



Scientific Program

2nd World Congress on

Mechanical, Metallurgy and Materials Science

February 13-14, 2020 | Lisbon, Portugal



Scientific Federation
Panjagutta, Hyderabad, Telangana-500082, India

Day 1 February 13, 2020

Arcade-5

08:30-09:30 Registrations
09:30-10:00 Introduction & Opening Words

Plenary Forum

10:00-10:45 **Title: Intelligible Usage of Solar Heat for Materials Processing: Current Achievements and Future Research Trends**
Luis Guerra Rosa, University of Lisbon, Portugal

10:45-11:30 **Title: Effect of Bottom Gas Injection in Ladles on Mass Transfer**
Alberto N. Conejo, University of Science and Technology, China

Refreshments Break 11:30-11:45 @ Foyer

11:45-12:30 **Title: Hybrid Techniques to Predict the Durability of Metallic Components**
Teresa Morgado, LNEC - National Laboratory of Civil Engineering, Portugal

12:30-13:15 **Title: The Modelling of Grain Boundary Cavitation and Rupture**
Qiang Xu, The University of Huddersfield, UK

13:15-13:20

Group Photo

Lunch Break 13:20-14:20 @ Restaurant

14:20-15:05 **Title: Strength and Toughness Improvement in Steels by Means of Microstructural Parameters Optimization**
Andrea Di Schino, University of Perugia, Italy

Keynote Forum

15:05-15:45 **Title: Modern Al-Mg-Si Alloys for Overhead Power Lines**
Beata Smyrak, AGH University of Science and Technology, Poland

Refreshments Break 15:45-16:00 @ Foyer

16:00-16:40 **Title: Cavitation, Working Conditions, Material Properties and Measuring Techniques**
Ezddin Hutli, NTI-BME, EK-MTA Budapest, Hungary

16:40-16:50

Panel Discussion

Closing the Conference for the Day 1

Day 2 February 14, 2020

Arcade-5

Keynote Forum

09:00-09:45 **Title: Extraction of Phosphorus and Manganese from Steelmaking Slag**
Shin-Ya Kitamura, Tohoku University, Japan

Oral Talks

Session Chair **Luis Guerra Rosa, University of Lisbon, Portugal**
Session Co-chair **Alberto N. Conejo, University of Science and Technology, China**

09:45-10:20 **Title: Ultrasonic Devices Optimization for Treatment of Light Alloy Melts**
Helder Puga, University of Minho, Portugal

Refreshments Break 10:20-10:35 @ Foyer

Seminar

10:35-12:35 **Title: Color Metallography**
George F. Vander Voort, Struers Inc., USA

12:35-12:45

Panel Discussion

Lunch Break 12:45-13:45 @ Restaurant

13:45-14:20

Title: Influence of Temperature on Dissolution of Al-Dross in Molten Steel for Usage of Chemical Energy Source in EAF Process

Sun-Joong KIM, Chosun University, South Korea

Symposium

14:20-15:20

Title: Influence of Manufacturing Intrinsic Defects in Durability of Metallic Components

Teresa Morgado, LNEC - National Laboratory of Civil Engineering, Portugal

Refreshments Break 15:20-15:35 @ Foyer

Oral Talks

15:35-16:10

Title: Advantage of the Vertically Aligned Carbon Nanotubes Structuration of the Metals, ITO and Other Materials

Natalia Vladimirovna Kamanina, Vavilov State Optical Institute, Russia

16:10-16:45

Title: Biomachining of Stainless Steel

Ana Paula Piedade, University of Coimbra, Portugal

16:45-17:20

Title: Fabrication of Fe-Fe₃O₄ Thin Films Prepared by Reactive Sputtering and Application of Electromagnetic Conduction Noise Absorbers

Sung-Soo Kim, Chungbuk National University, South Korea

17:20-17:55

Flattening Mechanism in Thermally Sprayed Particles

Fukumoto Masahiro, Toyohashi University of Technology, Japan

17:55-18:05

Panel Discussion

Poster Presentations

P-001

Title: Prognosticating Material Fracture in the Process of Cross-Wedge Rolling

Pater Zbigniew, Lublin University of Technology, Poland

P-002

Title: Development of Highly Conductive Metal Containing Monolithic Hybrid Ceramics as Potential Electrode Material for PEM Fuel Cell Application

Mauricio Goraiebe Pollachini, Federal University of Santa Catarina (UFSC), Brazil

P-003

Title: Biocatalytic Metal Powders: Immobilization of Alcohol Dehydrogenase on SiC and Yttria Particles

Manuel Pinelo, Technical University of Denmark, Denmark

P-004

Title: Crystallinity, Thermal and Mechanical Characteristics of Composites with Low Density Polyethylene (LDPE) Polymer Matrix/Metallic Powders

Doina Elena Gavrilă, Polytechnic University of Bucharest, Romania

P-005

Title: Manipulation of Cation Combinations of Hybrid Perovskite for Solar Cell Application

Sarah Derbali, Ibn Tofail University, Morocco

P-006

Title: Effect of Zinc Under Layer on the Properties of Electrodeposited CZTS Thin Films

Mohamed Yassine Zaki, Ibn Tofail University, Morocco

End of the Conference

Bookmark Your Dates

3rd World Congress on

Mechanical, Metallurgy and Materials Science

February 18-19, 2021 | Montreal, Canada

