**PROGRAM / PROGRAMME**

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| Sreda/ Wednesday, 16. 09. 2015 |

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| 16.30-19.00:  17.30: | Prijava udeležencev na recepciji posvetovanja /  **Registration of participants at the Conference reception desk**  Transfer pred Hotelom Slovenija za Piran  **Bus transfer from Hotel Slovenija to Piran** |
| 18.00: | Sprejem na občini Piran /  **Reception at the Municipality of Piran** |

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| Četrtek / Thursday, 17. 09. 2015 Dvorana/Hall Cristoforo Colombo |

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| 9.30-9.45: | MIRJAM JAN-BLAŽIČ  predsednica / **President**, *Društvo livarjev Slovenije*  Otvoritveni nagovor / **The Opening Address** |

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| Dvorana/Hall Cristoforo ColomboPlenarna predavanja / Plenary Lectures |

9.45-10.15: M. SCHUMACHER, *Bundesverband der Deutschen Gießerei-Industrie,*

*Düsseldorf* (D): **Status and challenges of the foundry industry** / Stanje in izzivi livarske industrije

10.15-10.45: R. BÄHR, S. SCHARF, M. LIEPE, E. RIEDEL, *Otto – von – Guericke –   
 University Magdeburg, Institute of Manufacturing Technology and Quality   
 Management* (D): **Primary Shaping – The Additive Manufacturing   
 Process** / Primarno oblikovanje – Dodaten izdelovalni proces

10.45-11.15: A. KRIŽMAN1 , M. DEBELAK2 , M. JAN-BLAŽIČ3, P. MRVAR4, *1Univerza*

*v Mariboru,2Gospodarska zbornica Slovenije,3Društvo livarjev Slovenije,   
 4Univerza v Ljubljani, Naravoslovnotehniška fakulteta* (SI): **Slovenian   
 Foundry in the Year 2014 and its integration into the development   
 strategy of the metallurgy in Slovenia 2015-2025 /** Slovensko livarstvo v   
 letu 2014 in vključevanje v strategijo razvoja metalurgije v Sloveniji 2015-  
 2025

11.15-11.30: Odmor /**Break**

11.30-12.00: P. SCHUMACHER1,2, K. TUCAN2, P. HOFER2, *1Chair of Casting Research,   
 University of Leoben, Leoben, 2Austrian Foundry Research Institute, Leoben,* (A): **Aspects of modern production methods of integrated high pressure die castings** / Vidiki modernih proizvodnih metod pri integriranem tlačnem litju

12.00-12.30: M. TOPIĆ1, K. TSCHIGGERL1, M. RAUTER2, K. DOSCHEK2, H.   
 BIEDERMANN1, H. RAUPENSTRAUCH2, *1Chair of Economic and Business*

*Management, Montanuniversitaet Leoben, 2Chair of Thermal Processing   
 Technology, Montanuniversitaet Leoben* (A): **Foundry products and their   
 added value in life cycle assessments** / Livarski izdelki in njihova dodana   
 vrednost z vidika življenjske dobe

12.30-13.00: I. RIPOSAN1, V. UTA1, I.C. STEFAN1, M.C. FIRICAN1, S. STAN1, R.L.

NARO2, D.C. WILLIAMS2, *1Politehnica University of Bucharest, Bucharest*

(RO), *2Asi International, Ltd, Cleveland, Ohio* (USA): **Cast Iron Inoculation   
 Enhancing – Solution for Critical Production Conditions** / Pospeševanje

cepljenja sivih litin – Rešitev za mejne proizvodne pogoje

13.00-15.00 : **Odmor za kosilo** / Lunch Break

15.00-15.30: K. WEISS, *RWP GmbH, Roetgen* (D**): Calculation of Micro Matrix for**

**Aluminium Silicon Alloys** / Izračun mikro osnove za Al–Si zlitine

15.30-16.00: B. KALKUNTE1, V.KOLDA2, *1Calcom* *ESI SA( CH), 2Mecas ESI ( CZ)*:   
 **Casting simulation applied successfully to die castings in industrie/** Simulacije litja uspešno uporabljene v industriji kokilnega in tlačnega litja

16.00-16.15: Odmor / **Break**

16.15-16.45: R. SQUATRITO, I. TODARO, L. TOMESANI, *Centro Interdipartimentale di   
 Ricerca Industriale Meccanica Avanzata e Materiali* (I): **How research can**

**support European foundries to  increase their competitiveness: some**

**examples of success from the Italian Motor Valley** / Kako raziskave lahko

podpirajo evropske livarne v namenu povečanja konkurenčnosti: nekaj uspešnih primerov iz Italian Motor Valley

16.45-17.15: P. MRVAR1 , M. PETRIČ1 , J. MEDVED1, M. KOMPREJ1, A. KRIŽMAN2 ,   
 *1Univerza v Ljubljani, Naravoslovnotehniška fakulteta ,2Univerza v Mariboru(SI):* **Production of reference samples/** Izdelava referenčnih vzorcev

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| **Četrtek zvečer/** **Thursday evening, 17. 09. 2015** |

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| 18.00 : | Večerja na ladjah Portorož in Laho z vožnjo po slovenskem morju in zaključkom na terasi hotela Riviera /  **Dinner on board of boats Portorož and Laho and a boat ride along Slovenian coast and afterwards gathering on the terase of hotel Riviera** |
| Petek / **Friday, 18.9 2015** | |

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| Sekcija A / **Section A:** Dvorana **/ Hall: Robert Scott**  Železove litine in livarska tehnologija / **Cast iron and casting technology** |

* + - 1. A. NOFAL1, M. AHMED1, L. REIZIG2, A. HUSSEIN3, *1Central Metallurgical R & D Institute (CMRDI), Cairo, Egypt, 2Fraunhofer Institute- IWT, Freiburg, Germany* (D), *Faculty of Engineering, Cairo University, Egipt* (EG): **Machinability of Austempered Ductile Iron (ADI) as related to**

**Microstructure and Strain Hardening Behaviour** / Obdelovalnost izotermno poboljšane sive litine s kroglastim grafitom (ADI) v povezavi z mikrostrukturo in deformacijskim utrjanjem

9.20-9.40: R. DOEPP, *Technical University Clausthal* (D): **Contribution to ductility of cast Fe-C-SI-X-materials** / Prispevek k duktilnosti Fe–C–Si–X livnih materialov

9.40-10.00: B. BAUER 1, I. MIHALIĆ -POKOPEC1, P. MRVAR2 , *1* *Fakulteta za strojništvo in brodogradnjo, Univerza v Zagrebu* (CRO)*,2* *Univerza v Ljubljani, Naravoslovnotehniška fakulteta* (SI) : **Influence of cooling rate and addition of Ce and Bi on graphite morphology in spheroidal graphite iron/** Vpliv ohlajevalne hitrosti in dodatkov Ce in Bi na obliko grafita v sivi litini s kroglastim grafitom

10.00-10.15: Odmor **/ Brake**

10.15-10.35: I. DUGIĆ, *Linnaeus University, Faculty of Technology, Department of*

*Mechanical Engineering, V*ä*x*jö*, Sweeden* (SE): **Effect of cooling rate on the casting defects of high chromium white cast iron for the impellers** / Vpliv ohlajevalne hitrosti na livarske napake na rotorjih iz bele litine z visoko vsebnostjo kroma

10.35-10.55: M. ACARER1, M.ÖZDEMIR1, H. AHLATCI2, Y.TÜREN2 AND Y.SUN2, *1Selcuk University, Metallurgy-Materials Engineering Department, Konya, 2Karabuk University, Metallurgy-Materials Engineering Department, Karabuk* (TR): **Characterization of Co Base Superalloy Produced by Investment Casting** / Karakterizacija superzlitine na bazi Co izdelane s precizijskim litjem

10.55-11.15: P. WEISS, P. F. BANSZERUS, C. CREMER, A. BÜHRIG-POLACZEK,   
 *Gießerei-Institut der RWTH Aachen* (DE): **Copper and Aluminium in High Silicon Ductile Iron** / Baker in aluminij v sivi litini s kroglastim grafitom z visoko vsebnostjo silicija

11.15-11.30: Odmor **/ Brake**

11.30-11.50: D. SOJER1, M. BRUNČKO2,1, Ž. ERMAN1, I. ANŽEL2, *1Magneti Ljubljana*

*d.d., Ljubljana, Slovenia, 2University of Maribor, Faculty of Mechanical*

*Engineering, Maribor, Slovenia* (SI): **Centrifugal atomization of Nd-Fe-B   
 flakes used for production of permanent magnets** / Centrifugalna atomizacija Nd–Fe–B kosmičov za uporabo pri izdelavi trajnih magnetov

11.50-12.10: Č. MIKYŠKA, *Livar d.d., Ivančna Gorica* (SI): **Effect of different covers   
 for “sandwich” method** / Vpliv različnih pokrivnih materialov za   
 “sandwich” postopek

12.10-12.30: U. KLANČNIK1, J. HABJAN1, J. MEDVED2, *1Valji, d.o.o., Slovenija,   
 2Univerza v Ljubljani, Naravoslovnotehniška fakulteta, Slovenija* (SI):   
 **Characterization of modified indefinite alloy for roll working layer   
 in rolls** / Karakterizacija modificirane indefinitne litine za izdelavo delovne   
 plasti valjev

12.30-12.45: Odmor **/ Brake**

12.45-13.05: S. HALAGAN, *Ferročrtalič d.o.o.* (SI): **The use of abrasives in foundry**

**industry** / Uporaba abrazivov v livarski industriji

13.05-13.25: D. ŽIVKOVIĆ1, D. MANASIJEVIĆ1, D. MINIĆ2, N.TALIJAN3, V.   
 ĆOSOVIĆ3, A. KOSTOV5, *1University of Belgrade, Technical Faculty in Bor, Bor, Serbia, 2Univeristy of Priština, Faculty of Technical Sciences, Kosovska Mitrovica, Serbia, 3University of Belgrade, Institute of Chemistry, Technology and Metallurgy, Belgrade, Serbia, 4Institute for Mining and Metallurgy, Bor, Serbia* (RS): **Survey on some potential ecological metallic materials with application in electronics** / Pregled nekaterih potencialnih ekoloških kovinskih materialov za aplikacije v elektroniki

13.25-13.45: A. MAHMUTOVIĆ1 , S. KASTELIC1, M. PETRIČ2, P. MRVAR2, A.   
 KRIŽMAN 3, *1TC Livarstvo Ljubljana,2Univerza v Ljubljani,   
 Naravoslovnotehniška fakulteta, 3Univerza v Mariboru* (SI): **Novelties in the** **numerical simulations of casting process /** Novosti pri numeričnih   
 simulacijah livarskih procesov

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| Sekcija B / **Section B:** Dvorana/ **Hall: Roald Amundsen**  Neželezne zlitine / **Non-ferrous alloys** |

9.00-9.20: J. MEDVED1, S. KORES1,P. MRVAR1, M. VONČINA1, A. KRIŽMAN2   
 1*Univerza v Ljubljani, Naravoslovnotehniška fakulteta,2Univerza v Mariboru,*(SI):**Influence of Zr addition on Al alloys properties /** Vpliv dodatka Zr na lastnosti Al zlitin

9.20-9.40: G. PODLIPNIK, T. MUHIĆ, *LTH Castings d.o.o., Ljubljana, Škofja Loka* (SI)*,* **Al-cast parts with cold welding technique /** Spajanje Al ulitkov z varjenjem v hladnem

9.40-10.00: W.K. KRAJEWSKI1, J. BURAŚ1, G. PIWOWARSKI1, P.K. KRAJEWSKI1, A.L. GREER2, K. FAERBER3, P. SCHUMACHER3, *1AGH University of Science and Technology, Faculty of Foundry Engineering, Krakow,* (PL), *2University of Cambridge, Department of Materials Science and Metallurgy, Cambridge,* (UK), *3University of Leoben, Department of Metallurgy, Leoben,* (AU): **Processing of molten aluminium-zinc based cast alloys** / Obdelava staljenih Al–Zn livarskih zlitin

10.00-10.15:Odmor **/ Brake**

10.15-10.35: B. MARKOLI, B. LESKOVAR, I. NAGLIČ , *Univerza v Ljubljani,   
 Naravoslovotehniška fakulteta* (SI): **Development of high-strength   
 quasicrystalline Al-based alloys via casting into permanent mould/** Razvoj visokotrdnih kvazikristalnih Al-zlitin s postopkom litja v kovinsko kokilo

10.35-10.55: F. ZUPANIČ1, T. BONČINA1, C. GSPAN2, *1 University of Maribor, Faculty of Mechanical Engineering* (SI), *2* [*Institut für Elektronenmikroskopie und Nanoanalytik*](https://online.tugraz.at/tug_online/webnav.navigate_to?corg=3390&cperson_nr=52512)*, Graz*, (AT): **Precipitates in an aluminium quasicrystalline alloy** / Izločki v aluminijevi kvazikristalni zlitini

10.55-11.15: Z. Z. BRODARAC1, J. KALINIĆ2, V. ŠUICA1, *1University of Zagreb, Faculty of Metallurgy, Sisak, 2Jajce Alloy Wheels Ltd, Jajce* (BIH), *1University of Zagreb, Faculty of Metallurgy, Sisak* (HR): **Solidification sequence of AlSi11 alloy** / Potek strjevanja AlSi11 zlitine

11.15-11.30: **Odmor / Brake**

* + - 1. R. RUDOLF 1,2 , *1University of Maribor,Faculty of mechanical Engineering,2Zlatarna Celje* (SI): **Gold nanoparticles –Properties, Synthesis and Application/** Au-nanodelci-lastnosti, sinteza,uporaba

11.50-12.10: N. M. TALIJAN1, V. R. ĆOSOVIĆ1, A. R. ĆOSOVIĆ2, D. T. ŽIVKOVIĆ3,   
 *1University of Belgrade, Institute of Chemistry, Technology and Metallurgy, Beograd, Serbia, 2Institute for Technology of Nuclear and Other Mineral Raw Materials, Belgrade, Serbia, 3Technical Faculty in Bor, University of Belgrade, Bor, Serbia* (SRB)*:* **Innovative approach on improvement of metal oxide dispersion and structure dependent properties of Cd free silver/metal oxide electrical contact materials** / Inovativni pristop k izboljšanju razpršenosti kovinskih oksidov in strukturno odvisnih lastnosti materialov za električne kontakte na osnovi srebro/kovinski oksidi

12.10-12.30: M. ZEYVELI, Y. TÜREN, *Karabuk University, Faculty of Technology,   
 Department of Mechatronic Engineering* (TR): **Investigation of the effects of cooling rate and cutting parameters on the machinability of the ecobrass** / Raziskava vpliva ohlajevalne hitrosti in parametrov odrezavanja na obdelovalnost ekološke medi

12.30-12.45: Odmor **/ Brake**

12.45-13.05: J. PRISTAVEC1, H. ROCKMANN2, *1EXOTERM-IT d.o.o., Kranj* (SI), *MAGMA GmbH, Aachen* (D): **Finding causes of crack occurrence at   
 automotive wheels with the use of numerical simulation of the complete production cycle** / Iskanje vzrokov za pojav razpok na avtomobilskih platiščih z uporabo numeričnih simulacij celotnega proizvodnega cikla

13.05-13.25: U. GAUERMANN, *Electronic GmbH, Neuhausen* (D): **Cost reduction by   
 using process data systems** / Zmanjšanje stroškov z uporabo sistemov   
 procesnih podatkov

13.25-13.45: K. DILGER, H. PRIES, S. MULLER*, Braunschweig University of   
 Technology, Braunschweig* (D): **Prediction of thermal fatigue life for   
 aluminium die casting moulds by experimental and computational methods** / Eksperimentalno in numerično napovedovanje življenjske dobe pri toplotni obremenitvi orodji za tlačno litje aluminijevih zlitin

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| **Posterske predstavitve / Poster presentations** |

1. G. TIMELLI, A. GUGLIELMI, D. CALIARI, *University of Padova, Department of Management and Engineering, Vicenza* (IT): **Effects of process parameters on the microstructure and casting defects of a LPDC engine block** / Vpliv procesnih parametrov na mikrostrukturo in livarske napake pri LPDC bloku motorja
2. D. CALIARI, G. TIMELLI, *University of Padova, Department of Management and Engineering, Vicenza* (IT): **Characterization of anodic oxide film formed on HPDC components** / Karakteristike oksidnega anodnega filma nastalega na HPDC komponentah
3. D. PIHURA1, D. MUJAGIĆ2, D. NOVIĆ3, *1Ljevari BiH”, Zenica, BiH, 2University   
   Zenica, Metallurgical institute “K. Kapetanović”, Zenica,* (BIH), *3Energoinvest,   
   Sarajevo*, (BIH): **Bringing pilot plant knowledge to foundry platform** / Prenosznanja pilotnih naprav na nivo livarn
4. Y. SUN, S. YILMAZ, H. KOÇAK, M. ACARER, H. AHLATCI, Y. TUREN, *Departments of Metallurgical and Materials Engineering, Engineering Faculty, Karabuk University* (TR): **Effect of Aging Heat Treatment on Mechanical Properties of Cupro NSS Alloys Produced by Casting** / Vpliv toplotne obdelave za staranje na mehanske lastnosti Cupro NSS zlitin proizvedenih z litjem
5. M. ÜNAL, H. A. GÖREN, E. KOC, *Karabuk University, Technology Faculty, Karabuk* (TR): **An investigation on cooling rates as a function of Si content of AZ91 magnesium alloy** / Vpliv ohlajevalnih hitrosti kot funkcija količine Si v AZ91 magnezijevi zlitini
6. Y. TUREN, M. M. YILDIRIM, M ACARER, H. AHLATCI, Y. SUN, M. UNAL, *Karabuk University, Engineerung Faculty, Department of Metallurgical and Materials Egineering, Karabuk* (TR): **The effect of silicon content on microstructure and mechanical properties of lead-free brass casting alloys** / Vpliv vsebnosti Si na mikrostrukturo in mehanske lastnosti medene livarske zlitine brez svinca
7. H. AHLATCI, H. CUG, H. ZENGIN, Y. TUREN, Y. SUN, M. ACARER, *Karabuk University,* *Engineerung Faculty, Department of Metallurgical and Materials Egineering, Karabuk* (TR): **The effect of manganese content on wear properties of AS41 magnesium casting alloys** / Vpliv vsebnosti mangana na obrabne lastnosti AS41 magnezijeve livne zlitine
8. M. ACARER, G. ARICI, F. AYDIN, M. UYANER, M. COLAK, R.KAYIKCI, *Selcuk   
    University, Technology Faculty, Konya* (TR): **Production of 3Cr-3W Steel by   
    Investment Casting** / Izdelava 3Cr-3W jekla s precizijskim litjem
9. M. PETRIČ1, J. MEDVED1, S. KASTELIC2, A. KRIŽMAN3,P. MRVAR1,   
   *1Univerza v Ljubljani, Naravoslovnotehniška fakulteta, 2TC Livarstvo Ljubljana 3Univerza v Mariboru* (SI): **Measurement of dimensional changes of AlSi alloys during solidification /** Meritve dimenzijskih sprememb med strjevanjem Al-Si zlitin
10. M. VONČINA , V TUBIN, P. MRVAR, J. MEDVED , *Univerza v Ljubljani, Naravoslovnotehniška fakulteta* (SI): **Bonding of AA 1170 and AA 6060 alloys /** Spajanje zlitin A31 in A6060
11. A.KRIŽAJ1, M.SVETLIN1, A.MAHMUTOVIĆ2, P.MRVAR3, *1Livarna Titan d.o.o., 2TC Livarstvo d.o.o., 3Univerza v Ljubljani, Naravoslovnotehniška fakulteta* (SI): **Master of casting of connection heads from white malleable cast iron** / Obvaldovanje ulivanja priključnih glav iz bele temprane litine