

**PROCEEDINGS**

**EEAS-2019**

**2nd International Conference on Empirical  
Evidence on Engineering, Basic and Applied  
Sciences Research**

**Venue: Hotel MyStays Shin-Osaka Conference Center, Japan**

**Osaka, Japan**

**Date: June 29-30, 2019**



# ***CONFERENCE BOOK OF ABSTRACT PROCEEDINGS***

*Consortium-ET*

Consortium of Engineering & Technology



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# **Book of Abstracts Proceedings**

**2nd International Conference on Empirical Evidence on Engineering, Basic and Applied Sciences Research (EEAS-2019)**

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Proceedings of the 2nd International Conference on Empirical Evidence on Engineering, Basic and Applied Sciences Research (EEAS)

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***2nd International Conference on Empirical Evidence on  
Engineering, Basic and Applied Sciences Research  
(EEAS)***

**Venue: Hotel MyStays Shin-Osaka Conference Center, Japan**

**Conference Theme:** Forum for enhancement of research and developmental activities through networking and sharing ideas.



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Kwansei Gakuin University, Japan





## ORGANIZING COMMITTEE

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Conference Supervisor

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Conference Coordinator

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## CONFERENCE TRACKS

- Computer and Software Engineering
- Mechanical & Metallurgical Engineering
- Electrical & Electronics Engineering
- Civil Engineering
- Bio-Technology & Food Technology
- Chemistry & Chemical Engineering
- Physical, Applied and Life Sciences
- Interdisciplinary

## CONFERENCE CHAIR MESSAGE

### **Michael Sasaoka**

“International Conference of Consortium of Engineering & Technology” is a platform that thrives to support the worldwide scholarly community to analyze the role played by the multidisciplinary innovations for the betterment of human societies. It also encourages academicians, practitioners, scientists, and scholars from various disciplines to come together and share their ideas about how they can make all the disciplines interact in an innovative way and to sort out the way to minimize the effect of challenges faced by the society. All the research work presented in this conference is truly exceptional, promising, and effective. These researches are designed to target the challenges that are faced by various sub-domains of the social sciences and applied sciences.

I would like to thank our honorable scientific and review committee for giving their precious time to the review process covering the papers presented in this conference. I am also highly obliged to the participants for being a part of our efforts to promote knowledge sharing and learning. We as scholars make an integral part of the leading educated class of the society that is responsible for benefitting the society with their knowledge. Let’s get over all sorts of discrimination and take a look at the wider picture. Let’s work together for the welfare of humanity for making the world a harmonious place to live and making it flourish in every aspect. Stay blessed.

Thank you.

Michael Sasaoka

Conference Chair

Email: [contact@consortium-et.com](mailto:contact@consortium-et.com)



# CONFERENCE AGENDA

DATE: June 29-30, 2019

LOCATION: Hotel MyStays Shin-Osaka Conference Center, Japan

Event Title: 2nd International Conference on Empirical Evidence on  
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## Start Time

- 09:00 am - 09:10 am: Registration & Kit Distribution
- 09:10 am - 09:20 am: Introduction of Participants
- 09:20 am - 09:30 am: Inauguration and Opening address
- 09:30 am - 09:40 am: Grand Networking Session

**Tea/Coffee Break (09:40 am - 10:00 am)**



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## 10:00 am - 12:00 pm: First Presentation Session

### Room 1

#### Track A: Business, Economics, Social Sciences & Humanities

Presenter Name	Manuscript Title	Paper ID
Attasuda Ler-skullawat	Effect of Financial Market Development on the Thai Stock Market during Pre- and Post- 1997 Asian Financial Crisis	IRBEMSH-069-ANI101
Thitima Puttitanun	Are Trust Acts Hindering ICEs Efforts to Target Criminals? Understanding the Use and Implications of Detainers	IRBEMSH-069-ANI102
Kim Su-Won	The hyper-connectivity network society and occupational ethics	IRBEMSH-069-ANI103
Andrey Kudryavtsev	Effect of Investor Inattention on Price Drifts Following Analyst Recommendation Revisions	IMSS-JUN-102
Wannming Wey	A Study of Applying Dynamic Network Process Approach to Built Environment Planning Strategy of a Smart City	IMSS-JUN-110
Jialu Shi	Incentive Factors Associated with High-tech Talents Aggregation in the Industry Cluster	IMSS-JUN-114

#### Track B: Engineering, Technology & Applied Sciences

Mr. Quoc Hanh Nguyen	Effect of Carbonaceous Addition to MoS <sub>2</sub> -based Nanocomposites As Anode Materials for High-Performance Li-ion Batteries	EEAS-JUNE19-101
Taehyun Park	Effect of Carbonaceous Addition to MoS <sub>2</sub> -based Nanocomposites As Anode Materials for High-Performance Li-ion Batteries	EEAS-JUNE19-102C

#### Lunch Break & Ending Note (12:00 pm - 01:00 pm)

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### Participants Registered As Listener/ Observer

The following Scholars/ practitioners who don't have any paper presentation, however they will attending the conference as delegates & observers.

**Name:** IMSS-JUN-105A

Gorm Jacobsen

Economics at University of Agder in Norway

**Name:** OSA-469-103MA

Andrew Robert Korda

Western University Sydney, Australia

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### Conference Day 02 (June 30, 2019)

Second day of conference will be specified for touristy. Relevant expenses are borne by Individual him/herself.



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***TRACK A***

***BUSINESS, ECONOMICS, SOCIAL SCIENCES & HUMANITIES***



## **Effect of Financial Market Development on the Thai Stock Market during Pre- and Post- 1997 Asian Financial Crisis**

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**Keywords:** Financial Market Development, Stock Market, Asian Financial Crisis, Thailand

The first financial market development plan introduced in Thailand in January 1990 is still questioned as one of the main factors that leads to an asset bubble and increase the risk of financial crisis in Thailand. Therefore, this study examines the effect of financial market development on the stock market in Thailand using the evidence study during 1997 Asian financial crisis which covering the period before the Asian financial crisis (January 1990 June 1997) and after the crisis (July 1997 December 2004). The empirical results from the VECM approach (Vector Error Correction Model) show that an increase in financial market development will lead to a higher stock return and this effect is considerably higher in the pre-financial crisis than after the crisis. Also, we find that other economic factors, such as inflation, exchange rate and economic growth, have relatively higher effect on the stock market return during the pre-financial crisis period than after the crisis.

## **Are Trust Acts Hindering ICEs Efforts to Target Criminals? Understanding the Use and Implications of Detainers**

<sup>1\*</sup>Thitima Puttitanun, <sup>2</sup>Catalina Amuedo-Dorantes <sup>3</sup>Mary Lopez  
<sup>1,2,3</sup>Economics-Kasetsart University Bagnkok, Thailand  
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**Keywords:** Detainer, ICE, Immigration holds, Trust Act, Sanctuary City

Since its peak in 2011, The United States of America is now observing a second upward trend in the use of immigration detainers. U.S. Immigration and Customs Enforcement (ICE) requests for law enforcement agencies to detain individuals for 48 hours beyond their lawful release date. Because detainers are not mandatory, many states and counties have resisted observing some of ICEs detainers through the adoption of a Trust Act. The current administration has denounced the adoption of Trust Acts and threatened to withhold federal funding, arguing that it undermines ICEs ability to remove serious criminal offenders from the United States and results in unsafe communities. In this paper, we aim to address whether counties that have adopted Trust Acts interfere with ICEs ability to secure individuals for whom a detainer was sent, whether these counties are less safe than others, and whether the use of detainers is justified, based on who they target, given their encroachment on civil liberties.

## **The Hyper-Connectivity Network Society And Occupational Ethics**

\*Kim, Su-won

Korea Research Institute for Vocational Education & Training-Kangwon National  
University Sejong, Korea

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**Keywords:** Hyper-Connectivity, SmartX, Connecting Sensors

It is essential to secure the national competitiveness of future in areas such as public, business, and smart (SmartX) that building of the advanced national network and collection & utilization of data through them for the intelligent information society and the fourth industrial revolution. The data of vast amounts collects and transmits by connecting sensors, terminals, mobile vehicles, etc. to networks, and the networks to create new business and to promote social innovation are expected to develop into 'neural networks of social systems'. The hyper-connectivity network society is a society environment in which all people-people, people-objects, things-things can be connected quickly and intelligently. In this environment of the hyper-connectivity network society, anyone can easily get the information they want, and the information and the knowledge will be a source of wealth. And the tasks in almost all division will be quick, simplified, globalized, and it will be possible to receive various educational services. However, in environment of the hyper-connectivity network society, the advanced information technology can harm human dignity or life if the information communication technology is used unfavorably (distortion, manipulation) by crime technique to satisfy the personal greed or pay back the grudge. And it can be exemplified the national harm such as intelligent crime, software piracy, machine domination, etc., and the social harm such as unhealthy information distribution, computer virus spreading, hacking, etc., the personal harm such as personal information leakage, privacy violations, misjudgement due to incorrect information, etc. that caused by the unauthorized use of information technology. In order to fundamentally prepare for these unethical problems that may arise in environment of the hyper-connectivity network society, it is necessary to prepare the measures to set up and apply the occupational ethics that are considered to be more important than ever in the business world before enacting laws, regulations, and laws related with it. Therefore, in this study, it established the direction of related occupational ethics in preparation for the hyper-connectivity network society in order to enable ethical values to be applied to experts and stakeholders in each field.



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And it made some suggestions necessary for the establishment of relevant policies at the national/social level.

## **Effect of Investor Inattention on Price Drifts Following Analyst Recommendation Revisions**

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**Keywords:** Analyst Recommendation Revisions; Behavioral Finance; Investor Inattention; Stock Price Drifts.

The study explores stock price dynamics after analyst recommendation revisions. Following the previous literature, which documents significant post-recommendation stock price drifts and attributes them to investor inattention to company-specific events, I hypothesize that if on the day when a recommendation revision with respect to a stock was issued, the sign of the stock's abnormal return was opposite to the direction of the revision, then it means that investors were especially inattentive to the revision and that the subsequent price drift should be more pronounced. Analyzing a large sample of analyst recommendation revisions, I document that recommendation revisions accompanied by the opposite-sign event-day abnormal returns are followed by significantly greater post-event price drifts in the direction of the revision, the magnitude of the drifts increasing for longer post-event periods. This effect is stronger for small and more volatile stocks and remains robust after accounting for additional company- (size, Market Model beta, historical volatility) and event-specific (number of recommendation categories changed in the revision, analyst experience) factors.

## **A Study of Applying Dynamic Network Process Approach to Built Environment Planning Strategy of a Smart City**

\*Wannming Wey

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Corresponding Email: [wmwey@mail.ntpu.edu.tw](mailto:wmwey@mail.ntpu.edu.tw)

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**Keywords:** Built environment, Dynamic Network Process, Open Data, Smart City, Time Series Analysis

In recent years, Smart City has become popular all over the world. Governments around the world have successively proposed relevant policies and plans. They look forward to improving the quality of life through the construction of smart cities, and on the other hand, making the city move towards sustainable development. And due to the built environment has a close relationship with social and economic activities and sustainable development. Therefore, this study believes that through the concept of smart city, the principle of planning, and ICT technology can be used to improve the built environment of the city, to achieve sustainability and livability, and more importantly, to enable the city to develop sustainably. In addition, the rise of Open Data makes urban planners use these data to produce more productive results. This study considers that the dynamic prediction of indicators through open data is an objective basis, and the model construction based on this can increase the accuracy of planning. Therefore, it is worthwhile to apply the open data to develop a strategy for urban built environment planning. Thus, in this study, we intend to combine the concepts of smart cities such as smart environment, smart mobility and smart living to establish built environment indicators that consider urban livability and sustainability. By means of utilizing the objective advantage of open data which were incorporated into the Dynamic Network Process (DNP) technique to develop a built environment planning strategy coping with the smart city goals. In this study, we try to apply open data into built environment planning strategies in smart cities. Furthermore, we develop the planning strategies of making the urban built environment towards sustainability and livability via the dynamic network process approach in order to achieve the implementation of smart city in the future.

## **Incentive Factors Associated with High-tech Talents Aggregation in the Industry Cluster**

\*Jialu Shi

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**Keywords:** Incentive Factors, High-tech, Talent Aggregation, Industry Cluster

During the last decade, high-tech talent aggregation has emerged as a critical topic for scholars, businesses, and public institutions. This growing interest is due to its potential positive effects on high-tech industry cluster and economic development in a region particularly in developing countries. The research firstly selects China as the sample and states relevant concepts of high-tech talent aggregation and high-tech industry cluster. Then based on the previous research, the research attempts to explore the key incentive factors influencing high-tech talent agglomeration from micro, meso and macro perspectives adopting Maslows hierarchy of needs theory, Kurt Lewins field theory and Lees push-pull theory. Methodologies such as deep interview and questionnaire are adopted here. 20 industry clusters are visited including Zhongguancun Science Park in Beijing, the photoelectron cluster in Optics Valley of China in Wuhan, microelectronic cluster in Zhangjiang Semiconductor Industrial Park of Shanghai and household appliances and relevant high-level technology and science talents employed in the enterprises are given deep interviews, meanwhile 50 questionnaires are given to the introducing high-tech scholars in universities and top HR managers who have working experience in this field for several years in high-tech industry over the country on the incentive factors for promoting talent gathering. With the filing, analyzing and refining of interviews and questionnaires results, a new multidimensional factors model were drawn out. Finally, this paper, according to the results and discussion, put forward relevant management and policy recommendations.



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***TRACK B***

***ENGINEERING, TECHNOLOGY & APPLIED SCIENCES***



## Effect of Carbonaceous Addition to MoS<sub>2</sub>-based Nanocomposites As Anode Materials for High-Performance Li-ion Batteries

<sup>1\*</sup>Mr. Quoc Hanh Nguyen, <sup>2</sup>Taehyun Park, <sup>3</sup>Quoc Hai Nguyen, <sup>4</sup>Jaehyun Hur  
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**Keywords:** Molybdenum disulfide, Carbonaceous matrix, Nanocomposite, Anode, Lithium-ion batteries

We report a simple and scalable method to synthesize MoS<sub>2</sub>-based nanocomposites embedded in carbonaceous matrix using high-energy ball milling technique and employed as anode material for lithium-ion batteries. In this study, the effect of various types of carbon matrix (graphite, carbon nanotube and amorphous carbon) on MoS<sub>2</sub> composite are investigated and the optimum milling time was figured out based on electrochemical performance. Among those MoS<sub>2</sub>-based nanocomposites studied, MoS<sub>2</sub>/G exhibited the best performance, delivering a specific capacity 737 mAh g<sup>-1</sup> over 210 cycles (84% retention) and superior rate capability which can be attributed to the uniform distribution between MoS<sub>2</sub> and graphite. Additionally, the longterm cyclic performance of MoS<sub>2</sub>/G showed significantly stable capacity retention, as compared to MoS<sub>2</sub>/CNT and MoS<sub>2</sub>/C. Furthermore, the optimum weight ratio (MoS<sub>2</sub>:G) and ball-milling time were experimentally determined to be (7:3) and 36 hours, respectively. The excellent performance of MoS<sub>2</sub>/G can be explained by the well-blended mixing between MoS<sub>2</sub> and graphite owing to the structural advantages of 2D graphite over other carbon matrices. We further demonstrated the much higher binding energy MoS<sub>2</sub>/G than MoS<sub>2</sub>/CNT nanocomposite by investigating density functional theory calculations that leads to the enhanced dispersion and mechanical robustness of MoS<sub>2</sub>/G. Overall, the introduction of graphite to MoS<sub>2</sub> offers an effective buffering matrix, high electrical conductivity and structural robustness, which facilitates electron transport pathway and suppresses of particle agglomeration during prolonged cycling.

## ***UP COMING EVENTS***

You can find the details regarding our upcoming events by following below:

<http://consortium-et.com/upcoming-events/>

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# MISSION

*To disseminate knowledge and help scholars, practitioners and administrators to promote the high quality research.*

