

Scientific Program

	SUN	MON				TUE				WED				THU	FRI
	(07-03)	(07-04)				(07-05)				(07-06)				(07-07)	(07-08)
	A	A	B	C	Poster	A	B	C	Poster	A	B	C	Poster	A	A
08:30 09:00		Opening Ceremony				Registration				Registration					
09:00 09:40		Plenary Lecture (Prof. Z. Zak Fang) Chairman : Prof. Jai-Sung Lee				Plenary Lecture (Prof. Suk-Joong L. Kang) Chairman : Dr. Ma Qian				Plenary lecture (Prof. Hikaru Kobayashi) Chairman : Dr. Mohammad Farvizi					
09:40 10:20		Plenary Lecture (Dr. Akos Horvath) Chairman : Prof. Pawel Zieba				Plenary Lecture (Prof. Dr. Jan Dusza) Chairman : Prof. Soon Hyung Hong				Plenary Lecture (Prof. Guoxiu Wang) Chairman : Prof. Young Do Kim					
10:20 10:40		Coffee Break				Coffee Break				Coffee Break					
10:40 12:10		Advanced Powder Metallurgy I (APM: K1, I1-I3) Chairman : Prof. Jan Kazior Dr. Yong-Jin Kim	Advanced Materials Processing I (AMP: K1, I1, O1, O2) Chairman : Prof. Guoxiu Wang	Characterization and Modeling I (CAM: I1-I3, O1) Chairman : Prof. Hamed Asgharzadeh	Poster	Novel Functional Materials I (NFM: I1, O1-O4) Chairman : Dr. Min-Ha Lee	MIM and Additive Manufacturing (3D Printing) (MIM: K1, I1, O1) Chairman: Dr. Ji-Hun Yu	Energy Materials (EGM: K1, O1, O2) Chairman : Prof. Il-Kyu Park	Poster	Rare Metals and Recycling I (RMR: I1-I3, O1, O2) Chairman : Dr. Ryan Ott Dr. Jung-Goo Lee	Refractory Metals and Hard Materials I (RMH: K1, O1-O4) Chairman : Prof. Young Do Kim Prof. Jean-Michel Mesiaen	Nanocomposites and Nanoporous Materials I (NNP: I1, O1, O2) Chairman : Prof. Seung Nam Cha			
12:10 13:30		Lunch				Lunch				Lunch					
13:30 15:00		Advanced Powder Metallurgy II (APM: K2, O1-O4) Chairman : Prof. Ji Soon Kim Dr. Haris Rudanto	Advanced Materials Processing II (AMP: K2, I2, O3, O4) Chairman : Prof. Kee-Ahn Lee	Characterization and Modeling II (CAM: I4-I6, O2) Chairman : Prof. Mohammad Farvizi	Poster (APM, AMP, CAM, MAM) Chairman : Dr. Chang Kyu Rhee	Novel Functional Materials II (NFM: O5, O6) Chairman : Dr. Chan-Gi Lee	Young Scientist session I Chairman : Dr. Jan Dusza Prof. Ji Soon Kim	Young Scientist session II Chairman : Dr. Akos Horvath Prof. Taesuk Jang	Poster (NFM, MIM, EGM)	Rare Metals and Recycling II (RMR: I4, I5, O3, O4) Chairman : Prof. Tadeusz Pieczonka Dr. Bum Sung Kim	Refractory Metals and Hard Materials II (RMH: K2, O5-O8) Chairman : Dr. Alan J. Hurd Dr. Min-Ha Lee	Nanocomposites and Nanoporous Materials II (NNP: O3, O4, O5) Chairman : Prof. Dayang Wang Prof. Il-Kyu Park	Poster (RMR, RMH, NNP) Chairman : Dr. Chang Kyu Rhee	Technical Tour	Panel Discussion
15:00 15:20		Coffee Break				Coffee Break				Coffee Break					
15:20 16:50	Registration	Mechanical Alloying and Mechanochemistry (MAM: O1-O3) Chairman : Prof. Stanislaw Dymek Prof. Jung-Ho Ahn	Advanced Materials Processing III (AMP: O5-O10) Chairman : Prof. Yong-Gyu Choi	Characterization and Modeling III (CAM: I7, I8, O3-O5) Chairman : Prof. Hyung Seop Kim	Poster (APM, AMP, CAM, MAM) Chairman : Dr. Chang Kyu Rhee							Nanocomposites and Nanoporous Materials III (NNP: K1, I2, I3) Chairman : Prof. Bin Zhang Prof. Hyo-Jin Ahn	Poster (RMR, RMH, NNP) Chairman : Dr. Chang Kyu Rhee		
16:50 18:00		Friendship Dinner				Friendship Dinner				Friendship Dinner					
18:00 20:00	Welcome Reception -HOTEL HELIA	Friendship Dinner				Friendship Dinner				Gala Dinner					

Symposium Schedule

2016. 7. 03 (Sun) Room A

- 15:00~18:00 **Registration**
 18:00~20:00 **Welcome Reception**

2016. 7. 04 (Mon) Room A

- 08:30-16:00 **Registration**
 08:30-09:00 **Opening Ceremony**
 Congratulatory Message : Prof. Taesuk Jang, Dr. Akos Horvath
- 09:00-09:40 **KPMI Plenary Lecture**
Chairman : Prof. Jai-Sung Lee (Hanyang University)
P-01 Coarsening, Densification, and Grain Growth during Sintering of Nano-sized Powders – A Perspective
 Prof. Z. Zak Fang (The University of Utah)
- 09:40-10:20 **Plenary Lecture**
Chairman : Dr. Pawel Zieba (Polish Academy of Sciences)
P-02 Radiation damage studies in the Budapest Neutron Centre
 Dr. Akos Horvath (HAS Centre for Energy Research)
- 10:20-10:40 **Coffee Break**
- 10:40-12:10 **Advanced Powder Metallurgy I**
Chairman : Dr. Yong-Jin Kim (Korean Institute of Materials Science)
 Prof. Jan Kazior (Krakow University of Technology)
- 10:40-11:10 **APM-K1** Powder Injection Molding of Multi-modal Type Nanopowder
 Prof. Jai-Sung Lee (Hanyang University)
- 11:10-11:30 **APM- I1** Advances in Powder Metallurgy Soft Magnetic Composite Materials
 Dr. Radovan Bures (Institute of Materials Research of SAS)
- 11:30-11:50 **APM- I2** In-situ Formation of TiB₂ Particulates in Fe Matrix from (FeB+TiH₂) Powder Mixture
 Prof. Ji Soon Kim (University of Ulsan)
- 11:50-12:10 **APM- I3** Effect of Ultrasonication Followed by Low Energy Ball Milling on Sintering
 Properties of CNT Reinforced Al-Zn-Mg-Cu Powder
 Dr. Haris Rudianto (Brno University of Technology)
- 12:10-13:30 **Lunch**
- 13:30-15:00 **Advanced Powder Metallurgy II**
Chairman : Prof. Ji Soon Kim (University of Ulsan)
 Dr. Haris Rudianto (Brno University of Technology)
- 13:30-14:00 **APM-K2** Sintering of 17-4 PH Stainless Steel Powder
 Prof. Jan Kazior (Krakow University of Technology)
- 14:00-14:15 **APM-O1** Cold Die Compaction of Titanium Powder with Lubricant and the As-sintered
 Tensile Mechanical Properties
 Prof. Ma Qian (RMIT University)
- 14:15-14:30 **APM-O2** Microstructure and Mechanical Properties of Fe-Al-TiC Composites Fabricated by In-situ Process
 Mr. Yong-In Kim (Hanyang University)
- 14:30-14:45 **APM-O3** High Speed Steel with Iron Additions Materials Sintered by SPS Method
 Dr. Marcin Madej (AGH University of Science and Technology)
- 14:45-15:00 **APM-O4** Effects of Additives on Liquid Phase Sintering of PM Stainless Steels
 Dr. Yong-Jin Kim (Korean Institute of Materials Science)
- 15:00-15:20 **Coffee Break**

- 15:20-16:05 **Mechanical Alloying and Mechanochemistry**
Chairman : Prof. Jung-Ho Ahn (Andong National University)
 Prof. Stanislaw Dymek (AGH University of Science and Technology)
- 15:20-15:35 **MAM-O1** Mechanochemical Synthesis of Molybdenum Silicides from the Blends of MoO₃, SiO₂ and Mg
 Ms. Didem Ovali Dondas (Istanbul Technical University)
- 15:35-15:50 **MAM-O2** The Effect of Additive Elements on the Properties of Mechanically Alloyed Fe-Y₂O₃ Alloys
 Prof. Jung-Ho Ahn (Andong National University)
- 15:50-16:05 **MAM-O3** Influence of Al₂O₃ Nanoparticles on Microstructure and Mechanical Properties of CoCrFeMnNi High Entropy Alloy
 Dr. Lukasz Rogal (Institute of Metallurgy and Materials Science, Polish Academy of Sciences)
- 17:00-20:00 **Friendship Dinner**

2016. 7. 04 (Mon)**Room B**

- 10:40-12:00 **Advanced Materials Processing I**
Chairman : Prof. Guoxiu Wang (University of Technology Sydney)
- 10:40-11:10 **AMP-K1** Fabrication Processes and Applications of Multi-functional Nanocomposites
 Prof. Soon Hyung Hong (Korea Advanced Institute of Science and Technology)
- 11:10-11:30 **AMP-I1** Surface Patterning of Chalcogenide Glass via Imprinting Process
 Prof. Yong Gyu Choi (Korea Aerospace University)
- 11:30-11:45 **AMP-O1** Processing of Aluminium by Hydrostatic Extrusion: Studies of Microstructure, Properties and Thermal Stability
 Prof. Beata Leszczynska-Madej (AGH University of Science and Technology)
- 11:45-12:00 **AMP-O2** Effect of Heat Treatment on the Microstructure and Tensile Deformation Behavior of Oxide Dispersion Strengthened Alloys Manufactured by Complex Milling Process
 Mr. Young-Kyun Kim (Andong National University)
- 12:10-13:30 **Lunch**
- 13:30-14:50 **Advanced Materials Processing II**
Chairman : Prof. Kee-Ahn Lee (Andong National University)
- 13:30-14:00 **AMP-K2** Discontinuous Reactions-Last Decade: Redivivus
 Prof. Pawel Zieba (Institute of Metallurgy and Materials Science, Polish Academy of Sciences)
- 14:00-14:20 **AMP-I2** The Synthesis and Characterization of Nano Ceria Coated with Si Oxide Using Hydrolysis Reaction of Liquid-glass
 Prof. Myungho Kong (Adama science and Technology University)
- 14:20-14:35 **AMP-O3** Enhancement in Electrical Resistivity of Submicron Ag-coated Cu Filler for Conductive Chip Bonding Paste Using a Surface-modifying Agent
 Ms. Eun Byeol Choi (Seoul National University of Science and Technology)
- 14:35-14:50 **AMP-O4** Swift Heavy Ions: A Versatile Tool for Nanoscale Modifications and Analysis
 Dr. Marko Karlusic (Ruder Boskovic Institute)
- 15:00-15:20 **Coffee Break**
- 15:20-16:50 **Advanced Materials Processing III**
Chairman : Prof. Yong-Gyu Choi (Korea Aerospace University)
- 15:20-15:35 **AMP-O5** Effect of Heat Treatment on Microstructure and Impact Toughness of Ti-6Al-4V Manufactured by Selective Laser Melting Process
 Prof. Kee-Ahn Lee (Andong National University)
- 15:35-15:50 **AMP-O6** High Temperature Oxidation Property of SiC Coating Layer Fabricated by Aerosol Deposition Process
 Mr. Gi-Su Ham (Andong National University)
- 15:50-16:05 **AMP-O7** Corrosion and Mechanical Properties of Low Temperature Carburized AISI316L Stainless Steels by Plasma Carburizing and Vacuum Carburizing
 Mr. Yeong-Ha Song (Korea Institute of Industrial Technology)

- 16:05-16:20 **AMP-08** Correlation between Surface Microstructure and Carburizing Behavior in AISI 316L Stainless Steel by Low Temperature Vacuum Carburizing
Mr. Kyu-Sik Kim (Korea Institute of Industrial Technology)
- 16:20-16:35 **AMP-09** Preparation of Porous Ni and Co Particles/Metal Foam as Catalysts for Hydrogenation Reaction
Ms. Dahee Park (Korea Institute of Material Science)
- 16:35-16:50 **AMP-10** Effect of Strut Thickness on High Temperature Compressive Property of Block-type Ni-Cr-Al Powder Porous Metal
Mr. Byung-Hun Kang (Andong National University)
- 17:00-20:00 **Friendship Dinner**

2016. 7. 04 (Mon)

Room C

- 10:40-12:10 **Characterization and Modeling I**
Chairman : Prof. Hamed Asgharzadeh (University of Tabriz)
- 10:40-11:05 **CAM-I1** Simulation and its Applications in Powder Injection Molding
Prof. Seong Jin Park (Pohang University of Science and Technology)
- 11:05-11:30 **CAM-I2** Hierarchic Architected Agglomerates of Hydrogen-reduced Copper Nanopowders
Prof. Hyoung Seop Kim (Pohang University of Science and Technology)
- 11:30-11:55 **CAM-I3** Microstructure-based Modeling of Texture Evolution in Primary Recrystallized Cold-rolled IF Steels
Dr. Dong-Kyu Kim (Korea Atomic Energy Research Institute)
- 11:55-12:10 **CAM-O1** Evaluation of Fracture Toughness Considering Crack Propagation in Bicrystalline Graphene via Molecular Dynamics Simulation
Dr. Jihoon Han (Korea Atomic Energy Research Institute)
- 12:10-13:30 **Lunch**
- 13:30-15:00 **Characterization and Modeling II**
Chairman : Prof. Mohammad Farvizi (Materials and Energy Research Center)
- 13:30-13:55 **CAM-I4** Finite Element Analysis of Deformation Behaviors of Randomly Distributed Hollow Spheres Reinforced Metal Matrix Composites
Prof. Yong Ho Park (Pusan National University)
- 13:55-14:20 **CAM-I5** Relevant Methods to Investigate Processability of Powder Injection Molding Materials
Prof. Berenika Hausnerova (Tomas Bata University in Zlin)
- 14:20-14:45 **CAM-I6** Microstructure and Mechanical Properties of Al-3 vol% CNT Nanocomposites Processed by High-pressure Torsion
Dr. Hamed Asgharzadeh (University of Tabriz)
- 14:45-15:00 **CAM-O2** Application of CFD Simulation to CVD/CVI Process of Silicon Carbide
Dr. Kyoong Choi (Korea Institute of Ceramic Engineering and Technology)
- 15:00-15:20 **Coffee Break**
- 15:20-16:55 **Characterization and Modeling III**
Chairman : Prof. Hyoung Seop Kim (Pohang University of Science and Technology)
- 15:20-15:45 **CAM-I7** Characterization of NiTi-nano Alumina Composites
Dr. Mohammad Farvizi (Materials and Energy Research Center)
- 15:45-16:10 **CAM-I8** Microstructure Based Modeling of Ni Superalloy Powder for High Temperature Forming Process
Dr. Eun Yoo Yoon (Korean Institute of Materials Science)
- 16:10-16:25 **CAM-O3** Calculation of Plastic Strain Ratio of Cu Sheet by Asymmetry Rolling and Annealing
Prof. In Soo Kim (Kumoh National Institute of Technology)
- 16:25-16:40 **CAM-O4** Atomistic Simulations on the Dislocation-Twin Boundary Interactions during Surface Indentation
Ms. Hyun-Jin Kim (Korea Institute of Industrial Technology)
- 16:40-16:55 **CAM-O5** Finite Element Modeling of Evolution of Thermal Residual Stress in Laser Metal Deposition Process
Dr. Wookjin Lee (Korea Institute of Industrial Technology)
- 17:00-20:00 **Friendship Dinner**

2016. 7. 04 (Mon)	Poster Session
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13:30-16:50 **Poster Session (APM, AMP, CAM, MAM)**
Chairman : Dr. Chang Kyu Rhee (Korea Atomic Energy Research Institute)

2016. 7. 05 (Tue)	Room A
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09:00-09:40 **Plenary Lecture**
Chairman : Prof. Ma Qian (Royal Melbourne Institute of Technology University)
P-03 Tailoring Microstructure: An Enduring Challenge in Materials Science and Engineering
 Prof. Suk-Joong L. Kang (Korea Institute of Ceramic Engineering and Technology)

09:40-10:20 **Plenary Lecture**
Chairman : Prof. Soon Hyung Hong (Korea Advanced Institute of Science and Technology)
P-04 Nano-mechanical Characterization of Advanced Ceramics
 Dr. Jan Dusza (Institute of Materials Research, Slovak Academy of Sciences)

10:20-10:40 **Coffee Break**

10:40-12:00 **Novel Functional Materials I**
Chairman : Min-Ha Lee (Korea Institute of Industrial Technology)

10:40-11:00 **NFM-I1** Controlling the Structure and Morphology of Semiconductor Nanocrystals in a Microfluidic Reactor
 Dr. Chan Gi Lee (Institute for Advanced Engineering)

11:00-11:15 **NFM-O1** Nanostructured Ceramic Based Biomaterials
 Dr. Katalin Balazsi (Centre for Energy Research, Hungarian Academy of Sciences)

11:15-11:30 **NFM-O2** Grain Growth and Thermal Stability of Ag and Ag-alloy Thin Films in Oxide/Metal/Oxide Multilayer System
 Dr. Chadrasekhar Loka (Kongju National University)

11:30-11:45 **NFM-O3** Plastic Deformation of High Strength Hf-based Bulk Amorphous Alloys at Room Temperature
 Dr. Min-Ha Lee (Korea Institute of Industrial Technology)

11:45-12:00 **NFM-O4** Thermo-mechanical Evolution of Ternary Bi-Sn-In Solder Micropowders and Nanoparticles Reflowed on the Flexible Plastic Substrate
 Dr. Sangsun Yang (Korea Institute of Materials Science)

12:10-13:30 **Lunch**

13:30-14:00 **Novel Functional Materials II**
Chairman : Chan-Gi Lee (Institute for Advanced Engineering)

13:30-13:45 **NFM-O5** Coloration Study of Silica-coated Iron-based Nanoparticles
 Ms. Ri Yu (Korea Institute of Ceramic Engineering and Technology)

13:45-14:00 **NFM-O6** Mechanical and Tribological Properties of High Target Utilization Sputtering W-C Based Coatings
 Dr. Frantisek Lofaj (Institute of Materials Research, Slovak Academy of Sciences)

2016. 7. 05 (Tue)	Room B
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10:40-11:55 **MIM and Additive Manufacturing(3D Printing)**
Chairman : Dr. Ji-Hun Yu (Korea Institute of Materials Science)

10:40-11:10 **MIM-K1** Additive Manufacturing of Titanium Alloys by Selective Laser Melting (SLM) and Selective Electron Beam Melting (SEBM): Recent Fundamental Developments
 Prof. Ma Qian (Royal Melbourne Institute of Technology University)

11:10-11:40 **MIM-I1** Metal Powder for Additive Manufacturing of Ti-6Al-4V by Selective Electron Beam Melting: Effect of Powder Reuse or Recycling Times
 Prof. Huiping Tang (Northwestern Institute for Nonferrous Metal Research)

11:40-11:55 **MIM-O1** Development of Hydrophobic Surgical Forcep Using Powder Injection Molding and Surface Treatment
 Dr. Dong Yong Park (Korea Institute of Energy Research)

12:10-13:30 **Lunch**

- 13:30-15:00 **Young Scientist Session I**
Chairman : Prof. Ji Soon Kim (University of Ulsan)
 Dr. Jan Dusza (Institute of Materials Research, Slovak Academy of Sciences)
- YSS-01** Influence of Material Coating on the Heat Transfer in Layered Cu-SiC-Cu Systems
 Dr. Agata Strojny-Nedza (Institute of Electronic Materials Technology)
- YSS-02** Development of Al₂O₃ Electrospun Fibers Prepared by Conventional Sintering Method or Plasma Assisted Calcination
 Dr. Erika Mudra (Institute of Materials Research of Slovak Academy of Sciences)
- YSS-03** Effect of Grinding Fineness of Fly Ash on the Properties of Geopolymer Foam
 Mr. Roland Szabo (University of Miskolc)
- YSS-04** Optimization of Roll Bonding by Hot Rolling in Experimental and Industrial Use
 Mr. Gabor Szabo (University of Miskolc)
- YSS-05** Surface Hardening of Steels
 Mr. Ali Al-Azzawi (University of Miskolc)
- YSS-06** Microstructural Effects and Shrinkage Analysis of Compaction, Heating and Sintering Stages of Hot Pressing of NiAl-Al₂O₃ Powder Mixture
 Ms. Kamila Jurczak (Institute of Fundamental Technological Research, Polish Academy of Sciences)
- YSS-07** Application of Contact Interaction of Hertz Model to Viscoelastic Discrete Element Model of Sintering
 Dr. Szymon Nosewicz (Institute of Fundamental Technological Research, Polish Academy of Sciences)
- YSS-08** Analysis of Clustering in Eutectic Structures
 Mr. Kornel Bortnyik (University of Miskolc)
- YSS-09** Development of Crack Detection Method with a Help of 2D Generated 3D Reconstructed Images in THT Solder Joints
 Dr. Greta Gergely (University of Miskolc)
- YSS-10** Whisker-like Formations in Sn-3.0Ag-Pb Alloys
 Dr. Daniel Koncz-Horvath (University of Miskolc)
- YSS-11** Synthesis and Characterization of Antimony Telluride for Thermoelectric and Optoelectronic Applications
 Dr. Rafal Zybala (Warsaw University of Technology)
- YSS-12** Control of Zeolite Properties by Mechanical Activation in Stirred Media Mill
 Ms. Katalin Bohacs (University of Miskolc)
- YSS-13** Corrosion Resistance and Adhesion Property of Zn-Mg-Zn Multi-layer Coated Steel by Heat Treatment
 Dr. Jong Min Byun (Hanyang University)

2016. 7. 05 (Tue)

Room C

- 10:40-11:50 **Energy Materials**
Chairman : Prof. Il-Kyu Park (Seoul National University of Science and Technology)
- 10:40-11:10 **EGM-K1** Current R&D Status on Nuclear Materials for Operating Plants and Future Nuclear Systems in Korea
 Dr. Yong Hwan Jeong (Korea Atomic Energy Research Institute)
- 11:10-11:30 **EGM-O1** Preparation and Investigation of Boron Nitride Dispersion Strengthened Steels
 Dr. Csaba Balazsi (HAS Centre for Energy Research)
- 11:30-11:50 **EGM-O2** Enhanced Thermoelectric Properties of Nanodiamond-dispersed Bismuth Telluride Matrix Nanocomposites by Controlling Extrinsic Interfaces
 Dr. Kyung Tae Kim (Korea Institute of Materials Science)
- 12:10-13:30 **Lunch**

- 13:30-15:00 **Young Scientist Session II**
Chairman : Prof. Taesuk Jang (Sunmoon University)
 Dr. Akos Horvath (Centre for Energy Research, Hungarian Academy of Sciences)
- YSS-14** Investigation of Multicomponent Lead-free Solders
 Ms. Anett Gyenes (University of Miskolc)
- YSS-15** Effect of Alloying Element Content on Crack Propagation in SAC Solders
 Ms. Aliz Molnar (University of Miskolc)
- YSS-16** Performance Analysis of New Al Based Alloys for Semi Fuel Cell Seawater Power Sources in Autonomous Underwater Vehicles (AUVs)
 Mr. Md Raihanuzzaman Rumman (University of Adelaide)
- YSS-17** Intermetallic Compounds and Self-propagating High-temperature Synthesis
 Mr. Reza Ghomashchi (University of Adelaide)
- YSS-18** Evaluation of Thermoelectric Properties of Bi-Sb-Te Alloy Depending on the Sintering Temperature
 Mr. Dong Won Shin (Kongju National University)
- YSS-19** Recycling of Gallium and REE from End-of-Life Light Emitting Diodes
 Mr. Tamas Magyar (University of Miskolc)
- YSS-20** Mechanical and Tribological Properties of Electrically Conductive SiC Based Cermets
 Mr. Martin Fides (Institute of Materials Research, Slovak Academy of Sciences)
- YSS-21** Tribological Properties of TiTaCN Based Cermets at Room and Elevated Temperatures Prepared by Mechanochemistry
 Dr. Jan Balko (Institute of Materials Research, Slovak Academy of Sciences)
- YSS-22** Effect of Graphene Platelets on Tribological Properties of Boron Carbide Ceramic Composites
 Mr. Richard Sedlak (Institute of Materials Research, Slovak Academy of Sciences)
- YSS-23** Silicon Nitride-Titanium Nitride Particulate Composites with Small Amounts of GPLs Particles
 Ms. Aleksandra Dubiel (AGH University of Science and Technology)
- YSS-24** The Effect of Tip Bluntness on Hardness and Modulus Depth Profiles of W-C/Steel Coated System Obtained by Nanoindentation and FEM Simulation
 Mr. Dusan Nemeth (Institute of Materials Research, Slovak Academy of Sciences)
- YSS-25** Pulse Plasma Sintering of Cemented Carbides: Mechanical Properties and Microstructural Analysis
 Mr. Md Raihanuzzaman Rumman (University of Adelaide)
- YSS-26** Spark Plasma Sintering of WC-7.5 wt.% Nano Co
 Mr. Md Raihanuzzaman Rumman (University of Adelaide)
- YSS-27** Addition of Al as a Binder in Cemented Carbide and its Effect on Mechanical and Microstructural Behavior
 Mr. Md Raihanuzzaman Rumman (University of Adelaide)

2016. 7. 05 (Tue)**Poster Session**

- 13:30-15:00 **Poster Session (NFM, MIM, EGM)**
Chairman : Dr. Chang Kyu Rhee (Korea Atomic Energy Research Institute)

2016. 7. 06 (Wed)**Room A**

- 09:00-09:40 **KPMI Plenary Lecture**
Chairman : Dr. Mohammad Farvizi (Materials and Energy Research Center)
P-05 ~20% Efficiency Black Si Solar Cells Fabricated by the SSCT Method with Simple Structure
 Prof. Hikaru Kobayashi (Osaka University)
- 09:40-10:20 **Plenary Lecture**
Chairman : Prof. Young Do Kim (Hanyang University)
P-06 Advanced Functional Materials for Energy Storage and Conversion
 Prof. Guoxiu Wang (University of Technology Sydney)
- 10:20-10:40 **Coffee Break**

- 10:40-12:10 **Rare Metals and Recycling I**
Chairman : Dr. Ryan Ott (Ames Laboratory(USDOE))
 Dr. Jung-Goo Lee (Korea Institute of Materials Science)
- 10:40-11:00 **RMR-11** Disruption of the Alumina Layer during Sintering of Aluminium in Nitrogen
 Prof. Tadeusz Pieczonka (AGH University of Science and Technology)
- 11:00-11:20 **RMR-12** Fabrication of Nanosized Cobalt Powder from Cobalt(II) Hydroxide of Spent Lithium Ion Battery
 Dr. Jung Yeul Yun (Korea Institute of Materials Science)
- 11:20-11:40 **RMR-13** Synthesis and Characterization of ZnSe:Eu Quantum Dots
 Dr. Bum Sung Kim (Korea Institute of Industrial Technology)
- 11:40-11:55 **RMR-O1** Combustion Synthesis of Titanium Powder by Direct Reduction from the Titanium Dioxide
 Mr. Sang-Hoon Choi (Korea Institute of Industrial Technology)
- 11:55-12:10 **RMR-O2** Carbon Co-Precipitation during Gas Reduction of Water-atomized Fe-Cr-Mo Powder
 Mr. Basit Ali (Korea Institute of Industrial Technology)
- 12:10-13:30 **Lunch**
- 13:30-14:40 **Rare Metals and Recycling II**
Chairman : Prof. Tadeusz Pieczonka (AGH University of Science and Technology)
 Dr. Bum Sung Kim (Korea Institute of Industrial Technology)
- 13:30-13:50 **RMR-14** Effects of Strain Ratio and Strain Rate on Microstructure and Magnetic Properties of Nd-Fe-B Nanocrystalline Magnets during Hot-deformation Process
 Dr. Jung-Goo Lee (Korea Institute of Materials Science)
- 13:50-14:10 **RMR-15** Applying Recycling Technologies to Actual End-of-Life Products
 Dr. Ryan Ott (Ames Laboratory (USDOE))
- 14:10-14:25 **RMR-O3** Microstructural and Magnetic Properties of DyH₂ Grain Boundary Process WS₂/Al Co-doped NdFeB Magnet
 Mr. Kyoung-Hoon Bae (Korea University)
- 14:25-14:40 **RMR-O4** Synthesis of Ti-Nb Alloy by Magnesiothermic Reduction Process
 Ms. So-Yeon Kim (Korea Institute of Industrial Technology)
- 17:00-20:00 **Gala Dinner**

2016. 7. 06 (Wed)

Room B

- 10:40-12:10 **Refractory Metals and Hard Materials I**
Chairman : Prof. Young Do Kim (Hanyang University)
 Prof. Jean-Michel Missiaen (Institut Polytechnique de Grenoble Laboratoire SIMAP)
- 10:40-11:10 **RMH-K1** Sintering Mechanism of Cu-Cr Metallic Composites
 Prof. Jean-Michel Missiaen (Institut Polytechnique de Grenoble Laboratoire SIMAP)
- 11:10-11:25 **RMH-O1** Ultrafast Densification and Microstructure Evolution of In-situ Ti/TiB Metal Matrix Composite Obtained by PPS Approach
 Dr. Andrzej Miklaszewski (Poznan University of Technology)
- 11:25-11:40 **RMH-O2** Development of (Ti,Ta)(C,N)-Co Based Composites with Carbon Additives
 Dr. Pavol Hvizdos (Institute of Materials Research, Slovak Academy of Sciences)
- 11:40-11:55 **RMH-O3** Effect of Milling Time on Structural Characteristic and Sintering Behavior of W-Cu Composite Powder Produced from WO₃-CuO Powder Mixtures
 Dr. Sung-Soo Ryu (Korea Institute of Ceramic Engineering and Technology)
- 11:55-12:10 **RMH-O4** The Influence of Adding Nanoparticles to Superhard Materials on their Microstructures and Properties
 Prof. Lucyna Jaworska (The Institute of Advanced Manufacturing Technology)
- 12:10-13:30 **Lunch**
- 13:30-15:00 **Refractory Metals and Hard Materials II**
Chairman : Dr. Alan J. Hurd (Los Alamos National Laboratory)
 Dr. Min-Ha Lee (Korea Institute of Industrial Technology)
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- 14:00-14:15 **RMH-05** Characteristics of Quenched and Tempered FeCrMoVC Steel
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- 14:15-14:30 **RMH-06** The Ceramic Materials to Forming by EDM Method
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- 11:20-11:40 **NNP-O1** Synthesis and Magnetic Properties of Strontium Ferrite Based Composite Magnet
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- 13:30-16:50 **Poster Session (RMR, RMH, NNP)**
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