

Conference Program

August 28-30, 2018

Singapore

IRSET

The International Research Symposium on
Engineering and Technology

ISBSS

International Symposium on Business and Social
Sciences

ICEEPS

International Conference on Education, Economics,
Psychology and Social Studies

IRSET

The International Research Symposium on Engineering and Technology

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Welcome Message



Local Host

Dr. Tan Khay Boon

Department of Economics
SIM Global Education

Dear delegates,

It is my pleasure to welcome you all to “Lion City” Singapore.

Singapore is known as the “Lion City”, as legend states that a Prince from Riau Islands first set foot in Singapore, witness a lion ran across a forest and has named the place Singapura, which means lion city. It was previously known as Temasek, a small fishing village. The combination of a lion head and a fish tail, represents both lion and sea, has created the Merlion as the symbol of Singapore. Overtime, Singapore has transformed to a modern and vibrant international city state. It is famous for its efficient port and shipyard services and has been consistently ranked the busiest port in the world. Two local companies, Keppel and Sembawang are the top two offshore marine companies in the world. It is also the oil hub in Asia and it is amongst the world top 5 oil refinery centres. Besides being a major financial centre in Asia, it is also well known for its retail, education, tourism and medical services. Many MNCS have set up regional headquarters and representative offices or in Singapore to facilitate business interactions in the region due to its strategic location, efficient government services, pro-business policies, well connected infrastructure and also productive human resource.

The weather in Singapore is usually warm, just like our feeling towards visitors to our country. Singapore is one of the top visited countries in South-East Asia. Although it is a small country with about 720 square km, the tourist attractions are scattered all over the country. It is best to explore Singapore through its highly modernized mass rapid transit (MRT) systems and its well-connected and extensive bus routes. The famous tourist attractions include Singapore Zoological Garden, Night Safari, River Safari, Merlion Park, Gardens by the Bay, Sentosa and the two integrated resorts, among others.

The Orchard Road district is the most popular shopping district in Singapore. It is usually engulfed by thousands of tourists and locals every night. The major shopping centres and prominent retail

outlets will be able to fulfil the requirements of shopping enthusiasts from all over the world. Consumers can get access to famous branded products at reasonable prices in the shopping outlets in Orchard Road.

When in Singapore, do not miss the opportunity of trying out the local food. The multi-racial culture and open to international investments has resulted in the availability of large varieties of food. Besides the establishments of restaurants offering Chinese, Western, Japanese, Malay and Indian food, there are many hawker centre offering authentic local food at very reasonable prices to satisfy the gourmet desires of the visitors.

The education system in Singapore is well-regarded by neighbouring and international countries. Every year, numerous students from the neighbouring and international countries enrol into the schools, polytechnics and universities in Singapore. The students pursue education at all levels, from certificate to diplomas and to undergraduates and even postgraduate programmes in the public and private institutions in Singapore. The two top government-funded autonomous universities, National University of Singapore and Nanyang Technological University are consistently ranked among the highest in international rating. The country is also a favourite host of international meetings, incentives, conferences and exhibitions.

So it is time to pack your luggage and come to Singapore.

It is my pleasure to welcome you all to our forthcoming conference. Besides delivering impactful conference presentations and benefits from knowledgeable and fruitful discussion, we hope that you will also be able to enjoy the warm hospitality offered in Singapore. We sincerely hope that you will come to Singapore and participate in the conference.

Yours sincerely,
Tan Khay Boon Ph.D.

General Information for Participants

■ **Registration**

The registration desk will be situated on the **5th floor** at **Novotel Clarke Quay Singapore** at

14:00-16:00 on Tuesday, August 28, 2018

08:30-16:00 Wednesday, August 29, 2018

08:30-16:00 Thursday, August 30, 2018

■ **A Polite Request to All Participants**

Participants are requested to arrive in a timely fashion for all addresses. Presenters are reminded that the time slots should be divided fairly and equally by the number of presentations, and that they should not overrun. The session chair is asked to assume this timekeeping role and to summarize key issues in each topic.



Sandals or Slippers



Tank Top



Shorts

■ **Certificate**

Certificate of Presentation or Certificate of Attendance

A certificate of attendance includes participant's name and affiliation, certifying the participation in the conference. A certificate of presentation indicates a presenter's name, affiliation and the paper title that is presented in the scheduled session.

Certificate Distribution

Oral presenters will receive a certificate of presentation from the session chair after their presentations or at the end of the session. Poster presenters will receive a certificate of presentation from the conference staff at the end of their poster session.

The certificate of presentation will not be issued, either at or after the conference, to authors whose papers are registered but not presented. Instead, the certificate of attendance will be provided after the conference.

■ **Preparation for Oral Presentations**

All presentation rooms are equipped with a screen, an LCD projector, and a laptop computer installed with Microsoft PowerPoint. You will be able to insert your USB flash drive into the computer and double check your file in PowerPoint. We recommend you to bring two copies of the file in case that one fails. You may also connect your own laptop to the provided projector; however please ensure you have the requisite connector.

Preparation for Poster Presentation

Materials Provided by the Conference Organizer:

1. X-frame display & base fabric canvases (60cm×160cm)
2. Adhesive tapes or binder clips

Materials Prepared by the Presenters:

3. Home-made poster(s)
4. Material: not limited, can be posted on the canvases
5. Recommended poster size: 60cm*160cm



<p>A 60cm*160cm poster illustrates the research findings.</p>	<ol style="list-style-type: none"> 1. Wider than 60cm (left) 2. Copy of PowerPoint slides in A4 papers (right)

International Committees of Natural Sciences

Abhishek Shukla	R.D. Engineering College Technical Campus	India
Ahmad Salihin Bin Samsudin	Universiti Malaysia Pahang	Malaysia
Ahmad Zahedi	James Cook University	Australia
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Karen Miranda Fernandez	Imus Institute	Philippines
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Naim Uzun	Aksaray University	Turkey
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Ramayah Thurasamy	Universiti Sains Malaysia	Malaysia
Reem Abed Almotaleb Abuiyada	Dhofar University	Palestine
Ricky Ng	Vocational Training Council	Hong Kong
Ronald Griffin	Florida Agricultural & Mechanical University	USA
Rotaru Ioan-Gheorghe	Timotheus Brethren Theological Insititute of Bucharest	Romania
Ruby Ann L. Ayo	Bicol University	Philippines
Sadiq Abdulwahed Ahmed Ismail	United Arab Emirates University	UAE
Sally dhruva' Stephenson	Frosterburg State University	USA
Shaik. Feroz	Caledonian College of Engineering	Oman
Shiv Prasad	Maharshi Dayanand Saraswati University	India
Shujen Lee	Asia University	Taiwan
Shun-Hsing Chen	Oriental Institute of Technology	Taiwan
Soon SONG	Wonkwang University	South Korea
Stacey Jocoy	Texas Tech University	USA
Sunil Kumar	Alliance University	India
T.S.Devaraja	University of Mysore, Hemagangothri Campus	India
Tan Khay Boon	SIM Global Education	Singapore
Theeraphab Phetmalaikul	Srinakharinwirot University	Thailand
Vijayaletchumy Subramaniam	Universitas Putra Malaysia	Malaysia
Wang Yu-Shan	National Kaohsiung First University of Science and	Taiwan

	Technology	
Wei-Cheng Mau	Wichita State University	USA
Yong-Ho Kim	Pukyong National University	South Korea
Yong-Taek Rhim	Namseoul University	South Korea

Special Thanks to Session Chairs

Bob Barrett	<i>American Public University</i>
Andrew Keong NG	<i>Singapore Institute of Technology</i>
Khairil	<i>Syiah Kuala University</i>
Tan Khay Boon	<i>Singapore Institute of Management Global Education</i>
Ben Wai-Ming Ng	<i>Chinese University of Hong Kong</i>
Parnprae Chaoprayoon	<i>Maejo University</i>
Purrie Ng	<i>BNU-HKBU United International College</i>
Tian-Bo Deng	<i>Toho University</i>
Mahesh C. Aggarwal	<i>Gannon University</i>
Jeeyoung Shin	<i>Sookmyung Women's University</i>
Mikio Sasaki	<i>Hachinohe Institute of Technology</i>

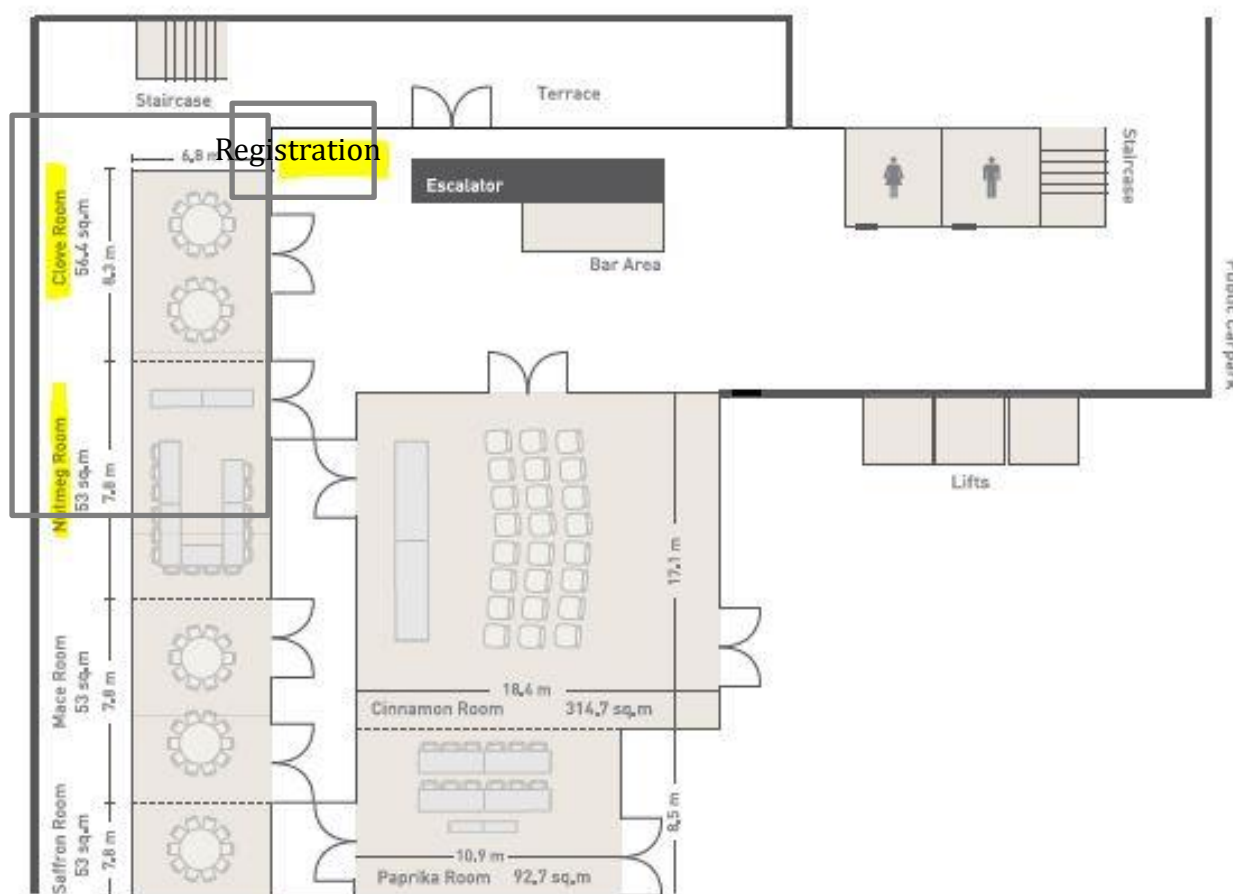
Conference Venue Information

Novotel Clarke Quay Singapore

177A River Valley Rd, Singapore 179031

TEL: +65 6338 3333

The 5th Floor Plan



Registration Desk: Foyer Area, 5F

Oral Session: Clove Room and Nutmeg Room, 5F

Poster Session: Nutmeg Room

Tea Break & Networking: Foyer Area, 5F

Lunch: The Square Restaurant, 7F

Transportation

From Singapore Changi Airport to Novotel Clarke Quay Singapore

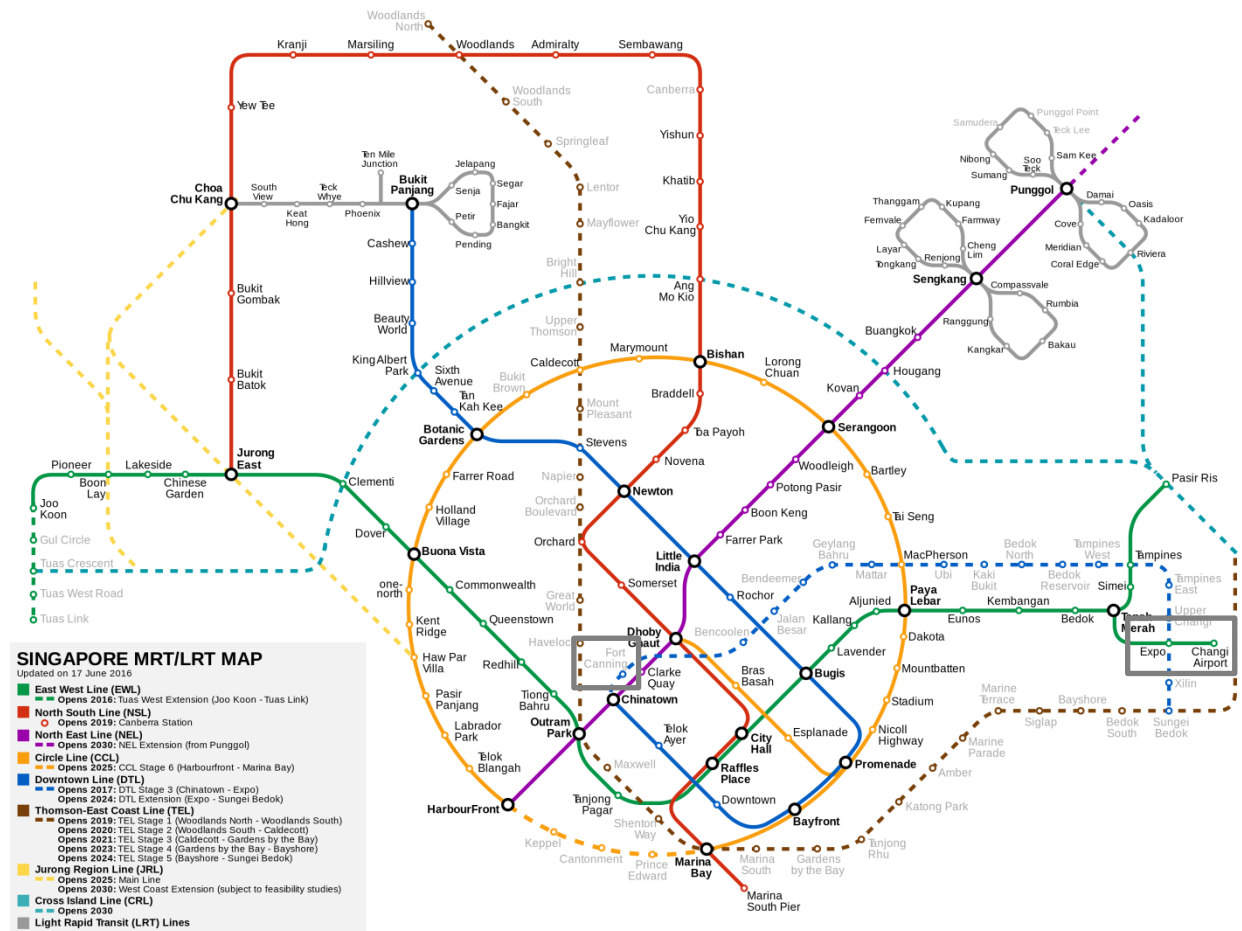
A. Taxi

It takes approximately 25 minutes to Novotel Clarke Quay Singapore and costs average 15 USD.

B. MRT

1. Take MRT East West Line from Changi Airport station to Expo MRT station (1 stop).
 2. Exchange to Downtown Line 4 from Expo MRT station to Fort Canning MRT station (Exit A)
 3. Take Exit A and head East toward River Valley Rd.
 4. Turn right onto River Valley Rd. and turn right onto Tan Tye Pl.
 5. The hotel will be on the right.
- (3 mins walk from Exit A)

Singapore MRT Map



Conference Schedule

Tuesday, August 28, 2018		
Time	Schedule	Venue
14:00-16:00	Pre-Registration	Foyer Area, 5F

Wednesday, August 29, 2018		
Oral Session		
Time	Schedule	Venue
08:30-16:00	Registration	Foyer Area, 5F
09:00-10:30	Education (1)	Clove Room, 5F
	Civil Engineering (1)/ Environmental Science (1)	Nutmeg Room, 5F
10:30-10:45	Tea Break & Networking	Foyer Area, 5F
10:45-12:15	Social Sciences Keynote Address [1] <u>Dr. Tan Khay Boon</u> <i>Topic: Finance Development and the Economic Growth Nexus: The Singapore Experience</i>	Clove Room, 5F
	[2] <u>Dr. Bob Barrett</u> <i>Topic: Multi-Generational Transformations of Business and Educational Workplaces in the Creation of Stronger Working Relationships and Bonding</i>	
	Natural Sciences Keynote Address <u>Dr. Andrew Keong NG</u> <i>Topic: Towards Condition Monitoring and Prognosis of Railway Track</i>	
	Environmental Science (2)/ Fundamental and Applied Sciences/ Mechanical Science and Engineering (1)	Nutmeg Room
12:15-13:15	Lunch Time	The Square Restaurant, 7F
13:15-14:45	Education (2)/ Communication	Clove Room, 5F
14:45-15:00	Tea Break & Networking	Foyer Area, 5F
15:00-16:45	Society/ Culture/ Education (3)	Clove Room, 5F

Wednesday, August 29, 2018

Poster Session

Time	Schedule	Venue
14:00-14:50	Poster Sessions (1) Education/ Psychology/ Management/ Social Studies	Nutmeg Room, 5F
15:00-15:50	Poster Sessions (2) Electrical & Electronic Engineering/ Mechanical Science and Engineering (1)/ Computing and Information Engineering/ Civil Engineering/ Fundamental and Applied Sciences (1)	Nutmeg Room, 5F

Thursday, August 30, 2018

Oral Session

Time	Schedule	Venue
08:30-16:00	Registration	Foyer Area, 5F
09:00-10:30	Management (1)/ Business/ Law	Clove Room, 5F
10:30-10:45	Tea Break & Networking	Foyer Area, 5F
10:45- 12:15	Management (2)	Clove Room, 5F
12:15-13:15	Lunch Time	The Square Restaurant, 7F
13:15-14:45	Electrical & Electronic Engineering/ Computing and Information Engineering/ Chemical Engineering/ Environmental Science	Clove Room, 5F
	Mechanical Science and Engineering (2)	Nutmeg Room, 5F
14:45-15:00	Tea Break & Networking	Foyer Area, 5F
15:00-16:45	Material Science and Engineering/ Chemical Engineering	Clove Room, 5F
	Environmental Science (3)/Civil Engineering (2)	Nutmeg Room, 5F

Wednesday, August 30, 2018

Poster Session

Time	Schedule	Venue
09:00-09:50	Poster Sessions (3) Chemical Engineering/ Fundamental and Applied Sciences (2)/ Material Science and Engineering/ Biological Engineering/ Environmental Science/ Mechanical Science and Engineering (2)	Nutmeg Room, 5F

Social Sciences Keynote Address (1)

Clove Room

10:45-12:15, Wednesday, August 29, 2018

Topic:

Finance Development and the Economic Growth Nexus: The Singapore Experience



Dr. Tan Khay Boon

Professor

Singapore Institute of Management Global Education

Abstract

The research aims to determine the causal effect between financial development and economic growth in Singapore. Singapore is ideal in this study as its economic growth arises out of mainly investment which is closely link to the availability and efficiency of capital resource. This paper explores the role of three financial markets, namely bank credit market, stock market and insurance market in the economic development of Singapore. Theory suggests that financial market can influence economic growth via the capital accumulation channel and the efficiency channel. This paper uses gross fixed capital formation, total factor productivity and real GDP per capita as growth indicators to establish the mechanism linking financial development and economic growth. Using Singapore annual data in a vector error correction model framework and applying Granger causality test, the results indicates causal effect from financial development to economic growth, mainly via the capital accumulation channel in Singapore. Additional evidence provided by variance decomposition and impulse response function also support financial development Granger causes economic growth. It might be beneficial for Singapore to put in more effort to develop its stock market and insurance market to promote economic growth.

Keywords: Bank credit market, Stock market, Insurance market, Economic growth, Granger causality, Impulse response

Social Sciences Keynote Address (2)

Clove Room

10:45-12:15, Wednesday, August 29, 2018

Topic:

***Multi-Generational Transformations of Business and Educational Workplaces
in the Creation of Stronger Working Relationships and Bonding***



Dr. Bob Barrett

Professor

American Public University

Abstract

As businesses and educational institutions work towards meeting the needs of learners, employees, and society – there is a common element that they share, namely, the inclusion of multi-generational human capital. While some generations may tend to have problems in seeing the same things or reaching the same conclusions with elements of their daily life, both the business and educational worlds can learn from these various generations of workers and learners in terms of helping to create a strong working relationship and bonding with each other in both of the environments. In particular, now is the greatest time in our world history where we can capitalize on the learning and work experiences of all generations, if we choose to. The key is the desire to learn from each other and share what we know in order to create a new body of knowledge and level of sharing and exchange than we have seen in previous decades. While many environments and cultures may not agree on all topics or arrive at the same conclusions, the creation, exchange, management, and retention of knowledge of everyone in our world is critical.

During the course of this presentation, the key elements to be highlighted will be the actors/stakeholders, environments/cultures, creation/management of knowledge, and how we can develop even stronger working relationships and bond with others in order to create better understanding and need to want to make a change and difference in our various types of institutions, organizations, and societies. Learning to change and nurturing change can be achieved, if one wants to take that extra step in understanding of others and their perspectives, as well as reaching out to become a bigger part of the lives of others, rather than standing on the sidelines or shadows of the world stage.

Natural Sciences Keynote Address

Clove Room

10:45-12:15, Wednesday, August 29, 2018

Topic:

Towards Condition Monitoring and Prognosis of Railway Track

Dr. Andrew Keong NG

Associate Professor

Singapore Institute of Technology



Abstract

Railway transportation is a common mode of moving people, animals, and goods from one place to another. Condition monitoring and prognosis are essential to improve railway reliability, availability, maintainability, and safety. They also provide good basis for effective asset maintenance and management, thereby reducing downtime and maintenance costs. This keynote presentation will elaborate the concept and importance of condition monitoring and prognosis, particularly of railway track including track geometry and rail defects, which play a critical role in railway safety. Different railway track condition monitoring and prognostic methods and technologies that are available in academia and industry will also be discussed. Lastly, future developments in this area will be highlighted.

Education (1)

Wednesday, August 29, 2018

09:00-10:30

Clove Room

Session Chair: *Prof. Bob Barrett*

ISBSS-0130

Teachable Moments: Rekindling the Love of Business Education

Bob Barrett | *American Public University*

ICEEPS-0009

Outcomes of Teacher Professional Learning in Addressing Challenging Behavior in Vietnamese Students with Intellectual Disability: A Pilot Phase

Thi Quynh Ni Pham | *The University of Newcastle*

Michael Arthur-Kelly | *The University of Newcastle*

Gordon Lyons | *The University of Newcastle*

Judith Foggett | *The University of Newcastle*

ICEEPS-0010

TVET in Korea: Policy Effects of the Global Field Study of Vocational High Schools / Meister Schools

Heekyung Cho | *Korea Research Institute for Vocational Education and Training*

ICEEPS-0012

Contributing Factors to Success and Attrition in Engineering Mini-MOOC

Gwyneth Ka Yee Lee | *Vocational Training Council*

ICEEPS-0016

Exploring the Potential Relationships between Original Teaching Materials and Student Awareness

Koji Uenishi | *Hiroshima University*

ICEEPS-0017

A Network Data Envelopment Analysis of the Teaching Excellence Framework Evaluation of Teaching in English HEIs

Boon Lee | *Queensland University of Technology*

Jill Johnes | *University of Huddersfield*

Civil Engineering (1)/ Environmental Science (1)

Wednesday, August 29, 2018

09:00-10:30

Nutmeg Room

Session Chair: *Prof. Andrew Keong NG*

IRSET-0101

Prediction Method of Low Cycle Fatigue Capacities of Steel Seismic Passive Control Devices under Random Plastic Deformation

Takumi Ito | *Tokyo University of Science*

Keita Saito | *Tokyo University of Science*

Akinobu Kano | *Azusa Sekkei*

Dong Hang Wu | *WU Building Office Corporation*

Takashi Nagumo | *SRG Takamiya Corporation*

Haruhiko Hirata | *SRG Takamiya Corporation*

IRSET-0125

Development of Deep Learning-Based Productivity Calculation Process of Finishing Works on Apartment Housing

Gi-Ryun Lee | *Kyung Hee University*

Moon-Young Cho | *Kyung Hee University*

Choong-Hee Han | *Kyung Hee University*

Junbok Lee | *Kyung Hee University*

IRSET-0149

A Study on BIM-Based Construction Progress Control Integrated with Point Cloud

Juhee Hong | *Kyung Hee University*

Chang-Hoon Choi | *Kyung Hee University*

Moon-Young Cho | *Kyung Hee University*

Choong-Hee Han | *Kyung Hee University*

Junbok Lee | *Kyung Hee University*

IRSET-0153

A Study on the Improvement Method to Predict Inner Part of Concrete by Linear Traveltime Interpolation Method

Tomohiro Nakano | *Tokai University*

Hiromasa Kimata | *Daido University*

IRSET-0173

The Effect of Topography on Building Structures in Urban Subdivision Utilizing Computational Fluid Dynamics for Critical Wind Pressure Determination

Bonifacio, Jr Aznar | *University of Mindanao*

Cresencio, Jr. Genobiagon | *University of Mindanao*

IRSET-0178

Snow Characteristics of Hakkoda Mountain

Shiho Kakizaki | *Hachinohe Institute of Technology*

Mikio Sasaki | *Hachinohe Institute of Technology*

Ryota Mizumoto | *Tohoku Engineering Co. Ltd*

**Environmental Science (2)/ Fundamental and Applied Sciences/
Mechanical Science and Engineering (1)**

Wednesday, August 29, 2018

10:45-12:15

Nutmeg Room

Session Chair: *Prof. Khairil*

IRSET-0141

Effect of Coal Blended on the Physical Properties of Iron Ore Briquette for Direct Reduction Iron

Khairil | *Syiah Kuala University*

Samsul Bahri | *Syiah Kuala University*

Nurdin Ali | *Syiah Kuala University*

Sarwo Edhy Sofyan | *Syiah Kuala University*

Jalaluddin | *Syiah Kuala University*

IRSET-0096

Removal of Highly Water-Soluble Cr (VI) Into Cr (III) Species Using Electrocoagulation Process

Anshu Yadav | *Guru Gobind Singh Indraprastha University, Delhi*

Vinita Khandegar | *Guru Gobind Singh Indraprastha University, Delhi*

IRSET-0104

Effect of Co-Existing Ions on Denitrification by Electrocoagulation of Groundwater

Sanigdha Acharya | *Guru Gobind Singh Indraprastha University, Delhi*

S.K. Sharma | *Guru Gobind Singh Indraprastha University, Delhi*

Vinita Khandegar | *Guru Gobind Singh Indraprastha University, Delhi*

IRSET-0138

**Sr-Nd-Pb Isotopic Characteristics of the Lamprophyric Rocks from Konya (Central
Anatolia-Turkey)**

Kürşad Asan | *Selçuk University*

Hüseyin Kurt | *Selçuk University*

Gülin Gençoğlu Korkmaz | *Selçuk University*

Mesut Gündüz | *Selçuk University*

IRSET-0139

**The Hydrological Budget Parameters Deduced from Hydrogeological Investigation of the Kulu
Area (Konya-Central Anatolia)**

Ali Ferat Bayram | *Selçuk University*

IRSET-0145

Water Resource Management in the Liberian District of Costa Rica

Svetlana Nikolaeva | *National University of Costa Rica*

G. Moraga | *National University of Costa Rica*

Education (2)/ Communication

Wednesday, August 29, 2018

13:15-14:45

Clove Room

Session Chair: *Prof. Tan Khay Boon*

ISBSS-0063

Influence Factors of Pre-Service Teachers' Pro-Industry Self-Efficacy Adjust Industry 4.0 & 107 Curriculum Reform

Chun-Mei Chou | *National Yunlin University of Science & Technology*

Chien-Hua Shen | *Transworld Institute of Technology*

Hsi-Chi Hsiao | *Cheng Shin University*

Tsu-Chguan Shen | *Feng Chia University*

ISBSS-0103

Indigenous Language Education in Taiwan

Lillian M. Huang | *Shih Chien University*

ISBSS-0109

Instagram, Teenagers, and the Construction of Idol (A Study of Junior High School Students in Yogyakarta)

Rebekka Rismayanti | *Universitas Atma Jaya Yogyakarta*

Irene Santika Vidiadari | *Universitas Atma Jaya Yogyakarta*

Lukas S. Ispandriarno | *Universitas Atma Jaya Yogyakarta*

ISBSS-0112

Language Assessment in Taiwan Indigenous Contexts

Joy Jing-Lan Wu | *National Taiwan Normal University*

Lillian M. Huang | *Shih Chien University*

ISBSS-0116

The Perspective on the Self of Teenagers in Movie Consumption (An Analysis of High School Students in Yogyakarta who Watch *Dilan 1990* the Movie)

Rebekka Rismayanti | *Universitas Atma Jaya Yogyakarta*

ISBSS-0134

Desire Characteristics of Agriculture Teachers of Thailand in the 21st Century

Apichart Jai-Aree | *Kasetsart University, Kamphaeng Saen Campus*

Society/ Culture/ Education (3)

Wednesday, August 29, 2018

15:00-16:45

Clove Room

Session Chair: *Prof. Ben Wai-Ming Ng*

ISBSS-0076

The Making of a Japanese Community in Contemporary Hong Kong

Ben Wai-Ming Ng | *Chinese University of Hong Kong*

ICEEPS-0029

E-Learning in Cross-Domain Classrooms- Integration of Language, Local Culture and Technology

Pei-Shi Weng | *Taipei University of Marine Technology*

ISBSS-0090

A Study of the Aging and Social Welfare in Asia- Singapore & Vietnam

Ryotaro Katsura | *Vietnam-Japan University*

ISBSS-0104

Jurong and Ozu in the 1940s

Kanji Matsuura | *Studio KK*

Akiko Miyamoto | *Doshisha Women's College of Liberal Arts*

ISBSS-0125

History of Korean Popular Culture: From Its Embryonic Stage to *Hallyu* (Korean Cultural Wave)

Bok-Rae Kim | *Andong National University*

ISBSS-0128

Cultural Practices in Food Protection of Ban Pa Nang Yoe, Nong Bua Sub-District, Mueang District, Kanchanaburi Province

Nobparat Chaichana | *Kanchanaburi Rajabhat University*

ISBSS-0146

Teachers' Level of Competence, Work Performance and Students' Academic Achievement: Basis for Teacher and Student Development

Mangada-Malihan, Elvira | *Graduate School, University of Cagayan Valley*

Miguel E. Mangada | *Cielito Zamora Junior High School, Caloocan City*

Management (1)/ Business/ Law

Thursday, August 30, 2018

09:00-10:30

Clove Room

Session Chair: *Dr. Parnprae Chaoprayoon*

ISBSS-0132

“Tea Tourism Route” The Creative Tourism Development in Chiangrai Province

Parnprae Chaoprayoon | *Maejo University*

ICEEPS-0014

Empirical Research on the Impact of Equity Incentive on Enterprise Performance: Based on the Data of Listed Chinese Manufacturing Company

Yanming Li | *Northeast Normal University*

Manxue Chen | *Northeast Normal University*

Kangyin Lyu | *Northeast Normal University*

ISBSS-0117

Online Merchants’ Usage of Express Parcel Delivery Service in Central Region, Thailand

Puwakorn Pinyanitikorn | *King Mongkut's Institute of Technology Ladkrabang*

Katanyu Hiransomboon | *King Mongkut's Institute of Technology Ladkrabang*

ISBSS-0120

Critical Factors for Participating Agri-Traceability Systems - From the Perspective of Tea Farmers in Taiwan

Heng-Chi Lee | *National Kaohsiung University of Science and Technology (Diyi Campus)*

Ming-Der Yang | *National Kaohsiung University of Science and Technology (Diyi Campus)*

Ing-Luen Luo | *National Kaohsiung University of Science and Technology (Diyi Campus)*

ISBSS-0124

The Impact of Aromatherapy Cognition and Needs on Purchasing Intention

Tsung-Shih Kuo | *Chang Jung Christian University*

ISBSS-0141

Legal Certainty of the Land Owners in Dumai, the Province of Riau, Through a Complete Systematic Land Registration

Maria Hutapea | *University of Atma Jaya Yogyakarta*

Management (2)

Thursday, August 30, 2018

10:45- 12:15

Clove Room

Session Chair: *Dr. Purrie NG Pui Yee*

ISBSS-0148

An Investigation of Competencies on the University Student Interns in the Emerging Creative Industries in China - Case studies on CCM Students in UIC

Purrie NG Pui Yee | *BNU-HKBU United International College*

Deng Fuyi | *BNU-HKBU United International College*

Shi Lei | *BNU-HKBU United International College*

ICEEPS-0030

A Study of Workplace Incivility, Emotional Labor, Job Stress and Work Engagement

Ming-Chu Yu | *National University of Tainan*

ISBSS-0066

Mineral Resource Management Model Based on Community Empowerment Using Financial Inclusion

Taufik Hidayat | *Indonesian Institute of Sciences*

Yoka Pramadi | *Indonesian Institute of Sciences*

ISBSS-0105

Use of Lavender Oil vs Cold Application to Relieve Pain from Episiotomy: Literature Review

Oi Man Kong | *Caritas Medical Centre*

Jessica Eugenia Tso | *Caritas Medical Centre*

Siu Man Leung | *Caritas Medical Centre*

Cheuk Lam Leung | *Caritas Medical Centre*

Ka Wai Fung | *Caritas Medical Centre*

Hoi Chun Chong | *Caritas Medical Centre*

ISBSS-0107

The Effectiveness of Wound Healing Promotion of Low-Level Laser Therapy Comparing with Betadine Dressing on Patients with Diabetic Foot Ulcers

Hui Tung Yeung | *Caritas Medical Centre*

Ho Hung Mok | *Caritas Medical Centre*

Siu Man Leung | *Caritas Medical Centre*

ISBSS-0110

Comparative Effectiveness of Pain Control of Massage and Aquatic Therapy in Patients with Arthritis

Wing Yan Vivian Tso | *Caritas Medical Centre*

Siu Man Leung | *Caritas Medical Centre*

Wai Tak Li | *Caritas Medical Centre*

Ka Ling Yip | *Caritas Medical Centre*

Yuen Yee Law | *Caritas Medical Centre*

Hoi Sze Yu | *Caritas Medical Centre*

**Electrical & Electronic Engineering/ Computing and Information
Engineering/ Chemical Engineering/ Environmental Science**

Thursday, August 30, 2018

13:15-14:45

Clove Room

Session Chair: *Prof. Tian-Bo Deng*

IRSET-0093

Phase-System Design Formulation with Linear Cost Function and Nonlinear Constraints

Tian-Bo Deng | *Toho University*

IRSET-0095

**Detritus to Functional Auxiliary: Twin Properties Polymer from Woody Biomass for Leather Post -
Tanning Application**

Pandian Balasubramanian | *Council of Scientific & Industrial Research- Central Leather
Research Institute*

Sathya Ramalingam | *Council of Scientific & Industrial Research- Central Leather
Research Institute*

Raghava Rao Jonnalagadda | *Council of Scientific & Industrial Research- Central Leather
Research Institute*

IRSET-0100

**Flux Influence to Concentration Increasing Process of Sugar Solution with Reverse Osmotic
Membrane**

Sri Redjeki, Iriani | *UPN Veteran Jawa Timur*

IRSET-0132

**Microbial Fuel Cell System Combined with Energy Harvesting Circuit (MFC-EH) for
Self-Sustainable IoT**

Jeongjin Yeo | *Chonbuk National University*

Yoonseok Yang | *Chonbuk National University*

IRSET-0136

**Designing Platformer Game Levels in Game Design Document with Mixed-Initiative Procedural
Content Generation**

Pratama Wirya Atmaja | *UPN Veteran Jawa Timur*

IRSET-0156

Design and Development of Surface Transducers based Calming System Using Multisensory Feedback

Urvi Maniar | *Republic Polytechnic*

Mechanical Science and Engineering (2)

Thursday, August 30, 2018

13:15-14:45

Nutmeg Room

Session Chair: *Prof. Mahesh C. Aggarwal*

IRSET-0111

Advancement in Locomotive Cooling Systems

Mahesh C. Aggarwal | *Gannon University*

Michael P. Sirak | *GE Transportation*

IRSET-0099

Enhanced Freezing in a Finned Enclosure Filled with Nanofluid

Yoshimi Komatsu | *Akita University*

Tetsuhiro Nakajyo | *Akita University*

IRSET-0118

Wood-Based Panel Surface Defects Testing Based on High Quality Image Acquisition Equipment

Xiao Wang | *Research Institute of Wood Industry, Chinese Academy of Forestry*

Yucheng Zhou | *Research Institute of Wood Industry, Chinese Academy of Forestry*

Ke Zhu | *Research Institute of Wood Industry, Chinese Academy of Forestry*

Cungen Liu | *Research Institute of Wood Industry, Chinese Academy of Forestry*

Hui Guo | *Research Institute of Wood Industry, Chinese Academy of Forestry*

IRSET-0120

Performance Test of Small Piezoelectric-Hydraulic Pump Brake System

Yong-Ha Hwang | *Korea Aerospace University*

Jai-Hyuk Hwang | *Korea Aerospace University*

IRSET-0163

The Numerical Simulation of the Effects of Double Jet Positions on Detonation Initiation

Zhiwu Wang | *Northwestern Polytechnical University*

Hongwei Li | *Northwestern Polytechnical University*

Zhigang Pan | *Northwestern Polytechnical University*

Yaqi Wang | *Northwestern Polytechnical University*

Shangzhe Zheng | *Northwestern Polytechnical University*

Lisi Wei | *Northwestern Polytechnical University*

Material Science and Engineering/ Chemical Engineering

Thursday, August 30, 2018

15:00-16:45

Clove Room

Session Chair: *Prof. Jeeyoung Shin*

IRSET-0150

Nickel-Based Alloy Catalyst for Direct Hydrocarbon Fueled Solid Oxide Fuel Cells

Seona Kim | *Ulsan National Institute of Science and Technology*

Guntae Kim | *Ulsan National Institute of Science and Technology*

Jeeyoung Shin | *Sookmyung Women's University*

IRSET-0097

Hydrodynamics of Oil-Water Flow in Coiled Tube

Shivam Verma | *Guru Gobind Singh Indraprastha University, New Delhi*

Vivek Chauhan | *Guru Gobind Singh Indraprastha University, New Delhi*

Sumit Bharti | *Guru Gobind Singh Indraprastha University, New Delhi*

Monisha Mridha Mandal | *Guru Gobind Singh Indraprastha University, New Delhi*

IRSET-0105

Effect of Temperature on Gas Dispersion and Bubble Characteristics in an Ejector-induced Downflow Bubble Column

Gautam Kundu | *Indian Institute of Technology, Kharagpur*

Rohit B. Meshram | *National Metallurgical Laboratory, Jamshedpur*

Dibyendu Mukherjee | *Indian Institute of Technology, Kharagpur*

IRSET-0129

Thermal and Mechanical Properties of Graphite Reinforced Copper Composites with Different Graphite Shapes

You Han Sohn | *Chungnam National University*

Jun Hyun Han | *Chungnam National University*

IRSET-0130

Improvement of Mechanical Properties by Heat Treatment in High Tin Bronze

Mu Seob Jeong | *Chungnam National University*

Jun Hyun Han | *Chungnam National University*

IRSET-0133**SiO₂ Coated Platy TiO₂ Prepared as Noble Sunscreen Materials and Its UV-Ray Shielding Ability**

Hee Jung Kim | *Korea Institute of Ceramic Engineering and Technology*

Jeong Ho Chang | *Korea Institute of Ceramic Engineering and Technology*

Dae-Sung Kim | *Korea Institute of Ceramic Engineering and Technology*

IRSET-0151**Preparation of CNT Nanofluids Using Alternative Dispersion Techniques**

Ankita Srivastava | *Motilal Nehru National Institute of Technology Allahabad*

S. K. Sharma | *Guru Gobind Singh Indraprastha University*

Babita | *Guru Gobind Singh Indraprastha University*

Arinjay Kumar | *Guru Gobind Singh Indraprastha University*

Environmental Science (3)/Civil Engineering (2)

Thursday, August 30, 2018

15:00-16:45

Nutmeg Room

Session Chair: *Prof. Mikio Sasaki*

IRSET-0169

Theoretical Investigation of Saltwater Movement in Lake Mouth

Satoru Kunugi | *Hachinohe Institute of Technology*

Mikio Sasaki | *Hachinohe Institute of Technology*

IRSET-0114

Measure of Discrimination between Two Residual Lifetime Distributions for k -Record Values

Ritu Goel | *Delhi Technological University, Delhi*

H.C.Taneja | *Delhi Technological University, Delhi*

IRSET-0159

Remanufacturing of Hydraulic Cylinder by Analysis of Failure Type

Hak Soo Mok | *Pusan National University*

Woo Hyun Son | *Pusan National University*

Sang Jin Park | *GOTs Co., Ltd*

Kyu Chang Lee | *GOTs Co., Ltd*

IRSET-0170

Geomorphological Change in Misawa Coasts between Artificial Headlands

Mikoto Kasai | *Hachinohe Institute of Technology*

Mikio Sasaki | *Hachinohe Institute of Technology*

Momoka Kubota | *Hachinohe Institute of Technology*

Masaru Simasita | *Aoi Mori Shinkin Bank*

IRSET-0172

Characteristics of Long Term Shoreline Change in Misawa Coast

Momoka Kubota | *Hachinohe Institute of Technology*

Mikio Sasaki | *Hachinohe Institute of Technology*

Mikoto Kasai | *Hachinohe Institute of Technology*

Masaru Simasita | *Aoi Mori Shinkin Bank*

IRSET-0176

Characteristics of Debris Flows Flowing Into Mainstream Channels and Their Depositions in the Mainstream-Tributary Intersections

Ji-Yuan Lin | *Chaoyang University of Technology*

Chang-Ting Tsai | *Chaoyang University of Technology*

IRSET-0179

Characteristics of Saltwater Intrusion in Lake Jusan

Hikaru Akasaka | *Hachinohe Institute of Technology*

Mikio Sasaki | *Hachinohe Institute of Technology*

Satoru Kunugi | *Tekken Corporation*

Poster Session (1)

Education/ Psychology/ Management/ Social Studies

Wednesday, August 29, 2018

14:00-14:50

Nutmeg Room

ICEEPS-0026

Learning Dietary Concepts via Augmented Reality

Kung-Chi Chan | *Providence University*

Lih-Juan ChanLin | *Fu Jen Catholic University*

ICEEPS-0027

The Augmented Reality Design Projects for Dissemination of Knowledge

Lih-Juan ChanLin | *Fu-Jen Catholic University*

Te-Lien Chou | *Fu-Jen Catholic University*

ISBSS-0145

The Influence of Mentoring Function, Perceived Conflict on Off-Campus Internships Satisfaction and Career Choices for Penghu Technical University's Students

Su-Chang Chen | *National Penghu University of Science and Technology*

Chih-Yu Liu | *National Penghu University of Science and Technology*

ICEEPS-0028

The Effect of LINE in Workplace from the Perspective of Cognitive and Affective Factors on Job Involvement

Ming-Yueh Hwang | *National Taiwan Normal University*

Jon-Chao Hong | *National Taiwan Normal University*

ISBSS-0089

Exploring the Causes and Consequences of Online Attitude Contagion of Brand Community Fans: From Social, Utilitarian, and Hedonic Perspectives

Li-Chun Hsu | *National Taitung University*

ISBSS-0106

Study on the Potential of Recruitment Utilizing Social Welfare Enhancement Plans

Taizo Ito | *Fukuyama Heisei University*

ISBSS-0140

A Literature Review of Sustainable Tourism (1990-2016): Development Trajectory and Framework

Ren-Yi Huang | *Hungkuo Delin University of Technology*

Wen-Jung Chang | *Hungkuo Delin University of Technology*

Yu-Shih Yin | *Hungkuo Delin University of Technology*

ICEEPS-0019

College Students' Travel Information Behaviors

Lih-Juan ChanLin | *Fu Jen Catholic University*

Jou-An Chen | *Fu Jen Catholic University*

Poster Session (2)

**Electrical & Electronic Engineering/ Mechanical Science and Engineering
(1)/ Computing and Information Engineering/ Civil Engineering/
Fundamental and Applied Sciences (1)**

Wednesday, August 29, 2018

15:00-15:50

Nutmeg Room

IRSET-0087

Innovative Hardware Architecture of High-Performance LDPC Decoder Design with Real-Time QC-LDPC Matrix Programming

Xin-Yu Shih | *National Sun Yat-Sen University*

IRSET-0142

A Long Stroke and 5-DOF Controlled Maglev Actuator for Non-Traditional Machining

Xiaoyou Zhang | *Nippon Institute of Technology*

Satoshi Murata | *Nippon Institute of Technology*

Yang Liu | *Nippon Institute of Technology*

Wei Wei | *Shenyang University of Technology*

Feng Sun | *Shenyang University of Technology*

Qiang Li | *Shenyang University of Technology*

IRSET-0157

Flow Visualization of EHD Fluid near Electrodes

Tetsuhiro Tsukiji | *Sophia University*

Taisei Tajima | *Sophia University*

IRSET-0190

Design and Construction of 30-kW R134a Transcritical Organic Rankine Cycle System for Low-Grade Waste Heat Recovery

Jung-Huang Liao | *Industrial Technology Research Institute*

Li-Feng Tsai | *Industrial Technology Research Institute*

Yi Cheng | *Industrial Technology Research Institute*

Ben-Ran Fu | *Ming Chi University of Technology*

IRSET-0109

Cuffless Blood Pressure Estimation: A New Approach Using Only an iPhone

Takehiro Yamakoshi | *Fukuoka Institute of Technology*

Peter Rolfe | *Harbin Institute of Technology*

Sogo Toda | *Hokkaido University*

Kenta Matsumura | *Hokkaido University*

IRSET-0144

Adaptive Tagged Visual Cryptography

Pei-Ling Chiu | *Ming Chuan University*

Kai-Hui Lee | *Ming Chuan University*

IRSET-0107

Production Technology of Free-Form Concrete Panels Using 3D Carving Techniques

Ki-Ho Kim | *Kyung Hee University*

Jeeyoung Lim | *Kyung Hee University*

Oum-Joong Oh | *Kyung Hee University*

Sunkuk Kim | *Kyung Hee University*

IRSET-0108

Conceptual Study of Innovative Production Technology of Free-Form Concrete Panels

Seunghyun Son | *Kyung Hee University*

Do Yeong Kim | *Kyung Hee University*

Youngju Na | *UI University*

Sunkuk Kim | *Kyung Hee University*

IRSET-0162

An Experimental Study on Effect of Retrofitting Brace Member to Brick Wall

Tomohiro Nakano | *Tokai University*

IRSET-0123

Variation of Elevated Temperature with Time in Magnetic Nanoparticles for Hyperthermia

C. Y. Ho | *Hwa Hsia University of Technology*

**Chemical Engineering/ Fundamental and Applied Sciences (2)/ Material
Science and Engineering/ Biological Engineering/ Environmental
Science/ Mechanical Science and Engineering (2)**

Thursday, August 30, 2018

09:00-09:50

Nutmeg Room

IRSET-0135

Direct Synthesis of Gd₂O₃:Eu³⁺ Coated Mica as a Red Phosphor

Se-Min Ban | *Korea Institute of Ceramic Engineering and Technology*

Dae-Sung Kim | *Korea Institute of Ceramic Engineering and Technology*

IRSET-0152

Discovery and Synthesis of Low Molecular Weight Compounds Having an Inhibitory Effect on the Proliferation of Acute T Lymphoblastic Leukemia Cells

Yoshifumi Hachiro | *University of Electro-Communications*

Chihiro Yoshida | *University of Electro-Communications*

Kazuya Miyashita | *Tokyo Metropolitan Institute of Medical Science*

Takuya Yagi | *Tokyo Metropolitan Institute of Medical Science*

Azusa Takechi | *Tokyo Metropolitan Institute of Medical Science*

Ryohei Saito | *University of Electro-Communications*

Nobuo Kitada | *University of Electro-Communications*

Takashi Hirano | *University of Electro-Communications*

Takahiro Hara | *Tokyo Metropolitan Institute of Medical Science*

Shojiro Maki | *University of Electro-Communications*

IRSET-0166

Hybrid Liposomes as Theranostic Agents Showing Enhanced Accumulation in Tumors in the Orthotopic Graft Model Mouse of Colorectal Cancer

Masaki Okumura | *Sojo University*

Hideaki Ichihara | *Sojo University*

Yoko Matsumoto | *Sojo University*

IRSET-0167

Therapeutic Effects of Cationic Liposomes against Pancreatic Cancer *in Vitro* and *in Vivo*

Muneaki Motomura | *Sojo University*

Hideaki Ichihara | *Sojo University*

Yoko Matsumoto | *Sojo University*

IRSET-0168

Inhibitory Effect of Trehalose Liposomes on the Growth of Cancer Cells Along With Apoptosis *in Vitro* and *in Vivo*

Keiji Kuwabara | *Sojo University*

Hideaki Ichihara | *Sojo University*

Yoko Matsumoto | *Sojo University*

IRSET-0180

Studies on Quantitative Analysis of Main Pigments and Synthesis of Hordeumin from Colored Barley (*Hordeum Vulgare*) Bran

Hyun Ah Oh | *Chungbuk National University*

Min Young Kim | *Chungbuk National University*

Yoon Jeong Lee | *Chungbuk National University*

Myeong Seob Song | *Chungbuk National University*

Heon Sang Jeong | *Chungbuk National University*

IRSET-0181

Anti-Inflammatory and Anti-Obesity Effects of Soyasaponin-Rich Fraction in Black Soybean [Glycine Max (L.)] with High Hydrostatic Pressure Treatment after Germination

Min Young Kim | *Chungbuk National University*

Yoon Jeong Lee | *Chungbuk National University*

Hyunah Oh | *Chungbuk National University*

Myeong Seob Song | *Chungbuk National University*

Heon Sang Jeong | *Chungbuk National University*

IRSET-0182**Changes in Antioxidant Components and Activities of White Rose Flower Extracts with Different Extraction Solvent**

Sun Young Choi | *Chungbuk National University*

Min Young Kim | *Chungbuk National University*

Hyunah Oh | *Chungbuk National University*

Myeong Seob Song | *Chungbuk National University*

Heon Sang Jeong | *Chungbuk National University*

IRSET-0183**Quality Characteristics of Rice Flour Varieties and Milling Method for Seol-Gi Rice Cake**

Gi Hoon Park | *Chungbuk National University*

Min Young Kim | *Chungbuk National University*

Yoon Jeong Lee | *Chungbuk National University*

Hyun Ah Oh | *Chungbuk National University*

Myeong Seob Song | *Chungbuk National University*

Heon Sang Jeong | *Chungbuk National University*

IRSET-0184**Physicochemical Characteristics and Antioxidant Activity of Colored Barley according to Cultivars and Germination Periods**

Yoon Jeong Lee | *Chungbuk National University*

Min Young Kim | *Chungbuk National University*

Myeong Seob Song | *Chungbuk National University*

Hyun Ah Oh | *Chungbuk National University*

Heon Sang Jeong | *Chungbuk National University*

IRSET-0185**Quality Characteristics of Jeung-Pyun in Different Varieties and Milling Method**

Ji Won Park | *Chungbuk National University*

Min Young Kim | *Chungbuk National University*

Yoon Jeong Lee | *Chungbuk National University*

Hyun Ah Oh | *Chungbuk National University*

Myeong Seob Song | *Chungbuk National University*

Heon Sang Jeong | *Chungbuk National University*

IRSET-0186**Changes of Quality Characteristics in the Normal and Etteum Doraji (*Platycodon Grandiflorum*) by Heat Treatment**

Myeong Seob Song | *Chungbuk National University*

Min Young Kim | *Chungbuk National University*

Gwi Yeong Jang | *NIHHS, RDA*

Yoon Jeong Lee | *Chungbuk National University*

Hyun Ah Oh | *Chungbuk National University*

Heon Sang Jeong | *Chungbuk National University*

IRSET-0089**Concise Fabrication and Characterization of Hydrocarbon Based Composite Membranes for Polymer Electrolyte Membrane Fuel Cells**

Young-Woo Choi | *Korea Institute of Energy Research*

Seol Jang | *Korea Institute of Energy Research*

Young-Gi Yoon | *Korea Institute of Energy Research*

IRSET-0110**Preparation of Chiral Carboxylic Acid-Metal Hybridized Luminophores with CPL Properties**

Daiki Kaji | *Kindai University*

Nobuyuki Hara | *Kindai University*

Kazunori Tsubaki | *Kyoto Prefectural University*

Michiya Fujiki | *Nara Institute of Science and Technology*

Yoshitane Imai | *Kindai University*

IRSET-0192**Influence of Chemical Treatment on the Low Molecular Weight Materials and Physical Properties of Polypropylene (PP)/Bamboo Fiber (BF) Composite**

Beom Hee Le | *Kongju National University*

Youn Cheol Kim | *Kongju National University*

IRSET-0103**Triterpenoids Produced from the Callus Suspension Culture of *Alnus Formosana* Makino for the Apoptosis of Cancer Cells**

Wen-Ta Su | *National Taipei University of Technology*

Chun-Yi Hsu | *National Taipei University of Technology*

IRSET-0161**Evaluation of Spring Wheat Varieties' Resistance to Heavy Metals**

Ravilya A. Alybayeva | *Al-Farabi Kazakh National University*

Saule D. Atabaeva | *Al-Farabi Kazakh National University*

S. Sh Asrandina | *Al-Farabi Kazakh National University*

IRSET-0158**Development of a Coding Car for Preschooler Using a Block-Type Coding System**

Eun Ho Kim | *Korea Institute of Industrial Technology*

IRSET-0160**A Study on the Piezoelectric Small Robot Using Piezoelectric Benders**

Seong Kyu Cheon | *Electrical engineering of Changwon National University in Korea*

Seong Su Jeong | *Electrical engineering of Changwon National University in Korea*

Ho Ik Jun | *Electrical engineering of Changwon National University in Korea*

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