GOLDEN ACADEMY

Message from the organizers

Dear Colleagues and Friends,

2019 International Symposium for Advanced Materials Research (ISAMR 2019) will be held in Kaohsiung, Taiwan during August 22-25 2019.

ISAMR 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 ISAMR 2019. Your active participation is the key to the success of this conference.

Yours Sincerely,

ISAMR 2019 Committee

Asia Pacific Society for Materials Science (APSMR)

www.apsmr.org

RESEARCH·ASIA PACIFIC SOCIETY FOR MATERIALS
APSMR

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Conference organizing committee

CONFERENCE CHAIRS

Prof. Hideki KITA (Nagoya University)

Prof. Chih-Yu CHANG (National Taiwan University of Science and Technology)

Prof. Yu-Chiang CHAO (National Taiwan Normal University)

Prof. Ruei-San CHEN (National Taiwan University of Science and Technology)

Prof. Akon HIGUCHI (National Central University)

Prof. Yung-Kang SHEN (Taipei Medical University)

CONFERENCE PROGRAM DIRECTORS

Dr. Yingxue SONG (APSMR)

CONFERENCE SECRETARIAT

Ms. Yaru WU (APSMR)

Mr. Chenhuan HSU (APSMR)

Ms. Yangjun HU (APSMR)

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Conference topics

1. Structure materials and Functional Coatings (metals, ceramics, and composites): No.304 (5-6, 11-12)

2. Materials for energy (saving, conversion, transfer, storage) and environment plus electrochemistry

- ***2.1. Photovoltaics: No.304 (3, 15)***
- ***2.2. Rechargeable Batteries and Fuel Cells: No.304 (1)***
- ***2.3. Materials for Thermal Management and Thermal Energy Utilization***
- ***2.4. Materials for Energy and Environmental Applications: No.304 (2, 22)***

3. Optics and Photonic Materials: No.304 (13, 19)

4. Electronics, Magnetics and Nanomaterials: No.304 (2, 14, 20-22), No.305 (21)

5. Polymer Science and Molecular Chemistry: No.304 (4)

6. Organic Materials and Biomaterials: No.304 (7, 14, 16-18)

7. Theory, Characterization and Computational Modeling of Materials: No.304 (8), No.305 (4)

<table>
<tr><th></th><th>THU, 08/22</th><th>FRI, 08/23</th><th>SAT, 08/24</th><th>SUN, 08/25</th></tr>
<tr><td>9:00 – 10:30</td><td rowspan="3">Pre-session technical and discussion forums on international collaboration (by invitation only)</td><td colspan="3">Oral Presentation</td></tr>
<tr><td>10:30 – 10:40</td><td colspan="3">Coffee & Tea Break</td></tr>
<tr><td>10:40 – 12:00</td><td colspan="3">Oral Presentation</td></tr>
<tr><td>12:10 – 13:00</td><td rowspan="5"></td><td colspan="2">Lunch Break</td><td rowspan="7"></td></tr>
<tr><td>13:00 – 14:20</td><td colspan="2">Oral Presentation</td></tr>
<tr><td>14:20 – 14:30</td><td colspan="2">Coffee & Tea Break</td></tr>
<tr><td>14:30 – 15:20</td><td>Oral Presentation</td><td rowspan="2">Oral Presentation</td></tr>
<tr><td>15:20 – 17:00</td><td rowspan="3">Conference Excursion</td></tr>
<tr><td>17:30 –18:30</td><td>Conference Registration</td><td>Poster Session</td></tr>
<tr><td>19:00 –20:30</td><td>Conference Reception</td><td>Conference Banquet (Approx. 1.5 hrs)</td></tr>
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GOLDEN ACADEMY

Presentation List

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–
10:30</td><td rowspan="3">Pre-session technical and discussion forums on international collaboration (by invitation only)</td><td colspan="2">Room 304</td><td colspan="2">Room 304</td><td rowspan="2">23. Reserved</td></tr>
<tr><td>1. T. HIGUCHI
2. S.C. JUN
3. W.C. TU</td><td></td><td>11. H. KITA
12. S. KIRIHARA
13. Y. FUJITA</td><td></td></tr>
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<tr><td rowspan="2">10:40
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12:00</td><td rowspan="2">Room 304
4. M. TAKAFUJI
5. I. HIMOTO
6. A. SERIZAWA</td><td>Room 305
4. M. YAMASHITA</td><td colspan="2">Room 304
14. Y. ICHIHASHI
15. C.C. LIN
16. A. HIGUCHI</td><td></td></tr>
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14:20</td><td colspan="2">Room 304
7. S. TAKEOKA
8. C.H. CHANG
9. Reserved</td><td colspan="2">Room 304
17. Y. CHANG
18. N. OHTSU
19. M. TAKAHASHI</td></tr>
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10. Reserved</td><td>Room 304
20. R.S. CHEN
21. S. YAMASHITA
22. M. BAR SADAN</td><td>Room 305
21. M. KIMURA</td></tr>
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Presentations for ISAMR 2019

FRIDAY 08/23

Meeting Room No 304

1. Developments of New electrolyte and Anode Electrode Materials for Smart-Type SOFC Device Operating at Medium Temperature (T. HIGUCHI)
2. Phosphorus-driven MoS2 nanowires as an advanced electrode material for quasi-solid-state supercapacitors (S.C. JUN)
3. Reduced graphene oxide composites for high-performance optoelectronic devices (W.C. TU)
4. Monodisperse black polymer spherical particles for selective reflection materials (M. TAKAFUJI)
5. Fracture behavior of macroporous Si-SiC ceramics with anisotropic three-dimensional network structure in the bending tests (I. HIMOTO)
6. Improvement of strength and corrosion resistance of Al alloys by using steam (A. SERIZAWA)
7. Evaluation of fibrinogen γ-chain peptide-coated, ADP-encapsulated liposomes as hemostatic nanoparticles (S. TAKEOKA)
8. Estimation of Breakpoints for Extended Efficiency Models (C.H. CHANG)
9. Reserved
10. Reserved

GOLDEN ACADEMY

Meeting Room No 305

4. An efficient mathematical approach for optimal selection problems in tree breeding (M. YAMASHITA)

SATURDAY 08/24

Meeting Room No 304

11. Surface modification of borides based ceramics and the effects on frictional properties (H. KITA)
12. Stereolithographic Additive Manufacturing of Functional Ceramic Components (S. KIRIHARA)
13. ZnO nanoparticle based near UV light emitting diodes (Y. FUJITA)
14. Photocatalytic Decomposition of Water over Picene Thin film as Organic Semiconductor (Y. ICHIHASHI)
15. Assessment of the ultraviolet exposure caused degradation of silver nanowire transparent conductive films for the organic photovoltaics applications (C.C. LIN)
16. The design of a thermoresponsive surface for the continuous culture and differentiation of human pluripotent stem cells (A. HIGUCHI)
17. Bio-inspired interfaces and Membranes in Medical Applications (Y. CHANG)
18. Simple chemical treatment process to give osteoconductivity and antibacterial efficacy on titanium implant (N. OHTSU)

19. Color-Tunable White-Light Emission from Fluorescent Urea Derivatives and Fluoride (M. TAKAHASHI)
20. Surface-dominant Electronic Transport Induced by Surface Electron Accumulation in MoS2 Layered Crystals (R.S. CHEN)
21. Control of packing bed for chemical heat storage system by using hetero coaggregation of Al2O3 and Mg-based Layered hydroxide salt (S. YAMASHITA)
22. Transition metals dichalcodenides: growth mechanism, structure and catalytic activity (M. BAR SADAN)

Meeting Room No 305

21. Neuromorphic system using thin-film devices as a novel computing system (M. KIMURA)

POSTER SESSION

P1. Development of high efficiency heat storage tank by utilizing black alumina hollow body (K. KONDO)
P2. Improved stability of reduced graphene oxide/polyvinyl alcohol photodetectors (W.C. LEE)
P3. Tunable light absorbance by graphene/metal nanoparticles hybrid structures (Y.T. HUANG)
P4. Modulation of high-reflectance color filters: a theoretical analysis (P.W. CHEN)

P5. Isolation and differentiation of mesenchymal stem cells cultured on thermoresponsive polymeric surface immobilized with ECM (Y.P. JIANG)

P6. Sign of Thermoresponsive Polymeric Surface for Continuous Culturing Human Pluripotent Stem Cells (Y.C. LIU)

P7. Comparative Study in Different Motifs of Laminin-derived Synthetic Peptides for Adhesion, Proliferation and Differentiation of Human Pluripotent Stem Cells (M.W. LU)

P8. Pluripotency and differentiation of human adipose-derived stem cells in 2-D & 3-D culture (C.S. HUNG)

P9. Oxide Ion and Proton Conduction of Nano-grained YSZ Thin Films Prepared by Pulse Laser Deposition (D. ETOH)

P10. Improvement of the photoluminescence properties of ZnO nanoparticles by thermal diffusion of Ga (C. SAKURAI)

P11. Fabrication of large area light emitting devices by ZnO nanoparticle based near UV light emitting diodes (Y. KONISHI)

P12. Flexible solid-state supercapacitors based on MoO2@N-doped carbon and CuCo2S4 tubular nanostructures (S. LIU)

P13. Chiroptical polymer film exhibiting strong circularly polarized luminescence through functionalization with chirally self-assembled nanofibrillar network. (H. OISHI)

P14. Effect of anion species and concentration in electrolyte on NiTi anodization (K. TAKIGUCHI)

P15. Comparison of anodized layer on titanium using nitrate electrolyte in various alcohol solvents for investigating layer growth mechanism (K. YAMAGUCHI)

P16. Preparation of strontium-doped apatite layer on titanium substrate through calcium phosphate slurry processing and ion release from the layer (S. KOMAI)

P17. Wettable behavior of hydrophobic surface prepared by thermal CVD using organic silane molecules with different alkyl chain length (T. ISHIZAKI)

SUNDAY 08/25

Meeting Room No 304

23. Reserved