

CONFERENCE PROGRAMME

SULISŁAW PALACE

April 20, 2026 | Monday

11:00	14:00	Registration Hotel Lobby
12:45	13:45	Lunch Column Hall
14:00	14:15	Official Opening Ceremony Congress Hall
14:15	14:45	Prof. Stanisław M. Dobosz 80th Jubilee Congress Hall
14:45 - 15:45 Plenary Session Congress Hall		
Chairmen: D. Bolibruchová, P. Lichý & K. Major-Gabryś		
14:45	15:05	Manufacturing of "Vari Morph" cast iron using Inmold technology – control and prediction of structure, mechanical and functional properties based on the results of ultrasonic testing J. S. Zych, M. Myska, J. Postuła, S. Kobyłecka
15:05	15:25	Possibilities of producing semi-finished products and final castings from ferrous alloys and non-ferrous alloys in the conditions of the faculty foundry of VŠB-TU Ostrava J. Odehnal, P. Lichý, M. Bašistová
15:25	15:45	Effect of Tungsten on Structural Integrity and Performance Properties of AlSi5Cu2Mg Alloy M. Matejka, D. Bolibruchová, M. Sýkorová
15:45	16:15	Coffee break Congress Hall

April 21, 2026 | Tuesday

07:30	09:00	Breakfast Column Hall
09:00 - 10:30 Scientific session II Congress Hall		
Chairmen: R. Pastirčák & A. Trytek		
09:00	09:15	Development of antibacterial coatings on Mg alloy acting as a base for hydroxyapatite formation W. Wyrwa, K. Naplocha
09:15	09:30	Cast steel in the railway infrastructure T. Wróbel
09:30	09:45	The influence of heat treatment on the corrosion resistance of weld deposits on steel X8CrNi25-21 E. Kantoríková
09:45	10:00	Application of numerical simulation in technology of layered castings A. Duška, N. Przysław
10:00	10:15	Mechanical and Tribological Properties of Borided Layers of Highly Stressed Components P. Fabian, R. Pastirčák, M. Jaššo
10:15	10:30	Evaluation of the manufacturing potential of thin-walled duplex cast steel castings G. Stradomski, M. Nadolski, E. Ociepa
10:30	11:00	Coffee break Congress Hall
11:00 - 13:00 Scientific session III Congress Hall		
Chairmen: K. Naplocha & G. Stradomski		
11:00	11:15	The effect of Nb on selected properties of aluminum alloys M. Sýkorová, D. Bolibruchová, M. Matejka, M. Chalupová
11:15	11:30	Geometric Optimization of Cast Iron Grates for Heating Devices with Respect to Thermal Stress Reduction and Service Life Enhancement J. Kamińska, K. Sanocki, R. Żuczek, M. Malysza, M. Angrecki
11:30	11:45	From Casting Heterogeneity to Ductile Fracture: Microstructural Evolution of Investment-Cast IN 738LC Ni-based Superalloy after HIP and Heat Treatment K. Konečná, P. Sova, P. Váňová, T. Válek
11:45	12:00	Effect of Si and Al additions on ferrite ordering in ductile cast irons J. Morgiel, K. Morgiel
12:00	12:15	A Cellular Automaton-Based Analysis of Nanoparticle Behavior in the Processes of Metal-Matrix Nanocomposite A. Burelko, P. Kurtyka, E. Olejnik, W. Maziar
12:15	12:30	Comparison of wear performance between composite materials manufactured using ex-situ and in-situ technology K. Žak, E. Olejnik, M. Łucarz, J. Sobczak, N. Sobczak, A. Bigos, L. Weitekämper C. Steppuhn, J. Scheithauer, Ł. Szymański
12:30	12:45	Investigation of oxides formed over SiMo DCI during HT exposure K. Morgiel
12:45	13:00	Evaluation of hydrogen storage materials F. Radkovský, B. Smetana, M. Bašistová
11:30 - 13:00 Scientific session IV Conference room - 2nd floor		
Chairmen: T. Wróbel & J. Krawczyk		
11:30	11:45	Analysis and Utilisation Potential of Selected Foundry Waste Material K. Miczková, M. Bašistová, S. Brožová
11:45	12:00	Intelligent support for the power industry - a platform for knowledge and data exchange J. Kasińska
12:00	12:15	Mechanical Properties Assessment of L21HMF Cast Steel from a Main Steam Pipeline Tee after 241,000 h of Service: Analysis of Anisotropy and Through-Thickness Variation Using the Small Punch Test (SPT) P. Baran, M. Nowak, H. Pasiowiec, J. Krawczyk
12:15	12:30	Development of an innovative, comprehensive service for the manufacturing and finishing of aluminium components dedicated to the furniture industry M. Wolski, M. Machalica
12:30	12:45	Concept of New Lead Free Fittings Intended for Drinking Water Installations A. Chaczyk, P. Skoda, K. Pańcikiewicz, J. Krawczyk
12:45	13:00	Analysis of the influence of the cross-sections of the gating system on the flow characteristics of liquid aluminum alloys in the HPDC process J. Wiśniowski, M. Brzeziński, P. Paszek
13:00	14:00	Lunch Column Hall
14:00	17:30	Visit to the automotive museum WENA in Olawa
18:00 - 19:00 Scientific session V Conference room - 2nd floor		
19:30	23:00	Barbecue meeting Column Hall

April 22, 2026 | Wednesday

07:30	09:00	Breakfast Column Hall
09:00	09:30	Summary and closing of the Conference

16:15 - 17:45 Scientific session I Congress Hall		
Chairmen: I. Vasková & J. S. Zych		
16:15	16:30	Innovative solutions and effective cooperation of HA GROUP, NOVACAST and FOUNDRY SERVICE on the Polish and Czech markets K. Karwas, A. Pietrzak - Hüttenes-Albertus Polska Sp. z o.o. – Sponsor's presentation
16:30	16:45	The current state and challenges of the Polish and European foundry industry W. Dobosz
16:45	17:00	Implementation doctorate as a promotion of a scientific approach to solving problems in industry J. Krawczyk, M. Wieczorowski, A. Kurkiewicz, J. Królczyk
17:00	17:15	Optimization of the T6 heat treatment for EN AC-46000 die-castings produced via VADC technology to maximise mechanical properties B. Pisarek, C. Rapiejko, T. Szymczak, R. Kaczorowski, P. Just, T. Pacyniak, M. Kłos, M. Rogulski, Z. Konopka
17:15	17:30	Magnesium alloy squeeze casting R. Pastirčák, M. Brůna
17:30	17:45	Ecology and Us: Updates on the Use of New-Generation Inorganic Binders M. Paręba, J. Beño, T. Bajer, M. Vykoukal
17:45 - 18:00 NetCastPL4.0 Project Conference Opening Congress Hall		
17:45	18:00	A201-TiC in-situ composites produced by SHSB technology for thin-walled castings M. Górny, J. Marosz, J. Lelito, M. Kawalec, Ł. Gondek, G. Angella, J. Piątkowski
18:00	19:30	Touring the Palace and Museum
20:00	24:00	Ceremonial Foundrymen's Meeting Congress Hall

09:00 - 10:30 Scientific session II Congress Hall		NetCastPL4.0 session I Conference room - 2nd floor	
Chairmen: R. Pastirčák & A. Trytek		Chairmen: M. Górny & K. Jalava	
09:00	09:15	Development of antibacterial coatings on Mg alloy acting as a base for hydroxyapatite formation W. Wyrwa, K. Naplocha	Effect of (Ti, Mo)C Particles on the Microstructure and Thermophysical Properties of Compacted Graphite Iron Castings J. Marosz, M. Górny, R. Chulist, J. Morgiel, M. Kawalec, G. Angella, R. Zapala, M. Tupa
09:15	09:30	Cast steel in the railway infrastructure T. Wróbel	The impact of Binder Jetting (3D printing) technology on the ecological and economic aspects of producing casting molds and cores from self-hardening molding sands with furfuryl resin K. Bernaś, K. Major-Gabryś
09:30	09:45	The influence of heat treatment on the corrosion resistance of weld deposits on steel X8CrNi25-21 E. Kantoríková	Chemical hardening of solid inorganic foundry binder N. Anwar, K. Jalava
09:45	10:00	Application of numerical simulation in technology of layered castings A. Duška, N. Przysław	The influence of modified inorganic binders intended for 3D printing on selected properties of thermally cured moulding sands - conventionally and with microwaves D. Halejcio, K. Major-Gabryś
10:00	10:15	Mechanical and Tribological Properties of Borided Layers of Highly Stressed Components P. Fabian, R. Pastirčák, M. Jaššo	Structural stability assessment of high-alloyed abrasion-resistant white cast iron M. Kawalec, M. Górny
10:15	10:30	Evaluation of the manufacturing potential of thin-walled duplex cast steel castings G. Stradomski, M. Nadolski, E. Ociepa	Selection of molding sands for thin-walled cast iron castings based on their selected properties K. Major-Gabryś, D. Drożyński
10:30	11:00	Coffee break Congress Hall	
11:00 - 13:00 Scientific session III Congress Hall		NetCastPL4.0 session II Conference room - 2nd floor	
Chairmen: K. Naplocha & G. Stradomski		Chairmen: R. Cygan & B. Cygan	
11:00	11:15	The effect of Nb on selected properties of aluminum alloys M. Sýkorová, D. Bolibruchová, M. Matejka, M. Chalupová	ADI Cast Iron - the material of the future B. Cygan, M. Górny, G. Angella, K. Jalava, Ł. Gondek, J. Marosz
11:15	11:30	Geometric Optimization of Cast Iron Grates for Heating Devices with Respect to Thermal Stress Reduction and Service Life Enhancement J. Kamińska, K. Sanocki, R. Żuczek, M. Malysza, M. Angrecki	The effect of binder type (including inorganic binder designed for 3D printing) on the properties of the surface layer of castings made from aluminium alloys D. Halejcio, K. Major-Gabryś, J. Marosz, M. Górny, A. Fijolek

18:00 - 19:00 Scientific session V Conference room; 2nd floor	
Chairmen: A. Duška & C. Rapiejko	
18:00 - 18:30 Poster presentations Part 1	
1	Effect of porosity on electrical and thermal conductivity of AlSi5Cu2Mg alloy with minor beryllium content D. Bolibruchová, M. Sýkorová, M. Matejka
2	Kinetics of moisture changes in innovative water-based protective coatings designed for no-bake molding sands St. M. Dobosz, J. Kozień, D. Drożyński, M. Hosadyna-Kondracka
3	Optimization of 3D printing parameters using selective laser melting (SLM) for CuSn10 alloy based on the influence of sample orientation on mechanical properties and microstructure K. Marlicka, K. Janus, A. Garbacz-Klempka, M. Piękoś
4	The influence of preheating temperature on the microstructure and selected properties of Ni-based superalloy joints strengthened with an intermetallic phase K. Chrzan, M. Grudzień-Rakoczy, W. Oleksy, R. Żuczek, Ł. Boroń, K. Jaśkowiec, Ł. Rakoczy, R. Cygan
5	Analysis of the microstructure and corrosion resistance of nickel-based superalloy clads M. Grudzień-Rakoczy, Ł. Rakoczy, E. Rząd, T. Dudziak, D. Tobała, K. Chrzan, W. Oleksy, K. Jaśkowiec, R. Cygan
6	Influence of Strontium Modification on the Microstructure and Electrical Conductivity of Aluminium Alloys Intended for Energy Applications J. Białoń, J. Piworońska
18:30 - 19:00 Poster presentations Part 2	
1	Quantitative evaluation of porosity from x-ray radiographs of HPDC castings as a basis for machine learning O. Kożej, I. Vasková, P. Fedorko
2	Analysis of the Effect of Refining Time on the Microstructure and Mechanical Properties of Recycled Magnesium Alloys J. Piworońska, J. Białoń
3	Medieval bells in Kosice (Slovakia). Reconstruction of bell-casting technology based on non-destructive testing and reverse engineering A. Garbacz-Klempka, A. Pribulova, M. Wardas-Lasoń, M. Jarinkovič, A. Fijolek, M. Piękoś, K. Marlicka, P. Futas, W. Tabaszewski
4	The influence of curing temperature and the type of resin-coated sand on the gas evolution of cores A. Bobrowski, J. Ryś, F. Woźniak, B. Grabowska
5	A modern quality management system as a response to the rising costs of CO2 emissions P. Paszek, J. Wiśniowski, M. Brzeziński
6	Analysis of the Effect of Synthetic Sand on Selected Properties of Moulding Sands N. Mordyl, J. Jakubski, D. Drożyński, J. Mocek, M. Skrzyński

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