

Program

27.4.2022 - streda

13:30 – 15.00 **Registrácia účastníkov**

14.00 – 15.00 **Obed**

15.00 – 15.15 **Zahájenie konferencie odbornými garantmi:**

prof. Dana Bolibruchová,

prof. Katarzyna Major-Gabryś,

doc. Petr Lichý

15.20 – 16.30 **Plenárna sekcia**

dr hab. inž. Jarosław Jakubski, prof. (AGH Kraków)

ANALYSIS OF ELASTICITY OF CORE SANDS MADE IN THE COLD-BOX TECHNOLOGY

Ing. Ivana Kroupová, Ph.D. (VŠB Ostrava)

TECHNOLOGY OF PRODUCTION OF MOULD FILLING MATERIAL FOR SPECIFIC PURPOSES IN THE FIELD OF METALLIC FOAM CASTING

Ing. Marek Matejka, PhD. (ŽU, Žilina)

INTERNAL QUALITY OF ALUMINUM CASTING PRODUCED BY HIGH-PRESSURE DIE CASTING

dr hab. inž. Jan Jezierski, prof. PŚ (Politechnika Śląska)

OPTIMUM PATTERN COATING SELECTION FOR THE FULL-MOULD METHOD TO CAST HEAVY DUCTILE IRON CASTINGS

16.30 – 18.45

**Sekcia I - sekcii riadia: *dr. Jadwiga Kamińska*
*doc. Richard Pastirčák***

prof. Ing. Alexander Čaus, DrSc (MTF v Trnave, STU)

MICROSTRUCTURE AND PROPERTIES EVALUATION OF DUCTILE CAST IRON SUBJECTED TO HOT PLASTIC DEFORMATION AND AMBIENT TEMPERATURE COMPRESSION

dr hab. inž. Monika Madej, Prof. (Politechnika Świętokrzyska)

CASTING MODIFICATION BY SURFACING WITH WEAR-RESISTANT COATINGS

dr Inž. Justyna Kasińska (Politechnika Świętokrzyska)

INFLUENCE OF RARE EARTH METAL OXIDE ADDITION ON THE MICROSTRUCTURE AND SELECTED PROPERTIES OF WEAR-RESISTANT PAD WELDS

16.45 – 17.00

Prestávka - Coffee break

Ph.D. D.Sc. Eng. Paweł Malinowski, prof. (AGH Kraków)

MACHINE LEARNING IN FOUNDRY

dr inž. Rafał Cygan (Consolidated Precision Products)

TECHNOLOGY PROBLEMS OF AIRCRAFT HPT GAS TURBINE AIRFOIL BLADES WITH INTERNAL COOLING SYSTEM REPRODUCED WITH MONOLITHIC CERAMIC CORES

Ing. Vladimír Krutiš, Ph.D. (VUT Brno)

METHODS FOR MEASURING THE PROPERTIES OF CERAMIC CORES UNDER THERMAL LOADING

Ing. Petr Bořil (VUT Brno)

IMPROVEMENT OF MECHANICAL PROPERTIES OF CAST CERAMIC CORES BASED ON ETHYLSILICATE

Ing. Martin Frátrik (ŽU, Žilina)

INFLUENCE OF WELDING PARAMETERS OF BEAM WELDING TECHNOLOGIES ON THE PROPERTIES OF WELDED JOINTS OF HSLA STEELS

19.30

Spoločenský večer (Dress code: semi formal)

28.4.2022 - štvrtok

9,00 - 10,45

**Sekcia II - sekciu riadia: *prof. Jan Jezierski*
*prof. Alexander Čaus***

Ing. Martina Sýkorová (ŽU, Žilina)

AGE HARDENING TEMPERATURE AND ITS EFFECT ON SELECTED PROPERTIES OF Zr CONTAINING AISi5Cu2Mg ALLOY

Ing. Filip Radkovský, Ph.D. (VŠB Ostrava)

EVALUATION OF THE EFFECT OF EXTERNAL CONDITIONS DURING CRYSTALLIZATION AND SOLIDIFICATION ON THE FINAL STRUCTURE OF AISi7Mg

dr inż. Jadwiga Kamińska (ŁUKASIEWICZ Research Network - Krakowski Instytut Technologiczny)

THE EFFECT OF ZIRCONIUM AS AN ALLOYING ADDITIVE ON THE MICROSTRUCTURE AND PROPERTIES OF AISi9Mg ALLOY

Ing. Marek Galčík (ŽU, Žilina)

EFFECT OF FILTER TYPE ON MECHANICAL PROPERTIES DURING ALUMINUM ALLOY CASTING

Ing. Lukáš Širanec (ŽU, Žilina)

EFFECT OF ZR ON SELECTED PROPERTIES OF ALUMINIUM ALLOY INTENDED FOR AUTOMOTIVE APPLICATIONS

Dr. Ing. Marko Grzinčič (DETYCON Solutions s.r.o.)

ŘÍZENÉ TUHNUTÍ SLÉVÁRENSKÝCH SLITIN S VYUŽITÍM NÁSTROJE METALURGIE DIFERENČNÍ TERMICKÉ ANALÝZY A KELÍMKŮ AccuVo

Ing. Lucia Pastierovičová (ŽU, Žilina)

INVESTIGATION OF SELF-HARDENING ALUMINIUM ALLOYS FOR THE PRODUCTION OF AUTOMOTIVE CASTING

dr hab. inż. Joanna Borowiecka-Jamrozek, prof. (Politechnika Świętokrzyska)

EFFECT OF ZEOLITE ADDITION ON THE PRODUCTION OF A CAST POROUS COMPOSITE BASED ON AC-AISi11 SILUMIN

10.45 – 11.00

Prestávka - Coffee break

11.00 – 12.40

**Sekcia III - sekciu riadia: *prof. Monika Madej*
*doc. Marek Brůna***

dr hab. inż. Tomasz Wróbel, prof. PŚ (Politechnika Śląska)

MICROSTRUCTURE AND USABLE PROPERTIES OF DUPLEX CAST STEEL GX2CrNiMoCuN 25-6-3-3 GRADE

dr hab. inż. Dawid Myszk, prof. uczelni (Politechnika Warszawska)

INFLUENCE OF TUNGSTEN ON THE STRUCTURE AND PROPERTIES OF AUSFERRITIC DUCTILE IRON

Ing. Alan Vaško, PhD. (ŽU, Žilina)

FATIGUE RESISTANCE OF NiMn-TYPE OF AUSTENITIC NODULAR CAST IRON

doc. Ing. Břetislav Skrbek, CSc. (Technická univerzita v Liberci)

DESKY SEDEL LITINOVÝCH HLAV VÁLCŮ PLYNOVÝCH PÍSTOVÝCH MOTORŮ

Ing. Martin Myška (VUT Brno)

PRECIPITATION OF SIGMA AND CHI PHASES IN CAST STANDARD DUPLEX STAINLESS STEEL

mgr inż. Michał Angrecki (Krakowski Instytut Technologiczny)

PHYSICAL AND CHEMICAL PROPERTIES OF RECLAIMED FURAN RESIN SANDS USED AS A SPRINKLING MATERIAL FOR MULTI-LAYER CERAMIC MOULDS

Ing. Václav Merta (VŠB Ostrava)

POLYURETHANE FOAM PATTERN MODIFICATION POSSIBILITIES IN THE TECHNOLOGY OF METAL FOAM PRODUCTION BY TWO-STAGE INVESTMENT CASTING PROCESS

Ing. Martina Gawronová (VŠB Ostrava)

MULLING AND ITS EFFECT ON THE PROPERTIES OF SAND-WATER-BENTONITE MOULDING MIXTURES

29.4.2022 – Piatok

13.00 – 14.00 **Obed**

14.30 – 16.30 **Výlet**

- Čičmany
- Hrad Lietava – turistické oblečenie

Wellness

16.30 – 17.00 **Coffee break**

19.30 **Večera, posedenie zlievačov**
(Dress Code: casual)

9,00 - 10,00 **Sekcia IV - sekciu riadia: *dr. Ivana Kroupová***
doc. Miloš Mičian

Ing. Elena Kantoríková, PhD. (ŽU, Žilina)
CHEMICAL HEAT TREATMENT OF STEEL SURFACE 16MnCr5

doc. Ing. Iveta Vasková, PhD. (TU, Košice)
INFLUENCE THE COMPOSITION OF THE CORE MIXTURE TO THE
OCCURRENCE OF VEININGS ON CASTINGS OF CORES PRODUCED BY
COLD-BOX-AMINE TECHNOLOGY

doc. Ing. Richard Pastirčák, PhD. (ŽU, Žilina)
SQUEEZE CASTING OF ALUMINIUM ALLOYS

10.15 – 10.30 **Slávnostné ukončenie konferencie**

Informácia pre prednášajúcich:

Doba prednášania - Plenárna sekcia 15 min.
 - Ostatné sekcie 10 min.

Poznámka ku covid opatreniam:

Odporúčania hlavného hygienika SR na prevenciu a zamedzenie šírenia ochorenia COVID-19 budú zverejnené krátko pred začiatkom konferencie.

V súčasnosti nie je potrebné dokladovať očkovanie ani negatívne testy; v interiéri sa vyžaduje nosenie respirátorov FFP2.

Comment on covid measures:

The recommendations of the Chief Hygienist of the Slovak Republic for the prevention and prevention of the spread of COVID-19 will be published shortly before the beginning of the conference.

At present, there is no need to document vaccinations or negative test; and FFP2 respirators are required indoors.