



**GISSF**  
GI Social Sciences Forum

International Conference

# **Abstract Proceeding**

**Advancements in Social, Business and  
Management Sciences Research**



**February 01-02, 2018**



International Conference on “Advancements in Social, Business and Management Sciences Research”(ASBMSR- February, 01-02, 2018)  
ASBMSR© 2018 Tokyo, Japan  
Global Illuminators, Kuala Lumpur, Malaysia.



# **ASBMSR 2018**

## **Conference Proceeding**

### **Book of Abstracts**

**International Conference on  
“Advancement in Social, Business and Management  
Sciences Research” (ASBMSR -2018)”**

**Venue: TKP Conference Center, Ichigaya, Tokyo, Japan**

**Editor:**

**Dr. Ahmad Saddam Ph.D.**

Country Director (Global Illuminators Iraq)

**ISBN: 978-969-695-002-8**

**Printed and Published by: Global Illuminators Malaysia**

## TABLE OF CONTENTS

<b>ASBMSR 2018 CONFERENCE ORGANIZING COMMITTEE .....</b>	<b>VII</b>
<b>ORGANIZED BY .....</b>	<b>VIII</b>
<b>CONFERENCE CHAIR MESSAGE.....</b>	<b>IX</b>
<b>VOICE CHANCELLOR MESSAGE .....</b>	<b>XI</b>
<b>TYPE OF ASBMSR PAPERS .....</b>	<b>XIII</b>
<b>REVIEWING CRITERIA .....</b>	<b>XIII</b>
<b>ACKNOWLEDGMENT .....</b>	<b>XV</b>
<b>SCIENTIFIC REVIEW COMMITTEE.....</b>	<b>XVI</b>
<b>KEYNOTE SPEAKER.....</b>	<b>XXVII</b>
<b>ASBMSR 2018 TRACKS’ CHAIRS.....</b>	<b>XXIX</b>
<b>ASBMSR 2018 WORKSHOP .....</b>	<b>XXX</b>
<b>BEST PAPER NOMINEE LIST .....</b>	<b>XXXI</b>
<b>ASBMSR 2018 BEST PAPER AWARD WINNER .....</b>	<b>XXXIII</b>
<b>ASBMSR 2018 CONFERENCE COMMITTEE.....</b>	<b>XXXIV</b>
<b>CONFERENCE PROGRAM .....</b>	<b>XXXV</b>
<b>LIST OF CONFERENCE ATTENDEES .....</b>	<b>XLV</b>
<b>TRACK A: BUSINESS MANAGEMENT &amp; ECONOMIC STUDIES 47</b>	
1. THE STUDY OF THE MARKET ECONOMY PROBLEM BY THE METHOD OF ECONOPHYSICS .....	48
2. DECISION-MAKING IN COMPETITIVE SUPPLY CHAINS WITH FUZZY DATA: A MEMBERSHIP FUNCTION APPROACH .....	49
3. MAKING A DIFFERENCE BY CORPORATE SOCIAL RESPONSIBILITY: THE CASE OF OMAN MEDICAL SPECIALTY BOARD.....	50
4. EMPLOYEE ENGAGEMENT & ITS IMPACT ON THEIR PERFORMANCE: THE CASE OF OMAN MEDICAL SPECIALTY BOARD (OMSB) .....	51
5. INVESTIGATION OF FINANCIAL STRENGTH OF AGRO & FOODS INDUSTRY IN THAI LISTED COMPANIES .....	52
6. BANKRUPTCY RISK IN SERVICE INDUSTRY OF THAI LISTED COMPANIES.....	53

7. THE EFFECT OF Z-SCORE ON FIRMS’ VALUE: EVIDENCE FROM AGRO & FOOD INDUSTRY IN THAI LISTED FIRMS ...	54
8. THE RELATION BETWEEN FINANCIAL RATIOS AND STOCK PRICES: EVIDENCE FROM TECHNOLOGY INDUSTRY IN THAILAND STOCK MARKET .....	55
9. MANAGING CHANGE FOR RADICAL BUSINESS PROCESS IMPROVEMENT: EFFECTS ON ISLAMIC BANKS’ PERFORMANCE .....	56
10. SPATIAL COMPETITION IN THE HEALTH CARE INDUSTRY	57
11. AN EMPIRICAL STUDY OF THE EFFECTS OF TRAINING & DEVELOPMENT PRACTICES ON EMPLOYEES’ PERFORMANCE AT ASDA IN UK .....	58
12. DYNAMIC CAPABILITIES AS STRETCH AND LEVERAGE OF RESOURCES: EXPLORING THE GENERIC PATTERN OF RESOURCE LEVERAGE .....	59
13. DYNAMIC CURRENCY HEDGING: THE DCC-GARCH MODEL .....	61
14. THE QUALITY FINANCIAL STATEMENTS OF SMALL AND MEDIUM ENTERPRISES BUSINESS (SMES) IN VIEW OF THE TAX AUDITOR .....	62
15. A MULTI-LEVEL MODEL OF WORK ENGAGEMENT IN TEMPORARY SERVICE EMPLOYEES .....	63
16. COMMON COMMITTEE MEMBERSHIP ON THE RELATIONSHIP BETWEEN CEO INCENTIVE COMPENSATION AND RISK-TAKING: A STUDY OF THE BANKING INDUSTRY .....	64
17. GLOBAL COMPETITIVENESS OF EXPORTING FIRMS: IMPACT OF THE INTERNET ON THE EXPORTER-IMPORTER RELATIONSHIP .....	65
<b>TRACK B: SOCIAL SCIENCES &amp; HUMANITIES.....</b>	<b>66</b>
18. HOW I GOT WOKE: CHANNELING GLOBAL COMPETENCE THROUGH CULTURALLY RELEVANT TEACHER LEADERSHIP .....	67
19. EVENT LEGACY AND COMMUNITY DEVELOPMENT: THE CASE OF 2008 EUROPEAN CAPITAL OF CULTURE, LIVERPOOL .....	68
20. WHAT SYRIA CAN TEACH US IN CREATING A NEW AND BETTER FUTURE? .....	69

21. DEVELOPMENT AND VALIDATION OF A READINESS FOR KNOWLEDGE MANAGEMENT IMPLEMENTATION QUESTIONNAIRE (RKMIQ) .....	70
22. INTEGRATED REGIONAL DEVELOPMENT POLICY FORMULATION IN ETHIOPIA .....	71
23. IMPROVING INDEPENDENT MUSIC BRAND MARKETING IN TAIWAN THROUGH SERVICE DESIGN .....	72
24. EARLY CHILDHOOD TEACHER ATTITUDES AND BELIEFS REGARDING COMPUTER APPLICATION IN LEARNING .....	73
25. THE ROLE OF EMBASSY OF THE REPUBLIC OF INDONESIA IN MALAYSIA IN SOLVING THE PROBLEMS OF EMPLOYMENT LAW .....	74
26. NEW LIGHT ON REGIONAL DEVELOPMENT IN CHINA: THE ROLE OF OVERLAPPINGS .....	75
27. USING SEVEN TYPES OF GM (1, 1) MODEL TO PREDICT THE NUMBER OF CASUALTIES FOR DRUNK-DRIVING TRAFFIC ACCIDENTS IN TAIWAN.....	76
28. RESEARCH ON THE EVALUATION INDEXES OF WALKING FRIENDLY ENVIRONMENT IN HEALTHY COMMUNITIES FROM THE PERSPECTIVE OF MASS TRANSIT-ORIENTED DEVELOPMENT -TAKING TAIPEI MRT AS AN EXAMPLE....	77
29. AN ASSESSMENT OF MANPOWER DEVELOPMENT CORRESPONDING TO WORKFORCE NEEDS IN HOME ECONOMICS GROUP IN TAIWAN'S VOCATIONAL SCHOOLS .....	78
30. THE COMPOSITION AND MEANING OF 'HYOCHANG INDEPENDENT ROAD .....	80
31. A STUDY ON STUDENT RECRUITMENT STRATEGIES OF PUBLIC TECHNICAL HIGH SCHOOLS IN TAIPEI CITY .....	81
32. RETRIEVING MOBILE APPLICATION FEATURES BY UTILIZING USER REVIEWS: CROSS-COUNTRY COMPARISONS BASED ON TOPIC MODELING.....	82
33. THE MODERATING EFFECT OF EMOTIONAL INTELLIGENCE ON THE RELATIONSHIP BETWEEN PASSION AND WORK OUTCOME AMONG SECONDARY SCHOOL TEACHERS IN DAVAO REGION .....	83
34. NEED ASSESSMENT IMPLEMENTATION OF STORY BOOKS IN BASIC SCHOOL .....	84

**TRACK C: HEALTH AND MEDICINE SCIENCES .....85**

- 35. A COMMUNITY-BASED PARTICIPATORY RESEARCH APPROACH FOR THE ADAPTATION OF AN EXISTING TUBERCULOSIS DIRECTLY OBSERVED TREATMENT SHORT-COURSE PROGRAMME IN LIMPOPO PROVINCE, SOUTH AFRICA ..... 86
- 36. PREPARATION AND EVALUATION OF ANTI-OXIDANT ENCAPSULATED CHITOSAN MICROSPHERE..... 87
- 37. PREPARATION AND EVALUATION OF HYALURONIC ACID-COATED TERNARY COMPLEX FOR TARGETED GENE DELIVERY SYSTEM..... 88

**TRACK D: ENGINEERING & TECHNOLOGY SCIENCES .....89**

- 38. EFFECT OF DRAIN EXTENSION ON THE PERFORMANCE OF 4-MASK AMORPHOUS INGAZNO CHANNEL PASSIVATED THIN-FILM TRANSISTORS ..... 90
- 39. BIPOLAR RESISTIVE SWITCHING CHARACTERISTICS OF CUOX MEMORY DEVICES ..... 91
- 40. SOLUTION PROCESSED ZNSNO AS A CHANNEL LAYER FOR THIN FILM TRANSISTORS ..... 92
- 41. STUDY OF PERFORMANCE EVALUATION INHIBITOR CORROSION BASED ON GREEN CORROSION INHIBITOR OF EXTRACT LEAF TOBACCO AND COMMERCIAL IMIDAZOLINE INHIBITOR IN SWEET ENVIRONMENT AT CARBON STEEL AISI 1045 IN NAACL 3.5% SOLUTION ..... 93
- 42. THE WORLD NEED OF PAKISTAN ASIAN HYBRID TECHNOLOGICAL WORLD IN THE MODERN WORLD ..... 95
- 43. THE ALTMETRICS FOR MEASURING READERS’ INTENTIONS TOWARDS SCHOLARLY CONTENTS IN THE FIELD OF INFORMATION SECURITY ..... 96
- 44. A SOMATOSENSORY EDUTAINMENT SYSTEM BASED ON PLANT GROWTH SIMULATION OF L-SYSTEM ..... 97
- 45. DYNAMIC TDD CONFIGURATION FOR TYPE-1 INBAND RN IN THE LTE-A NETWORK ..... 98
- 46. A NEURAL NETWORK PREDICTION FOR EFFECTS OF LAND USE PATTERNS ON TOTAL NITROGEN IN TAIWAN’S RIVER BASINS ..... 99
- 47. DEVELOPMENT OF A SRM-BASED DRIVE FOR BUILT-IN AUTOMOTIVE VACUUM CLEANERS ..... 100
- 48. ANALYTICAL APPROXIMATIONS FOR AMERICAN OPTIONS: THE BINARY POWER OPTION APPROACH..... 101

International Conference on “Advancements in Social, Business and Management Sciences Research”(ASBMSR- February, 01-02, 2018)

ASBMSR© 2018 Tokyo, Japan

Global Illuminators, Kuala Lumpur, Malaysia.

**TRACK E: PHYSICAL & APPLIED SCIENCES .....102**

49. THE EFFECT OF BIOFERTILIZER AND INORGANIC FERTILIZER ON THE VEGETATIVE GROWTH OF SUGARCANE (SACCHARUM OFFICINARUM) ..... 103

50. UTILIZATION OF OIL MIMBA AND ORGANIC FERTILIZER OF PAITAN LEAVES BASED ON MICROORGANISM FOR IMPROVING GROWTH AND SWEET CORN (ZEA MAYS VAR. SACCHARATA STURT) PRODUCTION ..... 104

51. ENVIRONMENTAL DESTRUCTION DUE TO COAL MINING ..... 105

**FUTURE EVENT .....106**

**CSR.....120**

International Conference on “Advancements in Social, Business and Management Sciences Research”(ASBMSR- February, 01-02, 2018)

ASBMSR© 2018 Tokyo, Japan

Global Illuminators, Kuala Lumpur, Malaysia.

## **ASBMSR 2018 CONFERENCE ORGANIZING COMMITTEE**

### **Conference Chair**

**Farooq Ahmed Jam (Ph.D.)**

*Executive Director (GI Social Sciences Forum)*

### **Conference Co-Chair**

**Tariq Iqbal Khan (Ph.D.)**

**Assistant Professor**

*University of Haripur, Pakistan*

### **Conference Co-Chair**

**Muhammad Abbas (Ph.D.)**

*Director Policy & Research (GI Social Sciences Forum)*

### **On Chee Hoong**

*Manager Operations (GI Social Sciences Forum)*

## Organized By



*Global Illuminators*



*Universitas of Haripur, Pakistan*

## Conference Chair Message

**Farooq Ahmed Jam (Ph.D.)**



International Conference on “Advancement in Social, Business and Management Sciences Research” (ASBMSR - 2018) 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 regional and global challenges faced by our societies. 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. The scholars attending this conference will certainly find it helpful in refining their own research ideas, finding solutions to basic/applied problems they face, and interacting with other renowned scholars for possible future collaborations.

I am really thankful to our honorable scientific and review committee for spending much of their time in reviewing the papers for this event, selecting the best paper awards, and helping the participants in publishing their research in affiliated journals. Also, special thanks to all the session chairs from industry, academia, and policy-making institutions who volunteered their time and support to make this event a success.

A very special thanks to the great scholars for being here with us as keynote speakers. Their valuable thoughts will surely open the horizon of new research and practice for the conference participants coming from across the globe. 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 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 to the betterment of society and welfare of humanity to bring prosperity, peace, and harmony in this world. Stay blessed.

## Voice Chancellor Message

**Prof. Dr. Abid Farid**

Vice Chancellor, University of Haripur



First of all, I would like to thank to our honorable keynote speaker Prof. Dr. Abdel Majid Bouazza, our collaborative partner Global Illuminators and our steering organizing committee to lend a hand for the success of this conference.

On behalf of University of Haripur, Pakistan, I welcome all the participants of the 4th International conference on “Global Issues in Multidisciplinary Academic Research” (GIMAR-2018). With a rapid advancement in knowledge, boundaries of various disciplines are fading away leading to integration and interdependence of various spheres of knowledge. This demands redefining the research questions in a multidisciplinary perspective and come up with an integrated approach to solve contemporary problems. I hope that this conference will provide a platform to bring together not only researchers, postgraduate students but also management specialists and social scientists to initiate a dialogue on a very important issue of multidisciplinary approach combining the expertise of multiple fields resulting in innovative and high impact research. I expect that this forum would pave the way to establish new trends in multidisciplinary academic fields and new knowledge, research and development activities across different disciplines would emerge.

It is the right time that we join hands and pool our expertise in a synergetic manner to maximize our capabilities in finding solutions to diverse problems. The international conference by Global Illuminators and University of Haripur on Global Issues in Multidisciplinary Academic Research is indeed an

International Conference on “Advancements in Social, Business and Management Sciences Research”(ASBMSR- February, 01-02, 2018)  
ASBMSR© 2018 Tokyo, Japan  
Global Illuminators, Kuala Lumpur, Malaysia.

important step in this regard and I firmly believe that conference will open new horizons which will benefit society in general and universities in particular.

Thank you for joining us in this conference and I do hope all of you will have a pleasurable time enjoying this conference. Wishing you all the best to enjoy your stay in Japan and have a good learning and sharing atmosphere in this conference.

Thank You,

## **Type of ASBMSR Papers**

For this year, ASBMSR has two types of papers: *Empirical Studies* and *Insight*. Research papers meet the needs of researchers and are reviewed on the basis of highest academic standards. The objective of the academic paper is to contribute to the scientific body of knowledge. On the contrary, Insight papers meet the needs of policy makers and professionals and are reviewed on the basis of high practical standards. The objective of the Insight is to identify the real-world problems and how they can be solved with the help of information systems.

## **Reviewing Criteria**

In ASBMSR, all papers are judged on the same criteria (relevance, significance, originality, validity and clarity). However some criteria differ between the Research papers and Insight papers.

**Relevance:** Relevance has a great impact on the theme of the conference. The material is relevant and according to the theme of the conference.

**Significance:** Knowledge in different researches in the conference is related to research papers and insight papers.

**Originality:** Ideas that are new for the researchers are used in the conference.

**Validity:** Research papers in the conference are based on theory while the insight papers in the research are based on experimental researches. References are according to content.

**Clarity:** Papers are according to the format, language is easy and understandable by the audience in the conference.

### Acceptance Rates

Full Research Papers				
Submitted Papers	Accepted Papers	Withdrawn	Unqualified papers	Acceptance Rate
80	35	18	27	43%

### Copyright Agreement

In ASBMSR 2018 proceedings, all authors have agreed on the copyright agreement. This agreement shows that only authors can retain copyright. It also permits that nobody can use, for non-commercial purpose such as to download, print out etc., an article published in the ASBMSR 2018 proceedings. All credit is given to the authors and they have copyright agreements. This copyright agreement and use license ensures, among other things, that an article will be as widely available as possible and that the article can be included in any scientific archive.

## **Acknowledgment**

A huge number of people helped in conducting the conference. First of all, thanks to all the members of the Conference and Program Committee and representatives of the ASBMSR board and their helpers. We also want to thank all the Track Chairs and reviewers, as well as all the members of the Scientific Committee, for their help in the review process and organizing the tracks and special sessions. We thank everyone for their hard work and dedication to this conference and we look forward to the latest episode of the ASBMSR tradition.

Farooq Ahmed Jam (Ph.D.), Tariq Iqbal Khan (Ph.D.)  
And Muhammad Abbas ( Ph.D.)

Program Chair & Co-Chairs

**INTERNATIONAL  
SCIENTIFIC REVIEW COMMITTEE  
ASBMSR-2018**

**BUSINESS, MANAGEMENT AND ECONOMIC STUDIES**

**Palti Marulitua Sitorus (Ph.D.)**

*Telkom University, Indonesia*

**Mej Mohd. Noor Azli bin Hj. Ali Khan (Ph.D.)**

*University Technology, Malaysia.*

**Prof. Ravindran Ramasamy (Ph.D.)**

*Graduate School of Business,  
UniRazaK, Kuala Lumpur, Malaysia*

**Ludmila Mládková (Ph.D.)**

*Faculty of Business Administration, Department of Management  
University of Economics Prague*

**Mohd. Norfian Alifiah**

*Faculty of Management,  
Department of Accounting and Finance,  
Universiti Teknologi Malaysia, Malaysia*

**Ahmed Saddam (Ph.D.)**

*Country Director- Iraq  
Global Illuminators*

**Mohammad Hamad Khalef AlKhresheh (Ph.D.)**

*Country Director-Jordan  
Global Illuminators*

**Dr. Suresh B.Gholse (Ph.D.)**

*Vatar Meherbaba College,  
Rtm Nagpur University, Nagpur, India*

International Conference on “Advancements in Social, Business and Management Sciences Research”(ASBMSR- February, 01-02, 2018)  
ASBMSR© 2018 Tokyo, Japan  
Global Illuminators, Kuala Lumpur, Malaysia.

**Ghulam Rasul Awan (Ph.D.)**

*UCP Business School, UCP Lahore, Pakistan*

**Lau Wee Yeap (Ph.D.)**

*Faculty of Economics & Administration,  
University of Malaya, Kuala Lumpur, Malaysia*

**Vignes Gopal**

*Faculty of Economics and Administration  
University of Malaya*

**J. A. Arul Chellakumar (Ph.D.)**

*Head Department of Economics  
Bharathidasan University  
Tiruchirappalli, Tamilnadu, India*

**Girish Karunakaran Nair (Ph.D.)**

*Programme Leader  
International Hospitality Management Faculty  
Stenden University, Qatar*

**Galla Venkata Rama Krishna Acharyulu (Ph.D.)**

*School of Management Studies,  
University of Hyderabad, India.*

**Amir Hossein Dastaviz (Ph.D.)**

*Institute of Graduate Studies,  
University Of Malay, Kuala Lumpur, Malaysia*

**Syed Ahmed Salman**

*International Islamic University  
Malaysia, Gombak, Selangor, Malaysia*

**Dr. Wurim Ben Pam (Ph.D.)**

*Federal University, Dutsin-ma,  
Katsina State, Nigeria*

**Wang, Yu-Mei**

*Asia University, Taiwan*

**Aglis Andhita Hatmawan**  
*STIE Dharma Iswara Madiun, Indonesia*

**Hasnun Anip Bin Bustaman**  
*University Teknologi MARA, Malaysia*

**Bertin Chen**  
*Vanung University, Taiwan*

**Susan Irawan Rifai**  
*Centro Escolar University, Philippines*

**Jihoon Kim**  
*Ehime University, Korea, South*

**Chien-Tu Jeff Lai**  
*National Chengchi University, Taiwan*

**Haykel Hadjs Alem**  
*LEM, University of Lille France*

**Prof. Dr. Tarek Taha Ahmed**  
*Faculty of Business,  
Pharos University in Alexandria, Egypt*

**Samar J. Al-Barghouthi**  
*Royal University for Women, Bahrain*

**Deus Ngaruko**  
*Centre for Economics and Community Economic Development,  
the Open University of Tanzania*

**Mohammad Ehsani**  
*Tarbiat Modares University,  
Israel, Imam Khomeini International University, Iran*

**Ismail BİLGİÇLİ**  
*Sakarya University Karasu MYO, Turkey*

International Conference on “Advancements in Social, Business and Management Sciences Research”(ASBMSR- February, 01-02, 2018)  
ASBMSR© 2018 Tokyo, Japan  
Global Illuminators, Kuala Lumpur, Malaysia.

**Tack Hyun Shin**

*Seoul National University of Science and Technology, Korea,  
South*

**Sun-Young Nam**

*Department of Pharmacology, College of Korean Medicine,  
Kyung Hee University, Seoul, 130-701, Republic of Korea*

**Vicent Stanslaus**

*The Open University Of Tanzania*

**Partha Ray**

*Indian Institute of Management Calcutta, Institute of  
Management Technology, Ghaziabad, India*

**SOCIAL SCIENCES AND HUMANITIES**

**Charlyna S. Purba, S.H., M.H.**

*Universitas Panca Bhakti  
Kalimantan BARAt*

**Hj. Yenny AS, S.H., M.H.**

*Universitas Panca Bhakti  
Kalimantan BARAt*

**Sailesh Sharma (Ph.D.)**

*Deputy Vice Chancellor (Academic & International)  
University of Malaya, Kuala Lumpur, Malaysia*

**Siamak Khodarahimi (Ph.D.)**

*Islamic Azad University,  
Fars Province, Iran*

**Rex Balena (Ph.D.)**

*Oceanographer and Education Specialist  
University of the Philippines in the Visayas*

**Dr. A B Sharangi**

*HOD, Research Scholar,  
Agricultural University*

**Jayson E. Lannu**

*Jose Rizal University, Philippines*

**Amandha Boy Timor Randita**

*Faculty of Medicine,  
Sebelas Maret University, Indonesia*

**Gogoberidze George**

*Russian State Hydrometeorological University (RSHU), Russia*

**Krittawaya Thongkoo**

*Chiang Mai University, Thailand*

**Tzu-yi Lee**

*Chung Yuan Christian University, Taiwan*

**Renan Limjuco (Ph.D.)**

*University of the Immaculate Conception  
Davao City, Philippines*

**Kankan Kasmana**

*Departemen Visual Communication Design-Indonesia Computer  
University, Indonesia*

**Monique Musni- Tagaytay, M.A.Ed**

*University of the Immaculate Conception Philippines,  
Philippines*

**Naidu Narainsamy**

*Department of Psychology of Education, University of South Africa  
(UNISA), College of Education, South Africa*

**Sultanbayeva Gulmira**

*Al-Farabi Kazakh national University, Kazakhstan*

**Emilio A. Cruz**

*Bulacan State University, Malolos City, Bulacan,  
Philippines*

**Si, Li**

*Wuhan University, China*

**Dr. Nessreen A. Elmelegy**

*Royal University for Women, Kingdom Of Bahrain, Bahrain*

**Dr. Shusil Kumar Das**

*Daffodil International University, Dhaka, Bangladesh*

**Dr. Rovelina B. Jacolbia**

*Polytechnic University of the Philippines*

**Sathiamoorthy Kannan**

*Institute of Educational Leadership, University of Malaysia*

**Dr. Isabella Musyoka-Kamere**

*Maasai Mara University, Kenyatta University, Kenya*

**Hadi Ebadi**

*Universiti Teknologi Malaysia 2. Razi University, Iran*

**Dr. Shusil Kumar Das**

*Daffodil International University, Dhaka, Bangladesh*

**Botabaeva Ademi Erkebaevna**

*Eurasian National University named after L.N. Gumilyov, Kazakhstan*

**Girma Y. I. Menelik**

*Penza State University Russia, K. Satbaev Kazakh National Technical University, Kazakhstan*

**I-Ju Chen**

*Ling Tung University, Taiwan*

**Wen, Yvonne, Ying-Ya**

*National Formosa University, Taiwan*

## **PHYSICAL LIFE AND APPLIED SCIENCES**

**Prof. Dr. Ir. Rahmatullah Rizieq, M.Si.**

*Universitas Panca Bhakti  
Kalimantan BARAt*

**Yan LI (Ph.D.)**

*Nanyang Technological University, Singapore*

**Md. Saleh Ahmed (Ph.D.)**

*Department of Mathematics & Statistics  
Sultan Qaboos University, Muscat, Oman*

**Saon Banerjee (Ph.D.)**

*OIC, AICRP on Agrometeorology,  
State Agricultural University*

**Mohd. Nizam Omar**

*Universiti Utara Malaysia, 06010 UUM Sintok, Kedah, Malaysia*

**Amina Bakhrouf**

*Laboratory of Analysis, Treatment and Valorisation of  
Environment Pollutants and Products, Monastir, Tunisia*

**Shatrova, Olga**

*Russian State Hydrometeorological University (RSHU), Russia*

## **ENGINEERING AND TECHNOLOGY STUDIES**

**Nurul Akmar Binti Emran (Ph.D.)**

*Faculty of Information Communication Technology  
Universiti Teknikal Malaysia Melaka*

**Chee-Ming Chan (Ph.D.)**

*Civil and Environmental Engineering  
Universiti Tun Hussein Onn, Malaysia*

International Conference on “Advancements in Social, Business and Management Sciences Research”(ASBMSR- February, 01-02, 2018)  
ASBMSR© 2018 Tokyo, Japan  
Global Illuminators, Kuala Lumpur, Malaysia.

**Zhaporov Meirambek Kazimovich (Ph.D.)**  
*Head of Micro learning Research Centre*  
*Suleyman Demirel University, Kazakhstan*

**Noor Zaman (Ph.D.)**  
*College of Computer Science and IT,*  
*King Faisal University, Saudi Arabia*

**Kelly Whealan George (Ph.D.)**  
*Embry-Riddle Aeronautical University (ERAU), USA*

**Prof. Dr. Hj. Dwi Kartini, SE. Spec. Lic (Ph.D.)**  
*University of Computer Indonesia (Unikom)*  
*Bandung, Indonesia*

**Valeria Ersilia Oniga (Ph.D.)**  
*Department of Terrestrial Measurements and Cadastre*  
*Technical University “Gh.Asachi” from Iasi*  
*Romania*

**Prof. Dr. Hj. Dwi Kartini, SE. Spec. Lic (Ph.D.)**  
*University of Computer Indonesia (Unikom)*  
*Bandung, Indonesia*

**Mira Rahayu**  
*Telkom University Indonesia, Indonesia*

**Ony Widilestariningtyas**  
*Universitas Komputer Indonesia, Indonesia*

**Yully Ambarsih Ekawardhani**  
*UNIKOM, Institut Teknologi Bandung, Indonesia*

**Emel Zeray**  
*Selcuk University Geomatics Department, Turkey*

**Nedjah**  
*Preparatory School of Sciences and Technology (EPST Annaba),*  
*Algeria*

**Tashenova**

*L. N. Gumilyov Eurasian National University, Kazakhstan*

**Farah Jemili**

*Department of Computer Sciences, Higher Institute of Computer and Communication Techniques, Sousse University, Tunisia*

**Nahid Sanzida**

*Bangladesh University of Engineering and Technology (BUET), Bangladesh*

**HEALTH AND MEDICINE STUDIES**

**Balachandar S. Sayapathi (Ph.D.)**

*Faculty of Medicine, University of Malaya*

**Ahmed Kaid Naji Allow (Ph.D.)**

*Head of Dept. of Human Physiology  
College of Medicine and Health Sciences  
Sana'a University, R. Yemen*

**Prof. Dr. drg. Andi Zulkifli, M. Kes**

*Faculty of Public Health Hasanuddin University,  
Makassar, Indonesia*

**Fauzie Rahman**

*Head of Health Policy Management Department at School of Public Health, Faculty of Medicine, Lambung Mangkurat University, Indonesia*

**Helia Rahbari**

*Faculty of Paramedical Sciences at Shahid Beheshti University of Medical Sciences, Iran*

**Dr. Narjis Rizvi**

*Aga Khan University, stadium road, Karachi, Pakistan*

**Dr. Elvira Urgel (Ph.D.)**

*Centro Escolar University, China*

**Maria Bea Lao**

*Medical Technology/Medical Laboratory Science University of the Immaculate Conception Philippine*

**Nima Kasraie**

*Children’s Mercy Hospital United States*

**Haseen Fariha**

*Bangabandhu Sheikh Mujib Medical University, Bangladesh*

**Der-Hsiang Huang**

*Graduate Institute of Professional Development in Education, Da-Yeh University, Taiwan*

**Kazushi Okamoto**

*Aichi Prefectural University, Japan*

**Abolhassani Shahla**

*Shahrekord University of Medical Sciences, Shahrekord, Iran*

**Dr. Umme Kulsum Rima**

*Hajee Mohammad Danesh Science & Technology University  
Dinajpur, Bangladesh*

**Mohammad A. H. Khan**

*Faculty of Veterinary Science, Bangladesh Agricultural University*

**Enayatollah Kalantar**

*Department of Microbiology and Immunology, School of Medicine,  
Alborz University of Medical Sciences, Karaj, Iran*

**Cahit Canbay**

*Yeditepe University, Turkey*

**Rahbari, Helia**

*Faculty of Paramedical Sciences at Shahid Beheshti University of  
Medical Sciences, Tehran, Iran*

**Cheng-Chi Chang**

*Graduated Institute of Oral Biology, National Taiwan University,  
Taipei, Taiwan*

International Conference on “Advancements in Social, Business and Management Sciences Research”(ASBMSR- February, 01-02, 2018)  
ASBMSR© 2018 Tokyo, Japan  
Global Illuminators, Kuala Lumpur, Malaysia.

**Bodin Oleg N**

*Ling Tung University, Taiwan*

**Zahra Godarzi**

*Tehran University of Medical Sciences, Iran*

**Zhou Rui-Hua**

*School of Public Health, North China University Of Science And Technology*

## **KEYNOTE SPEAKER**

### **Prof. Dr. Abdelmajid Bouazza**



Abdelmajid Bouazza is a Professor in the Department of Information Studies, Sultan Qaboos University. He received his Ph.D. in Information Science from the University of Pittsburgh, USA, and a Master’s in Information Science from the University of Montreal, Canada. Prof. Bouazza published 61 papers in international and regional refereed journals and prepared, translated, and contributed to a number of specialized books in Information Science with articles published in the Encyclopedia of Library and Information Science, Marcel Dekker Foundation in New York, and Encyclopedie Internationale de Bibliologie, Paris. He has presented 68 papers at national, regional, and international conferences. His memberships include being President of the Arab Federation for Libraries and Information, a member of the executive bureau of the International Association of Bibliologie during the period 1988-1990, and head of the Department of Information Studies during the period 2006-2010. He has received Harold Lancour Award for outstanding contribution to the International Studies in Information Science in 1987, the Distinguished Researcher Award from the Sultan Qaboos University in 2006, Distinguished Teacher Award from the Sultan Qaboos University in 2010, Best Paper Awards, and 2 Best Presentation Awards, Global Illuminators International

International Conference on “Advancements in Social, Business and Management Sciences Research”(ASBMSR- February, 01-02, 2018)  
ASBMSR© 2018 Tokyo, Japan  
Global Illuminators, Kuala Lumpur, Malaysia.

2nd Conference, Bangkok, 2015, the Best Paper Award from the organizers of 4th International Conference on “Global Trends in Academic Research” (GTAR-April 20-21, 2017) at Venice, Italy. He also received Best Paper Award from SLA President, Abu Dhabi, UAE (2015). His research interests include Knowledge Management, Internet and Smartphones addiction, Open access, Education of information professionals, and the job market needs.

## **ASBMSR 2018 Tracks’ Chairs**

### **Business, Management and Economics Studies**

Anura Amarasena & Yiti Tung

### **Social Sciences & Humanities**

Phaithun Intakhan & Mohd Rizal Razalli

### **Health and Medicine Studies**

Megumi Taoka & Farooq Ahmad Jam

### **Engineering & Technology Studies**

Abdul Hariss & J.Dalle

Sudiarso & Lieu-Hen Chen

## **ASBMSR 2018 Workshop**

### **“How To Improve The Quality Of A Research Article And Get It Published In Scopus/Isi Indexed Journals”**

**Trainer: Dr. Farooq Ahmed Jam (Ph.D.)**

In this workshop, we will discuss how to improve the quality of a research article and getting it published in good quality journals. Publication is considered as a KPI achievement for academic staff. It is considered to be the best way to enjoy benefits and promotion as a faculty member. In this workshop, trainer will shed light on how to identify a hot research topic, how to find a research gap, importance of a catchy Research Paper Title, what reviewers are looking for in a research article, what editors are expecting from authors, major reasons for article rejection by good journals, steps and tips to improve article quality and content, and finding a relevant outlet for your research. Hope this workshop will help the participants improve their understanding about the publication process.

## **Best Paper Nominee List**

### **Spatial Competition in the Health Care Industry**

*Dakshina G. De Silva<sup>1\*</sup> , Hojin Jungy<sup>2</sup> , Georgia Kosmopoulou<sup>3</sup>*

<sup>1</sup> Lancaster University, UK

<sup>2</sup> Henan University, Kaifeng, Henan, China

<sup>3</sup> University of Oklahoma, Norman, USA

### **New Light on Regional Development in China: The Role of Overlappings**

*Shu hen Chiang*

Chung-Yuan Christian University, Taiwan

### **Research on the Evaluation Indexes of Walking Friendly Environment in Healthy Communities from the Perspective of Mass Transit Oriented Development -Taking Taipei MRT as an Example**

*Yi-Kai Hsieh<sup>1</sup> , Chia-Nung Li<sup>2</sup>*

<sup>1,2</sup> Chinese Culture University, Taipei, Taiwan

### **Study of Performance Evaluation Inhibitor Corrosion Based on Green Corrosion Inhibitor of Extract Leaf Tobacco and Commercial Imidazoline Inhibitor in Sweet Environment at Carbon Steel AISI 1045 in NaCl 3.5% Solution**

*Chusururi, Mochamad, Alvan Mifta.<sup>1\*</sup> , Ravelia, Dendra<sup>2</sup>, Ahmadi, Fikri, Nafi'ul<sup>3</sup>, Saputro, Brahmanu<sup>4</sup>,  
<sup>1,2,3,4</sup> Institute of Technology Sepuluh Nopember, Indonesia*

**Dynamic TDD Configuration for Type-1 Inband RN  
in the LTE-A Network**

*Chun-Chuan Yang<sup>1</sup>, Jeng-Yueng Chen<sup>2</sup>, Yi-Ting Mai<sup>3</sup>,  
Yi-Ming Tsai<sup>4</sup>*

National Chi Nan University, Taiwan

## **ASBMSR 2018 Best Paper Award Winner**

### **Spatial Competition in the Health Care Industry**

*Dakshina G. De Silva<sup>1\*</sup> , Hojin Jungy<sup>2</sup> , Georgia Kosmopoulou<sup>3</sup>*

<sup>1</sup> Lancaster University, UK

<sup>2</sup> Henan University, Kaifeng, Henan, China

<sup>3</sup> University of Oklahoma, Norman, USA

## **ASBMSR 2018 Conference Committee**

### **Conference Chair**

**Farooq Ahmed Jam (Ph.D.)**

*Executive Director (GI Social Sciences Forum)*

### **Conference Co- Chair**

**Tariq Iqbal Khan (Ph.D.)**

*Assistant Professor*

*University Of Haripur, Pakistan*

### **Conference Co-Chair**

**Muhammad Abbas (Ph.D.)**

*Director Policy & Research (GI Social Sciences Forum)*

### **Editor**

**Dr. Ahmad Saddam (Ph.D.)**

ISBN: 978-969-695-002-8

Printed and Published by: Global Illuminators Malaysia

# CONFERENCE PROGRAM

**DAY 01 Thursday (February 1, 2018)**

**Welcome Reception & Registration**

**8:00 am – 8:30 am**

**Opening Ceremony (08:30 am –09:25 am)**

**Venue: Room 1**

08:30 am – 08: 40 am	Welcome Remarks – <b>Dr. J. Dalle(Ph.D.)</b>	Conference Cordinator Global illuminators
08:40 am – 08:55 am	Opening Speech – <b>Dr. Farooq Ahmad Jam (Ph.D.)</b>	Conference Chair- GIMAR-2018 Executive Director, Global Illuminators
08:55 am – 09: 05 am	Keynote Speech- <b>Prof. Dr. Abdelmajid Bouazza</b>	Professor at the Department of Information Studies, Sultan Qaboos University, Oman
09:05 am - 09: 25am	Group Photo & Award Ceremony	

**Grand Networking Session and Tea Break (09:25 am – 09:45 am)**

**DAY 01 Thursday (February 1, 2018)**

**Session 1 (09:45 am – 01:00 pm)**

**Venue: Room 1**

**Session Chairs: Phaithun Intakhan & Mohd Rizal Razalli**

**Track: Social Sciences & Humanities**

GIMAR-18-103	How I Got Woke: Channelling Global Competence Through Culturally Relevant Teacher Leadership	Garris Landon Stroud
GIMAR-18-109	Event Legacy and Community Development: The Case of 2008 European Capital of Culture, Liverpool	Yi-De Liu
GIMAR-18-120	What Syria Can Teach us in Creating a New, and Better Future?	Adham Mardini
GIMAR-18-128	Development and Validation of A Readiness For Knowledge Management Implementation Questionnaire (RKMIQ)	Abdelmajid Bouazza
GIMAR-18-170	Integrated Regional Development Policy Formulation In Ethiopia	Sukhumvit Saiyasopon
GIMAR-18-180	Improving Independent Music Brand Marketing in Taiwan through Service Design	Chen, Yen-Chi
GIMAR-18-201	Early Childhood Teacher Attitudes and Beliefs Regarding Computer Application in Learning	Muhayat
GIMAR-18-202	The Role of Embassy of the Republic of Indonesia in Malaysia in Solving the Problems Employment Law	Abdul Hariss
GIMAR-18-213	Global Competitiveness of Exporting Firms: impact of the Internet on the Exporter-Importer Relationship	Anura Amarasena

**Lunch Break (1:00 pm – 2:00 pm)**



**DAY 01 Thursday (February 1, 2018)**

**Session 1 (09:45 am – 01:00 pm)**

**Venue: Room 1**

**Session Chairs: Phaithun Intakhan & Mohd Rizal Razali**

**Track: Social Sciences & Humanities**

ASBMSR-18-111	New Light on Regional Development in China: The Role of Overlappings	Shu hen Chiang
ASBMSR-18-115	Using Seven Types of GM (1, 1) Model to Predict the Number of Casualties for Drunk-Driving Traffic Accidents in Taiwan	Yiti Tung
ASBMSR-18-127	Research on the Evaluation Indexes of Walking Friendly Environment in Healthy Communities from the Perspective of Mass Transit Oriented Development -Taking Taipei MRT as an Example	Yi-Kai Hsieh
ASBMSR-18-129	An Assessment of Manpower Development Corresponding to Workforce Needs in Home Economics Group in Taiwan's Vocational schools	Mei Tzu Chen
ASBMSR-18-130	The Composition and Meaning of 'Hyochang Independent Road'	Hyekyung Kang
ASBMSR-18-131	A Study on Student Recruitment Strategies of Public Technical High Schools in Taipei City	Hsiu-Te Sung
ASBMSR-18-132	Analyzing Mobile Application Market Based on Self-Organization Map: Cross-Country Comparisons	Youngeun Kang
GIMAR-18-191	Need Assessment Implementation of Story Books in Basic School	Nyihana Erma Niatu

**Lunch Break (1:00 pm – 2:00 pm)**



**DAY 01 Thursday (February 1, 2018)**

**Session 1 (09:45 am – 01:00 pm)**

**Venue: Room 2**

**Session Chairs: Anura Amarasena & Yiti Tung**

**Track: Business, Management and Economic Studies**

GIMAR-18-121	The Study of the Market Economy Problem by the Method of Econophysics	Askerov Shahlar
GIMAR-18-127	Decision-Making in Competitive Supply Chains with Fuzzy Data: A membership Function Approach	Shih-Pin Chen
GIMAR-18-206	Making a Difference by Corporate Social Responsibility: The Case of Oman Medical Specialty Board	Sheikha Saleh Al Belushi
GIMAR-18-207	Employee Engagement & Its Impact on their Performance: The Case of Oman Medical Specialty Board (OMSB)	Badriya Al habsi
ASBMSR-18-102	Investigation of Financial Strength of Agro & Foods Industry in Thai Listed Companies	Phaithun Intakhan
ASBMSR-18-103	Bankruptcy Risk In Service Industry of Thai Listed Companies	Nattida Moolta
ASBMSR-18-104	The Effect Of Z-Score on Firms’ Value: Evidence From Agro & Food Industry in Thai Listed Firms	Thanchanok Ruankaew
ASBMSR-18-105	The Relation between Financial Ratios and Stock Prices: Evidence in Technology Industry in Thailand Stock Market	Korrawee Jitprasarn
ASBMSR-18-133	The Quality Financial Statements Of Small And Medium Enterprises Business (Smes) In View of the Tax Auditor	Saratchanut Boonvut

**Lunch Break (1:00 pm – 2:00 pm)**



**DAY 01 Thursday (February 1, 2018)**

**Session 1 (09:45 am – 01:00 pm)**

**Venue: Room 2**

**Session Chairs: Anura Amarasena & Yiti Tung**

**Track: Business, Management and Economic Studies**

ASBMSR-18-107	Managing Change for Radical Business Process Improvement: Effects on Islamic Banks Performance	Mohd Rizal Razalli
ASBMSR-18-110	Spatial Competition in the Health Care Industry	Hojin Jung
ASBMSR-18-113	An Empirical Study of the Effects of Training & Development Practices on Employees Performance at ASDA in UK.	Mr Md Sahid Howladar
ASBMSR-18-120	Dynamic Capabilities as Stretch and Leverage of Resources: Exploring the Generic Pattern of Resource Leverage	Pham Thi Thuy Dung
ASBMSR-18-125	Dynamic Currency Hedging: The DCC-GARCH Model	Jae-Beom Cho,
GIMAR-18-212	The Moderating Effect of Emotional Intelligence on the Relationship between Passion and Work Outcome among Secondary School Teachers in Davao Region	Marionito L. Cervantes
ASBMSR-18-134	A Multi-Level Model of Work Engagement in Temporary Service Employees	Shu Ling Chen
ASBMSR-18-136	Common Committee Membership on the Relationship between CEO Incentive Compensation And Risk-Taking: A Study of the Banking Industry	Chia Chi Lu

**Lunch Break (1:00 pm – 2:00 pm)**



**DAY 01 Thursday (February 1, 2018)**

**Session 2 (2:00 pm – 04:00 pm)**

**Venue: Room 1**

**Session Chairs: Abdul Hariss & J.Dalle**

**Track: Engineering and Technology Studies**

GIMAR-18-183	The Effect of Biofertilizer And Inorganic Fertilizer on the Vegetative Growth of Sugarcane (Saccharum Officinarum)	Sudiarso
GIMAR-18-184	A Somatosensory Edutainment System based on Plant Growth Simulation of L-System	Lieu-Hen Chen
GIMAR-18-137	Bipolar Resistive Switching Characteristics of CuOx Memory Devices	Yu-Sheng Lin
GIMAR-18-138	Solution Processed ZnSnO as a Channel Layer for Thin Film Transistors	Cheng-Han Chou
GIMAR-18-171	Study of Performance Evaluation Inhibitor Corrosion Based on Green Corrosion Inhibitor of Extract Leaf Tobacco and Commercial Imidazoline Inhibitor in Sweet Environment at Carbon Steel AISI 1045 in NaCl 3.5% Solution	Mochamad Alvan Mifta Chusururi

**Tea Break (4:00 pm – 4:15 pm)**

**DAY 01 Thursday (February 1, 2018)**

**Session 2 (2:00 pm – 04:00 pm)**

**Venue: Room 1**

**Session Chairs: Abdul Hariss & J.Dalle**

**Track: Engineering and Technology Studies**

GIMAR-18-178	The World Need of Pakistan Asian Hybrid Technological World in the Modern World	Shafiq Ur Rehman
GIMAR-18-182	The Altmetrics for Measuring Readers’ Intentions Towards Scholarly Contents in the Field of Information Security	Halima Saleh Ali Al Balushi, Nawal Ali Abdullah Al Bulushi, Rabab Juma Mohammed Al-Riyami
GIMAR-18-134	Effect of Drain Extension on the Performance of 4-Mask Amorphous in GaZnO Channel Passivated Thin-Film Transistors	Po-Hao Huang

**Tea Break (4:00 pm – 4:15 pm)**

**DAY 01 Thursday (February 1, 2018)**

**Session 2(2:00 pm – 02:45 pm)**

**Venue: Room 2**

**Session Chairs: Megumi Taoka & Farooq Ahmad Jam**

**Track: Track: Health and Medicine Studies**

GIMAR-18-133	A Community-Based Participatory Research Approach for the Adaptation of An Existing Tuberculosis Directly Observed Treatment Short-Course Programme in Limpopo Province, South Africa	Jabu Tsakani Mabunda
GIMAR-18-194	Preparation and Evaluation of Anti-Oxidant Encapsulated Chitosan Microsphere	Gyeong-Wonjeong Jae-Woon Nah
GIMAR-18-195	Preparation and Evaluation of Hyaluronic Acid-Coated Ternary Complex For Targeted Gene Delivery System	Woong-Gil Hong

**Tea Break (4:00 pm – 4:15 pm)**

**DAY 01 Friday (February 1, 2018)**

**Session 2 (2:45 pm – 04: 00pm)**

**Venue: Room 2**

**Session Chairs: Sudiarmo & Lieu-Hen Chen**

**Track: Engineering and Technology Studies**

GIMAR-18-185	Utilization of Oil Mimba and Organic Fertilizer of Paitan Leaves Based on Microorganism For Improving Growth And Sweet Corn (Zea Mays Var. Saccharata Sturt) Production	Ririen Prihandarini
GIMAR-18-188	Dynamic TDD Configuration for Type-1 Inband RN in the LTE-A Network	Chun-Chuan Yang
GIMAR-18-192	A Neural Network Prediction For Effects of Land use Patterns on Total Nitrogen in Taiwan’s River Basins	Tzu-Yi Pai
GIMAR-18-203	Development of an SRM-based Drive for Built-in Automotive Vacuum Cleaners	Jaehyuck Kim
GIMAR-18-209	Environmental destruction due to coal mining	Hastirullah Fitrah
ASBMSR-18-135	Analytical Approximations for American Options: The Binary Power Option Approach	Chien-Ling Lo

**Tea Break (4:00 pm – 4:15 pm)**



**DAY 01 Thursday (February 1, 2018)**

**Workshop Session (4:15pm – 5:30 pm)**

**Venue: Room 1**

**“How to Improve the Quality of Research Article and get published in Scopus/ISI Indexed Journals”**

<b>Trainer</b>	<b>Dr. Frooq Ahmad Jam (Ph.D.)</b>
<b>Participants</b>	All Participants

In this workshop, we will discuss how to improve the quality of research article and getting published in good quality journals. Publication is considered as a KPI achievement for academic staff. It is considered to be the best way to enjoy benefits and promotion as a faculty member. In this workshop trainer will shed light on how to identify a hot research topic, How to find a research gap, Importance of a catchy Research Paper Title, What Reviewers are looking in research article, What editors are expecting from authors, Major Reasons of article rejection in good journals, Steps and tips to improve article quality and content and Finding a relevant outlet for your research. Hope this workshop will help the participants improve their understanding about publication process.

## LIST OF CONFERENCE ATTENDEES

The following scholars/practitioners/educationists don't have any paper presentations; however they will be attending the conference as delegates and observers.

ID	Name	Affiliation	Country
GIMAR-18- 171b	Brahmanu Wisn Saputro	Institute of Technology Sepuluh Nopember, Indonesia	Indonesia
ASBMSR-18-137	Megumi Taoka	GLOBIS university, Japan	Japan

## **DAY 02 Friday, (February 02, 2018)**

### **“CITY TOUR”**

All participants will come by themselves to Hamamatsucho Station at  
01:00 pm, Tokyo, Japan

Departure: 01:40 pm for City Tour  
Drop Back at TKP Conference Centre, Ichigaya, Tokyo,  
Japan at 6:00 pm

**Important Note:** This tour is organized by Global Illuminators and entry to this tour is free for all participants. You may also bring your Siblings/Family/Friends but you have to register for them on registration desk on day 1 of conference.



---

---

Abstract Proceeding Book  
ASBMSR- February 01-02, 2018  
Tokyo, Japan  
ISBN: 978-969-695-002-8

---

---

## **TRACK A: BUSINESS MANAGEMENT & ECONOMIC STUDIES**



## The Study of the Market Economy Problem by the Method of Econophysics

**Sh.G. Askerov<sup>1</sup>, Askerov Shahlar<sup>2</sup>**  
<sup>1,2</sup> Baku State University, Azerbaijan

### Abstract

---

The article considers the econophysical analysis of the relationship between monopoly and competition and the philosophy of progress investigated using the methods, model, and terms of physics. For example, the term "progress" has received a new content and is defined as the value of a numerically equal increase in the rate of production per unit time. It is shown that to achieve progress, it is necessary to increase the production of non-linear products over time. To do this, it is sufficient to have a multitude of firms interacting with each other under the influence of competition. In such conditions, there is no need for a strong science, it is sufficient to have a high level of university education and a legal field for competition and unbreakable antitrust legislation. By acquiring technology and creating conditions for competition in the market, it is possible to achieve progress even without having a strong science. A factor that strongly influences progress is technology. For the development of technology, there is a great need for science. Science is a very strong factor that influences the nonlinearly changing of the economy. It has been shown that in the transition from absolute monopoly to imperfect monopoly (oligopoly), the system becomes more complex, and its output characteristics are nonlinearly time-dependent. It is shown that competition, being a derived monopoly, displaces the competition providing progress, and to achieve progress, a nonlinear increase in the production of output by the passage of time is necessary.

**Keywords:** Monopoly, Competition, Progress, Speed Of Production, Polycrystalline, Cathode Sputtering, Sputtering Yield

---

\*All correspondence related to this article should be directed to Askerov Shahlar, Baku State University, Azerbaijan  
Email: [ashahlar@hotmail.com](mailto:ashahlar@hotmail.com)

## Decision-Making in Competitive Supply Chains with Fuzzy Data: A Membership Function Approach

Shih-Pin Chen<sup>1\*</sup>, Macro Chang<sup>2</sup>

<sup>1,2</sup> National Chung Cheng University, Taiwan

### Abstract

This paper investigates decision-making in a two-echelon supply chain (SC) with a supplier and duopolistic retailers playing a strategic game in the presence of imprecision arising from market turbulence characterized by increasingly short product life cycles (PLCs). A Stackelberg game structure is considered in both intra- and inter-echelons. An analysis method is proposed to more precisely describe the decision-making behavior of the SC in practice. The analysis method is based on fuzzy set theory and optimization theory. Specially, it follows Zadeh's extension principle, which is one of the most important concepts in fuzzy set theory. This membership function approach can be adopted to derive the membership functions of SC performance measures. In this approach, a pair of two-level mathematical programs is initially developed and subsequently transformed into a pair of quadratic programs to calculate the  $\alpha$ -cuts of each chain member's fuzzy maximum profit. By enumerating different values of  $\alpha$ , the membership function of the fuzzy maximum profit is constructed, and the corresponding optimal pricing and quantity decisions are derived. The proposed model is verified by the dataset of a supermarket supply chain in Taiwan, and the optimal strategy is derived through proving several theorems. A simple algorithm is designed to solve the optimal solutions of this model. Several numerical examples illustrate the validity of the proposed model and the solution procedure. Furthermore, sensitivity analysis is also conducted. Key results are summarized below. First, the maximum profit of the supplier is not always larger than the total maximum fuzzy profit of the duopolistic retailers. Second, the marginal variation in the supplier's maximum profit is the largest among these SC members. Third, the upstream maximum profit is more sensitive to imprecise downstream market demands, which could be more than the double of the downstream maximum profit.

**Keywords:** Game Theory, Fuzzy Data, Pricing, Supply Chain Management

\*All correspondence related to this article should be directed to Shih-Pin Chen, National Chung Cheng University, Taiwan  
 Email: [chensp@ccu.edu.tw](mailto:chensp@ccu.edu.tw)

## Making a Difference by Corporate Social Responsibility: The Case of Oman Medical Specialty Board

**Sheikha Saleh Al Belushi\***  
Arab Open University, Oman

### Abstract

---

This research project aimed to grasp the contextualized concept of Corporate Social Responsibility (CSR) in Oman Medical Specialty Board (OMSB). The primary objectives of this research project were to explore the level of CSR engagement at OMSB, to explore CSR benefits, to explore CSR impact on OMSB performance, reputation and competitiveness, and finally to explore employees' attitudes and perceptions towards CSR. A convenient sample of 120 employees was asked with a standardized questionnaire. The data were analyzed using mixed methods. The study findings have indicated that there was a general lack of CSR initiatives at OMSB. However, findings have acknowledged the benefits of CSR, the positive relationship between CSR and performance, and the positive employees' attitudes towards CSR. Several valuable strategies and recommendations have been suggested for making a great difference in OMSB by promoting CSR practices.

**Keywords:** Corporate Social Responsibility (CSR), Medical Specialty Board, employees' attitudes

---

\*All correspondence related to this article should be directed to Sheikha Saleh Al Belushi, Arab Open University, Oman  
Email: [sheikhah.b@omsb.org](mailto:sheikhah.b@omsb.org)

## Employee Engagement & Its Impact on their Performance: The Case of Oman Medical Specialty Board (OMSB)

**Badriya Al habsi\***

Oman Medical Specialty Board (OMSB), Oman

### Abstract

---

The aim of this research is to attempt to find out what encourages employees at my work place "Oman Medical Specialty Board" to have a passion for the job they do, which encourages them to display discretionary effort, thus going the extra mile to do their job to the very best of their ability. Also, as the new strategic plan of OMSB considers employees' engagement as one of its objectives, therefore, this research will be a good starting point to achieve this objective and for sure will add value to OMSB. This research is an exploratory study that aims to measure the current levels of engagement within OMSB, to identify the key drivers of employee engagement, to examine the employees' attitude toward engagement strategy, and to study the impact of employee engagement on job performance, which is directly affecting other dimensions like employees' satisfaction and organizational commitment. To achieve these objectives and to answer the research questions, a survey questionnaire was developed and validated. The findings of this research were presented in mean and standard deviation in addition to other calculated elements. The result showed that OMSB has high engagement level and the employees have high attitude toward this strategy. Also, findings showed that OMSB should pay attention to some engagement drivers within the organization to sustain and improve its performance. Several recommendations for improvements that would enhance the organization's employee engagement level have been suggested. Additionally, this study is important as a catalyst to explore the area further. This is so because it will require future work and further research after this body of work has been completed as it is suggested in the "Future Work" part in the report.

**Keywords:** Employees' Engagement., Commitment, Performance, Satisfaction

---

\*All correspondence related to this article should be directed to Badriya Al habsi, Oman Medical Specialty Board (OMSB), Oman  
Email: [badriya.a@omsb.org](mailto:badriya.a@omsb.org)

## Investigation of Financial Strength of Agro & Foods Industry in Thai Listed Companies

**Phaithun Intakhan<sup>1\*</sup>, Narissare Thepsiri<sup>2</sup>, Aemwika Yasueb<sup>3</sup>,  
Chutikan Thongchai<sup>4</sup>, Oanchaliphon Saisut<sup>5</sup>**  
<sup>1,2,3,4,5</sup> Lampang Rajabhat University, Thailand

### Abstract

---

This research aims to investigate the financial strength of Agro & Foods industry in Thai listed companies using 37 fiscal financial statements in 2016. Altman's Z-score model was used for examination. The result shows that the financial strength of Agro & Food industry was divided into three groups; the high level ( $Z > 2.99$ ), the moderate level ( $1.81 < Z < 2.99$ ), and the low level ( $Z < 1.81$ ). The high level had the highest proportion as 81.08 and the moderate level was 19.92%. Moreover, there were significant variations in the financial strengths between agribusiness and food & beverage business that means financial strength of agribusiness is more than food & beverage business.

**Keywords:** Financial Strength, Z-score, Agro & Food Industry, Thai listed Companies

---

\*All correspondence related to this article should be directed to Phaithun Intakhan, Lampang Rajabhat University, Thailand  
Email: [drphaithun@hotmail.com](mailto:drphaithun@hotmail.com)

## Bankruptcy Risk in Service Industry of Thai Listed Companies

**Nattida Moolta<sup>1</sup>, Pimchanok Wongtana<sup>2\*</sup>, Saowanee Wimuktayon<sup>3</sup>, Jeeraporn Pongpanpattana<sup>4</sup>, Natthanan Thityyapromote<sup>5</sup>**

<sup>1,2,3,4,5</sup> Lampang Rajabhat University, Thailand

### Abstract

---

This research aims to investigate the bankruptcy risk of service industry in Thai listed companies. The process consisted of the exploratory and documentary methods based on 395 fiscal financial statements of service business group from 2012 to 2016. Altman's Z-score model was used for data analysis. The result shows that 3 service business companies are ranged in distress zone for the consecutive period from 2012 to 2016. The following four distress zone companies have two companies in distress zone 3. There are 4 companies in the distress zone for 2 years. There are 3 companies in the distress zone and 1 company in the distress zone. There are 7 companies.

**Keywords:** Bankruptcy Risk, Z-score, Service Industry, Thai listed Companies

---

\*All correspondence related to this article should be directed to Pimchanok Wongtana, Lampang Rajabhat University, Thailand  
Email: khungkhingsasa@hotmail.com

## The Effect of Z-Score on Firms' value: Evidence from Agro & Food Industry in Thai Listed Firms

**Thanchanok Ruankaew<sup>1\*</sup>, Jaraschay Siri<sup>2</sup>, Philasinee Oeiwan<sup>3</sup>,  
Jaturaphat Wongsirisathaporn<sup>4</sup>, Sukasem Langkhunsan<sup>5</sup>**  
<sup>1,2,3,4,5</sup> Lampang Rajabhat University, Thailand

### Abstract

---

This research explores the effect of financial ratios from Altman Z-score on firms' value of Agro & Food industry in Thai listed firms using simple Pearson correlation and multiple regression analysis. The financial ratios consist of Net working capital/Total Assets, Retained Earnings/Total Assets, EBIT/Total Assets, Market Value of Equity/Total Liabilities, and Sales/Total Assets. The closing price of each year is used for proxy of firms' value. This research is performed by using 193 samples during the period from 2012 to 2016. The result shows that Retained Earnings/Total Assets and EBIT/Total Assets are significantly positively related to firms' value of Agro & Food industry. That means if these financial ratios are higher, the stock price will be higher, too.

**Keywords:** Z-score, Firms' Value, Agro & Food Industry, Thai Listed Firms

---

\*All correspondence related to this article should be directed to Thanchanok Ruankaew, Lampang Rajabhat University, Thailand  
Email: [thanchanok.water@gmail.com](mailto:thanchanok.water@gmail.com)

## The Relation Between Financial Ratios and Stock Prices: Evidence from Technology Industry in Thailand Stock Market

**Korrawee Jitprasarn<sup>1\*</sup>, Rujirada Toopthong<sup>2</sup>, Kamolvich Wongsai<sup>3</sup>, Kanpitcha Peasai<sup>4</sup>, Kanchana Khuma<sup>5</sup>, Pornchanok Tonglad<sup>6</sup>**

<sup>1,2,3,4,5,6</sup>Lampang Rajabhat University, Thailand

### Abstract

---

This research aims to investigate the relation between financial ratios and stock prices of technology industry in Thailand using simple Pearson correlation and multiple regression analysis. The financial ratios used in this research are financial liquidity, assets efficiency, profitability, solvency, and firm value. The closing price of each year is used in examination. This research is performed by using 110 samples during the period of 2012 to 2016. The result shows that Return on Equity ratio and Earnings per share are significantly positively related to market stock price of technology industry. That means if these financial ratios are positive, the stock price will be positive, too. However, debt to equity ratio and returns on assets are significantly negatively related to stock price.

**Keywords:** Financial Ratios, Stock Prices Technology, Industry Thailand Stock Market

---

\*All correspondence related to this article should be directed to Korrawee Jitprasarn, Lampang Rajabhat University, Thailand  
Email: [single.iice44@gmail.com](mailto:single.iice44@gmail.com)

## Managing Change for Radical Business Process Improvement: Effects on Islamic Banks' Performance

**Mohd. Rizal Razalli<sup>1\*</sup>, Norlena Hasnan<sup>2</sup>**  
<sup>1,2</sup> Universiti Utara Malaysia, Malaysia

### Abstract

---

Managing change is difficult as the change is constant. Organizational resources have to be wisely utilized in order to maximize the outcome of change management project. The rapid rate of change has imposed many companies to radically change to improve their current business processes. Financial sector is one of the main drivers of economy in any nation and has been experiencing drastic change in its operations. This paper examines the effect on Islamic banks' performance due to change management initiatives. The performance of Islamic banks differs from any conventional banks due to three main aspects namely, (1) educating individual, (2) public interest, and (3) establishing justice. In this study, the performance is measured by the cost spent by the banks to fulfill those three aspects. The direct relationship effect was analyzed using the Partial Least Square (PLS) structural equation modeling. Collectively, the results show the significant effect of change management on the performance of Islamic banks. The outcome of this study provides the important insights to both managers and researchers for further understanding of managing change to yield improved bank's performance.

***Keywords:*** Business Process, Bank Performance, Islamic Bank, Change

---

\*All correspondence related to this article should be directed to Mohd Rizal Razalli, Universiti Utara Malaysia, Malaysia  
Email: rizal@uum.edu.my

## Spatial Competition in the Health Care Industry

**Dakshina G. De Silva<sup>1\*</sup>, Hojin Jung<sup>2</sup>, Georgia Kosmopoulou<sup>3</sup>**

<sup>1</sup>Lancaster University, Lancaster, , UK

<sup>2</sup>Henan University, China

<sup>3</sup>University of Oklahoma, USA

Abstract

---

We investigate factors that determine firm markups by employing data on prices and quantities of various medical procedures at major hospitals in the US. We focus on the impact of hospital quality, rival competition, and the number of medical procedures upon the healthcare demand. Our analysis covers healthcare markets across the US with the market definition based upon the Hospital Referral Regions (HRRs). Our findings highlight potential implications of the relationship between hospital markups and market structure.

**Keywords:** Health; Spatial Competition; Markups; Hospital Referral Regions.

---

\*All correspondence related to this article should be directed to Hojin Jung, Henan University, China  
Email: [2hojin.jung@gmail.com](mailto:2hojin.jung@gmail.com)

## An Empirical Study of the Effects of Training & Development Practices on Employees' Performance at ASDA in UK

**Sahid Howladar\***

University of Posts & Telecommunications, China

### Abstract

---

Employment training seeks to develop in the new employee a positive approach to his work and also achieve the highest possible level of work behavior. It is widely recognised as an important activity within the Retail Industry. The present research involves an investigation of the Training and Development adopted by ASDA and, accordingly, it also carefully examines the effectiveness of such Training and Development. The researcher has analysed different Training and Development topics and procedures which occur before, during, and after the training programme. He has applied Kirkpatrick's model of Four-Level Training and Development evaluation to examine ASDA's Training and Development effectiveness. The Transfer of Training model has also been used in this study in association with Kirkpatrick's model. The researcher, by using of questionnaire survey, has analysed his findings with a reference to the effectiveness of ASDA's Training and Development program. Finally, he has made some significant recommendations deduced from this study, which could benefit any future examinations of this or related topics.

**Keywords:** Training, Development, Kirkpatrick's Training Evaluation Model

---

\*All correspondence related to this article should be directed to Sahid Howladar, University of Posts & Telecommunications, China  
Email: [sahid.cqupt2016@yahoo.com](mailto:sahid.cqupt2016@yahoo.com)

## Dynamic Capabilities as Stretch and Leverage of Resources: Exploring the Generic Pattern of Resource Leverage

**Tung-Shan Liao<sup>1\*</sup>, Pham Thi Thuy Dung<sup>2</sup>**

<sup>1,2</sup> Yuan Ze University, Taiwan

### Abstract

---

The dynamic capabilities view (DCV) that has emerged in the context of increasingly dynamic markets addresses how firms “integrate, build, and configure” the resource base to respond to the market dynamism (Teece & Pisano, 1994; Teece et al., 1997: 516). The DCV has essentially attracted many researchers’ attention in response to the arguably equilibrium nature of the resource-based view (RBV) and the innate problems such static approaches have in the context of capricious markets (Eisenhardt & Martin, 2000; Foss & Ishikawa, 2007; Zahra, Sapienza, & Davidsson, 2006; Teece, 2007). Despite of their significant contribution, most of the prevailing studies into the DCV seem to view that market dynamism is a premise to their assumptions. Their research focus may be potentially considered as ‘inward focused’ on the inner dynamics of firms, hence less highlighting the relevance to the interaction between internal and external dynamics of firms, which we argue should be a critical element to reflect the core insight of the DCV. A specific aim of this paper is to identify actions that firms conduct specifically to respond to somewhat of the specific environmental changes and to assess the effectiveness of these actions. We build our research focus on those identity dynamics and industrial trends that influence, and are involved in, the operations of industrial firms and their managers’ mindset, especially relating to what they have learned from and analyzed for the disruption, displacement, and recalibration in the development (and redevelopment) process. This process is accordingly reflective of how well they manipulate and leverage the existing resources and competencies toward the potential opportunities that are identified in accordance with environmental changes. The methodologies of the research were developed following the logic of the grounded theory.

To be continued.....

To be continued.....

We draw on a case-centered narrative approach to analyze the cases we collected from five companies, consisting of 4 multinational firms and 1 domestic firm in diverse industries, including telecommunications manufacturing, contract research organizations (CRO) in the pharmaceutical industry, search engine optimization (SEO), retailing and logistics, and global cosmeceuticals. Along with the cases, we investigated somewhat of potentially significant changes within their firms, such as their operations, target markets, product offerings and business models, and the environmental challenges and important trend and changes in their industrial position that spur their firms' inner changes. We used a semi-structured interview in order to ensure that each interview had a consistent focus on how the study participant companies address and interact with the external dynamics. Our findings, derived from the participant MNCs' narratives, present remarkable similarity. These narratives reveal five basic themes that reflect how the participant companies adapt, manipulate, or expand their resource base to either explore or exploit new opportunities. We suggest that these themes could be referred to as a set of processual patterns of resource leverage, and we strongly argue that firms' leverage in different resources can be used as a quantifiable form of the microfoundation to measure a firm's dynamic capabilities. These five basic themes of resource leverage were identified: (1) awareness leverage: the awareness of industrial trends of top-managing team helps firms develop sensing capability toward market opportunities; (2) relation leverage: industrial relationship is a critical factor that advances a firm's dynamic capabilities in sensing and seizing market opportunities; (3) generic resource leverage or asset leverage: a firm that performs well, and even outstanding, reflects how well it leverages the assets toward market opportunities, hence leading to competitive performance; (4) strategic leverage: the intention that a firm possesses forms its strategic goals, which, in turn, guides the development of its resource base, therefore, influencing how it employs dynamic capabilities; and (5) knowledge leverage: corporate knowledge combination and organizational learning that can be seen as a bridge to nurture the resources and capabilities of firms, transform them to be new competencies.

**Keywords:** Dynamic Capabilities View, Internal Dynamics, External Dynamics, Resource Leverage

---

\*All correspondence related to this article should be directed to Tung Shan Liao, Yuan Ze University, Taiwan  
Email: valenliao@saturn.yzu.edu.tw

## Dynamic Currency Hedging: The DCC-GARCH Model

**Jae-Beom Cho<sup>1\*</sup>, Hong-Ghi Min<sup>2</sup>**  
<sup>1,2</sup>KAIST, South Korea

### Abstract

---

We investigate comovements between international stock markets and currency markets using the DCC-GARCH model for the period 1995 to 2016. For the whole period, Japanese yen, Euro, Swiss franc, and U.S. dollar move against world stock market implying that those currencies are safe assets that can reduce the risk of international equity investment. Among those currencies, safe asset property of Japanese yen has been increasing for the sample period. Optimal currency hedge ratios for the stock market investment are very volatile during the crisis periods such as 1997 Asian currency crisis and 2008 U.S. subprime mortgage crisis. During the Asian foreign exchange crisis, Swiss Franc and U.S. dollar are safe assets whereas during the U.S. financial crisis, Swiss franc and Japanese yen are the safe assets

***Keywords:*** Dynamic Currency, DCC-GARCH Model

---

\*All correspondence related to this article should be directed to Jae-Beom Cho, KAIST, South Korea  
Email: bum123123@kaist.ac.kr

## The Quality Financial Statements of Small and Medium Enterprises Business (Smes) in View of the Tax Auditor

**Saratchanut Boonvut\***

Lampang Rajabhat University, Thailand

### Abstract

---

This research aimed to study the quality of financial statements of small and medium enterprises in the view of tax auditors by gender, age, education level, and experience in inspection. Sample population was 117 tax auditors using the questionnaire as a research tool. The statistics used in the research were percentage, mean, standard deviation, and variance. The results showed that most of the respondents were 94 female, 80.30%, aged from 41 to 50 years old, and had experience in audit and certification of financial statements from 11 to 15 years, 93 people. Quality of the financial statements of small and medium enterprises in the view of the tax auditor was Understandable, Decision-making, Reliability, and Comparison. There was no difference in age and experience in inspection. However, there was difference if classified by gender.

**Keywords:** Quality of Financial Statements, Small and Medium Business Enterprises

---

\*All correspondence related to this article should be directed to Saratchanut Boonvut, Lampang Rajabhat University, Thailand  
Email: [juti9505@windowslive.com](mailto:juti9505@windowslive.com)

## A Multi-Level Model of Work Engagement in Temporary Service Employees

**Kuan Yeh Tung<sup>1\*</sup>, Shu Ling Chen<sup>2</sup>**

<sup>1</sup>, Southern Taiwan University of Science and Technology, Taiwan

<sup>2</sup>, National Dong Hwa University, Taiwan

### Abstract

---

Currently, organizations that involve extensive customer service activities tend to employ temporary employees as a common strategy for manpower flexibility. Building on Bakker & Demerouti's (2008) JD-R model of work engagement, the study examined a multi-level model exploring how autonomy support climate motivates work engagement and service performance through relational psychological contract among frontline service employees. We conducted hierarchical linear modeling (HLM) to analyze 606 supervisor-subordinate dyads that were collected from 40 gas stations. Results revealed that the autonomy support climate has a cross-level positive effect on employee work engagement through relational psychological contract and employee work engagement in sequence enhances service performance. This study examined the impact of the autonomy support climate and psychological capital on service performance through relational psychological contract and work engagement among temporary service employees. Responding to the need for a meso-mediation approach in work engagement research (Mathieu & Taylor, 2007; Hakanen & Roodt, 2010), a key contribution of this study is to expand on Bakker & Demerouti's (2008) JD-R model of work engagement by exploring job resources at the organizational level, further identifying complementary mediation and detecting the interaction of job resources and personal resources. Our study demonstrates that integrating the psychology and management literature may enhance our knowledge of how interpersonal climate, based on self-determination theory and positive psychological processes, can influence contingent service employees' performance. In particular, our findings contribute to the positive organizational behavior and psychological contract literature.

**Keywords:** Work Engagement, Autonomy Support Climate, Psychological Capital, Temporary Service Employees

---

\*All correspondence related to this article should be directed to Kuan-Yeh Tung, Southern Taiwan University of Science and Technology, Taiwan  
Email: sherry@gms.ndhu.edu.tw, tung@stust.edu.tw

## Common Committee Membership on the Relationship between CEO Incentive Compensation and Risk-Taking: a Study of the Banking Industry

**Chia-Chi Lua<sup>1\*</sup>, Pai-Ta Shihb<sup>2</sup>, Ju-Fang Yenc<sup>3</sup>**

<sup>1</sup> National Central University, Taiwan

<sup>2</sup> National Taiwan University, Taiwan

<sup>3</sup> National Taipei University, Taiwan

### Abstract

---

CEO compensation practices in the banking industry are widely believed to have induced excessive risk-taking and, thus, to have played an important role in causing the recent financial crisis. The Basel Committee on Banking Supervision (BCBS) has called attention to the need to understand, and improve the corporate governance of financial organizations. The purpose of this study is to analyze whether there is a mechanism in boards that may have impacts on the relationship between CEO incentive compensation and risk-taking behavior for the banking industry. The mechanism this study proposes is the compensation/audit committee overlap (hereafter, director overlap). In this study, the results show that in the banking industry, director overlap affects the risk incentive resulting from CEO incentive compensation; director overlap can reduce the relationship between CEO incentive compensation and default risk; and director overlap reduces the relationship between CEO incentive compensation and systematic risk, instead of idiosyncratic risk. These findings indicate that director overlap between compensation committee and audit committee can help risk management by reducing risk-taking behavior inducing by CEO incentive compensation, reducing default probability inducing by CEO risk-taking behavior and systematic risk.

**Keywords:** Compensation/Audit Committees Overlap; CEO Incentive Compensation; Risk-Taking; Banking Industry

---

\*All correspondence related to this article should be directed to Chia Chi Lu, National Central University, Taiwan

Email: lunina@ncu.edu.tw

## Global Competitiveness of Exporting Firms: Impact of the Internet on the Exporter-Importer Relationship

**Anura Amarasena\***

Woosong University, Korea South

### Abstract

---

This paper investigated the factors responsible for the global competitiveness of exporting firms. In order to achieve this purpose the paper reviews the literature on the determinants of export performance and critically evaluates the role of the Internet and e-commerce in export business. The understanding gained in this in-depth review has led to suggest that the role of the owner/manager of small firms and their capabilities in interacting with internal and external environment factors of the firm, which carry the potential to influence the performance of firms, is vital. Literature highlights the importance of relationships to small firms where mutual-trust plays a vital role in building value adding relationships between the exporters and importers to overcome their difficulties and disadvantages. The potential factors which carry the converging effect that would nourish the relationship between the exporter-importer leading to strengthening their mutual-trust have been discussed. In-depth review of the literature led to a greater understanding of the benefits of the Internet technology particularly to small firms. However the review led to questions about whether such benefits are fully applicable to small firms exporting in the context of a developed to developing country, given the importance of maintaining the social relationships, as such relationships are critical to the export success. Thus it is arguable whether comprehensive benefits could be derived through full implementation of the Internet and e-commerce in exporting firms as it may be critical to maintaining such relationships in virtual situations. The important point raised here is that the owner/manager's major focus on the highest possible Internet applications in export business could divert their attention giving less importance to human factors which may hamper the development and maintenance of harmonious exporter-importer relationships.

**Keywords:** Exporting firms, Export performance, Exporter-importer relationship, Internet

---

\*All correspondence related to this article should be directed to Anura Amarasena, Woosong University, Korea South  
Email: [amarasena.anura@gmail.com](mailto:amarasena.anura@gmail.com)



---

---

Abstract Proceeding Book  
ASBMSR- February 01-02, 2018  
Tokyo, Japan  
ISBN: 978-969-695-002-8

---

---

## **TRACK B: SOCIAL SCIENCES & HUMANITIES**



International Conference on "Advancements In Social, Business and Management Sciences  
Research" (ASBMSR-2018)

## How I Got Woke: Channeling Global Competence Through Culturally Relevant Teacher Leadership

**Garris Landon Stroud\***

Murray State University, Kentucky, USA

### Abstract

---

After completing an education abroad program in Costa Rica, I became fascinated with the idea of cultural hegemony and how it is made evident and sustained within the field of education. From an autoethnographic framework, I explore my own coming to consciousness as it relates to privilege, equity, and cultural awareness. Based on my experiences as a “minority” during my time abroad, I advocate for globally competent teacher leaders – those who embrace culturally relevant dispositions as part of their leadership framework. I explore how culturally relevant teachers can promote global awareness in their students, an integral component of rapidly globalizing 21st Century education.

***Keywords:*** Culture, Education, Global Competence

---

\*All correspondence related to this article should be directed to Garris Landon Stroud, Murray State University, Kentucky, USA  
Email: [garris.stroud@hopkins.kyschools.us](mailto:garris.stroud@hopkins.kyschools.us)

## Event Legacy and Community Development: The Case of 2008 European Capital of Culture, Liverpool

**Yi-De Liu<sup>1\*</sup>, Tzu-Li Lin<sup>2</sup>**

<sup>1</sup> National Taiwan Normal University, Taiwan

<sup>2</sup> Tunghai University, Taiwan

### Abstract

---

The sustainability of major event on cities has become a major theme of discussion in recent years. Community in the host city is not only the key audience but also a vital source of sustainability for events. Cultural events, with the European Capital of Culture as a prominent example, have emerged as a means of facilitating community development in Europe. Based on a case study of Liverpool as the 2008 European Capital of Culture, this paper aims at conceptualising the articulation between cultural event and its sustained effects on community development. Methodologically, longitudinal and multifaceted data, both primary and secondary, were collected and analysed. The study period is from 2007 to 2015 in order to track the changes of performance. The research findings point to four dimensions of effects, including cultural access and engagement, volunteering, governance and infrastructure, and sense of place. Overall, the study underlines the importance of embedding the event as part of a long-term cultural development strategy and designing itself within the long-term development of the city as a whole through synergies between culture and other areas, such as urban regeneration, community development, and education. Finally, to transmit the value behind the findings, this research provides suggestions, as well as challenges considered, for those cities attempting to adopt an effective event-led strategy for community development.

**Keywords:** Sustainability; Community Development; Event Legacy; European Capital Of Culture; Liverpool

---

\*All correspondence related to this article should be directed to Yi-De Liu, National Taiwan Normal University, Taiwan  
Email: [yideliu@ntnu.edu.tw](mailto:yideliu@ntnu.edu.tw)

## What Syria Can Teach Us in Creating a New and Better Future?

**Adham Mardini\***

University of Central Lancashire, United Kingdom

### Abstract

---

It is clear that humanity is, once again, facing a crisis of identity and purpose. Weak global leadership, a crisis of displaced persons, and the complex problem of integrating different cultures into countries other than their homelands have led us to the threat of a complete breakdown of civilisation as we know it. In addition, we have the rise of the Islamic State (ISIS) in the Levant. How did they get to be so popular among the Muslim youth of the West? What started as a war of words to recruit Muslim youth, has now turned into a military war fought across many countries. The narrative of each warring party is increasing in tone to match the killings we witness daily by either side. This presentation aims to look at the narrative and language used by all sides of this conflict; a language that borrows words taken from the early days of Islam to convey legitimacy to the cause and the battle for ultimate leadership. There is no neat solution, but a need for collective collaboration. It is now up to the younger generation to explore and debate. It is important that the elders' wisdom is harnessed to guide the youth with vision and new ideas. A new way of living is necessary if we are to secure the future of the human race.

***Keywords:*** Syria, Future, Leadership, Humanity

---

\*All correspondence related to this article should be directed to Adham Mardini, University of Central Lancashire, United Kingdom  
Email: [amardini1@uclan.ac.uk](mailto:amardini1@uclan.ac.uk)

## Development and Validation of a Readiness for Knowledge Management Implementation Questionnaire (RKMIQ)

**Hamyar Nasser Al-Mahruqi<sup>1</sup>, Abdelmajid Bouazza<sup>2\*</sup>,  
Abdelhameed Hassan<sup>3</sup>, Mohammed AL-Suqri<sup>4</sup>**  
<sup>1,2,3,4</sup> Sultan Qaboos University, Oman

### Abstract

---

The purpose of this study was to identify the psychometric properties of a Readiness for Knowledge Management Implementation Questionnaire (RKMIQ) administered to State Audit Institution (SAI) Employees. This study explored the level of readiness for knowledge management (KM) process implementation in SAI. The dimensional structure of the questionnaire was investigated with a sample of 170 SAI employees (70% males and 30% females). Based on factor analysis results, the questionnaire emphasized sixteen factors categorized in five themes: organization culture, organization structure, information technology (IT) infrastructure, employees' acceptance of KM, and employees' intention to be involved in the KM process. The internal consistency and concurrent validity of RKMIQ were verified (Cronbach's alpha= 0.95). RKMIQ and its factors were significantly correlated with factors influencing the KM initiatives questionnaire (FIKMIQ). Testing of the reliability of RKMIQ using Test-Re-Test method revealed a significant correlation of (0.96) between the two applications. This questionnaire was proved to be relatively reliable and valid. The results showed that SAI is ready for KM process implementation. Since it is essential to assess organizational readiness for KM before embarking on KM initiatives, this study designed an instrument that brings together organizational and human factors influencing the readiness of organizations for KM. The comprehensiveness of the instrument, as well as the degree of validity and reliability that it demonstrated, justifies its adoption to measure the readiness of organizations to implement KM processes.

**Keywords:** Knowledge Management, Implementation, Readiness, Instrument, State Audit Institution, Oman

---

\*All correspondence related to this article should be directed to Abdelmajid Bouazza, Sultan Qaboos University, Oman  
Email: bouazza93@gmail.com

## Integrated Regional Development Policy Formulation in Ethiopia

**Kemal Abdela<sup>1\*</sup>, Sukhumvit Saiyasopon<sup>2</sup>, Weerakul Chaiphar<sup>3</sup>**  
<sup>1,2,3</sup> Khon Kean University, Thailand

### Abstract

---

The Ethiopian governments have been making efforts to address the socio-economic, political, and environmental issues. The citizens are facing through short, medium, and long-term policy-making, which has been an issue in the history of the country and influences many national developmental initiatives of all government systems of the country. The purposes of this research were to study the practice, explore and identify the possible challenges, and opportunities of integrated regional development policy formulation in Ethiopia. This qualitative research data were collected using in-depth interviews with the key informants of the study, and review of relevant documents. The study found that in practice, the federal executive and elite are the key actors in crucial policies' formulation process at both the federal and regional levels with limited consultation and participation of other federal and regional policymakers, officials, citizens, and other stakeholders, who are directly affected by the formulated policies. The study also reveals various political, socio-economic, and technical challenges that negatively affect the effective and efficient integrated regional development policy formulation in the country. A researcher suggests a systemic procedure and ways of participation that are paramount to increase the effectiveness and overall practice of policy formulation in Ethiopia. Further studies are needed to understand the power and duties and integrated regional developments policy formulation of both federal and regional governments.

***Keywords:*** Formulation, Integrated, Policy, Regional Development

---

\*All correspondence related to this article should be directed to Kemal Abdela, Khon Kean University, Thailand  
Email: kemalorom@gmail.com

## Improving Independent Music Brand Marketing in Taiwan through Service Design

**Chen, Yen-Chi<sup>1</sup>, Yu, Hsin-Chun<sup>2\*</sup>**  
<sup>1, 2</sup> Tunghai University, Taiwan

### Abstract

---

Independent music is regarded as an artistic and cultural activity with grassroots and subculture connotations, and its value improves the visibility of the local cultural ecology and demonstrates linkages between society and the creation of music. Musical performances have characteristics as both products and services, and performers use musical performances to provide sensory experiences to the audience. Because the audience enjoys the atmosphere of the performance and interaction with the performers, its members derive greater enjoyment than they would by simply listening to the music. This paper applies service design research methodologies combined with core modes of thinking related to experience economy and creative marketing. Given the preconditions of utilizing few resources and maintaining their unique characteristics, the aim of this study is to find new types of business concepts and marketing models for emerging Taiwanese independent musicians or groups to promote their brand and optimize their performance services. This paper is based on a literature review, in-depth interviews, and practical observations; service design methods were used to conduct research affinity diagrams to clarify the role of service providers in the service process. Finally, contact points were used to analyze and summarize things that can be improved or produced as a result of the implementation of creative design. The research outcomes of this study include the following: helping research subjects reestablish their brand image and marketing media and providing plans for improving research participants' performance service processes.

**Keywords:** Independent Music, Service Design, Brand Marketing

---

\*All correspondence related to this article should be directed to Yu, Hsin-Chun, Tunghai University, Taiwan  
Email: [hysu@thu.edu.tw](mailto:hysu@thu.edu.tw)

## Early Childhood Teacher Attitudes and Beliefs Regarding Computer Application in Learning

Noorhapizah<sup>1</sup>, Juhriyansyah Dalle<sup>2\*</sup>, Muhayat<sup>3</sup>

<sup>1,2</sup> Universitas Lambung Mangkurat, Indonesia

<sup>3</sup> Universitas Islam Negeri Antasari, Indonesia

### Abstract

---

This paper explores early childhood teacher attitudes and beliefs regarding computer application in teaching and their perception about information technology in the curriculum. A total of 210 teachers was chosen randomly from 30 kindergarten schools in Banjarmasin for answering a 25-item research questionnaire. The results showed that majority of teachers' attitude and beliefs are positive for using computer application in teaching. Also, teachers' perception showed that the information technology curriculum still needs to be performed more for teacher and student.

**Keywords:** Attitudes, Beliefs, Early Childhood Teacher

---

\*All correspondence related to this article should be directed to Juhriyansyah Dalle, Universitas Lambung Mangkurat, Indonesia  
Email: [j.dalle@unlam.ac.id](mailto:j.dalle@unlam.ac.id)

## The Role of Embassy of the Republic of Indonesia in Malaysia in Solving the Problems of Employment Law

**Abdul Hariss\***

Universitas Batanghari, Indonesia

### Abstract

---

For Indonesian workers, who really need jobs, they are still flowing to Malaysia, both legally administered by the government and illegally through irresponsible travel agencies. For the year 2017 just recorded that the official workforce of Indonesia in Malaysia was as many as 4 million people and the illegal as many as 1.5 million people. A large number of Indonesian workers entering the Malaysian state, especially the illegal Indonesian worker, has caused many problems for the Malaysian government and the Indonesian government. The administrative problems or incoming letters of Indonesian labor to Malaysia in the form of Passport, Visa, and permit are very complete, both from continuing the smuggling of Indonesian workforce and the incompleteness of administrative facilities of the Indonesian Embassy in general and immigration attaches, especially in Malaysia.

**Keywords:** Workers, Legal, Illegal, Indonesia, Malaysia

---

\*All correspondence related to this article should be directed to Abdul Hariss, Universitas Batanghari, Indonesia  
Email: [abdulhariss69@yahoo.co.id](mailto:abdulhariss69@yahoo.co.id)

## New Light on Regional Development in China: The Role of Overlappings

**Shu hen Chiang\***

Chung-Yuan Christian University, Taiwan

### Abstract

---

Over the past few decades, shift-share analysis is widely applied to explore the sources of local economic growth; however, there is little agreement as to the law of comparative advantage (CA) due to questions arising from spatial and industrial overlappings. The purpose of this paper is to exclude all overlapping biases to generate a new identity, which can fully show the concept of externalities and CA, the nation-industry-region interactions, and the structural change of local industry in a timely manner. Finally, the usefulness of classical shift-share analysis faces serious challenges, especially for the high degree of geographical and industrial concentrations characterizing China's regional economy from 1978-2008.

**Keywords:** Overlapping, Shift-Share Analysis; Comparative Advantage; Interregional Trade

---

\*All correspondence related to this article should be directed to Shu hen Chiang, Chung-Yuan Christian University, Taiwan  
Email: shchiang@cycu.edu.tw

## Using Seven Types of GM (1, 1) Model to Predict the Number of Casualties for Drunk-driving Traffic Accidents in Taiwan

**Yi-Ti Tung\***

National Taipei University, Taiwan

### Abstract

---

In this study, seven types of first-order and one-variable grey ordinary differential equation model (abbreviated as GM (1, 1) model) were constructed to predict the number of casualties for drunk-driving traffic accidents in Taiwan. Their predicting performance was also compared. All statistical values revealed that the predicting performance of GM (1, 1,  $x(0)$ ), GM (1, 1, a), and GM (1, 1, b) outperformed other GM (1, 1) models. The minimum mean absolute percentage error and the highest correlational coefficient were 30.95 % and 0.96, respectively when predicting the number of dead persons. When predicting the number of injured persons, all statistical values revealed that the predicting performance of GM (1, 1,  $x(0)$ ), GM (1, 1, a), and GM (1, 1, b) outperformed other GM (1, 1) models. The minimum mean absolute percentage error and the highest correlational coefficient were 13.70 % and 0.96, respectively. According to the results, it revealed that GM (1, 1) was an efficient tool to predict the number of casualties for drunk-driving traffic accidents.

**Keywords:** Grey System Theory, GM (1, 1), Number Of Casualties, Drunk-Driving, Traffic Accidents

---

\*All correspondence related to this article should be directed to Yi Ti Tung, National Taipei University, Taiwan  
Email: [yttung@mail.ntpu.edu.tw](mailto:yttung@mail.ntpu.edu.tw)

## Research on the Evaluation Indexes of Walking Friendly Environment in Healthy Communities from the Perspective of Mass Transit-Oriented Development - Taking Taipei MRT as an Example

**Yi-Kai Hsieh<sup>1\*</sup>, Chia-Nung Li<sup>2</sup>**  
<sup>1,2</sup> Chinese Culture University, Taiwan

### Abstract

---

Looking at the status quo of healthy cities, the current implementation of a healthy city is still undergoing a conceptual elaboration as a whole. It is because the conditions and characteristics of each place are different from those of the local culture. However, as Taiwan's society faces a process of rapid urbanization, it has also started to actively promote low-carbon cities and build mass transit facilities in the hope of responding to urban development issues such as global warming and slowing down environmental pollution. However, most of the construction of Taiwan's rapid transit facilities involves land with the development of the type of development-oriented transportation (i.e., guided by market demand), where the development is going and where public works are carried out, the population driven by it is not the living environment and the pedestrian environment certainly suitable for living health. Accordingly, this study explores Transit-Oriented Development (TOD), a healthy community formed by four stations of Taipei MRT Bannan Line: Jiangzicui Station, Xinpu Station, Banciao Station, and Fuchu Station Environment. As an example, we use Fuzzy Delphi Method (FDM) and Analytic Network Process (ANP), and import Gray System Theory to construct TOD healthy community by Gray-ANP analysis Walk friendly environmental assessment index system, by using index gray weighted value to assess the TOD walk friendly environmental level and priority order, with a view to measuring environmental indicators from healthy walking friendly environment, view the environmental differences caused by uneven distribution of local resources to understand the public walking behavior patterns, and the cognitive gap with the environment.

**Keywords:** Transit-Oriented Development, Healthy Community, Walk friendly, Evaluation Indicators

---

\*All correspondence related to this article should be directed to Yi-Kai Hsieh, Chinese Culture University, Taipei, Taiwan  
Email: kenszoids@gmail.com

## An Assessment of Manpower Development Corresponding to Workforce Needs in Home Economics Group in Taiwan's Vocational schools

**Li-Tuan Chou<sup>1\*</sup>, Mei-Tzu Chen<sup>2</sup>**

<sup>1,2</sup>National Taiwan Normal University, Taiwan

### Abstract

---

This research was designed to explore the status of manpower development in Home Economics Group and their correspondence with workforce needs in Taiwan. Research objects were Taiwan's Vocational Schools which provided courses in Home Economics Group. At the beginning, secondary data analysis method was employed. And then consulting job vacancy from 2011 to 2013 issued by Ministry of Labor and job openings released by 104 Job Bank from 2013 to 2015, this research inquired labor shortage in industries related to Home Economics Group. Later, four focus group interviews were conducted to collect opinions from industry experts and then made assessments for future workforce needs in Taiwan. Finally, after making comparisons between the number of students in Home Economics Group and the future workforce needs in related industries, the research proposed suggestions for manpower development in Home Economics Group for Vocational Schools. The research found that the enrollment in Home Economics Group was on the decrease; students majoring in Department of Beautification and Department of Fashion and Trends accounted for the majority. More than 70 percent of graduates chose to study further in colleges; as for those who obtained employment, most graduates took up an occupation in other service industry. Labor shortage remains in Home Economics-related industries, and among them, workforce shortage in Care Service was significant, while workforce need in Clothing Making was on the decrease. To adapt social change and workforce needs in industries, schools should accordingly modulate their programs for manpower development. However, there was a gap between workforce needs in Home Economics-related industries and the manpower cultivated from Vocational Schools. Moreover, Vocational Schools with Home Economics programs did not distribute evenly in Taiwan and the related industries could not provide career development visions for basic technicians; all these had an influence on graduates' willingness to obtain employment.

To be Continued.....

To be Continued....

Based on the results, the research suggested that Taiwan government should make prudent plans in setting up programs and approving the number of classes in Home Economics Group. Furthermore, industrial transformation and enhancement should be promoted and salary structure for basic technical workforce should be adjusted. In this way, the outline for students' career development visions could be drawn clearly and substantial management in Home Economics-related industries would be fastened securely.

**Keywords:** Manpower Development, Home Economics Group, Vocational Schools

---

\*All correspondence related to this article should be directed to Mei Tzu Chen, National Taiwan Normal University, Taiwan  
Email: m8781005@yahoo.com.tw

## The Composition and Meaning of 'Hyochang Independent Road

**Hyekyung Kang\***

Sookmyung Women's University, Seoul, Korea

Abstract

---

Hyochang Park is a place that shows the middle-class structure of semantic confrontation through the modern and contemporary history of Korea such as pro-Japanese, anti-Japanese, democratic, and anti-democratic. It shows how the Chosun dynasty and the imperial empire of the Korean empire have been shaped through the period of Japanese occupation and how the pro-Japanese and anti-Japanese days after liberation are located within the composition of democracy and anti-democratic society. I will try to construct contents based on history storytelling on the theme of 'independence road' among middle class meaning structure of Hyochang Park. Hyochang Park is the place where there was the tomb of Munhyo, the eldest son of king Jeongjo. It was called Hyochangwon in the past. It was used as a camp of the Japanese army during the colonial period, and was open to the public in 1924 when it was parked. Since then, it has been used as a park. Hyochang Park is located next to the memorial building of Kim Baek. This is not only the tomb of Kimgu, but also the tomb of Samcheongsa tombs and temporary government factors, which have been conducting insubordination, and Hyochang Park is like the tomb of Kimku and other interim government. The most expressive expression of this composition is thought to be 'Hyochang Independent Road', and I will try to organize it with the center of the feudal cemetery and the temporary government cemetery.

**Keywords:** Patriotic Martyr's Struggle, The Provisional Government, Great Master Wonhyo Statue, KimKoo Museum & Library

---

\*All correspondence related to this article should be directed to Hyekyung Kang, Sookmyung Women's University, Seoul, Korea  
Email: cosmopro@sm.ac.kr

## A Study on Student Recruitment Strategies of Public Technical High Schools in Taipei City

Hsiu-Te Sung<sup>1\*</sup>, Yu-Wun Huang<sup>2</sup>

<sup>1,2</sup> National Taiwan Normal University, Taiwan

### Abstract

---

This research aimed to explore the impacts of low birth rate phenomenon and the implementation of 12-year basic education program on student recruitment strategies of public technical high schools in Taipei City. With the knowledge of each school's strengths, technical high schools may develop corresponding marketing strategies to meet their expectations. Considering time and space restrictions, this research chose seven public technical high schools as the research sample and semi-structured interviews were conducted with a total of thirteen school personnel including school presidents and directors in charge of student recruitment. Interview contents were based on the 4 Ps of marketing mix and student recruitment strategies were thus divided into four aspects, that is, product, price, place, and promotion. By way of qualitative research method, several discussions and suggestions on recruitment strategies of public technical high schools were generated. Firstly, low birth rate has not yet caused any significant impacts on enrollment rate in these schools. However, the implementation of 12-year basic education program has led to a M-shaped trend in student qualities. Besides, judging from the aspects of the 4 Ps, some recruitment strategies were advised. From the product aspect, technical high schools may actively seek three-teacher collaboration launch feature classes for recruitment, and strengthen incorporation with local industries. As for the aspect of price, free tuition policy in 12-year basic education program has not influenced public technical high schools' low tuition advantage for the time being. About the aspect of place, traffic as well as cultural, social, and economic traits of the schools' locations can be factors that affect schools' recruitment. Finally, for the aspect of promotion, it is recommended that schools establish regular recruitment units, manage their own social media, and enhance art designs for recruitment media.

**Keywords:** Recruitment Strategy, Technical High School, 12-year basic education, 4 Ps

---

\*All correspondence related to this article should be directed to Hsiu-Te Sung, National Taiwan Normal University, Taiwan  
Email: [shtiowa@yahoo.com.tw](mailto:shtiowa@yahoo.com.tw)

## Retrieving Mobile Application Features by Utilizing User Reviews: Cross-Country Comparisons Based on Topic Modeling

**Youngeun Kang<sup>1</sup>, Yongtae Park<sup>2</sup>,  
Changho Son<sup>3</sup>**

<sup>1,2</sup> Seoul National University, Seoul, Republic of Korea

<sup>3</sup> Korea Army Academy, Yeongcheon, Republic of Korea

### Abstract

---

To prevent mobile application failures, increasing and maintaining user satisfaction is a significant issue. Therefore, it is important to identify the mobile application features that users are interested in. It can be obtained from user reviews on the app store. As a result, user reviews have been studied by many researchers to provide information about the features of the app for developers. Although some research has been carried out on mobile application reviews, there have been few empirical investigations into cross-country differences in the mobile application reviews. In response, this paper proposes a framework for comparative analysis of mobile application features that users of South Korea, the United States, and Japan are interested in. Latent Dirichlet Allocation (LDA), one of the topic modeling techniques, which extracts topic from the reviews and identifies the topic composition of the documents, is applied. The proposed approach can serve to help developers improve the target feature, benchmark competing apps, and provide insight into user characteristics of the country when launching and updating apps in other countries.

**Keywords:** Mobile Application, Mobile Services, User Reviews, Text Mining, Topic Modeling, Latent Dirichlet Allocation

---

\*All correspondence related to this article should be directed to Changho Son, Korea Army Academy, Yeongcheon, Republic of Korea  
Email: c13981@snu.ac.kr

## The Moderating Effect of Emotional Intelligence on the Relationship between Passion and Work Outcome among Secondary School Teachers in Davao Region

**Marionito L. Cervantes<sup>1\*</sup>, Gloria P. Gempes<sup>2</sup>**  
<sup>1,2</sup> University of Mindanao, Philippines

### Abstract

---

This study dealt with the moderating effect of emotional intelligence on the relationship between passion and work outcome among Secondary School Teachers in Davao Region. Non-experimental quantitative research design utilizing descriptive correlation technique and moderation analysis were employed in the study. Adapted survey questionnaire were given to a sample of 400 secondary school teachers in Davao Region chosen through random and stratified sampling. Findings showed high level of passion in terms of passion criteria; harmonious passion, and obsessive passion. The study also revealed that the indicators of work outcome have high levels in terms of job autonomy, job satisfaction and job performance. Further, the result also showed high level of emotional intelligence among secondary school teachers in Davao Region. Results revealed that emotional intelligence significantly moderates the relationship between passion and work outcome of teachers.

**Keywords:** Passion, Work Outcome, Emotional Intelligence, Secondary School Teachers, Davao Region, Philippines

---

\*All correspondence related to this article should be directed to Marionito L. Cervantes, University of Mindanao,, Philippines  
Email: cervs.1965@gmail.com

## Need Assessment Implementation of Story Books in Basic School

**Nyihana Erma Niatu<sup>1\*</sup>, Astuti Pratiwi Puji<sup>2</sup>**  
<sup>1,2</sup> Yogyakarta State University, Indonesia

### Abstract

---

This research is intended to foster positive appreciation toward the use of picture story book of elementary school students, as an effort to improve the quality of learning that gives a sense of calm, comfort and pleasant pleasure for students during the learning process. Specifically this study aims to: (1) to know the perceptions of teachers and principals on the use of picture books, (2) to grow the desire of teachers and principals in making picture books. The approach used in this research is Research and Development (R & D). Research subjects were teachers, principals, students, school committees, elements of the Education Office, selected by cluster sampling area. The first years research has produced a pictorial book product and then into the second years study of need assessment, teacher capacity building, school principals and school committees. The data collection techniques used were questionnaires, observations, interviews and focus group discussion (FGD). The data were analyzed descriptively qualitative. The second year research results obtained data on the condition of the 60 Elementary School selected as a place of study, as follows. (1) The sixty elementary schools assessed, it shows that there are some who have the ability and desire to make their own picture book and some have not grown desire in making picture books. (2) FGD results indicate the desire and ability of teachers in designing picture story books has grown despite the various limitations. The teacher's interest in designing his own picture story book hits the limitations of publishing access and knowledge of the book publishing flow. (3) Learning picture book should be given in an integrated manner with the study of Natural Sciences (IPA).

**Keywords:** Picture Story Books, Science Lesson

---

\*All correspondence related to this article should be directed to Nyihana Erma Niatu, Yogyakarta State University, Indonesia  
Email: [ermaniatu.nyihana2016@student.uny.ac.id](mailto:ermaniatu.nyihana2016@student.uny.ac.id)



---

---

Abstract Proceeding Book  
ASBMSR- February 01-02, 2018  
Tokyo, Japan  
ISBN: 978-969-695-002-8

---

---

## **TRACK C: HEALTH AND MEDICINE SCIENCES**



## A Community-Based Participatory Research Approach for the Adaptation of an Existing Tuberculosis Directly Observed Treatment Short-course Programme in Limpopo Province, South Africa

**Jabu Mabunda<sup>1\*</sup>, Base<sup>2</sup>**  
<sup>1,2</sup> University of Venda, South Africa

### Abstract

---

The purpose of the study was to develop an Adapted DOTS Intervention Programme in Limpopo Province. A Community-Based Participatory Research (CBPR) Approach was used to develop a multi-level theoretically and culturally-based intervention. In addition, an expert team comprising of an expert on health education and health was constituted. Workshops, focus group discussions, and in-depth interviews were conducted to collect data to inform the development and evaluation of the intervention. The intervention comprises of three components targeting the community, tuberculosis patients, and DOT Supporters. Education materials were also developed. These included: two brochures, one for community members and another for patients; two DVDs, one on the counselling of tuberculosis patients and another being a documentary narrative of a tuberculosis ambassador (a cured former tuberculosis patient). The door-to-door campaign showed some intermediary effects on the attitudes, beliefs or social norms of 28,051 people screened for tuberculosis and 2491 (8.8%) who were tested for TB. Meaningful accomplishments have been made through the CBPR approach. The approach brought together health promotion experts, researchers, healthcare workers, community members, and tuberculosis patients by promoting collaboration. It also included building capacity among both community and academic partners to engage in CBPR. The lessons learnt are applicable to health promotion as it increases partnership, empowerment, learning, and ownership; thus, it can be applied to other health promotion projects that are not necessarily partnerships.

**Keywords:** Community Engagement, Ownership, Participation, Community Involvement

---

\*All correspondence related to this article should be directed to Jabu Tsakani Mabunda, University of Venda, South Africa  
Email: [jabu.mabunda@univen.ac.za](mailto:jabu.mabunda@univen.ac.za)

## Preparation and Evaluation of Anti-oxidant Encapsulated Chitosan Microsphere

**Jae-Woon Nah<sup>1\*</sup>, Gyeong-Won Jeong<sup>2</sup>, Woong-Gil Hong<sup>3</sup>,  
Jun-Hyuk Ahn<sup>4</sup>**

<sup>1,2,3,4</sup> Suncheon National University, Republic Korea

### Abstract

---

Branched polyethyleneimine (bPEI) was a high gene transfection agent. However, its utilization as gene carrier was limited because of high cytotoxicity. To overcome these obstacle, chitosan was introduced to bPEI by EDC as coupling agent. The chemical structure of bPEI-grafted chitosan (PgC) was analyzed by 1H-NMR. The ternary complex with pDNA, PgC, and hyaluronic acid (HA) was prepared by electrostatic charge interaction in aqueous phase. Also, its gel retardation assay showed that pDNA was completely bound by PgC and HA. In addition, pDNA from ternary complex was protected against DNase. Moreover, the particle size and morphology of ternary complex were confirmed by DLS and TEM. Beside, its transfection with CD44-receptor overexpressed cancer cell showed that ternary complex with HA was increased more than binary complex without HA. To prove a targeting effect of ternary complexes, competition assay was accomplished in HCT116 cell. These results suggest that it can be enhanced to efficacy of gene delivery in CD44-receptor overexpressed cancer cell. This research was supported by The Leading Human Resource Training Program of Regional Neo industry through the National Research Foundation of Korea (NRF) funded by the Ministry of Science, ICT, and future planning (NRF-2016H1D5A1910499).

**Keywords:** Chitosan, Hyaluronic acid, Ternary complex, CD44-receptor, Transfection

---

\*All correspondence related to this article should be directed to Jae-Woon Nah, Suncheon National University, Republic Korea  
Email: [jwnah@suncheon.ac.kr](mailto:jwnah@suncheon.ac.kr)

## Preparation and Evaluation of Hyaluronic Acid-Coated Ternary Complex for Targeted Gene Delivery System

**Jae-Woon Nah<sup>1\*</sup>, Gyeong-Won Jeong<sup>2</sup>, Woong-Gil Hong<sup>3</sup>,  
Jun-Hyuk Ahn<sup>4</sup>**

<sup>1,2,3,4</sup> Suncheon National University, Republic Korea

### Abstract

---

Branched polyethyleneimine (bPEI) was a high gene transfection agent. However, its utilization as gene carrier was limited because of high cytotoxicity. To overcome these obstacle, chitosan was introduced to bPEI by EDC as coupling agent. The chemical structure of bPEI-grafted chitosan (PgC) was analyzed by <sup>1</sup>H-NMR. The ternary complex with pDNA, PgC, and hyaluronic acid (HA) was prepared by electrostatic charge interaction in aqueous phase. Also, its gel retardation assay showed that pDNA was completely bound by PgC and HA. In addition, pDNA from ternary complex was protected against DNase. Moreover, the particle size and morphology of ternary complex were confirmed by DLS and TEM. Beside, its transfection with CD44-receptor overexpressed cancer cell showed that ternary complex with HA was increased more than binary complex without HA. To prove a targeting effect of ternary complexes, competition assay was accomplished in HCT116 cell. These results suggest that it can be enhanced to efficacy of gene delivery in CD44-receptor overexpressed cancer cell. This research was supported by The Leading Human Resource Training Program of Regional Neo industry through the National Research Foundation of Korea (NRF) funded by the Ministry of Science, ICT, and future planning (NRF-2016H1D5A1910499).

**Keywords:** Chitosan, Hyaluronic Acid, Ternary Complex, CD44-Receptor, Transfection

---

\*All correspondence related to this article should be directed to Jae-Woon Nah, Suncheon National University, Republic Korea  
Email: [jwnah@suncheon.ac.kr](mailto:jwnah@suncheon.ac.kr)



---

---

Abstract Proceeding Book  
ASBMSR- February 01-02, 2018  
Tokyo, Japan  
ISBN: 978-969-695-002-8

---

---

## **TRACK D: ENGINEERING & TECHNOLOGY SCIENCES**



## Effect of Drain Extension on the Performance of 4-Mask Amorphous InGaZnO Channel Passivated Thin-Film Transistors

Chih-Chieh Hsu<sup>1\*</sup>, Po-Hao Huang<sup>2</sup>

<sup>1,2</sup>National Yunlin University of Science and Technology,  
 Taiwan

Abstract

---

A novel structure design for improving performance of a channel passivated (CHP) amorphous InGaZnO (a-IGZO) thin-film transistor (a-IGZO TFT) without using additional lithography processes was proposed in this work. An extended drain electrode was used as a parasitic field plate or a virtual top gate to active back channel conduction. Effects of the extended drain on the performance of the TFTs with different a-IGZO thickness (tIGZO) and channel passivation thickness (tCHP) were investigated. First, MoW with thickness of 100 nm was deposited by sputtering as the gate electrode. Second, 50-nm-thick silicon nitride and 200 nm-thick silicon oxide were grown by plasma-enhanced chemical vapor deposition (PECVD) as the gate insulator. Third, an a-IGZO layer with thickness of 50 nm was deposited by sputtering. Forth, a 200-nm thick silicon oxide was deposited as a channel passivation layer. Finally, a stacked layer of Ti (50nm) /Al (100nm) /Ti (50nm) was deposited and patterned as the source/drain electrode. A technology computer-aided design (TCAD) TFT model was established based on the measurement results of this fabricated a-IGZO CHP TFT. Simulation result shows that when extension of the drain electrode increases from 2.5  $\mu\text{m}$  to 9  $\mu\text{m}$ , more electrons can be induced to passivate the back-channel defect states. The virtual gate exhibits a higher controllability over subthreshold swing for a thinner a-IGZO active layer. By simultaneous driving of the virtual top gate and the bottom gate, bulk accumulation can be obtained to further enhance the on-state current. The optimal aIGZO CHP TFT can be obtained when the tCHP is 25 nm and the tIGZO is 10 nm. The threshold voltage is -0.96 V, subthreshold swing is 141 mV/decade, and mobility is 29.3  $\text{cm}^2/\text{V}\cdot\text{s}$ . Carrier concentration distribution, electric field distribution, and energy band diagrams are analyzed to explain the performance variation of the TFTs with different structure designs.

**Keywords:** Thin-Film Transistor, Electrical Characteristics, Field Plate, Defects

---

\*All correspondence related to this article should be directed to Chih-Chieh Hsu, National Yunlin University of Science and Technology, Taiwan. Email: cchsu@yuntech.edu.tw

## Bipolar Resistive Switching Characteristics of CuOx Memory Devices

**Chih-Chieh Hsu<sup>1\*</sup>, Yu-Sheng Lin<sup>2</sup>**

<sup>1,2</sup> National Yunlin University of Science and Technology, Taiwan

### Abstract

---

This study fabricated a CuOx resistive random access memory (RRAM) by using radio frequency (RF) sputtering. After ITO substrates were cleaned with acetone, ethanol, and deionized water, a CuOx layer was deposited by RF sputtering with a cuprous oxide (Cu<sub>2</sub>O) target (dia. 2", purity 99.95%) at room temperature. The base pressure of the sputtering system was 10<sup>-6</sup> torr and the working pressure was 10<sup>-3</sup> torr. Both argon and oxygen flow rates were 12 sccm. Al, which was deposited by evaporation, and In balls were used as top electrodes to obtain Al/CuOx/ITO and In/CuOx/ITO RRAMs. When using Al as the top electrode, a high resistive window, a ratio of high resistance state (HRS) to low resistance state (LRS), of ~10<sup>3</sup> was obtained at a read voltage 0.07 V. However, the resistive switching was not found in the In/CuOx/ITO RRAMs. The formation energy of Al<sub>2</sub>O<sub>3</sub> is known to be a high value of -1582 kJ/mol, which implies that spontaneous reaction of aluminum with oxygen that exists in the CuOx film is probable to occur. Therefore, the resistive switching behavior of the Al/CuOx/ITO RRAM is inferred to be caused by formation and dissociation of an interfacial Al<sub>2</sub>O<sub>3</sub> layer between the Al top electrode and the CuOx active layer. The memory structure was examined by a scanning electron microscope (SEM). The crystallinity of the CuOx film was investigated by using x-ray diffraction analysis (XRD). The chemical structure of the CuOx film was examined by using an X-ray photoelectron spectroscopy (XPS). Effects of temperature on electrical characteristic of the CuOx RRAM were also measured to investigate the resistive switching and the carrier conduction mechanisms.

**Keywords:** Copper oxide, Interfacial layer, Nonvolatile memory, Resistive random access memory (RRAM), Resistive switching (RS)

---

\*All correspondence related to this article should be directed to Chih-Chieh Hsu, National Yunlin University of Science and Technology, Taiwan  
Email: cchsu@yuntech.edu.tw

## Solution Processed ZnSnO as a Channel Layer for Thin Film Transistors

Chih-Chieh Hsu<sup>1</sup>, Cheng-Han Chou<sup>2\*</sup>,

<sup>1,2</sup> National Yunlin University of Science and Technology, Taiwan

### Abstract

Amorphous Zn-Sn-O (ZTO) thin-film transistors (TFTs) fabricated by using a rapid and low-cost solution process were investigated in this work. Effects of ZTO solution concentration on electrical characteristics of the TFTs were studied. The ZTO precursor solutions with concentrations of 0.065 M and 0.094 M were prepared by dissolving zinc acetate dihydrate ( $Zn(CH_3COO)_2 \cdot 2H_2O$ ) and tin chloride ( $SnCl_2$ ) into absolute alcohol. Ethanolamine was added to the solution as a stabilizer. The mixed solution was stirred at 70 °C for 1 hour. After cleaning a SiO<sub>2</sub>/Si substrate, a ZTO film was spin-coated with first spin speed of 1000 rpm for 10 s and second spin speed of 2000 rpm for 20 s. The deposited ZTO film was subsequently cured at 200 °C for 10 min and annealed at 600 °C for 1 hour. Finally, Al was deposited and patterned on the ZTO films as the source and drain electrodes. For the TFT fabricated with a ZTO concentration of 0.065 M, the on/off ratio was ~107, the mobility was 0.166 cm<sup>2</sup>/Vs, and the subthreshold swing (SS) was 0.6 V/decade. When the ZTO concentration was increased to 0.094 M, the on/off ratio and the mobility were significantly increased to ~108 and 1.23 cm<sup>2</sup>/Vs, respectively. A higher ZTO precursor solution can give a ZTO film with improved surface roughness and lower defect density. Surface morphology was examined by using scanning electron microscopy (SEM). Variation of the oxygen vacancy content was verified by X-ray photoelectron spectroscopy (XPS). The ZTO crystallinity was investigated by X-ray diffraction (XRD). The energy band diagram was explored to study the carrier transport process in the ZTO TFT. This study will be helpful for developing low-cost and high-performance ZTO TFTs in the future.

**Keywords:** Amorphous Oxide Semiconductor (AOS), Zinc Tin Oxide (ZTO), Thin-Film Transistor (TFT), Solution Process

\*All correspondence related to this article should be directed to Chih-Chieh Hsu, National Yunlin University of Science and Technology, Taiwan  
 Email: cchsu@yuntech.edu.tw

## Study of Performance Evaluation Inhibitor Corrosion Based on Green Corrosion Inhibitor of Extract Leaf Tobacco and Commercial Imidazoline Inhibitor in Sweet Environment at Carbon Steel AISI 1045 in NaCl 3.5% Solution

**Chusururi, Mochamad, Alvan Mifta<sup>1\*</sup>, Ravelia, Dendra<sup>2</sup>,  
Ahmadi, Fikri, Nafi'ul<sup>3</sup>, Saputro, Brahmanu, Wisnu<sup>4</sup>**  
<sup>1,2,3,4</sup> Institute of Technology Sepuluh Nopember, Indonesia

### Abstract

---

This study is to evaluate the performance of tobacco leaf extract and imidazoline commercial inhibitor in a sweet environment. This study used AISI 1045 carbon steel, with variation in pH 4 and pH 7, flow rate 7.85 cm/s, and 13.09 cm/s and NaCl 3.5% medium. For both used some testing, FTIR, XRD, Weight loss, Polarization, and Electrochemical Impedance Spectroscopy (EIS). Only for the tobacco leaf extract, the addition of a GC-FID method was done. For the tobacco showed GC-FID method test, nicotine level of total extract is 2.65%, and weight loss testing has lowest corrosion rate in pH 4 with flow rate 7.85 cm/s, concentration of inhibitor 265 ppm is 0.327 mmpy and efficiency 74.686%. While pH 7, flow rate 7.85 cm/s with concentration 132.5 ppm has corrosion rate 0.091 mmpy and efficiency 86.512%. XRD testing found FeCO<sub>3</sub> compound as corrosion product. Tobacco inhibitor made a thin layer on the surface of steel, which formed a complex compound [Fe(NH<sub>3</sub>)<sub>6</sub>]<sup>2+</sup>, hence can protect surface and decrease corrosion rate. For imidazoline inhibitor based on weight loss testing, the highest value of efficiency inhibitor in 200 ppm with flow rate 7.85 cm/s at the pH 4 is 82.59% with a low corrosion rate 0.104 mmpy. While at pH 7, the highest efficiency is 92.697% in 100 ppm concentration of inhibitor and flow rate 7.85 cm/s with a low corrosion rate 0.037 mmpy. XRD testing showed Fe<sub>24</sub>N<sub>10</sub> compound formed by the reaction that occurs between Fe and the pyridine nitrogen atom. And for both inhibitors, FTIR testing showed functional group of inhibitors precipitated to sample when immersed and EIS testing showed that the addition of the inhibitor concentration can increase the value of polarization resistance to the solution and the value of (constant phase element) declined.

To be Continued.....

To be Continued.....

**Keywords:** CO<sub>2</sub>, Corrosion, Tobacco Inhibitor, Imidazoline Inhibitor, AISI 1045

---

\*All correspondence related to this article should be directed to Mochamad Alvan Mifta Chusururi, Institute of Technology Sepuluh Nopember, Indonesia  
Email: [mchusururi@gmail.com](mailto:mchusururi@gmail.com)

## The World Need of Pakistan Asian Hybrid Technological World in the Modern World

**Shafiq Ur Rehman<sup>1\*</sup>, Mubeen Balooch<sup>2</sup>**

<sup>1,2</sup> Sir Syed University of Engineering & Technology, Pakistan

### Abstract

---

In this editorial, we describe the need of The World Essential of Pakistan Asian Hybrid. Technological World in the Present World of Technology. Here we specific major issue discoursed in the nominal world. The best method to find a new remarkable technology, which brings all technology together. In this article, we try to explain what measure to technology should be hybrid. Future potential of the world requirement and challenges of the real world of technology. The basic purpose of hybrid world is to solve problems of human being within a short period of time. The other focal purpose of research is to eradicate poverty of the people of Asia and other parts of the world. The main idea is to technologically advance the world and develop people's conditions by reducing deficiency.

***Keywords:*** Asian Hybrid Technology, World Need

---

\*All correspondence related to this article should be directed to Shafiq Ur Rehman, Sir Syed University of Engineering and Technology, Pakistan  
Email: srehan198456@yahoo.com

## The Altmetrics for Measuring Readers' Intentions Towards Scholarly Contents in the Field of Information Security

**Halima Saleh Ali Al Balushi<sup>1\*</sup>, Nawal Ali Abdullah Al Bulushi<sup>2</sup>,  
Rabab Juma Mohammed Al-Riyami<sup>3</sup>, Naeema Jabur<sup>4\*</sup>**  
<sup>1,2,3,4</sup> Sultan Qaboos University, Muscat, Oman

### Abstract

---

This study aimed to apply altmetrics tools to measure readers' intentions towards the highly cited contents in the field of information security among specific types of scholarly documents and, therefore, investigate the correlation between the citations (Bibliometrics) and readers' intentions (Altmetrics) for each type of scholarly document. To achieve study objectives, the researchers used Scopus database to find out the highest productive types of documents published in the field of information security in the period (2014-2015) - since this period is considered as a valid period for the scholarly production to be available in the full text and, therefore, to take the right to use and cite, as well as to be used and interacted through different social media channels. Conferences papers, articles, and book chapters were the most productive types of scholarly documents. The first 20 of highly cited scholarly contents from each document types were chosen to be analyzed for measuring the readers' intentions. The results reveal that articles were the types of documents that gained the highest number of citations, followed by conference papers and book chapters. As articles gained the highest number of citations, they also gained the highest number of readers' intentions. This is an expected result because citations and intentions are affected by each other. The type of document affected the correlation. The statistical results reveal that the significant correlation between citations and intentions was for the articles. Articles gained the highest citations and readers' intentions.

***Keywords:*** Altmetrics, Information Security, Readers' Intentions, Citations

---

\*All correspondence related to this article should be directed to Halima Saleh Ali Al Balushi, Sultan Qaboos University, Muscat, Oman  
Email: s91068@student.squ.edu.om

## A Somatosensory Edutainment System Based on Plant Growth Simulation of L-system

Lieu-Hen Chen<sup>1\*</sup>, Ting-Hui Lee<sup>2</sup>, Cheng-Yu Sun<sup>3</sup>  
<sup>1,2,3</sup> National Chi Nan University, Taiwan

### Abstract

---

In recent years, the somatosensory technology has been used widely in the game industry. Moreover, it is also used widely for the purpose of rehabilitation, motion capture, input/output interfaces, and so on. Meanwhile, the development and application of VR and AR have also become a hot trend. In many scenes of virtual reality environments or movies, a large number of plants often appear to present a natural landscape. In the field of Computer Graphics, Lindenmayer system — or L-system for short — is the mainstream method of simulating the growth of plants. The L-system is a parallel rewriting system which consists of axiom, the number of iteration, angle, and production rules. In this paper, we integrate the motion-capture technique of Kinect 2, the plant growth simulation of L-system, and Unity to implement a somatosensory Edutainment System. This system provides users interesting and interactive experience of growing plants in real-time. The user can swing his/her body to control the virtual tree growth in the beginning. After that, the virtual tree will swing its branches as user did, just like the Ents in the fantasy world. Finally, user can wear HTC VIVE HMD to observe their own generated trees. We look forward to increasing users' awareness and care about the environment through our system.

**Keywords:** L-system, Somatosensory, Human-computer interaction, Plant Growth Simulation

---

\*All correspondence related to this article should be directed to Lieu-Hen Chen, National Chi Nan University, Taiwan  
Email: lhchen@csie.ncnu.edu.tw

## Dynamic TDD Configuration for Type-1 Inband RN in the LTE-A Network

**Chun-Chuan Yang<sup>1\*</sup>, Jeng-Yueng Chen<sup>2</sup>, Yi-Ting Mai<sup>3</sup>,  
Yi-Ming Tsai<sup>4</sup>**

<sup>1,2,3,4</sup> National Chi Nan University, Taiwan

### Abstract

---

LTE-Advanced (LTE-A) is one of the radio access technology standards developed by the Third Generation Partnership Project (3GPP), and it is also the most popular standard of 4G mobile communications technology at present. In order to extend the coverage area and provide higher transmission rates for users at the cell edge, the idea of Relay Node (RN) was proposed in LTE-A. On the other hand, two duplex modes are defined in LTE-A, namely frequency division duplex (FDD) and time division duplex (TDD), for transmission in both the uplink (UL) and downlink (DL) directions. In this paper, dynamic TDD configuration for Type-1 inband RN is addressed. Four schemes under top-down and bottom-up strategies are proposed to select a proper configuration for the backhaul link and the access links. Simulation study demonstrates the benefit of the top-down schemes in terms of higher throughput than bottom-up schemes as well as the contrast scheme of random selection

**Keywords:** LTE-A, Relay Node, TDD Configuration

---

\*All correspondence related to this article should be directed to Chun-Chuan Yang, National Chi Nan University, Taiwan  
Email: ccyang@csie.ncnu.edu.tw

## A Neural Network Prediction For Effects of Land Use Patterns on Total Nitrogen in Taiwan's River Basins

**Tzu-Yi Pai<sup>1\*</sup>, Ray-Shyan Wu<sup>2</sup>, Ching-Ho Chen<sup>3</sup>, Ya-Hsuan Wang<sup>4</sup>, Yun-Hsin Cheng<sup>5</sup>, Meng-Hung Tsai<sup>6</sup>, Ya-Chun Zhao<sup>7</sup>, Wun-Long Luo<sup>7</sup>, Gin-Tai Wang<sup>8</sup>, Hsiu-Ling Chen<sup>9</sup>, Chia-I Shen<sup>10</sup>, Pin-Tsen Lin<sup>11</sup>, Pei-Yu Chiang<sup>12</sup>, Hsing-Jung Lee<sup>13</sup>, Nai-Jun Zeng<sup>14</sup>, Yu-Wen Huang<sup>15</sup>, Chien-Min Lee<sup>16</sup>**

<sup>1,4-16</sup> National Taichung University of Education, Taiwan

<sup>2</sup> National Central University, Chungli, Taiwan

<sup>3</sup> National Taipei University of Education, Taipei, Taiwan

<sup>4, 9,10,12</sup> Taichung City Environmental Protection Bureau, Taiwan

### Abstract

---

When nitrogen presents in the nature, there are many oxidation states. If nitrogen with different oxidation states is discharged into river, negative environmental effects will occur. Therefore, in this study, the artificial neural network (ANN) was used to explore the effects of land use pattern on total nitrogen (TN) in Taiwan's river basins. At first, 22 river basins with more complete data were selected for correlational analysis of TN and land use patterns to determine the land use pattern with significant effect. Subsequently, the significant land use patterns with higher correlational coefficients were used as the input variables to train the ANN. The results indicated that ANN could predict the TN concentrations well.

**Keywords:** Artificial Neural Network, Land Use Patterns, Total Nitrogen, River Basins

---

\*All correspondence related to this article should be directed to Tzu-Yi Pai, National Taichung University of Education, Taichung, Taiwan  
Email: bai@ms6.hinet.net

## Development of a SRM-based Drive for Built-in Automotive Vacuum Cleaners

**Jaehyuck Kim\***

Wonkwang University, Korea South

### Abstract

---

This paper describes the design and control of a SRM (Switched reluctance motor) drive system for automotive vacuum cleaners. With the increasing popularity of outdoor activities and recreation, the automobile industry has expanded the technology to enhance the convenience of the automobile industry, introducing a built-in vacuum cleaner. However, conventional DC motors in vacuum cleaning systems have several disadvantages, such as maintenance cost and life of the commutator-brush structure. SRM is a good alternative to existing DC motors due to its high speed capability, long life, low maintenance cost, and high efficiency. The prototype SRM drive is designed and built to verify its use in a built-in automotive vacuum cleaner system. Dynamic simulation is performed to determine the optimum switching angle for maximum efficiency and minimum torque ripple. We also perform load tests, noise measurements, and suction tests.

**Keywords:** Built-In Vacuum Cleaners, Motor Drive, Switched Reluctance Motor (SRM), Variable Speed Drive

---

\*All correspondence related to this article should be directed to Jaehyuck Kim, Wonkwang University, Korea South  
Email: [jaehkim@wku.ac.kr](mailto:jaehkim@wku.ac.kr)

## Analytical Approximations for American Options: The Binary Power Option Approach

**Pai Ta Shih<sup>1\*</sup>, Mi-Hsiu Chiang<sup>2</sup>, Hsin-Hao Fu<sup>3</sup>, Chien-Ling Lo<sup>4</sup>**

<sup>1</sup>National Taiwan University, Taiwan

<sup>2</sup>National Chengchi University, Taiwan

<sup>3</sup>Fo Guang University, Taiwan

<sup>4</sup>Feng Chia University, Taiwan

### Abstract

---

This study proposes an innovative approach to value American options. Using a portfolio of binary power options to replicate the early exercise premium, we modify Medvedev and Scaillet (2010) to derive an analytical approximation of American option values under the Black-Scholes framework. Compared with Medvedev and Scaillet (2010), our approach provides a much simpler functional form of the early exercise premium that can be easily extended to high-order series expansions. The numerical results show that the pricing performance of our method is closely comparable to that of Medvedev and Scaillet (2010) and superior to that of Barone-Adesi and Whaley (1987).

**Keywords:** American Option, Binary Power Option, Early Exercise Premium

---

\*All correspondence related to this article should be directed to Pai Ta Shih, National Taiwan University, Taiwan  
Email: [ptshih@ntu.edu.tw](mailto:ptshih@ntu.edu.tw)



---

---

Abstract Proceeding Book  
ASBMSR- February 01-02, 2018  
Tokyo, Japan  
ISBN: 978-969-695-002-8

---

---

## **TRACK E: PHYSICAL & APPLIED SCIENCES**



## The Effect of Biofertilizer and Inorganic Fertilizer on the Vegetative Growth of Sugarcane (*Saccharum officinarum*)

**Sudiarso<sup>1</sup>, Ririen Prihandarini<sup>2\*</sup>**

<sup>1</sup> Universitas Brawijaya, Indonesia

<sup>2</sup> Universitas Widyagama, Indonesia

### Abstract

---

Sugarcane requires large nutrients during the growth period. During the fulfillment of nutrients cane derived from inorganic fertilizers, continuous inorganic fertilizer application would be at risk of soil conditions. It required new technologies to reduce the dose of inorganic fertilizers such as biological agents. The purpose of this knowing the effect of combination of biological agents with inorganic fertilizers and finding the right dose for the combination of biological agents with inorganic fertilizer for the growth of sugarcane. The research was conducted in the village Pakiskembar, Pakis subdistrict, Malang. The study was using a randomized block design with 7 treatments and 4 replications. Data were analyzed using analysis of variance (ANOVA), if there is significant difference then followed by a further test LSD 5%. The results showed the effect of combination of inorganic fertilizer with biological agents. There are significant differences in plant height and length of the rod at 139 DAP, stem diameter at 153 DAP, and the number of tillers at 97 DAP. P5 (NPK 300 kg ha<sup>-1</sup> + ZA 400 kg ha<sup>-1</sup> + Biofertilizer 30 L ha<sup>-1</sup>) is known to give good growth in most but not significantly different from P1 (NPK 400 kg ha<sup>-1</sup> + ZA 600 kg ha<sup>-1</sup>). Combination of inorganic fertilizer with biological agents can lower the dose of inorganic fertilizer and biological agents can provide nutrients needed for sugarcane so that the use of inorganic fertilizers can be reduced.

***Keywords:*** Biological Agents, Inorganic Fertilizer, Sugar, Combination

---

\*All correspondence related to this article should be directed to Ririen Prihandarini, Universitas Widyagama, Indonesia  
Email: [ririenuwg@gmail.com](mailto:ririenuwg@gmail.com)

## Utilization of Oil Mimba and Organic Fertilizer of Paitan Leaves Based on Microorganism For Improving Growth And Sweet Corn (Zea Mays Var. Saccharata Sturt) Production

**Sudiarso<sup>1</sup>, Ririen Prihandarini<sup>2\*</sup>**

<sup>1</sup> Universitas Brawijaya, Indonesia

<sup>2</sup> Universitas Widyagama, Indonesia

### Abstract

---

The aim of this research is to know the effectiveness of organic fertilizer from paitan leaf (P) and organic pesticide from neem oil (M) based on the addition of microorganisms (photosynthetic bacteria and Streptomyces) to improve the function of paitan as organic fertilizer and mimba oil as organic pesticide. The use of pesticides and organic fertilizers was tested on sweet corn ((Zea mays var. Saccharata Sturt). The research was conducted in Mojolangu Village, Lowokwaru District, Malang City. The study was conducted from June to August 2016. The design using factorial randomized block design (RBD) consisted of 2 treatments: Organic Fertilizer from Paitan (P) and Organic Pesticide from Mimba Oil (M). P0: No paitan fertilizer, P1: Dose of fertilizer paitan 10 ton ha<sup>-1</sup>, P2: Dosage of 15 ton ha<sup>-1</sup> fertilizer. M0: Without Neem, M1: Dosage of Neem Oil 2.5 g / plant, M2: Dosage of neem oil 5 g / plant, M3: Dosage of oil of mimba 7.5 g / plant. The results showed that observation of crops resulted in interaction on the weight of sweet corn cob with skin, the weight of sweet corn without skin, sweet corn length, and production per hectare. Provision of 15 ton / ha of fertilizer with 5 grams of neem oil / plant and 15 ton / ha of paitan / ha with neem oil 7.5 grams / plant gives the best yield per hectare. Fertilizer paitan gives a real effect on plant height, leaf number, leaf area, plant dry weight, diameter of cob, fresh weight of plant, and sweet corn sugar. Fertilizer paitan 10 ton / ha and fertilizer paitan 15 ton / ha give better influence than fertilizer paitan 0 ton / ha.

**Keywords:** Paitan Leaves, Neem Oil, Organic Farming, Sweet Corn

---

\*All correspondence related to this article should be directed to Ririen Prihandarini, Universitas Widyagama, Indonesia  
Email: [ririenuwg@gmail.com](mailto:ririenuwg@gmail.com)

## Environmental Destruction Due to Coal Mining

**Hastirullah Fitrah\***  
Universitas Achmad Yani, Indonesia

### Abstract

---

Environmental degradation in Indonesia, already at a very alarming level, is evident from many changing environmental conditions, such as climate change, land use change and ecosystem changes that pose a threat to the survival of the earth. Therefore, this paper aims to describe the environmental damage settlement through the improvement of former coal mine land, the use of organic liquid organic fertilizer, and the performance of the former coal mine.

**Keywords:** Environmental, Changing, Coal Mine Land

---

\*All correspondence related to this article should be directed to Hastirullah Fitrah, Universitas Achmad Yani, Indonesia  
Email: muhayat@uay.ac.id

## **FUTURE EVENT**

## INTERNATIONAL CONFERENCE ON

“Global Issues in Social Sciences, Psychology and Business Management (GISSPBM-2018)”



**Date:** March 23-24, 2018

**Venue:** Rydges Camperdown, Sydney Australia

**Submission Email:** [gisspbm@gissf.com](mailto:gisspbm@gissf.com)

**Abstract Submission Date:** February 25, 2018

**Full Paper Submission Date:** March 5, 2018

**Selected conference papers will be published in special /regular issue of ISI/Scopus indexed journals associated with this conference.**

### **Conference Main Tracks**

- Social and Community Studies
- Arts
- Humanities
- Civic and Political Studies
- Cultural & Global Studies
- Environmental Studies
- Organizational Studies
- Educational and Communication Studies
- Economics, Finance & Accounting
- Business and Management Studies

For more details visit <http://gissf.com/>

## INTERNATIONAL CONFERENCE ON

“Sustainable Development in Information Technology,  
Business and Social Sciences (SDITBSS-2018)”



**Date:** April 05-06, 2018

**Venue:** Holiday Inn Bangkok Silom, Bangkok Thailand

**Submission Email:** [Sditbss@gissf.com](mailto:Sditbss@gissf.com)

**Abstract Submission Date:** March 15, 2018

**Full Paper Submission Date:** March 20, 2018

**Selected conference papers will be published in special /regular issue of ISI/Scopus indexed journals associated with this conference.**

### Conference Main Tracks

- Social and Community Studies
- Arts
- Humanities
- Civic and Political Studies
- Cultural & Global Studies
- Environmental Studies
- Organizational Studies
- Educational and Communication Studies
- Economics, Finance & Accounting
- Business and Management Studies

For more details visit <http://gissf.com/>

# INTERNATIONAL CONFERENCE ON

“Dynamics of Management and Economic Research  
(DMER-2018)”



**Date:** April 21-22, 2018

**Venue:** Sallés Hotel Pere IV Barcelona, Spain

**Submission Email:** [dember@gissf.com](mailto:dember@gissf.com)

**Abstract Submission Date:** March 30, 2018

**Full Paper Submission Date:** April 10, 2018

**Selected conference papers will be published in special /regular issue of ISI/Scopus indexed journals associated with this conference.**

## **Conference Main Tracks**

- Social and Community Studies
- Arts
- Humanities
- Civic and Political Studies
- Cultural & Global Studies
- Environmental Studies
- Organizational Studies
- Educational and Communication Studies
- Economics, Finance & Accounting
- Business and Management Studies

For more details visit <http://gissf.com/>

## INTERNATIONAL CONFERENCE ON

“Law, Business, Education and Social Sciences  
(LBESS-2018)”



**Date:** May 12-13, 2018

**Venue:** Hilton London Heathrow Airport Terminal 5

**Submission Email:** [lbess@gissf.com](mailto:lbess@gissf.com)

**Abstract Submission Date:** April 15, 2018

**Full Paper Submission Date:** April 20, 2018

**Selected conference papers will be published in special /regular issue of ISI/Scopus indexed journals associated with this conference.**

### **Conference Main Tracks**

- Social and Community Studies
- Arts
- Humanities
- Civic and Political Studies
- Cultural & Global Studies
- Environmental Studies
- Organizational Studies
- Educational and Communication Studies
- Economics, Finance & Accounting
- Business and Management Studies

For more details visit <http://gissf.com/>

## INTERNATIONAL CONFERENCE ON

“Emerging Issues in Economics , Social Sciences and  
Business Management (EIESSBM-2018)”



**Date:** June 25-26, 2018

**Venue:** The Federal Kuala Lumpur Malaysia

**Submission Email:** [eiessbm@gissf.com](mailto:eiessbm@gissf.com)

**Abstract Submission Date:** May 10, 2018

**Full Paper Submission Date:** May 25, 2018

**Selected conference papers will be published in special /regular issue of ISI/Scopus indexed journals associated with this conference.**

### **Conference Main Tracks**

- Social and Community Studies
- Arts
- Humanities
- Civic and Political Studies
- Cultural & Global Studies
- Environmental Studies
- Organizational Studies
- Educational and Communication Studies
- Economics, Finance & Accounting
- Business and Management Studies

For more details visit <http://gissf.com/>

## INTERNATIONAL CONFERENCE ON

“Strategy Theories in Business and Social Science  
(STBSS-2018)”



**Date:** July 14-15, 2018

**Venue:** Mecure Banjarmasin, Indonesia

**Submission Email:** [stbss@gissf.com](mailto:stbss@gissf.com)

**Abstract Submission Date:** June 5, 2018

**Full Paper Submission Date:** June 30, 2018

**Selected conference papers will be published in special /regular issue of ISI/Scopus indexed journals associated with this conference.**

### **Conference Main Tracks**

- Social and Community Studies
- Arts
- Humanities
- Civic and Political Studies
- Cultural & Global Studies
- Environmental Studies
- Organizational Studies
- Educational and Communication Studies
- Economics, Finance & Accounting
- Business and Management Studies

For more details visit <http://gissf.com/>

## INTERNATIONAL CONFERENCE ON

“Recent Development in Economics, Business Management and Information Technology (RDEBMIT-2018)”



**Date:** July 27-28, 2018

**Venue:** The Howard Plaza Hotel Taipei, Taiwan

**Submission Email:** [rdebmit@gissf.com](mailto:rdebmit@gissf.com)

**Abstract Submission Date:** July 10, 2018

**Full Paper Submission Date:** July 15, 2018

**Selected conference papers will be published in special /regular issue of ISI/Scopus indexed journals associated with this conference.**

### **Conference Main Tracks**

- Social and Community Studies
- Arts
- Humanities
- Civic and Political Studies
- Cultural & Global Studies
- Environmental Studies
- Organizational Studies
- Educational and Communication Studies
- Economics, Finance & Accounting
- Business and Management Studies

For more details visit <http://gissf.com/>

## 2<sup>nd</sup> INTERNATIONAL CONFERENCE ON

“Academic Research in Social Sciences and Humanities  
(ARSSH-2018)”



**Date:** August 24-25, 2018

**Venue:** Kuntai Hotel Beijing China

**Submission Email:** [arssh@gissf.com](mailto:arssh@gissf.com)

**Abstract Submission Date:** July 25, 2018

**Full Paper Submission Date:** July 30, 2018

**Selected conference papers will be published in special /regular issue of ISI/Scopus indexed journals associated with this conference.**

### **Conference Main Tracks**

- Social and Community Studies
- Arts
- Humanities
- Civic and Political Studies
- Cultural & Global Studies
- Environmental Studies
- Organizational Studies
- Educational and Communication Studies
- Economics, Finance & Accounting
- Business and Management Studies

For more details visit <http://gissf.com/>

## 2<sup>nd</sup> INTERNATIONAL CONFERENCE ON

“Academic Research in Social Sciences and Humanities  
(CSSR-2018)”



**Date:** September 27-28, 2018

**Venue:** Holiday Inn Bangkok Silom, Bangkok Thailand

**Submission Email:** [cssr@gissf.com](mailto:cssr@gissf.com)

**Abstract Submission Date:** September 5, 2018

**Full Paper Submission Date:** September 10, 2018

**Selected conference papers will be published in special /regular issue of ISI/Scopus indexed journals associated with this conference.**

### **Conference Main Tracks**

- Social and Community Studies
- Arts
- Humanities
- Civic and Political Studies
- Cultural & Global Studies
- Environmental Studies
- Organizational Studies
- Educational and Communication Studies
- Economics, Finance & Accounting
- Business and Management Studies

For more details visit <http://gissf.com/>

## INTERNATIONAL CONFERENCE ON

“ Innovation in Global Business, Social Sciences &  
Economics (IGBSSE-2018)”



**Date:** October 5-6, 2018

**Venue:** Hi Seoul Youth Hostel Seoul, South Korea

**Submission Email:** [igbsse@gissf.com](mailto:igbsse@gissf.com)

**Abstract Submission Date:** September 20, 2018

**Full Paper Submission Date:** September 20, 2018

**Selected conference papers will be published in special /regular issue of ISI/Scopus indexed journals associated with this conference.**

### **Conference Main Tracks**

- Social and Community Studies
- Arts
- Humanities
- Civic and Political Studies
- Cultural & Global Studies
- Environmental Studies
- Organizational Studies
- Educational and Communication Studies
- Economics, Finance & Accounting
- Business and Management Studies

For more details visit <http://gissf.com/>

## 2<sup>nd</sup> INTERNATIONAL CONFERENCE ON

“Dynamics of Social Sciences and Humanities Research  
(DSSHR-2018)”



**Date:** October 19-20, 2018

**Venue:** Istanbul GONEN Hotel, Istanbul, Turkey

**Submission Email:** [dsshr@gissf.com](mailto:dsshr@gissf.com)

**Abstract Submission Date:** September 25, 2018

**Full Paper Submission Date:** October 10, 2018

**Selected conference papers will be published in special /regular issue of ISI/Scopus indexed journals associated with this conference.**

### Conference Main Tracks

- Social and Community Studies
- Arts
- Humanities
- Civic and Political Studies
- Cultural & Global Studies
- Environmental Studies
- Organizational Studies
- Educational and Communication Studies
- Economics, Finance & Accounting
- Business and Management Studies

For more details visit <http://gissf.com/>

## INTERNATIONAL CONFERENCE ON

“Research Methodology for Business Economics, Social Sciences and Entrepreneurial Studies (RBESE-2018)”



**Date:** November 27-28, 2018

**Venue:** The Trans Resort Bali

**Submission Email:** [rbese@gissf.com](mailto:rbese@gissf.com)

**Abstract Submission Date:** September 25, 2018

**Full Paper Submission Date:** October 10, 2018

**Selected conference papers will be published in special /regular issue of ISI/Scopus indexed journals associated with this conference.**

### Conference Main Tracks

- Social and Community Studies
- Arts
- Humanities
- Civic and Political Studies
- Cultural & Global Studies
- Environmental Studies
- Organizational Studies
- Educational and Communication Studies
- Economics, Finance & Accounting
- Business and Management Studies

For more details visit <http://gissf.com/>

## 2<sup>nd</sup> INTERNATIONAL CONFERENCE ON

“Social and Management Sciences; Theoretical and Practical Approaches (SMSTPA-2018)”



**Date:** December 15-16, 2018

**Venue:** Hotel Grand Pacific Singapore

**Submission Email:** [smstpa@gissf.com](mailto:smstpa@gissf.com)

**Abstract Submission Date:** October 10, 2018

**Full Paper Submission Date:** October 15, 2018

**Selected conference papers will be published in special /regular issue of ISI/Scopus indexed journals associated with this conference.**

### **Conference Main Tracks**

- Social and Community Studies
- Arts
- Humanities
- Civic and Political Studies
- Cultural & Global Studies
- Environmental Studies
- Organizational Studies
- Educational and Communication Studies
- Economics, Finance & Accounting
- Business and Management Studies

For more details visit <http://gissf.com/>

# CSR



Environment

Charities

Public Health



Growth and  
Development



Sustainability



## **CSR Activity Conducted By GI Social Sciences Forum: Sport Activation for Children against Negative Impact of Internet & Technology**

In April 2016, GI Social Sciences Forum conducted Corporate Social Responsibility program together with Maestro and the Clover as Sport Facility Provider in Bandung, initiating an event with theme:



### **The Objectives of this event were:**

1. Media of education for parents and children to be aware of digital new era and its impact on children's life
2. Facilitate and promote futsal as one of the kinds of sports activation that can be alternative activity for children against the negative impact of internet
3. Social activity and charity engaging orphans to enjoy sports activities together with their friends
4. Corporate Social Responsibility of Company to contribute to the society especially to solve one of the social problems in Bandung.

Highlights of CSR Activities are given below:



## **GI Social Sciences Forum Malaysia Team conducted its Latest CSR activity at Rumah Charis, Kuala Lumpur, Malaysia Children Home**

GI Social Sciences Malaysia Team conducted its latest CSR activity at Rumah Charis, Kuala Lumpur, Malaysia Children home. The children home ministry provides care for orphans and single parent children, their homes and activities aim to create a suitable environment to enable children to grow. They help to provide spiritual direction, education, and counselling for the children. Emphasis was given to fellowshiping and spending time with the children over refreshments, as well as presenting them with small gifts and the organizing of special entertainment programmes for the children such as a special game segment. One of the other highlights of the evening was the goodie bags distribution programme carried out by GI Social Sciences Forum



## GI Social Sciences Forum Indonesian Team conducted its Latest CSR activity in Ramadan for Local Community Welfare, Sharing Happiness and developing Orphan Children

GI Social Sciences Forum Indonesian team conducted its latest CSR activity in Ramadan for orphans. The purpose of this activity was to give happiness and develop orphans with the support of more than 60 volunteers and distribute iftar to more than 400 beneficiaries (yateem, orphans, and dhuafa). GI Social Sciences Forum Indonesian team spent time with children and conducted different activities for their moral self-development.

Highlights of this activity are given below:







# ASBMSR-2018

---

February 1-2, 2018

Venue: TKP Conference Center, Ichigaya, Tokyo, Japan

## Vision

Researching and  
Developing to promote  
Innovation

## Mission

Our mission is to  
persistently nurture the  
values to promote the  
institutional and  
academic development  
through quality research  
contributions.

## Core Values

Capacity Building,  
Learning of New  
Insights and  
Innovation.

ISBN 978-969-695-002-8



[www.gissf.com](http://www.gissf.com)