 times in total.

Over the past 64 years, we have welcomed around 6400 participants, 315 of whom were foreigners.

The 2023 conference will be the seventh time that a separate student and doctoral student section, which will be held under the name of the "University of Miskolc Section", and more than 400 high school students have participated in the foundry demonstrations so far.

For 64 years, the Hungarian Foundry Days event has been a key meeting place for those involved in the foundry profession!