

TABLE OF CONTENTS

PART 1: PROGRAM SCHEDULE	2
PART 2: KEYNOTE SPEECH	3
PART 3: ORAL SESSIONS	4
ORAL SESSION 1: AMSCE2017, EESD2017	4
ORAL SESSION 2: TMAM2017, METMI2017	5
PART 4: POSTER SESSION	6
PART 5: INSTRUCTIONS FOR PRESENTATIONS	8
PART 6: CONFERENCE VENUE	9
PART 7: CONTACT	12

PART 1: PROGRAM SCHEDULE

April 21, 2017		
09:00-12:00	Conference Registration	Hotel Lobby The Patong Resort Hotel, Phuket, Thailand
14:00-17:00	Conference Registration	
Morning, April 22, 2017		
09:00-09:15	Open Ceremony	Khun Thanit Room The Patong Resort Hotel, Phuket, Thailand
09:15-10:00	Keynote Speech <i>Professor Young Cheol KWON</i>	
10:00-10:15	Coffee Break	
10:15-12:00	Oral Session 1 <i>AMSCE2017 & EESD2017</i>	
12:00-13:00	Lunch	Hotel Restaurant
Afternoon, April 22, 2017		
14:00-18:00	Oral Session 2 <i>TMAM2017 & METMI2017</i>	Khun Thanit Room The Patong Resort Hotel, Phuket, Thailand
15:00-15:15	Coffee Break	

PART 2: KEYNOTE SPEECH

TITLE: Cellulose Insulation for Use as Building Insulation In Korea



**Speaker: Professor Young Cheol KWON
Halla University, Korea**

Time: 09:15-10:00, April 22, 2017

Location: *Khun Thanit Room the Patong Resort Hotel, Phuket, Thailand*

Abstract

Cellulose insulation was introduced into Korea in the 1980s when several small companies started production. The cellulose industry in Korea is still in an early stage of development with current production of about 1000 tons a year. The Korean equipment used to produce cellulose insulation was imported from the United States and installed by U.S. technicians. A typical cellulose manufacturing plant includes facilities for storing and moving large quantities of waste paper, chopping and shredding, milling or fiberizing, adding chemicals, and packaging. For broader use of cellulose insulation in buildings in Korea, it is necessary to establish its thermal performance. To this end, the effect of density and temperature on the thermal conductivity of loose-fill cellulose insulation manufactured in Korea and U.S. was reported. The apparent thermal conductivity of a particular type of spray-applied cellulose insulation was also determined and compared with previously published data. Apparent thermal conductivity (k_a) measurements of Korean-made loose-fill cellulose insulations were completed using equipment that was built and operated in accordance with ASTM C 518. Korean loose-fill cellulose has thermal conductivity about 5% greater than the corresponding U.S. product at the same density. This is likely due to differences in the recycled material being used. Both spray-applied and loose-fill cellulose insulation lose about 1.5% of their thermal resistivity for 5.5°C increase in temperature.

PART 3: ORAL SESSIONS

Oral Session 1: AMSCE2017 & EESD2017

Time: 10:15-12:00, April 22, 2017

Location: Khun Thanit Room the Patong Resort Hotel, Phuket, Thailand

Oral Presentation

Study on Co-distribution System for Agricultural Products within Beijing City
Xiao-hui YAN AMSCE-AM263

Quantile Regression Analysis on Short-Term Measured Data of Gravity-Arch Dam Based on POD
Wei-hua FANG, Yun-ping CHEN, Hui ZHANG and Lin LI AMSCE-AM264

Cellulose Insulation for Use as Building Insulation in Korea
Young Cheol Kwon and David W. Yarbrough AMSCE-AM265

A Cooperation and Competition model for Risk Management of a Two-Stage Supply Chain
Li-na XU and Zhi-qing MENG AMSCE-AM266

Flexible Manufacturing Technology for Children's Customized Furniture
Lin-qi ZHAO, Xian-qing XIONG, Shu-man ZHU, Yu-yu WU, Meng-nan YU and Yu DI AMSCE-AM268

Potassium-free Solid Fuel Production from Palm Empty Fruit Bunch by Hydrothermal Treatment
Kunio YOSHIKAWA EESD-E103

Commercial Demonstration of Solid Fuel Production from Municipal Solid Waste Employing the Hydrothermal Treatment
Tri Sesilia Safiril, Bayu Indrawan Safiril and Kunio Yoshikawa EESD-E110

Kinetic Study of Aerobic Degradation of Tetramethylammonium Hydroxide (Tmah) Waste Produced in Electronic Industries
Ida DE MICHELIS, Alessia DI RENZO, Matteo SARAULLO and Francesco VEGLIO* EESD-E121

Biomimicry, S.PSS and DRE: Designerly Strategies to Reduce the Knowledge Gap between Design and Nature
Corbin RAYMOND, Aletta CHISIN and Andrea BROOM EESD-E123

Experimental Study on Seismic Performance of Full Precast Shear Wall-Frame Structures
Jun-wei MA, Jin-long PAN, Wan-yun YIN and Shou-cheng LIU EESD-E128

Daylight and Energy Performance of Automated Shading with Parametric Design: Case Study Bangkok
Phetcharin PHONGPHETKUL and Pimonmart WANKANAPON EESD-E143

Application of an Airfoil to the Tidal Turbine Design by Analyzing Two-dimensional Performance in the Water
Chul-hee JO and Kang-Hee LEE EESD-E148

Energy Monitoring for Small Smart Farm Using Internet of Things
Pictchaya Jamjan and Waris Rattananimit EESD-E172

Oral Session 2: *TMAM2017 & METMI2017*

Time: 14:00-18:00, April 22, 2017

Location: *Khun Thanit Room the Patong Resort Hotel, Phuket, Thailand*

Oral Presentation

The Relationship between Partnerships and Organizational Performance in the Industrial Waste Management Industry

Wen-chih YEH, Ming-hsun TSENG and Chun-chang LEE TMAM-T118

Periodic Solution of a Nonautonomous Predator-prey System of Holling Type II with Strong Allee Effect and Impulsive Perturbations

Yu-shu SUN, Kai-hua WANG and Zhan-Ji GUI TMAM-T120

Circuit Design and Simulation of Hydraulic System that Applied Optional Redundancy about Hydraulic Pumps for Track-based Seabed ROV

Jeongwoo PARK, Youngho CHOI, Hyogon KIM, Jungwoo LEE, Jongdeuk LEE, Hyojun LEE and Jonggeol KIM
TMAM-T121

Expert Assessment of Technological Excellence of Metallurgical Enterprises in Kazakhstan

Saule KAZHIKENOVA, Dinara KAZIMOVA, Yelena SPIRINA, Aliya KELDIBEKOVA, Rita DOPIRA and Gulim TURSUNGALIYEVA TMAM-T124

Assessment of Technological Processes in the Metallurgy of Non-Ferrous Metals Based on Information Theory

Saule KAZHIKENOVA, Gauhar ZHETIMEKOVA, Dinara KAZIMOVA, Abdykhabib OMAROV, Assylzat SLANBEKOVA and Nadezhda POPOVA TMAM-T128

Investigation on Optimal Control of Hybrid Vehicle Energy Management System Based on Multi-source Traffic Information

Qing-sheng SHI, Ke LU and Shi-jie ZHANG TMAM-T132

Strategic Management on Design of Cultural Creation in Silk Pattern

Kang-fu ZHANG and Yi-han ZHANG METMI-MT267

Research on the Training Mode of Engineering Master Students Based on Innovation and Entrepreneurship

Jing-feng HE METMI-MT268

Research on Network Informatization Tactics of Continuing Education in Yunnan University under the Background of "Internet+"

Hong-wu ZUO and Guan-hua SUN METMI-MT269

Theoretical Framework Research on Retail Business Model Innovation in Internet Environment

Ze-jian LI and Jia-ying KU METMI-MT270

User Adoption Intention of the tourism APP Based on Experimental Method

Lan PAN, Ai-qing RUAN and Wei ZHANG METMI-MT271

Mathematics and Nutritional Status: A Proposal for the Development of Research Skills

Jorge Eliécer VILLARREAL FERNÁNDEZ and Jhony Mauricio CANO GIRALDO METMI-MT312

PART 4: POSTER SESSION

An Overview on Resource Utilization of Sewage Sludge

Bi-fan HE AMSCE-AM260

Multi-objective Signal Timing Model of Single Intersection Based on Genetic Algorithm

Zhuo-qun WANG, Yu-fei HOU, Qin LUO, Min YAN and Yi-ming ZHANG AMSCE-AM262

Experimental Study of Chemical Composition of Hangzhou Soft Clay

Jie-qing HUANG, Xing-wang LIU and Guo-qiang CAO AMSCE-AM270

Design and Analysis of Automobile Composite Muffler Model

Dong-wei WANG AMSCE-AM271

The Study on Earth Pressure against Retaining Wall Considering Displacement

Hai-dong KUAI, Wei LI, Kun-yong ZHANG and Ying-bo AI AMSCE-AM287

Experimental of Prepared Zinc Powder from Hot-Dip Galvanizing Zinc Dross

Xun-hua YUAN and Qi-fu ZHANG AMSCE-AM290

Embedded Children Painting Machine Based on Image Processing

Jin-xiang ZENG and Ke-rong GAI AMSCE-AM292

A Performance Testing Platform of ECG Electrodes Based on Millipore Films

Jin-zhong SONG, Hao LIU, Ming WEI and Jin-song LI AMSCE-AM293

Economic Evaluation of ESS in Micro Grid According to Load Type and System Configuration

Soo-kyeong HAN, Hoon-chul SHIN and Soo-hwan CHO EESD-E106

Three-Dimensional Adjustment of Precision Control Network Based on Independent Coordinate System

Xiao-guang ZHANG, Yi-jun WANG, Feng CHEN and Zheng-wei LIU EESD-E111

Seasonal Aerosol Vertical Distribution and Optical Properties over North China

Xing-xing GAO, Yan CHEN, Lei ZHANG and Wu ZHANG EESD-E120

Research on the Internet Interactive Teaching Mode of Advanced English in Multimedia Network Environment

Chun-hua SHEN EESD-E125

New Dy³⁺ Containing Whitlockite for LED Devices

Dina DEYNEKO, Darya PETROVA, Ivan LEONIDOV and Bogdan LAZORYAK EESD-E140

Ferroelectrics Vanadates as New Multi-Functional Materials

Daria A. Petrova, Dina V. Deyneko, Vladimir A. Morozov, Sergey Yu. Stefanovich and Bogdan I. Lazoryak
EESD-E141

Spatial Appeal and Spatial Response of Hui-xian Wetland Protection and Development in Guilin—Based on the Natural landscape

Zheng-min WEN and Zhen ZHANG EESD-E170

Overseas Talents Backflow under the Level of IPR—Based on the View of Technology Backward Countries

Qi-ang JIANG and Ting-hua LIU TMAM-T101

Application of Markov Random Field on Microwave Near-field Imaging of Breast Tumor

Yi-zhong PENG and Meng YAO TMAM-T108

Design and Research of Amphibious Cleaning Robot

Xue-feng YANG and Li-gang CHEN TMAM-T116

Design of Six Axis Automatic Painting Machine for Automatic Up and Down

Xu-deng XU, Mian-hao ZHANG, Zhi-qiang LIU, Ze-hua WANG and Liu-lin WU TMAM-T130

Fabrication of Hydrophobic Micro-lens Arrays by Capillary Force Lithography

Jia XU, Wen-bin XU, Tai-sheng WANG, Chun-bo LIN, He WANG, Jian-zhuo LIU, Jia-lin XU, Zhen-wu LU and Hong-xin ZHANG TMAM-T135

Evaluation of Water Environment Quality of Si River Based on Multivariate Statistical Method

Sheng-nan LIU, Wen-li ZHOU, Yong DOU, Jin-wei GAO, Xu-ying JIA, Feng-yue SHU and Ying-hui CHAI TMAM-T137

Effects of Different Allelochemicals on the Growth and Gene Expression of Beet Seedlings

Bing-xue MA, Da-you CHENG, Jie CUI and Cui-hong DAI TMAM-T139

The Analysis on Inter-Regional Industrial Production Chain of China Based on the Average Propagation Length

Zhong MA, Xiang-xiang HUI, Quan-run CHEN and Cui MA TMAM-T148

Application of Zoom in Multisensory Teaching from the Perspective of Multisensory Integration

Hai-yan LI and Man-rui GUO METMI-MT251

Scientific Practice-A Exploration of Education Mode on Training of the Talents of Traditional Chinese Medicine

Ling-yun ZHONG, Wei-feng ZHU, Yao-hui YE, Yi HUANG, Xiang ZHOU and Hong-ning LIU METMI-MT253

Research on the Cultivation Mode of Graduate Students of Architecture and Civil Engineering Based on Team Guidance

Wei-gong CHEN, Hui-hui WANG and Li-hong YUE METMI-MT254

Exploring a New Chinese Model of Tourism and Hospitality Education: Lessons learned from American Counterparts

Jin-lin WU, Zong-qing ZHOU, Hong-bin XIE and Fei CHENG METMI-MT255

Current Situation Research and Proposal of Social Organization Standardization Management Mode

Qing XU and Xiang-hua ZHU METMI-MT256

Research on the Cooperation between Universities and Enterprises in Career Technical College

Xiao-dong ZHU and Ning JIANG METMI-MT258

Research on the Training Mode of Engineering Master Students Based on Innovation and Entrepreneurship

Jing-feng HE METMI-MT268

Research on Network Informatization Tactics of Continuing Education in Yunnan University under the Background of "Internet+"

Hong-wu ZUO and Guan-hua SUN METMI-MT269

Theoretical Framework Research on Retail Business Model Innovation in Internet Environment

Ze-jian LI and Jia-ying KU METMI-MT270

User Adoption Intention of the tourism APP Based on Experimental Method

Lan PAN, Ai-qing RUAN and Wei ZHANG METMI-MT271

PART 5: INSTRUCTIONS FOR PRESENTATIONS

For Oral Presentation

Devices Provided by the Conference Organizer:

- λ Laptops (with MS-Office & Adobe Reader)
- λ Projectors & Screen
- λ Laser Pointer

Materials Prepared by the Speaker:

- λ PowerPoint or PDF files

Duration of each Presentation:

- λ Regular Oral Session: 5-10 Minutes of Presentation.
- λ Keynote Speech: 30 Minutes of Presentation, 10 Minutes of Q&A

Part 6: CONFERENCE VENUE

Hotel Information

The Patong Resort Hotel

<http://www.patongresorthotel.com/>



Hotel

The Patong Resort Hotel is a 4 star hotel located near the Patong Beach-one of the best locations in Phuket for an enjoyable island escape. The hotel comprises of 325 rooms in a variety of categories including Superior, Deluxe, Premium Deluxe, Executive and Grand Suite. All rooms are non smoking and equipped with modern amenities.

The hotel is also well equipped to host a range of functions and events. With professional staff, high-quality service and comprehensive facilities, the Patong Resort Hotel will help to make the best out of the conference.

Reservation

If you would like to make your reservation in this hotel, please contact

<http://www.patongresorthotel.com/>

You can also contact Ms. Piyarat Chantasaswat from the hotel for help:

Email: piyarat@patongresorthotel.com

Tel: +66-2 2342406

Hotel Address

Address: 208 Raj-Uthit 200 Pee Rd., Patong Beach, Phuket 83150, Thailand

Tel: +66 (76) 340551-4

Tip: you can print this page and show it to your driver to help them find the hotel.

Transportation

The Patong Resort Hotel is about one hour drive away from the Phuket airport.

We suggest you take taxi or ask the hotel to arrange pick-up service.

About Phuket

Tourist Attractions in Phuket

Phuket is called "a pearl on the Andaman Sea" for its charming tropical scenery and abundant tourism resources, and is very rich in natural resources. It is also lauded as "treasured island" and "treasure island".

Phang Nga Bay



Phang Nga Bay is a 400 km² bay in the Strait of Malacca between the island of Phuket and the mainland of the Malay peninsula of southern Thailand. Since 1981, an extensive section of the bay has been protected as the Ao Phang Nga National Park.

Phang Nga is a shallow bay with 42 islands, comprising shallow marine waters and intertidal forested wetlands, with at least 28 species of mangrove; seagrass beds and coral reefs are also present. A number of diverse cultures co-exist in local communities, which practice fishing, harvesting *Nypa* palm fronds for thatch, and catering to an international tourist presence drawn both by the natural beauties and by the archaeological sites, which have paintings more than a

thousand years old.

The most famous of the many islands in the bay is the so-called James Bond Island, a needle formed limestone rock in the sea, which featured in the movie *The Man with the Golden Gun*. Nearby villages include Ao Luk.

Hat Patong



Hat Patong (Patong Beach) is Phuket's most developed beach and is 3 kilometres (1.9 mi)-long. It is 15 km from Phuket town. Patong is mostly made up of hotels, restaurants, nightclubs and various tourist attractions. Daytime activities are primarily centered on the beach with watersport activities. Patong is equally well known for its nightlife, centered on Soi Bangla. The northern end of Patong Bay is called Kalim and is a popular place for viewing the sunset and for surfing between April and September each year.

Big Buddha

The Big Buddha of Phuket is on the peak of a mountain near Muang Phuket, or Phuket town. The image is 45 m in height and covered in white Burmese marble.

Hat Karon

Hat Karon is the second largest of Phuket's tourist beaches, approximately 20 kilometres (12 mi) from town. Large resort



complexes line the road behind the shoreline, but the broad beach itself has no development. The southern point has a coral reef stretching toward Kata and Poo Island. There is also its sister beach, Karon Noi.

Two Heroines Monument

Two Heroines Monument is a monument in Amphoe Thalang, a memorial statue of the heroines Thao Thep Kasattri (Kunying Jan) and Thao Sri Sunthon (Mook), who rallied islanders in 1785 to repel Burmese invaders. As the island's governor had just died, the organization of Phuket's defense against the Burmese invasion of 1785 was conducted by his widow, Thao Thep Kasattri. With her sister's help, they assembled what forces they had, then disguised local women as male soldiers, a ruse to swell the ranks of the defenders. After a month's siege, the Burmese invaders became exhausted and withdrew. King Rama I awarded Kunying Jan with the royal title of Thao Thep Kasattri.

PART 7: CONTACT

<i>AMSCE2017</i>	Email: submit@amsce2017.org contact@amsce2017.org	Tel: +86-13407123446
<i>EESD2017</i>	Email: submit@eesd2017.org contact@eesd2017.org	Tel: +86-15072334473
<i>TMAM2017</i>	Email: submit@tmam2017.org contact@tmam2017.org	Tel: +86-15927561725
<i>METMI2017</i>	Email: submit@metmi2017.org contact@metmi2017.org	Tel: +86- 15927539606