



4th POLISH-SLOVAK-CHINESE SEMINAR ON CERAMICS
under patronage of
President of the Slovak Academy of Sciences Prof. Pavol Sajgalik
and
His Magnificence Rector of AGH University of Krakow Prof. Jerzy Lis

Friday 27th September

Arrival of delegates – 19:00 welcome reception

Saturday 28th September

9:00 Invitation - welcome addresses – awards ceremony
9:15-13:00 Lectures Session A (7)
13:30-15:00 Lunch
15:00-18:15 Lectures Session B (6)
19:00- Dinner

Sunday 29th September

9:00-12:30 Lectures Session C (7)
12:30-14:30 Lunch
15:00-17:00 Krakow sightseeing and Wawel Castle
19:00 Dinner

Monday 30th September

9:00-13:15 Lectures Session D (8)
13:15-14:30 Lunch
14:30-18:15 Lectures Session E (6)
19:00- Dinner

Tuesday 1st October

9:00-11:00 Lectures Session F (4)
11:00-12:30 Round table discussion; AGH laboratories visiting according to individual plans
12:30-14:00 Lunch
14:30-18:30 Underground Krakow Museum visiting
19:00- Farewell Dinner

Wednesday 2nd October

Departure of delegates

Sessions order – all presentations are invited lectures:

Session A

- 9:00- 9:15 **Zbigniew Pędzich** – introduction and welcome address
9:15- 9:45 **Hua-Tay Lin** – Microstructure Design of High Performance Ceramic Cutting Tools
9:45-10:15 **Pavol Šajgalík** – Is silicon nitride based ceramics suitable for the drug delivery ?
10:15-10:45 **Lucyna Jaworska** – Obtaining of polycrystalline oxide-diamond material under reduced pressure conditions
10:45-11:00 *coffe break*
11:00-11:30 **Wei Pan** – Metal bonding Ceramic Substrate by Atmosphere Plasma Spray
11:30-12:00 **Krzysztof Wojciechowski** – Composite Thermoelectric Materials with Attuned Electronic Structure and Mismatched Phonon Structure (AES-MPS)
11:30-12:00 **Feng Gao** – Microstructure and properties of high-entropy MeTiO₃ perovskite thermoelectric ceramics
12:30-13:00 **Ján Dusza** – Development of ultra-high temperature high-entropy ceramics
13:00-13:30 **Yiquan Wu** – Laser ceramics / details TBA

Session B

- 15:00-15:30 **Pavol Hvizdoš** – Structural integrity and grain boundary strength of ultra-high temperature dual-phase high-entropy ceramic composites
15:30-16:00 **Jingyang Wang** – High-entropy Environmental Barrier Coating for SiC_f/SiC CMC
16:00-16:30 **Ondrej Hanzel** – Additive-free SiC ceramics with high thermal conductivity
16:30-16:45 *coffe break*
16:45-17:15 **Guo Rong Li** – Microstructure and Electrical Properties of TiO₂ doped ZnO ceramics via spark plasma sintering
17:15-17:45 **Konrad Świerczek** – / Details TBA
17:45-18:15 **Zoltán Lencéš** – Performance of graphite/atomic layer deposited ZnO composite anodes in Li-ion batteries

Session C

- 9:00- 9:30 **Shiwei Wang** - Meter-size Alumina ceramics by Spontaneous Coagulation Casting and Pressureless Sintering
9:30-10:00 **Alexandra Kovalčíková** – Effect of SiC whiskers on mechanical properties, wear and oxidation resistance of high-entropy (TiZrHfNbTa)C carbides
10:00-10:30 **Miroslav Hnatko** – Eco-Friendly Micro- and Nanotexturing of 3D Printed Titanium Alloys for Enhanced Biomedical Applications
10:30-10:45 *coffe break*
10:30-11:00 **Jie Xu** – Composition design and properties of rare-earth-zirconate high-entropy porous ceramics
11:00-11:30 **Kaiqi Liu** – Low temperature preparation of solid thermal storage material for renewable energy
11:30-12:30 **Magdalena Dudek** – Materials for hydrogen conversion / Details TBA

Session D

- 9:00- 9:30 **Jiayi Cheng** – China-Poland Cooperation in Science and Technology
9:30-10:00 **Peter Tatarko** – Ultra-High Temperature Ceramics for Extreme Environment Applications
10:00-10:30 **Jiang Li** – Transparent ceramics for optical and photoelectric applications
10:30-11:00 **Dawid Kozień** – Reactive sintering of UHTC composites
11:00-11:15 *coffe break*
11:15-11:45 **Xiang Ming Chen** – Electric field-controlled magnetism in R-substituted BiFeO₃ multiferroic ceramics
11:45-12:15 **Jianfeng Yang** – Research on Fabrication of Silicon Carbide Ceramics with Very Low Residual Silicon Content through Reaction Sintering
12:15-12:45 **Hana Kaňková** – Determining the content and distribution of Nd in YAG using laser ablation
12:45-13:15 **Ali Talimian** – Densification and Grain Growth of Transparent Ceramics: Case Studies of Solid State and Liquid Phase Sintering

Session E

- 14:30-15:00 **František Lofaj** – The evolution and mechanical properties of reactively sputtered compositionally complex nitride coatings
15:00-15:30 **Leiyang Zhang** – The study of electrostrictive strain of relaxor ferroelectric ceramics materials
15:30-16:00 **Gang Liu** – The phase structure modification and dielectric energy storage performance of Na_{0.5}Bi_{0.5}TiO₃ based ceramics
16:00-16:15 *coffe break*
16:15-16:45 **Chengyu Zhang** – Creep properties and damage mechanisms of (Ti,Zr)(C,B) ceramics
16:45-17:15 **Xingang Luan** – SiBCN-based ceramic films for high temperature electrode of SAW sensors
17:15-17:45 **Mikolaj Szafran** – Chemistry in ceramic / details TBA
17:45-18:15 **Michal Žitňan** – Composite ceramic scaffolds for photocatalytic wastewater treatment

Session F

- 9:00- 9:30 **Kun Zheng** – Designing heterostructured nanofibers as high-performance electrodes for intermediate temperature solid oxide cells
- 9:30-10:00 **Mokhtar Mahmoud** – Masked stereolithography of 3D scaffolds using porous glass microspheres
- 10:00-10:30 **Zulema Vargas Ossorio** – Fabrication of Si-Ca MBG-coated zirconia implants for dental applications by dip coating: Parameters optimization
- 10:30-11:00 **Anusha Sekar** – Impact of surface roughness on the infiltration of calcium magnesium alumino silicate corrosion salts at high temperatures