PEAS-2018
Global Conference on Changing Paradigm in Engineering and Applied Sciences Research

Venue: Osaka International Convention Center
Osaka, Japan
Date: May 23-25, 2018
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADVISORY BOARD</td>
<td>vii</td>
</tr>
<tr>
<td>ADVISORY BOARD</td>
<td>viii</td>
</tr>
<tr>
<td>ORGANIZING COMMITTEE</td>
<td>ix</td>
</tr>
<tr>
<td>CONFERENCE TRACKS</td>
<td>x</td>
</tr>
<tr>
<td>CONFERENCE CHAIR MESSAGE</td>
<td>xi</td>
</tr>
<tr>
<td>CONFERENCE SCHEDULE</td>
<td>xii</td>
</tr>
<tr>
<td>Conference Day 02 (May 24, 2018)</td>
<td>xv</td>
</tr>
<tr>
<td><strong>TRACK A</strong></td>
<td></td>
</tr>
<tr>
<td><strong>BUSINESS, SOCIAL SCIENCES AND MANAGEMENT STUDIES</strong></td>
<td></td>
</tr>
<tr>
<td>Determinants of Frontline Employee Engagement and Their Influence on Service Performance</td>
<td>2</td>
</tr>
<tr>
<td>Educating Rautes in Nepal</td>
<td>3</td>
</tr>
<tr>
<td>Liberal Islam in Indonesia and Malaysia: An Intellectual Discourse</td>
<td>4</td>
</tr>
<tr>
<td>Satisfaction Study Towards Classroom Language Training Courses of English Teachers In Primary Educational Service Area Office, Nakhon Pathom Province, Thailand</td>
<td>5</td>
</tr>
<tr>
<td><strong>TRACK B</strong></td>
<td></td>
</tr>
<tr>
<td><strong>ENGINEERING, TECHNOLOGY, COMPUTER AND APPLIED SCIENCES</strong></td>
<td></td>
</tr>
<tr>
<td>Synthesis and Electrochemical Studies of Macrocyclic Porphyrin</td>
<td>7</td>
</tr>
<tr>
<td><strong>TRACK C</strong></td>
<td></td>
</tr>
<tr>
<td><strong>MEDICAL, MEDICINE &amp; HEALTH SCIENCES</strong></td>
<td></td>
</tr>
<tr>
<td>Investigating the Forearm Muscle Activity of Clients With De Quervains Disease Wearing Thumb Orthoses</td>
<td>9</td>
</tr>
<tr>
<td>Development of an Assessment for Social Knowledge in People With Schizophrenia</td>
<td>10</td>
</tr>
<tr>
<td><strong>UP COMING EVENTS</strong></td>
<td>11</td>
</tr>
</tbody>
</table>
Book of Abstracts Proceedings

Global Conference on Changing Paradigm in Engineering and Applied Sciences Research (PEAS)

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May 23-24, 2018
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Global Conference on Changing Paradigm in Engineering and Applied Sciences Research (PEAS)

Venue: Osaka International Convention Center, Japan

Conference Theme: Providing Platform for enhancement of research and developmental activities through networking.
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Natthawut Kaewpitoon (Ph.D.)
Conference Coordinator
Email: contact@consortium-et.com
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 SCHEDULE

Consortium-et-2018

Venue: Osaka International Convention Center, Japan

Time: Registration & Kit Distribution (09:00 am - 09:20 am)
Day: Wednesday
Date: May 23, 2018

Venue: Room 1

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>09:20 am - 09:30 am</td>
<td>Introduction of Participants</td>
</tr>
<tr>
<td>09:30 am - 09:40 am</td>
<td>Inauguration and Opening address</td>
</tr>
<tr>
<td>09:40 am - 09:50 am</td>
<td>Grand Networking Session</td>
</tr>
</tbody>
</table>

Tea/Coffee Break (09:50 am - 10:00 am)
**DAY 01 (May 23, 2018)**

First Presentation Session (10:00 am - 11:15 am)

**Venue: Room 1**

**Track A: Business, Economics, Social Sciences and Humanities**

<table>
<thead>
<tr>
<th>Presenter Name</th>
<th>Manuscript Title</th>
<th>Paper ID</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jui-Chen Peng</td>
<td>Determinants of Frontline Employee Engagement and Their Influence on Service Performance</td>
<td>SM-MAY-106</td>
</tr>
<tr>
<td>Mani Ram Sharma</td>
<td>Educating Rautes in Nepal</td>
<td>SM-MAY-119</td>
</tr>
<tr>
<td>Wannee Niamhom</td>
<td>Satisfaction Study Towards Classroom Language Training Courses of English Teachers in Primary Educational Service Area Office, Nakhon Pathom Province, Thailand</td>
<td>EBAS-MAY-102O</td>
</tr>
<tr>
<td>Dr. R.Sivaperegasam</td>
<td>Liberal Islam in Indonesia and Malaysia: An Intellectual Discourse</td>
<td>SM-MAY-117</td>
</tr>
<tr>
<td>P.Rajanthiran</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Track B: Engineering and Technology and Applied Sciences

<table>
<thead>
<tr>
<th>Presenter Name</th>
<th>Manuscript Title</th>
<th>Paper ID</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cheng-Chi Chiu</td>
<td>Synthesis and Electrochemical Studies of Macro-cyclic Porphyrin</td>
<td>PEAS-MAY18-101</td>
</tr>
</tbody>
</table>

### Track C: Medical, Medicine & Health Sciences

<table>
<thead>
<tr>
<th>Presenter Name</th>
<th>Manuscript Title</th>
<th>Paper ID</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hsin yu Chiang</td>
<td>Development of an Assessment for Social Knowledge in People with Schizophrenia</td>
<td>OSA-458-101M</td>
</tr>
<tr>
<td>Liu Chien Hsiou</td>
<td>Investigating the Forearm Muscle Activity of Clients with De Quervains Disease Wearing Thumb Orthose</td>
<td>OSA-458-102M</td>
</tr>
</tbody>
</table>

Lunch Break & Ending Note: (12:00 to 01:00 pm)
Second day of conference will be specified for touristry. Relevant expenses are borne by Individual him/herself.
TRACK A

BUSINESS, SOCIAL SCIENCES AND MANAGEMENT STUDIES
Determinants of Frontline Employee Engagement and Their Influence on Service Performance

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Saint. John’s University, Taiwan
Corresponding Email: Jjpeng@Mail.Sju.Edu.Tw

Keywords: Work engagement, Servant leadership, Psychological capital, Service performance

Drawing from the perspective of positive organizational behavior and the job demands-resources model, this study explores the antecedents of service employees work engagement and their impact. Survey data were collected from the frontline service employees and managers at some branches of a chain restaurant in Northern Taiwan. Hierarchical linear modeling results revealed that frontline employees psychological capital mediated the positive relationship between store managers servant leadership and employees work engagement. Furthermore, the results indicated that employees work engagement mediated the relationship between employees psychological capital and their service performance. Implications of this study as well as limitations and suggested directions for future research are also discussed.
Educating Rautes in Nepal

*Mani Ram Sharma
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**Keywords:** Unequal, Nomadic, Castes, Wandering, Raute

Nepal is indeed a multi-religious, multi-ethnic and multi-lingual country. Most of the communities are nuisance, backward and subsidiary in the country by dint of unequal distribution of natural resources. At least 20 billion people have been living their low level life style (Boodle 1988). Kobila, caste and indigenous communities are kept under this category. The life of these people is committed in hunting and nomadic activities. As we know that the development process of society has various speed and shapes which resembles the unity in diversity. The process of emerging powerful countries, system of imperialistic practice, population growth and its effect in natural resources, scientific inventions and miracles in communication are the challenges for the nomadic people (Rautes) in the country. The debates have been started, who are Rautes? What do they need? Why are the people messaging wrong issues about them? Why are Rautes famous among other groups? Late Prithvi Narayan Shah stated Nepal is the public garden of four castes and thirty six sub-castes’. Yes! There are many social groups that have been source of revenue from the very beginning. Raute caste is one of them, historically found in mid and far-western regions Terai of Nepal, Known as wandering caste in Asia.
Liberal Islam in Indonesia and Malaysia: An Intellectual Discourse

*Dr. R. Sivaperegasam P. Rajanthiran
Universiti Utara, Malaysia
Corresponding Email: sivaperegasam@uum.edu.my

**Keywords:** Liberal Islam, Progress, Political Outcomes

The roots of Liberal Islam thought have their origins in two major sources: the Islamic intellectual tradition and modern Western philosophy. However, it must be clarified that the underlying assumptions of modernization—secularism, materialism, individualism, and a commitment to progress through science and technology—formed the core of Western intellectual polemic against Islam and the intellectual justification for Western political domination of Muslims. Likewise, development, defined as the control of nature for the benefit of man, proceeded according to principles of liberal market forces, leading inevitably to secular and individualist political outcomes. The tenets of these reformulations are derived from the European Enlightenment principles of materialism and rationalism, as well as the Marxist concept of class consciousness. Islamic development is argued to be superior to Western forms of capitalism and socialism because it attends to both spiritual and material needs, and addresses the problem of equity more effectively. The dominant social science interpretations of modernization and development, however, have been subjected to an even more powerful challenge from indigenous Islamic forces, coinciding with the Islamic revival from the mid-1960s onward.
Satisfaction Study Towards Classroom Language Training Courses of English Teachers In Primary Educational Service Area Office, Nakhon Pathom Province, Thailand.

*Wannee Niamhom
Lecturer in Department of Human and Community Resources Development, Faculty of Education and Development Science, Kasetsart University, Thailand
Corresponding Email: feduvna@ku.ac.th

Keywords: Standard Deviation, Teachers Satisfaction, Instrument

The objectives of this research were to study and to compare satisfaction towards classroom language training course of English teachers in Primary Educational Service Area Office, Nakhon Pathom Province, Thailand. This study focuses on four areas: courses content, training instructor, training method and training facilities. Comparing English teachers satisfaction towards classroom language training courses in Primary Educational Service Area Office in Nakhon Pathom Province by gender, teaching experience and school sizes. The samples used in the study were 28 English teachers in Primary Educational Service Area Office in Nakhon Pathom Province. The research instrument used for data collection was questionnaire. The data was analyzed by using frequency, percentage, mean, standard deviation, t-test, and one way analysis of variance. The findings of this study were as follow: 1. English teachers were satisfied with classroom language training courses in overall and each areas at a high level except the facilities to support training courses was at moderate level. 2. Comparing the English teachers satisfaction towards classroom language training courses: 2.1 There was no statistically significant for the English teachers satisfaction in terms of gender. 2.2 There was statistically significant at 0.05 for the English teachers satisfaction in terms of teaching experience. 2.3 There was no statistically significant for the English teachers satisfaction in terms of school size.
TRACK B

ENGINEERING, TECHNOLOGY, COMPUTER AND APPLIED SCIENCES
Synthesis and Electrochemical Studies of Macrocyclic Porphyrin

1Cheng-Chi Chiu, 2Tzu-Ching Hsu
3Yuan Chiu, 4Yuhlong Oliver Su
1,2,3,4 Applied Chemistry, National Chi Nan University, Taiwan
Corresponding Email: s1010160@gm.pu.edu.tw

Keywords: Synthesized, Electrochemistry, Self-Assembling

In this study, the macrocyclic porphyrin with the porphyrin and bridging substituent has been synthesized successfully. In the synthesis of macrocyclic porphyrin, we use the temperature changes and the conditions of the reaction to achieve the best yield. The self-assembling of the macrocyclic porphyrin with C70 also has been investigated by using UV-Vis spectroscopy and electrochemistry. According to spectral changes, the formation constant between the macrocyclic porphyrin and C70 could be obtained. Also, we use cyclic voltammetry to observe the redox potentials of macrocyclic porphyrin, and calculate the electron transfer number for each redox potentials of the complex. The porphyrin complex can be applied to the electronic storage system.
TRACK C

MEDICAL, MEDICINE & HEALTH SCIENCES
Investigating the Forearm Muscle Activity of Clients With De Quervains Disease Wearing Thumb Orthoses

*Liu Chien Hsiou
Fu Jen Catholic University, ROC
Corresponding Email: 072223@mail.fju.edu.tw

**Keywords:** De Quervains Disease, Thumb Orthosis, Electromyography

Thumb orthoses are commonly applied in clients with de Quervains disease. In rehabilitative clinics, therapists often recommend thumb orthoses to these clients to decrease hand discomfort and pain. Although rest is necessary for clients with de Quervains disease, hand motion is inevitable in activities of daily living. This research aimed to investigate forearm muscle activity during a lateral pinch task performed by clients with de Quervains disease wearing thumb orthoses. A series of 2x2 (Group x Orthosis) repeated experiments were designed. The between factor was Group, and the within factor was Orthosis. Twelve clients with de Quervains disease were recruited as the experimental group, and 16 healthy adults were recruited as the control group. All subjects were randomly assigned to complete a lateral pinch task. The activities of four forearm muscles (the extensor digitorum communis (EDC), abductor pollicis longus (APL), flexor digitorum superficialis (FDS), and flexor pollicis longus (FPL)) were measured simultaneously by surface electromyography to investigate the exertion condition. For analysis, 2x2 repeated ANOVAs were used. For the Group factor, the muscle activities of the EDC, FDS, and FPL were greater in the experimental group than in the control group. No significant differences were found in the muscle activity of the APL for the Group factor. For the Orthosis factor, the muscle activities of the APL and FPL were significantly less in the orthosis condition than in the non-orthosis condition. Since APL tendinitis is a main cause of hand discomfort or pain in de Quervains disease, the findings of this study suggest that clients with de Quervains disease can wear thumb orthoses to decrease APL exertion while doing lateral pinch activities in daily living.
Development of an Assessment for Social Knowledge in People With Schizophrenia

*Hsin yu Chiang
Fu-Jen Catholic University, Taiwan
Corresponding Email: ariel.hychiang@gmail.com

**Keywords:** Social Knowledge, Schizophrenia, Assessment

Social knowledge (SK) is associated with functional outcomes in people with schizophrenia and often become targets of intervention. SK refers to the awareness of the roles, rules, and goals that characterize social situations and guide social interactions. However, the lack of standardized measures and the limitations of current measures are listed as follows: 1) the psychometric properties of the measures have not been sufficiently examined; 2) the psychometric properties are unsound; 3) the measures developed in overseas have language and cultural issues that restrict their utility on patients in Taiwan; 4) practice effect of the measures is still unknown; and 5) inefficiency of the measures due to too many items in a measure. These limitations reduce the ability of clinicians and researchers to precisely and efficiently assess SK deficits in patients, thereby reducing the effectiveness of rehabilitation. Several studies have indicated that computerized adaptive testing (CAT) can be an efficient way to resolve the aforementioned limitations. The purpose of this study is to develop a precise and efficient measuring system, named the CAT-Assessment for SK (CAT-SK). So the clinicians and researchers will be able to precisely and efficiently assess SK deficits. We have established two item banks containing items that assess schizophrenia patients SK (101 items). The item banks of SK are completed. The item banks of SK were tested on 187 patients with schizophrenia already. Item analysis was conducted by Rasch analysis to establish CAT-SK. The results revealed that SK item banks had good internal consistency and convergent validity. In addition, the item banks could be used to assess patients with different levels of SK abilities. The results of Rasch analysis indicated that the item banks of SK could be applied to develop CAT-SK. To our knowledge, this project might be the first study to develop a CAT system for SK. We expect that the CAT-SK will eliminate practice effects and be precise and efficient for clinicians to use in routine evaluation. Moreover, the results of the CAT-SK will be able to reflect patients real SK status and assist clinicians and researchers in intervening patients interpersonal relationship.
UP COMING EVENTS

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

http://consortium-et.com/upcoming-events/ieas-annual-conference/
http://consortium-et.com/upcoming-events/eemas-annual-conference/
http://consortium-et.com/upcoming-events/dtas-annual-conference/
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MISSION

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