

# "PETROMAT" Poster Sessions

## *Session: Ceramic for Industrial Technology*

- IND-P-001**     **Feasibility Study of Improved Porous by Paper Waste Addition in Fired Clay Bricks**  
Anuwat Srisuwan  
*Sisaket Rajabhat University, Thailand*
- IND-P-004**     **Effect of Firing Condition of Reduction Atmosphere on Physicals Properties of Copper Red Glaze for Automatic Kiln**  
Soravich Mulinta  
*Lampang Rajabhat University, Thailand*
- IND-P-006**     **Fabrication and Physical-Mechanical Properties of Fired Clay Brick from Wood Ash**  
Nonthaphong Phonphuak  
*Rajabhat Maha Sarakham University, Thailand*
- IND-P-008**     **Influence of Si/Al Ratio on Phase Formation, Structure and Mechanical Properties of Perlite-Based Geopolymer**  
Rewadee Wongmaneerung  
*Maejo University, Thailand*
- IND-P-011**     **Effect of Coir and Polypropylene Fiber on Mechanical Properties of Reinforced Kaolin Based Geopolymer**  
Khemmakorn Gomonsirisuk  
*National Metal and Materials Technology Center, Thailand*
- IND-P-013**     **Thermal Degradation and Thermal Properties of Gypsums used in Gypsum Wallboard**  
Songpol Homutai  
*Prince of Songkla University, Thailand*
- IND-P-014**     **Synthesis of Tridymite Phase and Phase Transition Behavior of SiO<sub>2</sub> from Amorphous Silica in the Presence of K<sub>2</sub>O or Silica Brick Waste**  
Tomoko Kitani  
*Kyoto Institute of Technology, Japan*
- IND-P-017**     **Factor in Formation of Bubbles at the Interface between Borosilicate Glass and Dense Zircon Refractory**  
Hiroki Akahane  
*Kyoto Institute of Technology, Japan*
- IND-P-023**     **Characterization of Cordierite-Mullite Ceramics prepared from China Clay, Talc and Alumina**  
Sibpawishkon Sittiakkaranon  
*Rajabhat Nakhon Sawan University, Thailand*
- IND-P-027**     **Effects of Red Clay and Coffee Grounds on Physical and Renewable for Hydroponic Vegetable of Planting Materials**  
Anuwat Sueakhlai  
*Lampang Rajabhat University, Thailand*

- IND-P-028**      **Effects of Firing Temperature of Diatomite and Lampang Clay on Physical – Mechanical Properties of High Absorption Water Saucer**  
Sunsanee Boonruksa  
*Lampang Rajabhat University, Thailand*
- IND-P-029**      **Effects of Cow-Bone Ash, Lampang Kaolinite Residue, Feldspar and Quartz on Physical – Mechanical Properties of Bone China Body**  
Wasurat Maneetapho  
*Lampang Rajabhat University, Thailand*
- IND-P-030**      **Utilization of Body Waste from Casting Process for Giftware Products Case Study Kritsiri Ceramic Factories**  
Sukanya Pukpobsuk  
*Lampang Rajabhat University, Thailand*
- IND-P-031**      **Development of Light Weight Concrete from Industrial Waste**  
Suparut Narksitipan  
*Maejo University, Thailand*
- IND-P-032**      **Evaluation of Natural and Synthetic Hybrid Fiber Reinforced Cement**  
Nittaya Jaitanong  
*Maejo University, Thailand*
- IND-P-038**      **Utilization of Ratchaburi Ball Clay as Raw Material for Refractory Brick Fabrication for Dragon Kiln Construction**  
Nithiwach Nawaukkaratharnant  
*Metallurgy and Materials Science Research Institute, Thailand*
- IND-P-043**      **Low Thermal Expansion Glaze of Ceramic Cookware Body**  
Pranee Junlar  
*Chulalongkorn University, Thailand*
- IND-P-045**      **Preparation of Lightweight Clay Brick with Adding Lignite Bottom Ash and Foaming Agent**  
Witsanu Maliyam  
*Chulalongkorn University, Thailand*
- IND-P-046**      **Characterization of Lightweight Kaolinite-Based Geopolymers Synthesized by Using Sodium Lauryl Ether Sulfate (SLES) as Foaming Agent**  
Watcharee Sornlar  
*National Metal and Materials Technology Center, Thailand*
- IND-P-050**      **Bagasse Ash as an Alternative to Replace Sodium Silicate for Metakaolin-Based Geopolymer Paste**  
Pakamon Kittisayarm  
*Kasetsart University, Thailand*
- IND-P-058**      **Antibacterial and Dust Storage Performance of Light-Weight Concrete Prepared from Eco-Friendly Cement-Like Materials**  
Latda Chandeng  
*Kasetsart University, Thailand*

- IND-P-060**     **Metakaolin-Based Geopolymers Formed by Semi – Dry Process with Different Types of Alkali Solution**  
Sitthisak Prasanphan  
*Chulalongkorn University & National Metal and Materials Technology Center, Thailand*
- IND-P-062**     **Physical and Mechanical Properties of a Cellular Lightweight Concrete containing Fibers and Fly Ash from Industrial Wastes**  
Suteerapun Punlert  
*National Metal and Materials Technology Center, Thailand*
- IND-P-063**     **Using Industrial Wastes for Porous Materials Manufactured for Antibacterial in Biological Water Treatment**  
Suteerapun Punlert  
*National Metal and Materials Technology Center, Thailand*
- IND-P-069**     **Properties of Terra Cotta Body for Ban Nam-Phu in Loei Province**  
Nattawut Ariyajinno  
*Loei Rajabhat University, Thailand*

### ***Session: Advanced Ceramics***

- ADV-P-002**     **Effect of Polystyrene Molecular Weight on an Ability to Inhibit Dewetting Behavior of ZnO Nanoparticles in Polystyrene Thin Film**  
Nampueng Pangpaiboon  
*King Mongkut's University of Technology North Bangkok, Thailand*
- ADV-P-007**     **Relationship between Green and Sintered Properties of Slip Cast Alumina with Different Binder Loadings**  
Kritkaew Somton  
*National Metal and Materials Technology Center, Thailand*
- ADV-P-010**     **Effect of Argon Flow Rate on the Phase Formation of B<sub>4</sub>C Synthesis from Glutinous Rice Flour via Carbothermic Reduction Process**  
Kannigar Dateraksa  
*Chulalongkorn University, Thailand*
- ADV-P-015**     **Synthesis and Evaluation of Consolidated Linde F Zeolite by a Novel Process**  
Miku Masuda  
*Kyoto Institute of Technology, Japan*
- ADV-P-016**     **Effect of TiO<sub>2</sub> Addition on CA6 Formation in Alumina Castables**  
Hiroki Shinka  
*Kyoto Institute of Technology, Japan*
- ADV-P-019**     **Preparation of Activated Carbon-Zeolite Composites from Rice Husk Ash**  
Miyuki Miyazaki  
*Kyoto Institute of Technology, Japan*

- ADV-P-025**      **Effect of Acetonitrile as a Drying Control Chemical Additive on the Pore Structure Properties of Sodium Silicate Based Silica Aerogels**  
Younghun Kim  
*Yonsei University, South Korea*
- ADV-P-033**      **Synthesis of Zeolite Y from Thai Kaolin and Silica from Rice Husk via Hydrothermal Method**  
Apiluck Eiad-Ua  
*King Mongkut's Institute of Technology Ladkrabang, Thailand*
- ADV-P-035**      **Comparison of Biodiesel obtained from Waste Cooking Oil of a Fried Rice Cracker (Khaw-Tan) Process by Using Catalytic Transesterification from Egg and Cockle Shells**  
Sittipong Aupree  
*Lampang Rajabhat University, Thailand*
- ADV-P-037**      **Preparation of Transparent Alumina Thin Films Deposited by RF Magnetron Sputtering**  
Busarin Noikaew  
*Thailand Institute of Scientific and Technological Research, Thailand*
- ADV-P-039**      **Effects of Liquid Phase Sintering Additives on Properties of Alumina Ceramics**  
Kanyapak Siriphaisarntavee  
*Chulalongkorn University, Thailand*
- ADV-P-048**      **Organic Binder-Silica Composite Aerogel with Improved Mechanical Strength**  
Kyu-Yeon Lee  
*Yonsei University, South Korea*
- ADV-P-049**      **Dioxybenzene Linker Crosslinked Organic Modified Silica Aerogel for Improving Structural and Mechanical Properties**  
Younghun Kim  
*Yonsei University, South Korea*
- ADV-P-051**      **Photocatalytic Activity of C Doped TiO<sub>2</sub> Nanoparticles prepare by Simple Microwave Cooking-Assisted Sol-Gel Method**  
Samroeng Narakaew  
*Lampang Rajabhat University, Thailand*
- ADV-P-054**      **Oxidation-Bonded Porous SiC Fabricated by Powder Injection Molding**  
Parinya Chakartnarodom  
*Kasetsart University, Thailand*
- ADV-P-064**      **Effects of NH<sub>4</sub>F on Hydrophilicity in TiO<sub>2</sub> Films for Dental Implant Application**  
Phanawan Whangdee  
*Rajamangala University of Technology Isan, Thailand*
- ADV-P-074**      **Preparation of Calcium Silicate-Based Dental Cement from Cockle Shell and Rice Husk Ash**  
Thanakorn Wasanapiarnpong  
*Chulalongkorn University, Thailand*

- ADV-P-075**      **Effects of  $ZrO_2$ - $SiO_2$ - $MgO$ - $Y_2O_3$  Additions on Pressureless Sintering Silicon Nitride**  
Thanakorn Wasanapiarnpong  
*Chulalongkorn University, Thailand*
- ADV-P-079**      **Tribology and Mechanical Properties of a Mica Glass-Ceramic**  
Sahadsaya Prasertwong  
*Kasetsart University, Thailand*
- ADV-P-081**      **The Use of Rice Husk Ash and Bagasse Ash for the Fabrication of Silicon Oxynitride Ceramics via Direct Nitridation Method**  
Wiphawan Khopthong  
*Thammasat University, Thailand*

### ***Session: Ceramic Art and Design***

- ART-P-009**      **Innovative of Creation Souvenirs Wisdom of Dan-Kwian Pottery Come to the Knowledge in Local Youth**  
Kriangkrai Duangkachon  
*Nakhon Ratchasima Rajabhat University, Thailand*

### ***Session: Glass and Coatings Technology***

- GLA-P-053**      **Prediction of Liquidus Temperature of Basaltic Glasses**  
Apirat Theerapapvisetpong  
*Chulalongkorn University, Thailand*
- GLA-P-068**      **Comparison Study of Clear Glaze Properties from Beer Bottle Cullet for Ceramic Products Decoration**  
Nattawut Ariyajinno  
*Loei Rajabhat University, Thailand*

### ***Session: Materials Testing and Characterization***

- TES-P-020**      **Nano Cellulose–Polyvinyl Alcohol Films with Improved Mechanical Performance**  
Tawat Soitong  
*Maejo University, Thailand*
- TES-P-056**      **Effects of Quenchant on Microstructures and Mechanical Properties of Steel Grade AISI 5160**  
Pattama Apichai  
*Lampang Rajabhat University, Thailand*
- TES-P-072**      **Effects of  $La_2O_3$  Addition on Physical and Dielectric Properties of  $(Bi_{0.5}Na_{0.5})TiO_3$  Ceramics**  
Chontira Sangsubun  
*Thaksin University, Thailand*