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SPONSORS

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TP TECHNOPLUS Ltd.

UNIVERSITY OF MISKOLC, FOUNDRY INSTITUTE (H)

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



INVITATION

TO THE

**26th HUNGARIAN FOUNDRY
DAYS**

15 – 17 October 2021

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 – III**

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

**Student section and Forum
Milton Keynes Hall III**

**Professional exhibition
Lobby of Hotel ABACUS******

Plant tours (10.30 15 October 2021)

**CSEPEL METALL Ltd, Budapest
ECSERI Ltd, Cegléd**

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**

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11.

PROGRAM ON FRIDAY, 15. October 2021

10¹⁵- 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 the tour.

The tours start at 10:30 a.m. and are guided in Hungarian.

- 1. CSEPEL METALL Ltd, Budapest**
1211 Budapest, Öntöde utca 2-12.
Program co-ordinator at site: **ÉRSEKI, László**
- 2. ECSERI Ltd, Cegléd**
2700 Cegléd, Ipartelepi út 25.
Program co-ordinator at site: **ECSERI Ferenc**

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.

Dress code

Semi-formal wear i.e. "Half dress"

**The Society members are asked for wearing the uniform of
the Society.**

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10.
PROGRAM ON SUNDAY, October 17, 2021

- 09⁰⁰–11⁰⁰ **Registration – At the lobby of Hotel Abacus**
- 09⁰⁰–12¹⁵ **Informational and professional presentations**
Chairman: **Ákos Szoboczki, CSABAcast Lightmetall Works Ltd**
Conference Room: Milton Keynes Hall I – II
- 09⁰⁰–09²⁰ **Tibor Ferenczi, Gábor Gyarmati, University of Miskolc:**
Processing of cast aluminum dross by pressure digestion
- 09²⁰–09⁴⁰ **Attila Szalai, Mozicentrum Ltd:** How much is it worth a career? My private story
- 09⁴⁰–10⁰⁰ **Gergely Hajas, Alu-Öntő Kft.:** Aluminum thin wall /1-3mm/ gravity sand cast process with printed sand mold
- 10⁰⁰–10²⁰ **László Érseki, Daniella Érseki, László Pelzhoffer, Csepel Metall Ltd:** Foundry investments with the help of VEKOP application
- 10²⁰–10⁴⁰ **Break**
Chairman: **János Szalai, PYROVEN Iron Foundry Ltd**
- 10⁴⁰–11⁰⁰ **Imre Selmeczi, Öntőgépszerviz Ltd.:** The new generation of Idra casting machines
- 11⁰⁰–11²⁰ **István Babos, Öntőgépszerviz Ltd.:** Enercon ventilation and air cleaning machines
- 11²⁰–11⁴⁰ **Dr. Viktória Dargai, Dr. László Varga, University of Miskolc:**
Investigation of granulometric and strength properties during the use of waterglass sand mixtures in cycles
- 11⁴⁰–12⁰⁰ **Viktor Pomichal, Robotline Ltd:** Innovative robotics solutions in foundry industry
- 12⁰⁰ **Closing session, closing speech**
Chairman: **Dr Laszló VIGH, president, Association of Hungarian Foundries**
Conference Room: Milton Keynes Hall I – II
- 12³⁰ **Lunch**

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3.
PROGRAM ON FRIDAY, 15. October 2021

- 09⁰⁰–19⁰⁰ **Registration - At the lobby of Hotel Abacus******
- 10⁰⁰– 13³⁰ **Professional presentations for the students of secondary level foundry education**
Presentations, Aluminum sand casting

During the last ten years this page was reserved for the secondary level foundry education noon program especially for lectures, sand forming and aluminium casting practical education.

The message - the invited professional casting education centers this year could not delegate participant about lack of students - has arrived too late to the organiser we were not able to follow it re-editing the program brochures.

The organisers – **Hungarian Foundry Association, Hungarian Mining and Metallurgical Society** and the **Hotel ABACUS****** - pay their's respects with their logos to he 380 students and their teachers who had participated at that educational programs.



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4.

PROGRAM ON FRIDAY, 15. October 2021

13⁰⁰–19⁰⁰ **Registration - At the lobby of Hotel Abacus******

15¹⁵ Opening ceremony of the Exhibition
Opening speech: **Dr Anna Szombatfalvy, OMBKE**

EXHIBITORS

BL Metal Ltd/Kft. (SLO)

CASTER CSOPORT (H)

KVARC és ÁSVÁNY Kft./Ltd (H)

FOUNDEX Kft./Ltd (H)

GRUDZEŃ LAS SP z o.o. (PL)

HOUGHTON MAGYARORSZÁG Kft./Ltd (H)

INDUCTOTHERM EUROPE Ltd/Kft. (UK)

JAMES DURRANS AND SONS Ltd (Slo)

NANOTEST H Kft./Ltd (H)

NEMAK GYŐR Kft./Ltd

SIDERMAG O O O (RUS)

TPLUST s. r. o (SK)

TP TECHNOPLUS Kft./Ltd (H)

VESUVIUS Ltd (SK)

VOEST ALPINE HUNGARY Ltd (H)

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9.

PROGRAM ON SATURDAY, 16. October 2021

08³⁰–19⁰⁰ **Registration - At the lobby of Hotel Abacus******

14³⁰–17³⁰ **PhD student and Student Session**
Chairman: **Dr Dániel Molnár, University of Miskolc**
Conference Room: Milton Keynes Hall III

14³⁰–14³⁵ **Speech of the Chairman**

14³⁵–14⁵⁵ **Zoltán Kéri, Zsolt Molnár, Dr György Fegyverneki, University of Miskolc:** Technical feasibility of low pressure die casting technology

14⁵⁵–15¹⁵ **Dávid Halápi, Dr László Varga, University of Miskolc:** Investigation of parameters influencing the recyclability of metal powders used in additive manufacturing technologies

15¹⁵–15³⁵ **Sándor Endre Kovács, Dr László Varga, University of Miskolc:** Residual stress analysis of 3D printed steel specimens

15³⁵–15⁵⁵ **Dr László Varga, Imre Budavári, University of Miskolc:** The influence of acid hardener content on strengths properties and thermal resistance ability of the no-bake sand cores

15⁵⁵–16¹⁰ **Break**

Chairman: **Dr János Erdélyi, University of Miskolc**

16¹⁰–16³⁰ **Levente Bogoly, Gábor Gyarmati, Dr György Fegyverneki, Dr Tamás Mende, University of Miskolc:** Investigation of the interactions between double oxide films and grain refining phases in liquid aluminum alloys

16³⁰–16⁵⁰ **Dr Varga László, Laura Mádi, University of Miskolc:** Effect of the different heat input on blow-holes formation in AlSi7 alloy

16⁵⁰–17¹⁰ **Szabolcs Krajnyák, Dr László Varga, University of Miskolc:** The analysis of core-blow related defects in case of Hot-box cores

17¹⁰–17³⁰ **Henrietta Hudák, Dr László Varga, University of Miskolc:** Investigation of the permeability of green sand and no-bake resin bonded sand mixtures based on a new type of qualification method

17³⁰ **Closing speech of the Chairman**

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8.

PROGRAM ON SATURDAY, October 16, 2021

- 08³⁰–19⁰⁰ **Registration - At the lobby of Hotel Abacus**
- 14³⁰–17⁴⁵ **Informational and professional presentations**
Chairman: **Dr Anna Szombatfalvy, Albametal 1991 Ltd**
Conference Room: Milton Keynes Hall I - II
- 14³⁰–14⁵⁰ **Johann Hagenauer, HAGI Ltd:** 3D Printing - the perfect complement in the foundry industry
- 14⁵⁰–15¹⁰ **Ondrej Fazekas, Vesuvius Moravia s.r.o.:** SMARTT – Innovative process control for rotor degassing of aluminum melts
- 15¹⁰–15³⁰ **Eliška Adámková, FOSECO:** Water Base Coating - new trends
- 15³⁰–15⁵⁰ **Zoltán Hényel, EXCOR Austria GmbH:** All-round treatment of corrosion
- 15⁵⁰–16⁰⁵ **Break**
Chairman: **Dr Sándor Lukács, Wieland Kupral Ltd**
- 16⁰⁵–16²⁵ **Sam Wrainwright, Inductotherm Europe Ltd.:** Induction Melting Applications for the Aluminium Industry
- 16²⁵–16⁴⁵ **Dr. János Erdélyi, University of Miskolc:** PQ² characteristics in theoretical and practice
- 16⁴⁵–17⁰⁵ **Csaba Tót, FÉMALK PLC:** Measurement of vacuum pressure in the cavity of a die casting tool
- 17⁰⁵–17²⁵ **Attila Masa, ROBOT-X Ltd:** Reduce costs in foundry environment with digitization tools
- 17²⁵–17⁴⁵ **Péter Szalva, Fémalk PLC.:** Effects of artificial and natural defects on fatigue strength of a cast aluminum alloy AlSi9Cu3(Fe)
- 18⁰⁰–19³⁰ **Dinner**
- 20⁰⁰ **Traditional Foundry men' evening party**
Location: Milton Keynes Hall I – II

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5.

PROGRAM ON FRIDAY, 15. October 2021

- 13⁰⁰–19⁰⁰ **Registration - At the lobby of Hotel Abacus******
- 16⁰⁰–17⁴⁵ **Opening of the Conference, plenary presentations**
Chairman: **Dr. Pál Hatala,**
Conference Room: Milton Keynes Hall I - II
- 16⁰⁰ Presidential speech:
Dr Laszlo Vigh, Association of Hungarian Foundries
- Welcome speech:
Zsuzsanna Csizmadia, Major of City Herceghalom
Tamás Kőrösi, chef secretary of Hungarian Mining and Metallurgical Societies
- Plenary sessions**
- 16³⁰–16⁴⁵ **Lóránd Hornyák, Technology and Innovation Center, Miskolc**
The relationship between innovation ecosystem and industry on the example of the University of Miskolc
- 16⁴⁵–17¹⁵ **Dr László Varga, University of Miskolc**
The actual situation and the future of the university level professional foundrymen education in Miskolc
- 17¹⁵–17³⁰ **Dr Pál Hatala**
Remembering of the last twenty years Hungarian Foundry Days events
- 18⁰⁰–21³⁰ **Dinner**
- 19⁴⁵–20³⁰ **Welcome drink before the cultural program**
Hosts: Öntőgépszerviz Ltd, welcome speech: Imre Selmeczi, managing director of the Company
- 20³⁰–22⁰⁰ **Cultural program**
Location: Milton Keynes I – II Hall
- Concert of the ILLFON GT super group – the best of Hungarian rock music from the '70s and '80s**

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6.

PROGRAM ON SATURDAY, 16. October 2021

- 08³⁰–19⁰⁰ **Registration - At the lobby of Hotel Abacus******
- 09⁰⁰–12²⁵ **Informational and professional presentations**
Chairman: **Dr. György Fegyverneki**
Conference Room: Milton Keynes Hall I – II
- 09⁰⁰–09³⁰ **Gábor Kaposi, Voestalpine High Performance Metals Hungary Kft.:** Uddeholm, advanced steel materials for the more effective production
- 09³⁰–09⁵⁰ **Dr József Sohajda, László Érseki, László Pelzhoffer, Csepel Metall Kft.:** “Hearth transplant” at Csepel Metall Ltd
- 09⁵⁰–10²⁰ **Jerome Honorio, FONDAREX S.A:** The new FX PREMIUM vacuum system
- 10²⁰–10³⁵ **Break**
- Chairman: **Dr Tünde Sinka, Magyarmet Ltd**
- 10³⁵–10⁵⁵ **Dr József Tamás Svidró, Jönköping University:** Latest development in gas-permeability and gas-evolution measurement techniques
- 10⁵⁵–11²⁵ **János Pócs, Spinto Hungária Ltd:** Introduction of the Spinto Hungária Kft.
- 11²⁵–11⁴⁵ **Róbert Petus, Spinto Hungária Ltd.:** Contour tracing cooling of aluminum HPDC tools
- 11⁴⁵–12⁰⁵ **Dr Judit Svidró, Jönköping University:** Examination of foundry sands from different geographical origins
- 12⁰⁵–12²⁵ **Dr Dániel Molnár, Gábor Gyarmati, University of Miskolc:** Computer simulation in foundry Reserch & Development
- 12³⁰ **Lunch**

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7.

PROGRAM ON SATURDAY, 16 October 2021

- 08³⁰–19⁰⁰ **Registration - At the lobby of Hotel Abacus******
- 9⁰⁰–12³⁰ **Informational and professional presentations**
Chairman: **Dr Richárd Szabó, Csabametal PLC**
Conference Room: Milton Keynes Hall III
- 09⁰⁰–09³⁰ **Béla Halász, Knorr-Bremse Vasúti Jármű Rendszerek Hungária Ltd.:** Additive technologies in the serial production
- 09³⁰–09⁵⁰ **Gergely Lőrincz, ROBOT-X Ltd:** Advanced Automation - Demonstrating Press Automation through a Case Study
- 09⁵⁰–10²⁰ **Dr Andrea Bíró, Oerlikon Balzers Coating Austria GmbH:** Increased lifetime of die casting dies by applying Oerlikon Balzers PVD coatings
- 10²⁰–10⁴⁰ **Hényel Zoltán, Erwin Wolf, EXCOR Ltd:** Corrosion protection with VCI technology
- 10⁴⁰–11⁰⁰ **Break**
- 11⁰⁰–12³⁰ **Forum – round-table discussion**
- The actual situation and the future of the medium and high level foundry men’s education in
- Moderators**
Foundry Institute, University of Miskolc
Szeged Iron Casting Ltd
Association of Hungarian Foundries
- In the chair: Dr László Varga, University of Miskolc**
- 12³⁰ **Lunch**

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