



MultiScience - microCAD
International Multidisciplinary
Scientific Conference



Organizers



Antal Kerpely Doctoral School of Materials Science
and Technology, University of Miskolc



Faculty of Materials Science and Engineering,
University of Miskolc



Hungarian Academy of Sciences, Miskolc Academic
Committee



Research Centre for Advanced Materials and
Technologies, Kosice



1st Science Unlimited Conference - Eötvös Symposium

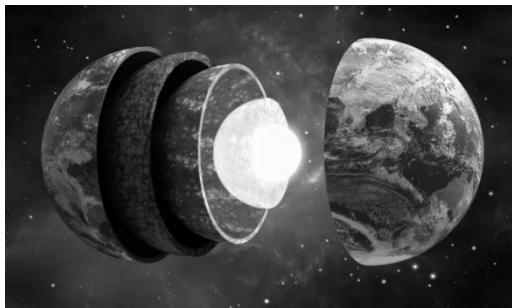
May 23-24, 2019

Venue

Hungarian Academy of Sciences,
Miskolc Academic Committee
3 Erzsébet Square, Miskolc, 3530
Hungary

Conference chairman: **András ROÓSZ**
Secretary: László Somlyai-Sipos





DAY 1 | MAY 23, 2019

09:30-10:00	Registration
10:00-10:10	András ROÓSZ, Jan DUSZA Greetings
10:10-10:30	Árpád Bence PALOTÁS The brighter side of publishing
Session 1	Chair: Valéria MERTINGER
10:30-10:50	Kinga TAMÁSI Development of TPS-based Biopolymers at the Department of Polymer Engineering
10:50-11:10	Ivan SHEPA Development of Precursor and Ceramic Fibers by Electrospinning Technology
11:10-11:30	Armand ABORDÁN Particle Swarm Optimization Based Interval Inversion of Direct Push Logging Data
11:30-11:50	Matej BALÁŽ Mechanochemistry as a Universal Strategy Applicable in Various Research Fields
11:50-12:10	Tea/coffee break
Session 2	Chair: Endre TURAI
12:10-12:30	Gábor GYARMATI The Effect of Melt Treatments on the Melt Quality of Aluminum Casting Alloys
12:30-12:50	Tibor SOPCAK Composite Cements Based on Bioactive Glasses and Calcium Phosphates
12:50-13:10	Rachid HADJADJ Uncatalyzed Molecular Network for CO ₂ Hydrogenation to Methanol and Methane
13:10-13:30	Mária KOVÁČOVÁ Bio-Mechanochemical Synthesis of Silver Nanoparticles Using Thymus Vulgaris L. Plant
13:30-14:10	Lunch break

Session 3

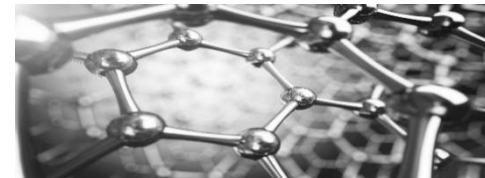
14:10-14:30	Chair: Jan DUSZA Tamás CSANÁDI Nanomechanical Testing: A Path to Discovering Hard-Yet-Ductile Ceramics
14:30-14:50	Ágota KAZUP High Purity Primary Aluminium Casting by INDUTHERM CC3000 Semi-Continuous Casting Equipment
14:50-15:10	Martin FABIÁN Structural, Electrical and Physical Properties of Complex Oxides Prepared via Ball Milling for Green Energy Production and Storage Devices
15:10-15:30	Arjun Kumar TALGOTRA Investigation of Portevin-Le Chatelier Effect in Austenitic Fe-18wt%Mn-Cr Twip Steels by Thermomechanical
15:30-15:50	Michal RAJNAK Experimental Study of Magnetic Fluids in Electric Fields

15:50-16:10

Tea/coffee break

Session 4

16:10-16:30	Chair: Márton BENKE Anett KISS Description of the Pressure Dependent Porosity
16:30-16:50	Ali AL-AZZAWI Modification of Cast Iron Surface by Laser Melt Injection Method with Mechanically Alloyed Powder
16:50-17:10	Luca HEGYI Development of Eco-Friendly PLA-Based Packagings with Natural Fillers
17:10-17:30	Mate SEPSI Potential Application of a Novel Non-Destructive Anisotropy Investigation Method
17:30-17:50	Mahitha UDAYAKUMAR Preparation and Investigation of Glassy Carbon Foams from Waste Polyurethanes



DAY 2 | MAY 24, 2019

08:30-9:00	Registration
Session 5	Chair: George KAPTAY
09:00-09:20	Mahmood HASAN ALHAFADHI The Effect of Heat Input Parameters on Residual Stress Distribution by FEM
09:20-09:40	Mohamed ABDELFAHAT Effect of Firing on Mineral Phases and Properties of Lightweight Expanded Clay Aggregates
09:40-10:00	Bence Ádám BRAUN Seismic Forward Modeling of Sub-Volcanic Zones
10:00-10:20	Tamás BUBONYI Evaluation of Eutectic Structure in Aluminum Alloys
10:20-10:40	Mahmoud Ibrahim ABDELAZIZ Application of Magnetic and Geoelectrical Resistivity Sounding Methods in Groundwater Exploration in a Part of Central Sinai, Egypt
10:40-11:00	Kassab HUSSEIN AL-OMARI New Method to Measure Interlamellar Spacing in Irregular Eutectic
11:00-11:20	Tea/coffee break
Session 6	Chair: Péter BAUMLI
11:20-11:40	Edina REIZER A DFT Application for Benzo(a)pyrene Formation
11:40-12:00	Jamal Eldin FADOUL MOHAMMED IBRAHIM Synthesis, Characterization and Rheological Properties of Alumina-Zeolite Mixtures
12:00-12:20	Dheeraj VARANASI On the Joint Microstructure and Grain Boundary Penetration by Copper in Low Alloyed Steels
12:20-12:40	Zsófia Borbála RÓZSA Molecular Understanding of Structural Changes of 1,3-Butadiene from Vapor-Liquid Equilibrium to Supercritical Conditions
12:40-13:00	Tibor HEGYES Optimization of Aluminium Rolling Technology and Possibilities of the Hot Workability of Different Aluminium Alloys
13:00-13:40	Lunch break