

Meeting Program

Sunday, June 5th

15:00-19:00	Registration
19:00-20:00	Dinner
20:00-	Welcoming Party

Monday, June 6th

7:30-9:00	Breakfast
9:00-9:10	Opening Ceremony
9:10-9:50	Invited Keynote Lecture: prof. Ian Baker - Microstructures and Mechanical Properties of FeNiMnAl Alloys
9:50-10:30	Invited Keynote Lecture: prof. Krzysztof J. Kurzydłowski - Design of Advanced Materials
10:30-11:00	Coffee Break

11:00-13:30	<p>Plenary Session Topic B</p> <p>Advanced thermal, mechanical and chemical processing and surface engineering</p> <p>Chairmen: T.Kulik and B.Major</p>	
	IS1.	prof. Boris Straumal et al., <i>Phase Transformations Driven by the High Pressure Torsion</i>
	BO1.	Cempura G., Rutkowski B., Jelita Rydel J., Cieszynski K., Czyrska-Filemonowicz A., <i>Microstructural evolution of HR6W alloy during ageing at high temperatures</i>
	BO2.	
	BO3.	Kokosza A., Pacyna J., <i>Effect of austenitising temperature on the kinetics of phase transformations in low carbon TRIP steel</i>
	BO4.	Kotowski S., Nowotnik A., <i>The application of tumble finishing in surface preparation process for deposition of TBC coatings</i>
	BO5.	Krawczyk J., Kokosza A., Pacyna J., Madej M., <i>Tribological and material utility aspects of mill rolls for cold rolling</i>
11:00-13:30	<p>Plenary Session Topic D</p> <p>Materials applications: materials for transportation, materials for electronics, biomaterials and bioengineering, materials for energy harvesting</p> <p>Chairmen: A.Frączkiewicz and J.Pacyna</p>	
	IS2.	prof. Andrzej Całka, <i>Electric Discharge Assisted Mechanical Milling - NOVEL Technology for Synthesis and Processing of</i>

		Materials
	DO1.	Czyż K., Marczak J., Wachulak P., Major R., Mzyk A., Rycyk A., Sarzyński A., Strzelec M., <i>Surface topography elaborated by prism optics based laser modification, influencing on cellular differentiation</i>
	DO2.	Kucharska B., Szumiata M., Sobiecki J. R., <i>The effect of self-lubricated solid phase on the microstructure and tribological properties of Ni-MoS₂ composite coatings produced by electrochemical method</i>
	DO3.	Maj P., Romelczyk B., Mizera J., <i>Mechanical properties of aircraft turbine component made of a nickel super alloy INCONEL 625 obtained in the of laser assisted metal spinning forming process</i>
	DO4.	Major Ł., Lackner J. M., Janusz M., Kot M., Major B., <i>Biomimetic, bio-tribological multilayer coatings design and their multiscale characterization</i>
	DO5.	Major R., Wilczek P., Sanak M., <i>Surface drug carrier system dedicated to the inhibition of human blood clotting process</i>
13:30-15:00		Lunch
15:00-17:00	<p style="text-align: center;">Plenary Session Topic B</p> <p style="text-align: center;">Advanced thermal, mechanical and chemical processing and surface engineering</p> <p style="text-align: center;">Chairmen: E.Zschech and D.Oleszak</p>	
	IS3.	prof. Dariusz Kata et al., <i>AlN-graphen nanocomposites – versatile but challenging material</i>
	BO6.	Serbiński W., Gajowiec G., Szoka A., Zieliński A., <i>Effects of oxidation temperature on morphology of oxide layers on the zircalloy-2 alloy</i>
	BO7.	Sułkowski B., <i>Structure and properties of AZ61 and AZ91 hot rolled at high strain rate</i>
	BO8.	Wierzchoń T., Trojanowski J., Drobek A., <i>The physical metallurgy characteristics and resistance properties of steel 32CDV13 after nitriding processes as a perspective technology for use in the aerospace industry</i>
	BO9.	LOT – Quantum Design GmbH presentation
15:00-17:00	<p style="text-align: center;">Plenary Session Topic D</p> <p style="text-align: center;">Materials applications: materials for transportation, materials for electronics, biomaterials and bioengineering, materials for energy harvesting</p> <p style="text-align: center;">Chairmen: P.Zięba and D.Myszka</p>	
	IS4.	prof. Robert A. Varin, <i>Complex Hydride Systems for Energy Generation, Storage and Conversion</i>
	DO6.	Mzyk A., Major R., Lackner J. M., Wilczek P., Lipińska L., Niemiec-Cyganek A., Samotus A., Morenc M., Major B., <i>Polyelectrolyte Multilayer Films modification for chemo-mechano-regulation of endothelial cells' response</i>
	DO7.	Shirani Bidabadi A., Varin R. A., Polański M., <i>Synthesis of disordered titanium borohydride (d-Ti(BH₄)₃) and its dehydrogenation behavior</i>

	DO8.	Wojewoda-Budka J., Wierzbicka-Miernik A., Lityńska-Dobrzyńska L., Szczerba M. J., Sypien A., Mordarski G., Mosialek M., Zieba P., <i>Influence of rhenium addition to the Ni-P coatings electroless deposited on copper</i>
	DO9.	COMEF presentation
17:00-19:00	Poster session (All Topics)	
19:00-	Social evening - barbecue	
Tuesday, June 7th		
7:30-9:00	Breakfast	
9:00-11:00	Plenary Session Topic A Functional and structural materials Chairmen: M.Demura and M.Lewandowska	
	IS5.	prof. Masahiko Demura, <i>Development of nickel aluminide foils: cold rolling, recrystallization, and "texture memory effect"</i>
	AO1.	Chulist R., Szczerba M. J., Faryna M., Asymmetric distribution of martensitic variants in NM Ni-Mn-Ga alloys: In-situ study
	AO2.	Gajda D., Morawski A., Zaleski A., Cetner T., Tomsic M., Rindfleisch M., Haßler W., Nenkov K., Czujko T., <i>Influence of HIP process on structure and the critical parameters of MgB₂ wires</i>
	AO3.	Kędzierski P., Stanisławek S., Niezgoda T., Miedzińska D., Comparative fracturing of gneissic samples with fluids of different viscosity
	AO4.	Maziarz W., Wójcik A., Czaja P., Szczerba M., Żywczak A., Dutkiewicz J., Cesari E., Magneto-structural transformations in Ni ₅₀ Mn _{37.5} Sn _{12.5-x} Ge _x (x=0, 1, 2, 3) Heusler powders
9:00-11:00	Plenary Session Topic C Materials characterization and modeling on all length scale Chairmen: B.Straumal and J.Lis	
	IS6.	prof. Ehrenfried Zschech, <i>Nano X-ray Tomography – A Novel Technique for Materials Development</i>
	CO1.	
	CO2.	Bieda M., Jarzębska A., Koprowski P., Kawalko J., Sztwiertnia K., <i>Microstructural investigations of materials after plastic deformation by means of in-situ annealing and orientation mapping in TEM and SEM</i>
	CO3.	Bobrowski P., Faryna M., Pędzich Z., Bućko M. M., <i>On correlation between microstructure and ionic conductivity in cubic zirconia polycrystals</i>
	CO4.	Czeppe T., Sypien A., Garzel G., Stoica M., <i>Influence of small Sn additions on the thermomechanical properties and microhardness of</i>

		$Ti_{40}Zr_{10}Cu_{36-x}Pd_{14}Sn_x$ amorphous alloys
11:00-11:30	Coffee Break	
11:30-13:30	Plenary Session Topic A Functional and structural materials Chairmen: W.Gąsior and D.Kata	
	IS7.	prof. Jerzy Lis et al., Processing of MAX Phase Materials using Combustion Technique
	AO5.	Miszczyk M. M., Paul H., Driver J.H., Recrystallization texture formation during annealing in stable FCC single crystals
	AO6.	Morgiel J., Jaworska L., Major Ł., Klimczyk P., Szlezynger M., Microstructure and mechanical properties of SPS alumina with graphene
	AO7.	Oleszak D., Mechanical alloying of garnet type c-LLZO powders
	AO8.	Szczerba M. J., Chulist R., Maziarz W., Detwinning of non-modulated martensite variants in a Ni-Mn-Ga alloy
11:30-13:30	Plenary Session Topic C Materials characterization and modeling on all length scale Chairmen: J.Morgiel and J.R.Sobiecki	
	IS8.	prof. Russell Goodall et al., Mesostructured materials; Designing Porosity in Metals to Tailor Properties
	CO5.	Bazarnik P., Cantoni M., Śniezek L., Lewandowska M., Structure and chemical composition of Ti6Al4V-AA2519 composite obtained by explosive welding
	CO6.	Kudłacz K., TEM-based orientation mapping
	CO7.	Rauh G., Harris A., Beake B., Nanomechanical testing to 950 °C
	CO8.	Rutkowski B., Gil A., Ratuszek W., Czyrska-Filemonowicz A., The microstructure of the Sanicro 25 steel after steam oxidation studied by advanced electron microscopy and spectroscopy methods
13:30-15:00	Lunch	
15:00-17:00	Plenary Session Topic C Materials characterization and modeling on all length scale Chairmen: J.Lelaćko and J.Janiszewski	
	IS9.	prof. Anna Frączkiewicz et al., DEVELOPMENT OF HIGH STRENGTH AUSTENITIC HEA STEELS OF CoCrFeMnNi FAMILY
	CO9.	Senatorski J., Tacikowski J., Mączyński P., Descriptions and tribological properties of diffusion layers producing on the steel
	CO10.	Siemiaszko D., Nowakowska I., Komorek Z., The influence of heating rate on plastic properties at room temperature of Fe40Al sinters
	CO11.	Skolek E., Wasiluk K., Świątnicki W., Myszka D., The microstructure of the ductile iron after austempering heat treatment - the time

		<i>influence</i>
	CO12.	Stan-Głowińska K., Rogal Ł., Góral A., Wierzbicka-Miernik A., Wojewoda-Budka J., Lityńska-Dobrzyńska L., <i>Quasicrystalline phase formation in the Al-Mn and Al-Mn-Fe alloys prepared by casting with various cooling rates</i>
15:00-17:00	<p style="text-align: center;">Plenary Session Topic E Young researchers - Advanced materials and technologies Chairmen: D.Stróż and A.Całka</p>	
	EO1.	Hara A., Kazimierczak H., Ozga P., <i>The corrosion resistance of Zn-Mo layers electrodeposited with the presence of various chemical organic compounds intended as a substrate for graphene layer</i>
	EO2.	Ciołek S., Józwiak S., Karczewski K., <i>Selection of production parameters FeAl based intermetallic composites reinforced with Al₂O₃ particles</i>
	EO3.	Frocisz Ł, Krawczyk J., Dziurka R., Górecki K., Cios G., Gondek Ł., Skawińska M., <i>Microstructural and phase characterization of the Ti-Al intermetallic alloy</i>
	EO4.	Fronczek D. M., Chulist R., Litynska-Dobrzynska L, Szulc Z., Zieba P., Wojewoda-Budka J., <i>Microstructure characterization of Al/Mg/Al explosively welded platters with particular attention to phase composition of their interfaces</i>
	EO5.	Grzywna P., Kopeć M., Kukła D., Kowalewski Z., <i>Evaluation of the fatigue damage development using ESPI method</i>
17:00-17:30	Coffee Break	
17:30-19:30	<p style="text-align: center;">Plenary Session Topic E Young researchers - Advanced materials and technologies Chairmen: S.Dymek and A.Zieliński</p>	
	EO6.	
	EO7.	Jakubowska J., Węglewski W., Bochenek K., Kasiarova M., Dusza J., Basista M., <i>Effect of microstructure and thermal residual stresses on fracture behaviour of metal-ceramic composites</i>
	EO8.	Janusz M., Major Ł., Kot M., Lackner J. M., <i>Bio-tribological and microstructure characterization of the diamond like carbon (DLC or a-C:H) coatings reinforced by metallic nano-particles</i>
	EO9.	Jarzębska A., Bieda M., Kawałko J., Berent K., Rogal Ł., Sztwiertnia K., Piela K., Pachla W., <i>Effect of high plastic deformation on microstructure and mechanical properties of zinc alloys with magnesium</i>
EO10.	Koprowski P., Bieda M., Boczek S., Ostachowski P., Kudłacz K., Czeppe T., Maziarz W., Piela K., Sztwiertnia K., <i>Influence of KoBo extrusion at various parameters on microstructure of AA6013 aluminum alloy</i>	
20:00-	Gala Dinner	

Wednesday, June 8th

7:30-9:00	Breakfast
9:00-11:00	Plenary Session Topic E Young researchers - Advanced materials and technologies Chairmen: J.Wojewoda-Budka and Z.Pakieta
	EO11. Maj Ł., Morgiel J., Szlezynger M., Pomorska M., <i>Bonding of Ti-6Al-4V alloys with use of Ti/Al nanometric multilayers</i>
	EO12. Mitka M., Góral A., Lityńska-Dobrzyńska L., <i>Influence of Si addition on formation and thermal stability of quasicrystalline phase in Al-Cu-Fe mechanically alloyed powder</i>
	EO13. Skrzypek S., Bolanowski K., Nawojowski K., <i>Thermal Cycling Activated Microplasticity in Zr2.5Nb Alloy</i>
	EO14. Słupska M., Ozga P., Bigos A., <i>The effect of pulse current on the process of electrodeposition of Sn-Zn-Cu alloys</i>
	EO15. Solecka M., Radziszewska A., Kopia A., Kusiński J., <i>Investigation of Ni-base coatings after corrosion test</i>
11:00-11:30	Coffee Break
11:30-14:00	Plenary Session Topic E Young researchers - Advanced materials and technologies Chairmen: R.A.Varin and Z.Bojar
	EO16. Stróż A., Dercz G., Chmiela B., Goryczka T., <i>Synthesis and characterization of TiO2 nanotubes on biomedical Ti13Nb13Zr alloy</i>
	EO17. Szymanska J., Wisniewski P., Malek M., Mizera J., <i>Determination of the suitability of ceramic proppants obtained by the mechanical granulation method with polymer binders addition</i>
	EO18. Szymański M., Michalski B., Leonowicz M., Miazga Z., <i>Insights into HDDR process applied to Nd-Fe-B magnets</i>
	EO19. Wieczerzak K., Bała P., Cios G., <i>Effect of nickel addition on microstructure of new in-situ composites from the Fe-Cr-Ni-Mo-C system</i>
	EO20. Wójcik A., Szczerba M., Sikora M., Chernenko V., Cesari E., Dutkiewicz J., Aguilar-Ortiz Ch., Flores-Zuñiga H., Maziarz W., <i>Microstructure, magneto-structural transitions and magnetocaloric properties in Cu-doped Ni44-xCuxCo6Mn39Sn11 Heusler ribbons</i>
	EO21. Wysocki B., Buhagiar J., Cassar G., Maj P., Krawczyńska A., Kurzydłowski K. J., Święzkowski W., <i>Characterization of Ti-6Al-4V alloy processed by SLM and EBM technologies</i>
14:00-14:30	Closing Remarks
14:30	Lunch