

GOLDEN ACADEMY

Message from the organizers

Dear Colleagues and Friends,

2019 International Conference for Leading and Young Materials Scientists (IC-LYMS 2019) will be held in Shanghai, China, during December 22-25 2019.

IC-LYMS is being held every year and intends to provide a platform for the exchange and networking between top scientists, emerging young researchers, and students across a wide spectrum of materials science and engineering.

We would like to invite you to participate in IC-LYMS 2019. Your active participation is the key to the success of this conference.



Yours Sincerely,

IC-LYMS 2019 Committee

Asia Pacific Society for Materials Science (APSMR)

www.apsmr.org



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Conference organizing committee

CONFERENCE CHAIRS

Prof. Xingmao JIANG (Wuhan Institute of Technology)

Prof. Junhua HU (Zhengzhou University)

Prof. Haihua WANG (Shaanxi University of Science and Technology)

CONFERENCE PROGRAM DIRECTORS

Dr. Yingxue SONG (APSMR)

CONFERENCE SECRETARIAT

Ms. Yaru WU (APSMR)

Ms. Yangjun HU (APSMR)

Ms. Ai CHUNG (APSMR)



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Conference topics

1. **Structure materials and Functional Coatings (metals, ceramics, and composites)**
2. **Materials for energy (saving, conversion, transfer, storage) and environment plus electrochemistry**
 - 2.1. **Photovoltaics**
 - 2.2. **Batteries and Fuel Cells**
 - 2.3. **Materials for Thermal Management and Thermal Energy Utilization**
 - 2.4. **Materials for Energy and Environmental Applications**
3. **Optics and Photonic Materials**
4. **Electronic, Magnetic and Nanomaterials**
5. **Polymer Science and Molecular Chemistry**
6. **Organic Materials and Bio-materials**
7. **Materials Characterization and Computational Modeling**

	SUN, 12/22	MON, 12/23	TUE, 12/24	WED, 12/25
9:00 – 10:20	Pre-session technical and discussion forums on international collaboration (by invitation only)	Plenary Presentation		
10:20 – 10:30		Coffee & Tea Break		
10:30 – 12:10		Oral Presentation		
12:10 – 13:00		Lunch Break		Conference Excursion
13:10 – 14:50		Oral Presentation		
14:50 – 15:00		Coffee & Tea Break		
15:00 – 16:00		Oral Presentation		
16:30 – 17:30	Conference Registration		Poster Session	
18:00 – 19:30	Reception		Conference Banquet (Approx. 1.5 hrs)	

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Presentation List (No. 1 Meeting Room)

	SUN, 12/22	MON, 12/23	TUE, 12/24	WED, 12/25
9:00 – 10:20	Pre-session technical and discussion forums on international collaboration (by invitation only)	1. J.H. HU 2. Y. YANG	11. Y.Y. MAI 12. H.T. LIU	21. Reserved 22. Reserved
10:20 – 10:30		Coffee & Tea Break		
10:30 – 12:10		3. X.M. JIANG 4. Q. HUANG 5. W. ZHU	13. X.C. ZHOU 14. Z.H. QI 15. S. LI	23. Reserved 24. Reserved 25. Reserved
12:10 – 13:00		Lunch Break		Optional Excursion
13:10 – 14:50		6. S.S. PARK 7. B.S. KIM 8. J. XIA	16. X.G. ZHENG 17. L.B. GAO 18. Y.F. ZHANG	
14:50 – 15:00		Coffee & Tea Break		
15:00 – 16:00		9. S.H. CAI 10. Z.H. XIE	19. J.Z. JIANG 20. Reserved	
16:30 – 17:30	Conference Registration		Poster Session	
18:00 – 19:30	Conference Reception		Conference Banquet (Approx. 1.5 hrs)	

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Presentations for IC-LYMS 2019

MONDAY 12/23

1. Mechanism for oxidation of Zr alloy and the strategy for the protection (J.H. HU)
2. Hybridized and Coupled Nanogenerators (Y. YANG)
3. Controlled synthesis and applications of nanostructured materials (X.M. JIANG)
4. CNT-application on High speed railway's air purification (Q. HUANG)
5. The evolution of pores in thermal barrier coatings under volcanic ash corrosion using X-ray computed tomography (W. ZHU)
6. Designing corrosion-resistant Mg alloys via second-phase control (S.S. PARK)
7. Analysis of Inter-Mediate Al Alloy Steering Shaft under Torsion Loading Conditions Using FEM Analysis (B.S. KIM)
8. Evolution of microstructure and mechanical properties in EB-PVD thermal barrier coatings corroded by volcanic ash at 1150°C (J. XIA)
9. Influence of BC pretreatment on microstructure and bonding strength of 8YSZ fabricated by EB-PVD (S.H. CAI)
10. On the thermal diffusion conditions of electroplated Pt-diffusion bond coat for thermal barrier coatings (Z.H. XIE)

TUESDAY 12/24

11. Polymer-functionalized structurally defined graphene nanoribbons and their supramolecular chemistry in liquid phase (Y.Y. MAI)

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12. Fabrication of Temperature/pH dual sensitive hemicellulose-based Hydrogels from APMP waste liquor (H.T. LIU)
13. Liquid metals: from droplets to flexible electronics (X.C. ZHOU)
14. Exploring Bioactive Macrocycles in Aqueous Medium (Z.H. QI)
15. Utilization of multiple cloning site as a versatile platform for DNA block copolymer synthesis (S. LI)
16. Geometrically frustrated magnetism and quantum atomic properties in hydroxyl salts (X.G. ZHENG)
17. Dielectric tunable cubic pyrochlore materials for microwave applications (L.B. GAO)
18. Malleable and Recyclable Thermoset Soft Materials Based on Dynamic Covalent Bonds (Y.F. ZHANG)
19. TBA (J.Z. JIANG)
20. Reserved

POSTER SESSION

- P1. Metallo-Supramolecular Interfacial Polymerization Driven by the Coordination of Selenium-Containing Crown Ethers (Q. ZHANG)
- P2. Selenium Containing Crown Ether Acts as an Unconventional Amphiphile Exhibiting Multi-Responsiveness in Aqueous Medium (S.R. LI)
- P3-1. Performance improvement of multi-component rare-earth doped bond coat of environmental barrier coatings with different contents (M.M. WANG)

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- P3-2. Introduction of total-area scanning PLPS system for turbine blades (Y. CHEN)
- P4. Study of TGO residual stress on curved thermal barrier coatings by PLPS (W.H. LI)
- P5. Preparation and characterization of thermal barrier coatings(TBCs) VA-corrosion resistant protective coatings based on SOL-GEL method (Z.M. LI)
- P6. Synthesis of graphene quantum dots/Ni(OH)₂ nanocomposites on carbon cloth as a binder-free electrode for supercapacitors (W.M. CHOI)
- P7. Conductive PPy supported on flake cobalt carbonate hydroxide/carbon fiber clothes arrays for high performance supercapacitor (W.M. CHOI)

WEDNESDAY 12/25

- 21. Reserved
- 22. Reserved
- 23. Reserved
- 24. Reserved
- 25. Reserved