

# GOLDEN ACADEMY

## **Message from the organizers**

---

Dear Colleagues and Friends,

We would like to invite all of you to join the 2018 International Interdisciplinary Conference on Materials Science & Engineering, Biology & Medical Science and Computational Information Technology, which is held in Hangzhou, China, during August 19-22 2018.

The conference is intended to serve as an interdisciplinary platform for the exchange and networking between top scientists, experienced engineers, frontier researchers, and students across a wide spectrum of research fields.

Your active participation and discussion is the key to the success of this conference.



Yours Sincerely,

Organizing Committee

2018 International Interdisciplinary Conference on Materials Science & Engineering, Biology & Medical Science and Computational Informatics

IFMR 2018 (APSMR) / CITR 2018 (APSCIT) / CBMS 2018 (APSBMS)

# GOLDEN ACADEMY

---

## Conference organizing committee

---

### CONFERENCE CHAIRS

#### MATERIALS SCIENCE & ENGINEERING:

Prof. Xingmao JIANG (Changzhou University)

Prof. Weidong HE (University of Electronic Science and Technology of China)

#### COMPUTATION & IT:

Prof. Qing PAN (Zhejiang University of Technology)

Prof. Wen-Tsung LIN (Minghsin University of Science and Technology)

#### BIOLOGY & MEDICAL SCIENCE:

Prof. Fan LIN (Nanjing Medical University)

Prof. Yu-Cheng KUO (Taipei Medical University)

### CONFERENCE PROGRAM DIRECTORS

Dr. Yingxue SONG (APSMR)

### CONFERENCE SECRETARIAT

Ms. Yaru WU (APSMR)

Ms. Yangjun HU (APSCIT)

Mr. Chen-Huan HSU (APSBMS)

# GOLDEN ACADEMY

---

## Conference topics

---

### **MATERIALS SCIENCE & ENGINEERING:**

- 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**

### **COMPUTATION AND IT:**

- 1: Theory, Algorithms, Programming**
- 2: Database, Cloud Computing, Data Mining, Big Data**
- 3: Communications, Networking, Security, and Internet of Things**
- 4: Multimedia, Image Processing and Recognition (Virtual Reality)**
- 5: High Performance Computing and Intelligent Systems (AI, Robotics)**
- 6: Software Engineering and Applications**
- 7: Electronics (Analog/Digital Circuits, Signal Processing, System Architectures)**

### **BIOLOGY & MEDICAL SCIENCE:**

- 1: Biology**
- 2: Life Sciences**
- 3: Medical Sciences**
- 4: Paramedical Science**
- 5: Animal Sciences**
- 6: Health Sciences**
- 7: Food Science & Nutrition**

# GOLDEN ACADEMY

## Conference program

---

	SUN, 8/19	MON, 8/20	TUE, 8/21	WED, 8/22
9:00 – 10:20	Pre-session technical and discussion forums	Plenary Presentation		
10:20 – 10:30		Coffee & Tea Break		
10:30 – 12:00		Oral Presentation		
12:10 – 13:00		Lunch Break		Conference Excursion
13:10 – 14:40		Oral Presentation		
14:40 – 14:50		Coffee & Tea Break		
14:50 – 16:30				
17:00 – 18:30	Conference Registration		Poster Session	
19:00 – 20:30	Reception		Conference Banquet (Approx. 1.5 hrs)	

# GOLDEN ACADEMY

## Presentation List (Meeting Room A)

	SUN, 8/19	MON, 8/20	TUE, 8/21	WED, 8/22
9:00 – 10:20	Pre-session technical and discussion forums	1. Q. CHEN 2. W.D. HE	12. S.N. YOON 13. L. LUO	23. J.W. JIANG 24. J.L. JIANG
10:20 – 10:30		Coffee & Tea Break		
10:30 – 12:00		3. S.H. CAI 4. L.M. CHEN 5. X.F. DAI	14. L. ZHANG 15. Y.H. WU 16. F. LIN	25. W.H. LI 26. M. LIU 27. R.C. LI
12:10 – 13:00		Lunch Break		Conference Excursion
13:10 – 14:40		6. H.C. SUNG 7. K.C. HSU 8. S.Q. LIANG		
14:40 – 14:50		Coffee & Tea Break		
14:50 – 16:30				
17:00 – 18:30	Conference Registration		Poster Session	
19:00 – 20:30	Reception		Conference Banquet (Approx. 1.5 hrs)	

# GOLDEN ACADEMY

## Presentation List (Meeting Room B)

	SUN, 8/19	MON, 8/20	TUE, 8/21	WED, 8/22
9:00 – 10:20	Pre-session technical and discussion forums	1. Z.Z. XU 2. Q.J. SUN	12. Z. LI 13. Y. YANG	
10:20 – 10:30		Coffee & Tea Break		
10:30 – 12:00		3. K.H. CHI 4. H.M. WU 5. J.Y. CHEN	14. G.Q. ZHANG 15. M.Y. HE 16. Y.T. XIE	
12:10 – 13:00		Lunch Break		Conference Excursion
13:10 – 14:40		6. W.T. LIN 7. C.Y. LIU 8. Y.C. KUO		
14:40 – 14:50		Coffee & Tea Break		
14:50 – 16:30				
17:00 – 18:30		Conference Registration		
19:00 – 20:30	Reception		Conference Banquet (Approx. 1.5 hrs)	

# GOLDEN ACADEMY

---

**MONDAY 08/20**

**Meeting Room A**

1. Metamaterial Microfluidic Sensors (Q. CHEN)
2. TBA (W.D. HE)
3. Tailored microstructure of thermal barrier coatings by EB-PVD (S.H. CAI)
4. Na<sup>+</sup>/HCO<sub>3</sub><sup>-</sup> cotransporters in renal physiology (L.M. CHEN)
5. Cold atmospheric plasma: an emerging oncotherapeutic approach for breast cancer treatment (X.F. DAI)
6. Clinical treatment of andrographis panic in the cause of physical and mental health problems caused by chronic pharyngitis (H.C. SUNG)
7. Synthetic Amphoteric Copolymer as a Dispersant for Aqueous Barium Titanate Suspensions (K.C. HSU)
8. Development of High-performance Cathodes for Aqueous Zinc-ion Battery (S.Q. LIANG)

**Meeting Room B**

1. Full Parameter Detetion of Linear Objects (Z.Z. XU)
2. Piezopotential Modulated Graphene Semiconductor Devices (Q.J. SUN)
3. A Deep Learning-Based Technique for Detecting Facade Tile Degradation (K.H. CHI)

# GOLDEN ACADEMY

---

4. Deep Learning Driven Wireless Communications (H.M. WU)
5. Research on adversarial attack based on evolutionary mechanism (J.Y. CHEN)
6. An Architecture for Intelligent Security Predictive System (W.T. LIN)
7. Key technology for real-time and long-term wearable ECG monitoring (C.Y. LIU)
8. Meridian leads West and East meet at Quantam Medicine (Y.C. KUO)

## **TUESDAY 08/21**

### **Meeting Room A**

12. Sealing Surgical Orthotopic Implantation of Human Colon Cancer Cells in Nude Mice Induces Tumor Foci in All Clinically Relevant Metastatic Sites without Early Peritoneal Carcinomatosis (S.N. YOON)
13. Single-Molecule Photodynamic Theranostics: From Mechanism to Application (L. LUO)
14. TBA (L. ZHANG)
15. Meridian Medicine on Pharmacology (Y.H. WU)
16. Targeting Core Mutated Pathways of Glioblastoma (F. LIN)

### **Meeting Room B**

12. TBA (Z. LI)



# GOLDEN ACADEMY

---

13. Hybridized triboelectric nanogenerators and energy storage devices (Y. YANG)

14. TBA (G.Q. ZHANG)

15. Deep Learning Approach for Hyperspectral Data Classification (M.Y. HE)

16. Continuous-Valued Annotations Aggregation for Heart Rate Detection (Y.T. XIE)

## **WEDNESDAY 08/22**

### **Meeting Room A**

23. Metal-Organic Frameworks as Adsorbents, Membranes and Catalysts: A Computational Perspective (J.W. JIANG)

24. Interdiffusion behaviour and lifetime prediction of Co-Al coating on Ni-based superalloy (J.L JIANG)

25. Study of TGO residual stress using PLPS (W.H. LI)

26. Study on Al<sub>2</sub>O<sub>3</sub> modified YSZ thermal barrier coating mitigate volcanic ash corrosion prepared by EBPVD method (M. LIU)

27. On the mechanisms and mitigation of rare earth doped YSZ against molten volcanic ash attack (R.C. LI)