

PROCEEDINGS

ISET-2019

**2nd International Conference on Innovative
Approaches in Sciences, Engineering
and Technology**

Venue: Hotel MyStays Shin-Osaka Conference Center, Japan

Osaka, Japan

Date: Aug 31-Sep 01, 2019



CONFERENCE BOOK OF ABSTRACT PROCEEDINGS

Consortium-ET

Consortium of Engineering & Technology



TABLE OF CONTENTS

| | |
|---|-------------|
| ADVISORY BOARD | vii |
| ADVISORY BOARD | viii |
| ORGANIZING COMMITTEE | ix |
| CONFERENCE TRACKS | x |
| CONFERENCE CHAIR MESSAGE | xi |
| Conference Day 02 (September 01, 2019) | xiv |
| <i>TRACK A</i> | xv |
| <i>ENGINEERING, TECHNOLOGY & APPLIED SCIENCES</i> | xv |
| Load Torque Estimation for Single Power-Assisted Wheel Kit in Wheelchair | xvi |
| <i>TRACK B</i> | 1 |
| <i>BUSINESS, ECONOMICS, SOCIAL SCIENCES & HUMANITIES</i> | 1 |
| Limited internationalization as an instrument increase investment and migration attractiveness of the region | 2 |
| Adaptation of Thai Women whose husbands migrate to work abroad | 3 |
| Factors Influencing Work-life Balance of Thai University Staff Members | 4 |
| Factors related to The Structural Violence in Women’s work: A Case of Khon Kaen Province, Thailand | 5 |
| <i>UP COMING EVENTS</i> | 6 |

Book of Abstracts Proceedings

2nd International Conference on Innovative Approaches in Sciences, Engineering and Technology (ISET-2019)

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Proceedings of the 2nd International Conference on Innovative Approaches in Sciences, Engineering and Technology (ISET)

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*2nd International Conference on Innovative Approaches
in Sciences, Engineering and Technology (ISET)*

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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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



CONFERENCE AGENDA

DATE: Aug 31-Sep 01, 2019

LOCATION: Hotel MyStays Shin-Osaka Conference Center, Japan

Event Title: 2nd International Conference on Innovative Approaches in Sciences

Engineering and Technology ISET-2019

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 - 11:30 am: First Presentation Session

Room 1

Track A: Engineering, Technology & Applied Sciences

| Paper ID | Manuscript Title | Presenter Name |
|----------------|--|----------------|
| ISET-AUG19-106 | Load Torque Estimation for Single Power-Assisted Wheel Kit in Wheelchair | Chih-Hsien Yu |

Track B: Business, Economics, Social Sciences & Humanities

| | | |
|--------------|--|---------------------|
| SMPA-AUG-101 | Limited internationalization as an instrument increase investment and migration attractiveness of the region | Sergey Yachin |
| SMPA-AUG-103 | Adaptation of Thai Women whose husbands migrate to work abroad | Suvimon Khamnoi |
| SMPA-AUG-104 | Factors Influencing Work-life Balance of Thai University Staff Members | Nattawat Auraiampai |
| SMPA-AUG-105 | Factors related to The Structural Violence in Women's work: A Case of Khon Kaen Province, Thailand | Dusadee Ayuwat |

Lunch Break & Ending Note (11:30 am - 12:30 pm)

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Conference Day 02 (September 01, 2019)

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



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TRACK A

ENGINEERING, TECHNOLOGY & APPLIED SCIENCES

Load Torque Estimation for Single Power-Assisted Wheel Kit in Wheelchair

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Keywords: power-assisted wheelchair, kalman observer, recursive least squares

Power-assist wheelchair (PAW) is one kind of electric wheelchair that detects the user's driving intention and assists the driving force through electric motors. Most of PAWs in the market are controlled by two driving wheels, in which two independent electric motors are employed to provide the required power and controlled by the user through pushrim force sensors. However, in addition to the increase in system cost, the dual-motor wheelchair architecture also makes motion control more difficult due to the inherent dynamic coupling effects. Moreover, the force sensor in the pushrim is quite expensive and this approach also makes the wheel a little bit clumsy. In order to reduce system cost and complexity, the architecture of PAW in this study will adopt the "single power-assisted wheel" type, such as Max Mobility's Smartdrive MX2 product. A load torque estimator integrated Kalman observer (KO) and recursive least squares (RLS) algorithm is developed in this paper to realize the force sensorless detection of human input torque. Since some parameters of PAW system will be time-varying in accordance with the road environment, such as coulomb and viscous friction coefficients, the parameter identification process is based on RLS method. The observed load torque is precisely provided by KO because of accurate system parameters online identified by RLS. Simulation results demonstrate the validity and robustness of the proposed algorithm in contending with varying load and torque disturbance.



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TRACK B

BUSINESS, ECONOMICS, SOCIAL SCIENCES & HUMANITIES

Limited internationalization as an instrument increase investment and migration attractiveness of the region

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Keywords: Internationalization Of The Territory, Regions Attractiveness, Human Resources.

Limited internationalization of a territory is analyzed in relation to the development conditions of the Russian Far East. Taking into account further reduction of Russias population, the regions major problem is insufficient investment appeal and low migration attractiveness for foreign partners. It can be attributed to the lack of basic guarantees to ensure long-term interest of investors and human resources that are to be attracted. The guarantees can be provided by a special concession regime to enable limited internationalization of certain sections of the regions territory. The regime could be modeled after exisiting international industrial clusters.

Adaptation of Thai Women whose husbands migrate to work abroad

^{1*}Suvimon Khamnoi , ²Dr.Dusadee Ayuwat

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Keywords: Adaptation, Migration To Work Abroad

This article investigates the adaptation of women whose husbands migrate to work abroad. The qualitative research method was employed. In-depth interview was the tool and conducted with the key informants, including 20 Thai women who left behind international migration for more than one year and 10 key informants. Data were collected from April to May 2019 in Tambon Kho Tai, Sawang Dandin district, Sakon Nakhon province; there is a district with the highest number of international migration. Content analysis method was applied to data analysis. The results showed that women whose husbands migrate to work abroad as a person who left behind have to adapt themselves by changing the way of agricultural production, household expense plans, and career. Thought involves the husbands migration patterns.

Factors Influencing Work-life Balance of Thai University Staff Members

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Keywords: Work-life balance, Job satisfaction, Attitude toward work, Organization Culture, Engagement

This article aims at explaining the factors influencing the work-life balance of Thai University staff members. The quantitative research method was applied based on the analytical unit at an individual level. The data was collected from January to February, 2018 using the questionnaire that measures peoples happiness with the sample group comprising 2,873 Khon Kaen University staff members (72.1% of the total of 3,998 members). The descriptive analysis and the multiple regression statistics were applied with the data in order to find the factors influencing the work-life balance of Thai university staff. The findings show female majority among the respondents (65.6%). Most of the sample group (44.4%) were at the Gen X age range (39-53 years), whereas 18.3% were at the Gen B age range (54 years old and over). Most (42.1%) hold a bachelors degree, 78% are supporting staff and 22.0% are academic staff members. The analytical results show the majority (64.8%) have the work-life balance while 35.2 percent do not. Age, absence of congenital disease, being supporting staff, perception of organization culture, job satisfaction, attitudes toward work and organization, and organization engagement are the factors significantly influencing the work-life balance at the level of 0.01. The factors studied explain the variation of the work-life balance of the staff at 41.7% ($R^2=0.417$).

Factors related to The Structural Violence in Women's work: A Case of Khon Kaen Province, Thailand

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Keywords: Structural Violence, Womens work, Violence in work

This research aims to examine factors related to structural violence in women's work. The quantitative methodology was employed with individual level as a unit of analysis. The sample consisted of 398 women who are working in government agencies and private enterprise. The samples were randomly by multi-stage sampling technique in 9 municipalities of Khon Kaen province. The data were collected using the interview schedule from May to June 2018 and analyzed by descriptive statistics and Chi-square. The results found that most of women samples were in Generation Y (19-38 years old). 51.3% of women sample were married, and 43.7% got a bachelors degree or higher degree. Most of women sample was worked in large organizations and 40.7% of the women samples have worked more than 10 years. The result showed that 23.9% of women samples were subjected to the structural violence in work at a rather high level and high level (combined). When analyzing factors related to the structural violence in women's work with Chi-square, it was found that the characteristics of women (age and education level), work condition factors (the understanding of women's labor rights), and social and gender factors (socialization of gender roles and self-efficacy in work) are the factors that related to the structural violence in women's work at the low level of relationship at 0.265 0.214 0.270 0.315 and 0.224 respectively at statistically significant 0.01 level.

UP COMING EVENTS

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

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

MISSION

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

