

Volume 269, Issue 14



ECBA 2016



August 20-21, 2016
Hong Kong



CONFERENCE PROCEEDINGS

BOOK OF ABSTRACTS ECBA-2016

**International Conference on
“Engineering & Technology, Computer, Basic & Applied
Science”
(ECBA-2016) Hong Kong**

Book of Abstracts Proceedings

**International Conference on
“ENGINEERING & TECHNOLOGY, COMPUTER, BASIC &
APPLIED SCIENCE”
(ECBA-2016)
Hong Kong**

Office Address:

M2-17-01 Tower 2, Level 17 8trium

Bandar Sri Damansara

52200 Kuala Lumpur, Malaysia

CONTACT: (+6) 03 6735 6566

EMAIL: contact@academicfora.com

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted in any form or by any means, electronic, mechanical, photocopying, recording or otherwise, without the prior written permission of the publisher. Applications for the copyright holder's written permission to produce any part of this publication should be addressed to the publisher.

Proceedings of the International Conference on
“Engineering & Technology, Computer, Basic & Applied
Science
(ECBA-2016)”

ISBN: 978-969-670-770-7

Disclaimer

Every reasonable effort has been made to ensure that the material in this book is true, correct, complete, and appropriate at the time of writing. Nevertheless the publishers, the editors, and the authors do not accept responsibility for any omission or error, or for any injury, damage, loss, or financial consequences arising from the use of the book. The views expressed by the contributors do not necessarily reflect those of the Academic fora.

TABLE OF CONTENTS

ORGANIZING COMMITTEE	VI
CONFERENCE CHAIR MESSAGE	VII
CONFERENCE PROGRAM	VIII
TRACK A: ENGINEERING & TECHNOLOGY, COMPUTER, BASIC & APPLIED SCIENCES.....	1
1. BETEL NUT ARECOLINE INHIBITS THE GROWTH OF 3T3-L1 PREADIPOCYTES VIA THE REACTIVE OXYGEN SPECIES PATHWAY	10
2. PRODUCTION LINE CONFIGURATION AND IMPACTS ON COMPLEXITIES.....	11
TRACK B: BUSINESS, ECONOMICS, SOCIAL SCIENCES & HUMANITIES	12
3. THE APPLICATION OF CONCEPT ADVANCED INTERPRETIVE STRUCTURAL MODELING IN ASSESSING LEARNING EFFECTIVENESS: AN EXAMPLE FROM THE ADVENTURE COURSE	13
4. STUDY ON COMPANY-INTERNAL SOCIAL MEDIA USAGE IN THE WORKPLACE: THE TELECOM CORPORATION AS AN EXAMPLE	14
5. COMMUNITY'S OPINIONS ACCORDING TO TOURISM COMPONENTS TO IMPEL TOONG BUA DANG AS A TOURIST ATTRACTION.....	15
6. EXPLORING ANTECEDENTS FOR JOB CRAFTING IN SMART WORK ENVIRONMENT	16
7. EXPLORING THE RELATIONSHIP BETWEEN TEAM CLIMATE AND SOCIAL CAPITAL IN IT PROJECT TEAM.....	17
TRACK C: MEDICAL, MEDICINE AND HEALTH SCIENCES.....	18
8. EVIDENCE OF MULTIPLE REASSORTMENT EVENTS OF FELINE-TO-HUMAN ROTAVIRUSES BASED ON A RARE HUMAN G3P[9] ROTAVIRUS ISOLATED FROM A PATIENT WITH ACUTE GASTROENTERITIS	19
FUTURE EVENT	10

**International Conference on
“Engineering & Technology, Computer, Basic & Applied
Science at Hong Kong”**

**Venue: The Charterhouse Causeway Bay Hotel
Hong Kong**

ORGANIZING COMMITTEE

1. Ms. Ani Wahyu

Conference coordinator

Email: aniwahyu@academicfora.com

2. Mr. Metha

Conference coordinator

Email: metha@academicfora.com

3. Ms. Grace Ooi

Conference coordinator

Email: grace@academicfora.com



CONFERENCE CHAIR MESSAGE

Dr. Malika Ait Nasser

International Conference on Engineering & Technology, Computer, Basic & Applied Science” serves as platform that aims to help the scholarly community across nations to explore the critical role of multidisciplinary innovations for sustainability and growth of human societies. This conference provides opportunity to the academicians, practitioners, scientists, and scholars from across various disciplines to discuss avenues for interdisciplinary innovations and identify effective ways to address the challenges faced by our societies globally. The research ideas and studies that we received for this conference are very promising, unique, and impactful. I believe these studies have the potential to address key challenges in various sub-domains of social sciences and applied sciences.

I am really thankful to our honorable scientific and review committee for spending much of their time in reviewing the papers for this event. I am also thankful to all the participants for being here with us to create an environment of knowledge sharing and learning. We the scholars of this world belong to the elite educated class of this society and we owe a lot to return back to this society. Let’s break all the discriminating barriers and get free from all minor affiliations. Let’s contribute even a little or single step for betterment of society and welfare of humanity to bring prosperity, peace and harmony in this world. Stay blessed

Thank you.

Dr. Malika Ait Nasser

Conference Chair

Email:Chair2016@academicfora.com

ECBA-2016

CONFERENCE PROGRAM

DAY 01 Saturday (August 20, 2016)
Welcome Reception & Registration

9:00– 9:30 am

Opening Ceremony (09:30 – 10:00 am)

Venue: Room 1

09:30 – 9:40 am	Introduction of Participants
09:40– 9:50 am	Welcome Remarks – Ms. Petrel Qiu Conference Coordinator Academic Fora
09:50 – 10.00 am	Group Photo Session

Grand Networking Session and Tea Break (10:00– 10:30 am)

DAY 01 Saturday (August 20, 2016)

Session 1 (10:30 am – 12:00 pm)

Venue: Room 1

Session Chair: Mr. Leon Yap

Track A: Business, Economics, Social Sciences and Humanities

HKS-386-102	The Application of Concept Advanced Interpretive Structural Modeling in Assessing Learning Effectiveness: An Example from the Adventure Course	Yin Che Chen
HKS-386-106	Study on Company-internal Social Media Usage in the Workplace: The Telecom Corporation as an Example	Shu-Ya Hu
HKS-386-108	Community's Opinions According to Tourism Components to Impel Toong Bua Dang as a Tourist Attraction	Parrichat Faenphimai
HKS-386-110	Exploring Antecedents for Job Crafting in Smart Work Environment	Sihoon Moon
HKS-386-111	Exploring the relationship between Team Climate and Social Capital in IT Project Team	Seulki Lee

Track B: Medical, Medicine and Health Sciences

HKM-386-101	Evidence of Multiple Reassortment Events of Feline-To-Human Rotaviruses Based on a Rare Human G3P[9] Rotavirus Isolated from a Patient with Acute Gastroenteritis	Wonyong Kim
-------------	---	-------------

Lunch Break (12:00 - 1:00pm)

DAY 01 Saturday (August 20, 2016)

Session 2 (1:00 am – 2:30 pm)

Venue: Room 1

Session Chair: Mr. Leon Yap

Track C: Engineering and Technology study

HKE-386-101	Betel Nut Arecoline Inhibits the Growth of 3T3-L1 Preadipocytes via the Reactive Oxygen Species Pathway	Yung-Hsi Kao
HKE-386-102	Production Line Configuration and Impacts on Complexities	Edward Ko Wah Law

Closing Ceremony

DAY 02 Sunday (August 21, 2016)

City Tour and Shopping Day

All respective guests are free to conduct their own sightseeing and tour. The second day of the event is reserved for this memorable purpose



**TRACK A: ENGINEERING & TECHNOLOGY,
COMPUTER, BASIC & APPLIED SCIENCES**

Betel Nut Arecoline Inhibits the Growth of 3T3-L1 Preadipocytes via the Reactive Oxygen Species Pathway

**Yung-Hsi Kao^{1*}, Zi-Han Tien², Li-Jane Shih³, Yi-Wei Tsuei⁴,
Yow-Chii Kuo⁵**

^{1, 2, 3}Department of Life Sciences, National Central University, Zhongli City, Taoyuan 32001, ⁴Department of Emergency, Armed Forces Taoyuan General Hospital, Taoyuan, Taiwan, ⁵Department of Gastroenterology, Landseed General Hospital, Taoyuan, Taiwan

Abstract

Betel nut alkaloids, especially arecoline, have been reported as modulators for metabolic syndrome and obesity. This study investigated the pathways involved in the effect of arecoline on cell viability in 3T3-L1 preadipocytes. Preadipocyte viability, as indicated by greater incorporation of the tetrazolium dye MTT, was inhibited by arecoline in dose- and time-dependent manners. An alkaloid-specific effect of betel nut was evident; arecoline was more effective than arecaidine and guvacine in inhibiting cell viability. Arecoline arrested preadipocytes in the G2/M phase of the cell cycle, decreased total protein levels of cyclin-dependent kinase 1 (CDK1), p21 and p27, increased p53 and cyclin B1 proteins, and had no effect on CDK2 protein level. These data suggest that arecoline selectively affects particular members of the CDK family. Moreover, pre-treatment with an antioxidant N-acetylcysteine (NAC) not only prevented the actions of arecoline on cell viability, AMPK phosphorylation, and levels of CDK1, p21 and p27 proteins, but also suppressed arecoline-induced increases in all G2/M growth arrest, p53, cyclin B1, and reactive oxygen species (ROS) production. These data demonstrate the cell cycle-dependent effect of arecoline on preadipocyte growth through the ROS pathway.

Keywords: Betel Nut, Arecoline, Preadipocyte, Reactive Oxygen Species

*All correspondence related to this article should be directed to Yung-Hsi Kao, Department of Life Sciences, National Central University, Zhongli City, Taoyuan 32001

Email: ykao@cc.ncu.edu.tw, han-0602@hotmail.com

Production Line Configuration and Impacts on Complexities

Edward Ko Wah Law¹, Winco Kc Yung²

^{1,2} Hong Kong Polytechnic University

Abstract

The paper systematically organizes and reviews mostly through empirical and exploratory studies of production line configuration that can affect manufacturing complexity. Complexity impact on Smoothed Effect on individual product types is used as an example to demonstrate as an added benchmarking in line balancing. Complexity issues have been discussing in the manufacturing field for sometime but drawing more attention recently. Manufacturers found it is important to ensure the assembly flow be manageable. Therefore, complexity should be considered as well in the optimization process. Structural and Dynamic complexities are proposed to be considered as a result of line balance, and illustrated with a case study.

Keywords : Production Line Configuration, Information Entropy, Structural Complexity, Dynamic Complexity

*All correspondence related to this article should be directed to Edward Ko Wah Law, Hong Kong Polytechnic University
Email: edward7kwlaw@gmail.com

Abstract proceeding book
ECBA-August 20-21, 2016
Hong Kong
ISBN 978-969-670-770-7

**TRACK B: BUSINESS, ECONOMICS, SOCIAL
SCIENCES & HUMANITIES**

The Application of Concept Advanced Interpretive Structural Modeling in Assessing Learning Effectiveness: An Example from the Adventure Course

Yin Che Chen^{1*}, Wen Liang Hung²

^{1,2}National Hsinchu University of Education, Taiwan

Abstract

Adventure education is based on the theory of experiential learning cycle, referring to a series of indoor or outdoor group activities in various levels that are designed to develop multiple team building skills. This study applied concept advanced interpretive structural modeling (CAISM) analysis to identify the learning concept hierarchy and its changes observed in adventure education trainees, in order to achieve individualized evaluation of training effectiveness and establish a new approach for educational training evaluation. According to the integral data analysis, the participating students exhibited the highest level of mastery in “contract value.” After completing the adventure education course, the students mastered more concepts in the posttest than they did in the pretest and midtest. However, most students yielded a low level of mastery in the concept “self-confidence” in the pretest, midtest, and posttest. Finally, this study proposed practical suggestions for designing adventure education courses and evaluating adventure training programs.

Keywords: Adventure Education, Learning Effectiveness, Concept Advanced Interpretive Structural Modeling

*All correspondence related to this article should be directed to Yin Che Chen, National Hsinchu University of Education, Taiwan
Email: yinchechen@mail.nhcue.edu.tw

Study on Company-internal Social Media Usage in the Workplace: The Telecom Corporation as an Example

Mei-Hsiang Wang¹, Shu-Ya Hu^{2*}

^{1,2} Southern Taiwan University of Science and Technology, Taiwan

Abstract

Social media has been widely-adopted by workers and, consequently, have the potential to become a valuable resource to support their working communications and collaborations with coworkers. This is essential in work context in order to solve problems that require intensive interaction and knowledge sharing among employees. Obviously, social media would be important mechanisms that enable personnel to mutually share and create useful knowledge for their works and may have a profound impact in the way people communicate and connect with each other. Especially, the potential benefits and risks of company-internal social media are still not properly addressed in Taiwanese firms. Company-internal social media, which facilitates business-related connections, can therefore be used as a supporting platform for organization operation. As different social transactions on social media are executed, they could create various social capital and organization value at workplace. In response, we present a framework that integrates social constructs (social transaction, social capital) and organization value to study possible beneficial consequences of the company-internal social media use from the perspective of a firm.

Keywords: Social Media, Telecom Corporation, Social Capital, Social Transaction

*All correspondence related to this article should be directed to Mei-Hsiang Wang, Department of Information Management, Southern Taiwan University of Science and Technology, Taiwan
Email: shiang@stust.edu.tw

Community's Opinions According to Tourism Components to Impel Toong Bua Dang as a Tourist Attraction

Parrichat Faenphimai*

Vongchavalitkul University, Thailand

Abstract

This research aimed to study the community's opinion according to the 6 A's framework of tourism destinations to develop Toong Bua Dang as a tourist attraction. Data was collected by convenience sampling, using questionnaire. Sampling size was 248 villagers who live in Baan Don Plao, Ban Lueam Distric, Nakhon Ratchasima province. The research found that most of the respondents were female, age more than 41 years old, work as farmer. This research enquired the community about the tourism components of Toong Bua Dang. The research queried the 6 A's framework (attractions, accessibility, amenities, available packages, activities, ancillary services) The results showed that attraction is the best tourism components of Toong Bua Dang ($\bar{X} = 4.09$). The activities are ranked second ($\bar{X} = 4.04$). The ancillary services are ranked third ($\bar{X} = 3.84$). The accessibility is ranked fourth ($\bar{X} = 3.65$). The amenity is ranked fifth ($\bar{X} = 3.54$). And the lowest ranked is available packages ($\bar{X} = 1.67$). Toong Bua Dang can be impel to be a new tourist attraction because of a good components of tourism but the tourists who will visit here should like to learn about nature and the need to preserve nature as well.

Keywords: Community-Based Tourism, Community, Toong Bua Dang

*All correspondence related to this article should be directed to Parrichat Faenphimai, Vongchavalitkul University, Thailand
Email: parrichat_fae@vu.ac.th

Exploring Antecedents for Job Crafting in Smart Work Environment

Jungwoo Lee¹, Sihoon Moon^{2*}, Hyejung Lee³

^{1, 2, 3} Yonsei University, Republic of Korea

Abstract

Since IT Project Team members has individually their own expertise, it is very important enhancing knowledge sharing and increasing social capital. This study examines the relationship among the team climate, social capital and team performance in IT project context. Different two types of social capital and two factors of team climate for team performance are identified from a literature review and tested; innovative and supportive team climate as antecedents, social capital was composed of internal and external divided by team boundary, leading to team performance. 166 data points were collected from IT project team members to test these hypotheses. PLS data analysis indicated that innovative climate and supportive climate are positive effect on internal and external social capital. However, statistically support climate has not significant effect. And internal social capital has a positive effect on the team performance. On the contrary, external social capital has not an effect on the team performance as literature of bridging social capital. Based on the results, we proposed practically several team management skills for IT project managers, leaders and even members, and explained theoretical contributions.

Keywords: Internal Social capital, External Social capital, Innovative, Supportive, Organizational Climate, IT Team Performance

*All correspondence related to this article should be directed to Hyejung Lee, Yonsei University, Republic of Korea
Email: jlee@yonsei.ac.kr

Exploring the relationship between Team Climate and Social Capital in IT Project Team

Hyejung Lee¹, Jungwoo Lee², Seulki Lee^{3*}

^{1, 2, 3} Yonsei University, Korea

Abstract

It has long been predicted that information technology is fundamentally changing the way we work and live. In human resource management, where focus is on individuals at work, motivation has been a critical area of research in terms of work design and job analysis. In this regard, job crafting is becoming more and more feasible as work is becoming more knowledge based and project based. In this paper, we were conducted an empirical analysis of the impact of the Three antecedents (individual characteristic, work characteristics, and technology characteristics) on the job crafting and the impact of job crafting on the job performance. Using online survey of IT workers collected a total of 239 usable data, using the PLS (Partial Least Square), it was statistically analyzed. Result indicates that IT variables is closely related to the job crafting behavior, and crafter has a significant impact on performance. This study is a first try to test relationship between IT and job crafting behavior. In this regard, we suggest theoretical and practical implication.

Keywords: Self-Efficacy, Proactivity, Compatibility, Use, Complexity, Autonomy, Job Crafting, Job Performance.

*All correspondence related to this article should be directed to Jungwoo Lee, Yonsei University, Korea
Email: h.jlee@yonsei.ac.kr

Abstract proceeding book
ECBA-August 20-21, 2016
Hong Kong
ISBN 978-969-670-770-7

TRACK C: MEDICAL, MEDICINE AND HEALTH SCIENCES

Evidence of Multiple Reassortment Events of Feline-to-Human Rotaviruses Based on a Rare Human G3P[9] Rotavirus Isolated From a Patient with Acute Gastroenteritis

Wonyong Kim^{1*}, Tinh Huu Nguyen², Van Thai Than³,
Hien Dang Thanh⁴

^{1, 2, 3, 4} Chung-Ang University, Korea

Abstract

A rare human/feline-like rotavirus G3P[9] strain, CAU14-1-262, from a 2-year-old girl with severe gastroenteritis was isolated and sequenced. The 11 gene segments of the CAU14-1-262 strain possessed a novel genotype constellation, G3-P[9]-I3-R3-C3-M3-A3-N3-T1-E3-H6, which was identified for the first time. Phylogenetic analysis of this strain identified the following genome origins: VP7, VP4, VP6, VP1-VP3, NSP1, NSP2, and NSP4 genes possessed an AU-1-like genotype 3 constellation with high sequence identity to those of the feline and human/feline-like rotaviruses; NSP5 possessed a H6 lineage, with highest sequence identity to the human/feline-like E2541 strain; and the NSP3 gene possessed a Wa-like genotype 1 constellation with high sequence identity to those of the of human rotaviruses. These results provided evidence of multiple reassortment events in G3P[9] rotavirus CAU14-1-262 and possibility of feline-to-human interspecies transmission.

Keywords: G3P[9], Feline, Human, Interspecies, Transmission

*All correspondence related to this article should be directed to Wonyong Kim, Chung-Ang University, Korea
Email: kimwy@cau.ac.kr

FUTURE EVENT

You can find the Details regarding our future events by following below:

Business, Economics, Social Science & Humanities (BESSH) Conferences:

<http://academicfora.com/buisness-conference-home/>

Engineering & Technology, Computer, Basic & Applied Science

<http://academicfora.com/engineering-conference-home/>

Medical, Medicine & Health Science

<http://academicfora.com/medical-conference-home/>

For paper publication:

You can contact at publication@academicfora.com

VISION

“Our vision is to promote research excellence through networking platform.”

**ECBA-2016
Hongkong**

**International Conference on
Society for Engineering & Technology,
Computer, Basic & Applied Sciences**

Organized By:



Academic Fora