

2nd International Conference on "TRENDS IN MULTIDISCIPLINARY BUSINESS AND ECONOMIC RESEARCH"

2nd International Conference On  
Trends in Multidisciplinary  
Business and Economic Research  
**TMBER**

BANGKOK, THAILAND  
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PROCEEDINGS

BOOK OF ABSTRACTS

TMBER-2015

2nd International Conference on  
“TRENDS IN MULTIDISCIPLINARY  
BUSINESS AND ECONOMIC RESEARCH”  
(TMBER- 2015)

Bangkok Silom, Thailand.

**Global Illuminators,  
Kuala Lumpur Malaysia**

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## INTERNATIONAL SCIENTIFIC COMMITTEE **TMBER 2015**

### **BUSINESS, MANAGEMENT AND ECONOMICS STUDIES**

**Palti Marulitua Sitorus (PhD).** *Chair of Scientific & Review Committee, Telkom University Indonesia.*

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**Balachandar S. Sayapathi (PhD).** *Centre for Occupational and Environmental Health, Faculty of Medicine, University of Malaya.*

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

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## CONFERENCE CHAIR MESSAGE

### **Farooq Ahmed Jam (PhD)**



International Conference On “Trends in Multidisciplinary Business and Economic Research” (TMBER-2015)” 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 interact with other renowned scholars for possible future collaborations.

I am really thankful to our honourable 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 key note 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 back to this society. Let's break all the discriminating barriers and get free from all minor affiliations. Let's contribute even a little or single step for betterment of society and welfare of humanity to bring prosperity, peace and harmony in this world. Stay blessed.

Thank you

**Farooq Ahmed Jam (PhD)**

Conference Chair TMBER 2015

Executive Director

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## KEYNOTE SPEAKER

### **Amarasinghe B.M.W.P.K. (Ph.D)**



**Professor & Dr. Padma Amarasinghe** graduated in Chemical Engineering in 1983 with a First Class Honours. She joined the Department of Chemical Engineering, University of Moratuwa in 1984 as a lecturer. Padma obtained her M.Sc. and Ph.D from the University of

Manchester (UMIST), United Kingdom in 1986 and 1990 respectively. She is involved in teaching Unit Operations and Particle Technology. She has served as the Head of the Department from 2001 to 2004. She has current research interests in Particle Technology and applications in environmental pollution control, Equilibrium and kinetic characterization of adsorbents and process development, Rice bran stabilization, optimization of oil extraction and process equipment design and Fluidized bed and spouted bed technology for drying. Padma was promoted to the post of Professor in 2009. She is a Chartered Engineer and Member of the Institution of Engineers Sri Lanka. She has received E O E Pereira Award of the Institution of Engineers, Sri Lanka, University of Moratuwa Outstanding Research Award and Presidential award for scientific research for her the research work. She serves as the reviewer for several international research journals and also a member of the Research committee on Engineering science and Architecture, National Science and Foundation. She received the Commonwealth Fellowship from UK's association of commonwealth universities to pursue post doctoral research work at the University of Leeds, UK., Fulbright Fellowship from US- Sri Lanka Fulbright Commission under advanced research and university lecturing awards, University of Missouri-Rolla, USA and Research fellowship from National Science Foundation, Sri Lanka.



# CONFERENCE PROGRAM

**DAY 01 Wednesday (March 25, 2015)**

**Welcome Reception & Registration**

**8:15 am – 9:00 am**

**Opening Ceremony (09:00am – 10:30 am)**

**Venue: Room 1**

09:00 am – 9:15 am	Welcome Remarks – <b>Ms. Hendrati Dwi Mulyaningsih</b>
09:15am - 09:25am	Opening Speech – <b>Tariq Iqbal Khan- Director-Global Operations and Conferences Co-chair</b>
09:25 am – 9:45 am	Key Note Speech – <b>Prof. Dr. Amarasinghe B.M.W.P.K.</b>
09:45 am - 10:30 am	Group Photo & Award Ceremony

**Grand Networking Session and Tea Break (10:30 am – 11:00 am)**

**DAY 01 Wednesday (March 25, 2015)**

**Session 1 (11:00 am – 1:00 pm)**

**Venue: Room 1**

**Session Chairs: Dr Raju Ranaswamy & Dr Rakesh Singh**

**Track A: Business, Management and Economics Studies**

<b>TMBER-15-118</b>	PERFORMANCE APPRAISAL SYSTEM OF THE ACADEMICS IN PUBLIC AND PRIVATE UNIVERSITIES OF BANGLADESH: AN EMPIRICAL STUDY	MINDIA, PIANA MONSUR
<b>TMBER-15-119</b>	INNOVATIVE POLICY OPTIMIZATION: A CATALYST FOR MULTIDISCIPLINARY BUSINESS AND ECONOMIC DEVELOPMENTA	MOHAMED HANEFUDDIN
<b>TMBER-15-123</b>	INTERACTION BETWEEN COMMUNICATION AND ORGANIZATIONAL CONFLICT AND ITS RELATIONSHIP WITH PERFORMANCE	OMID MAHDIEH
<b>TMBER-15-180</b>	INTERDISCIPLINARITY AND CLIMATE CHANGE ADAPTATION IN BUSINESS: THE CASE OF CANADA'S LARGEST WINE REGION	GARY JAMES PICKERING
<b>TMBER-15-187</b>	JANUARY EFFECT OF STOCK RETURNS ON INDONESIA: THE UNCONDITIONAL METHOD AND THE CONDITIONAL METHOD	IKA PRATIWI SIMBOLON

**Lunch Break (1:00 pm – 2:00 pm)**

**DAY 01 Wednesday (March 25, 2015)**

**Session 1 (11:00 am – 1:00 pm)**

**Venue: Room 2**

**Session Chairs: Dr. Shelia Mokoboto Zwane & Prof Naeema .H .Jabur**

**Track B: Social Science & Humanities**

<b>TMBER-15-102</b>	ECOTOURISM AND VALUE ADDING: SOURCE OF LIVELIHOOD AMONG THE VILLAGERS IN BASEY SAMAR, EASTERN VISAYAS, PHILIPPINES	ANITA G. CULAR
<b>TMBER-15-106</b>	"THE ROLE OF SELF-DEVELOPMENT OF FUTURE SPECIALISTS IN MULTILINGUAL EDUCATION".	GULNUR ISSABEKOVA
<b>TMBER-15-111</b>	THE COMPARATIVE STUDY OF ISLAMIC PHILOSOPHY AND INDIAN PHILOSOPHY IN THE MATTER OF REINCARNATION	MOHAMMAD HASSAN BORHANIFAR
<b>TMBER-15-127</b>	EXPLORING THE LEARNING STYLE PREFERENCES USED BY ACCOUNTING STUDENTS IN A UNIVERSITY OF TECHNOLOGY IN SOUTH AFRICA: IMPLICATIONS FOR TEACHING ACCOUNTING	MADODA CEKISO
<b>TMBER-15-134</b>	VIBRIOBASE: A MODEL FOR NEXT-GENERATION GENOME AND ANNOTATION DATABASE DEVELOPMENT	TAN TZE KING
<b>TMBER-15-155</b>	MATHEMATICAL MODELING OF DRYING KINETICS OF BLACK PEPPER IN A SPOUTED BED DRYER WITH AND WITHOUT NON POROUS DRAFT TUBES	JAYATUNGA G.K.
<b>TMBER-15-176</b>	INTERNET AND LAW (SPECIAL REFERENCE TO SRI LANKA)	JAYASEKARA, DINITHI
<b>TMBER-15-186</b>	THE PSYCHOLOGICAL STUDY OF MUKHAGALI MAKHATAYEV'S CREATIVITY	TILEUBAYEVA MERUYERT SLYAMKHANOVNA

**Lunch Break (1:00 pm – 2:00 pm)**

**DAY 01 Wednesday (March 25, 2015)**

**Session 1 (11:00 am – 1:00 pm)**

**Venue: Room 3**

**Session Chairs: Dr Gunasekara R.P.T.H & Dr. Pornthipa Ongkunaruk**

**Track D: Engineering & Technology**

<b>TMBER-15-120</b>	DEVELOPMENT AND VALIDATION OF A SMARTPHONE ADDICTION QUESTIONNAIRE (SPAQ)	PROF ABDELMAJID BOUAZZA
<b>TMBER-15-122</b>	PERFORMANCE OF SELECTION COMBINING TECHNIQUE IN ENERGY DETECTION	HACI ILHAN
<b>TMBER-15-151</b>	RICE BRAN OIL EXTRACTION: A STUDY ON LEACHING KINETICS AND CROSS FLOW EXTRACTION	AMARASINGHE B.M.W.P.K
<b>TMBER-15-158</b>	IMPROVEMENT OF BEARING CAPACITY OF STRIP FOOTINGS ON DUNE SANDS USING GEOGRIDS	MOHAMMED Y. AL-AGHBARI
<b>TMBER-15-168</b>	EDUCATING SELF-DETECTION AND RISK FACTOR ASSESSMENT MODEL FOR BREAST CANCER: COMPUTING PERSPECTIVE AND KNOWLEDGE TRANSFER ISSUES- CASE OF OMANI WOMEN	MARYAM GHAREIB AL JABRI

**Lunch Break (1:00 pm – 2:00 pm)**

**DAY 01 Wednesday (March 25, 2015)**

**Session 2 (02:00 pm – 3:30 pm)**

**Venue: Room 1**

**Session Chairs: Dr Raju Ranaswamy & Daiki Asanuma**

**Track A: Business, Management and Economics Studies**

<b>TMBER-15-193</b>	INTEGRATING CLMV INTO THE ASEAN ECONOMIC COMMUNITY: CHALLENGES AND OPPORTUNITIES	DR. RAKESH SINGH
<b>TMBER-15-199</b>	LOCAL POPULATION PREFERENCES TOWARD RESTORING ECOSYSTEM SERVICES OF A WETLAND IN THAILAND	MAYULA CHAIKUMBUNG
<b>TMBER-15-201</b>	STREAMING MUSIC, THE NEW BUSINESS MODEL	ROBERT ALEX BURNETT
<b>TMBER-15-212</b>	CORPORATE DIGITAL IDENTITY: KEY FACTORS OF POLICY AND BUSINESS	KATALIN FEHER
<b>TMBER-15-222</b>	STRATEGIES OF THAI COMPANIES OVERSEAS IN READY-TO-EAT MARKET: A COMPARATIVE CASE STUDY RESEARCH	PINRADA METHAROM

**Tea Break (3:30 pm – 3:45 pm)**

**DAY 01 Wednesday (March 25, 2015)**

**Session 2 (02:00 pm – 3:30 pm)**

**Venue: Room 2**

**Session Chair: Dr Anita Cular & Dr Hacı İlhan**

**Track D: Engineering & Technology**

<b>TMBER-15-213</b>	COST FACTORS OF C&D WASTE RECYCLING PROGRAM IMPLEMENTATION	DAT TIEN DOAN
<b>TMBER-15-145</b>	A STUDY ON HOW TO IMPROVE THE PERFORMANCE OF K-MEAN DATA MINING ALGORITHM IN A PARALLEL ENVIRONMENT	GUNASEKARA R.P.T.H
<b>TMBER-15-202</b>	DEVELOPMENT OF ESTIMATION MODEL OF TIMBER WASTE MATERIALS FOR HOUSING CONSTRUCTION PROJECT	HERDA BALQIS ISMAIL
<b>TMBER-15-204</b>	TIMBER WASTE GENERATION: FACTORS AFFECTING FROM VARIOUS PERSPECTIVE	ASMAWATI CHE HASAN
<b>TMBER-15-239</b>	USING SEMANTIC HYPERGRAPH TO PRESENT THE COMPUTER NETWORK ONTOLOGY	ASKAROVA SANDUGASH ASKAROVNA

**Tea Break (3:30 pm – 3:45 pm)**



**DAY 01 Wednesday (March 25, 2015)**

**Session 2 (02:00 pm – 3:30 pm)**

**Venue: Room 3**

**Session Chair: Dr. Pornthipa Ongkunaruk & Dr Dr Sheila Mokoboto-Zwane**

**Track E: Medicine & Health Sciences**

<b>TMBER-15-133</b>	COMPARATIVE GENOMIC ANALYSIS OF MYCOBACTERIUM IRANICUM UM_TJL AGAINST REPRESENTATIVE MYCOBACTERIAL SPECIES SUGGESTS ITS ENVIRONMENTAL ORIGIN.	JOON LIANG TAN
<b>TMBER-15-166</b>	HEALTH OF CAPTIVE ELEPHANT KEEPERS IN SRI LANKA	JAYAWARDENE KLTD
<b>TMBER-15-174</b>	REASONS AND SOCIAL EFFECTS OF CHRONIC KIDNEY DISEASE (CKD) PATIENTS IN NORTH CENTRAL PROVINCE SRI LANKA (WITH SPECIAL REFERENCE TO PADAWIYA AREA)	DR.WASANTHA SUBASINGHE
<b>TMBER-15-210</b>	HYPOGLYCEMIC, HYPOCHOLESTEROLEMIC AND CYTOPROTECTIVE EFFECTS OF PERSEA AMERICANA MILL (FAMILY LAURACEAE) SEED EXTRACT ON DIABETIC RATS	JULIETA Z. DUNGCA

**Tea Break (3:30 pm – 3:45 pm)**

**DAY 01 Wednesday (March 25, 2015)**

**Session 3 (03:45 pm – 5:00 pm)**

**Venue: Room 1**

**Session Chair: Dr Rakesh Singh & Prof Gary James Pickering**

**Track A: Business, Management and Economics Studies**

<b>TMBER-15-223</b>	AN EXAMINATION ON THE ZOMBIE THEORY AN AGENT BARD APPROACH	DAIKI ASANUMA
<b>TMBER-15-226</b>	FACTORS EXPLAINING INDIA'S SERVICES TRADE: WHAT DOES IT REVEAL?	DR.PRABHEESH K P
<b>TMBER-15-228</b>	DEVELOPMENT OF LEAN SIX SIGMA MODEL FOR HOSPITAL INDUSTRY	C SELVAN
<b>TMBER-15-229</b>	DEVELOPMENT OF CUSTOMIZED LEAN SIX SIGMA FRAMEWORK FOR AMBULANCE MANAGEMENT SYSTEM – INDIAN SCENARIO	DR.RAJU RAMASWAMY
<b>TMBER-15-237</b>	AN INSIGHT INTO SERVICE RECOVERY PARADOX: THE PROPOSED MODEL AND PROPOSITIONS	PANITHARN JUNTONGJIN, DBA

**Closing Ceremony (Room 1): 5:00pm to 5:30pm**



**DAY 01 Wednesday (March 25, 2015)**

**Session 3 (03:45 pm – 5:00 pm)**

**Venue: Room 2**

**Session Chair: Dr Anita Cular & Madad Cekiso**

**Track B: Social Sciences & Humanities**

<b>TMBER-15-136</b>	YERSINIABASE: A GENOMIC RESOURCES AND ANALYSIS PLATFORM FOR YERSINIA RESEARCH COMMUNITY	SHI YANG TAN
<b>TMBER-15-144</b>	THE RELATIONSHIP BETWEEN SOCIAL NETWORKS ADDICTIONS IN TERMS OF SELF-MANAGEMENT AND KEY VARIABLES: THE CASE OF OMANI YOUNGSTERS	PROF. NAEEMA H. JABUR,
<b>TMBER-15-153</b>	EXPLORING THE EXPERIENCE OF VIRGINITY TESTING BY FEMALE ADOLESCENTS IN THE UTHUNGULU DISTRICT OF KWAZULU-NATAL, SOUTH AFRICA	DR SHEILA MOKOBOTO-ZWANE
<b>TMBER-15-218</b>	ENERGY SECURITY AS A POLITICAL PROBLEM OF THE REPUBLIC OF KAZAKHSTAN	R. NURTAZINA
<b>TMBER-15-221</b>	ASSESSMENT OF EFFICIENCY OF A SIMPLIFIED COST-EFFECTIVE MODIFIED BIOSAND FILTER FOR THE REMOVAL OF IRON, TURBIDITY AND COLIFORM BACTERIA FROM GROUND WATER	LOPA SARKAR
<b>TMBER-15-200</b>	TRANSFERABLE SKILLS DEVELOPMENT AND ENGINEERING EDUCATION – IS THERE A GAP	MS PREKERTHI PANIKAR & DR ANTHEA WASHINGTON
<b>TMBER-15-211</b>	INTERDISCIPLINARY PRACTICE IN THE THEATRE INDUSTRY IN MALAYSIA	AIDA NURUL AIN

**Closing Ceremony (Room 1): 5:00pm to 5:30pm**



**DAY 01 Wednesday (March 25, 2015)**

**Session 3 (03:45 pm – 5:00 pm)**

**Venue: Room 3**

**Session Chair: Dr. Anita Cular and Jayawanrdene KLTD**

**Track C: Physical Life and Applied Sciences**

<b>TMBER-15-170</b>	DECISION SUPPORT FOR MILK BLENDING: A RAW MILK COLLECTING CENTRE IN THAILAND	MANASANANT CHUEPRASERT
<b>TMBER-15-171</b>	DISTRIBUTION STRATEGY FOR AN ORGANIC-CHEMICAL FERTILIZER INDUSTRY IN KALASIN	CHONTIDA TANAWATPAIBOON
<b>TMBER-15-172</b>	ORGANIC CHEMICAL FERTILIZER BLENDING OPTIMIZATION CONSIDERING NUTRIENT DEGRADATION AND UNCERTAINTY	AJJANA JAREONKITPOOLPOL
<b>TMBER-15-238</b>	SIMULATION FOR PRODUCTION LINE BALANCING OF A LARGE-SIZED FROZEN CHICKEN MANUFACTURER	PORNTHIPA ONGKUNARUK

**Closing Ceremony (Room 1): 5:00pm to 5:30pm**

**DAY 02, March 26, 2015**

**Gathering of Participants at the Lobby of Hotel Holiday Inn  
Bangkok Silom, Thailand at 5.45 pm**

**Departure from Lobby: 6.15 pm**

**Arrival at Cruise Pier: 6.45 pm**

**Cruise Dinner: 7:00-9:00 pm**

**Expected time for return to Hotel: 9:30 pm**





## 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.

	NAME	AFFILIATION	COUNTRY
1	<b>Osakpamwan Peter Osayande</b>	Osayande Travel and Tours Klamson Towers	South Africa
2	<b>Anthea Washington</b>	Caledonian College of Engineering, Oman	Oman
3	<b>Mohammadi Zarah</b>	Centro Escolar University, School of Science and Technology	Philippines





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## **TRACK A: BUSINESS MANAGEMENT & ECONOMICS**





## **Innovative Policy Optimization: A Catalyst for Multidisciplinary Business and Economic Development in OMAN**

**Mohamed Haneefuddin\***

A'Sharqiyah University, Ibra, Sultanate of Oman

### **Abstract**

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Innovation in business and economical research is a vital factor that ensures the optimal long term business growth and financial security. The dynamicity in current business scenario has ignited numerous analytical paradigms driving the innovation in product and service quality, business processes and systems. This paper emphasizes over the requirement of innovation policy optimization for higher economical growth and financial security in Omanis multidisciplinary businesses. The prime limitations of present innovation policies have been studied and hypotheses have been defined for existing policies and scopes of policy optimization. A semi-structured interview has been conducted with 89 questionnaires reflecting current economical policies, needs and scopes for policy optimization in Omanis economy. The respondents from varied multidisciplinary businesses like manufacturing, SMEs, education, skill development, ICT services, corporate consultants and local research establishments have provided their views, which have been processed for data analysis and evaluation using multivariate analysis paradigm with IBM-SPSS statistical analysis tool. The statistical analysis has been performed using descriptive statistics, one-sample t-test, Pearson Correlation, and Chi-Square test to evaluate relevancy of the data and hypothesis justification. The study concluded that innovation policy optimization in Omanis economy can be a catalyst for competitive quality production and service generation for its higher economical growth and financial security. The study has suggested some policy optimization schemes by incorporating regulated information exchange, resource transfer and mobility, skills development, open innovation supports for local research establishments, financial assistance to institutions and SMEs, public-private collaboration, demand generation and penetration across global market opportunities..

**Keywords:** Innovation, Policy Optimization, Multidisciplinary Business and Financial Research, Policy Optimization.

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## Interaction between Communication and Organizational Conflict and Its Relationship with Performance

**Omid Mahdiah\***

University of Zanjan, Iran.

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### Abstract

Improving organizational performance is one of the most important goals that all kind of organizations try to achieve it in terms of growth, profitability, increasing market share, productivity and other criteria. The purpose of this paper is to examine the interactional relationship among organizational communication, organizational conflict, and performance. To do so, the research institutions (under supervision of ministry of science, research and technology) were selected as statistical population. The descriptive research method was used for conducting this research. For gathering required data, two questionnaires were designed and distributed among sample institutions (using convenient sampling). The information of 22 institutions (188 questionnaires) was gathered and used for analyzing. The results show that there is a significant relationship among organizational communication, organizational conflict, and performance.

*Keywords:* Organizational Communication, Organizational Conflict, Performance.

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## **January Effect of Stock Returns on Indonesia: The Unconditional Method and the Conditional Method**

**Simbolon, Ika Pratiwi\***

University of Padjadjaran, Bandung, Indonesia.

### **Abstract**

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This paper examines the January effect on stock market returns by using the unconditional method and the conditional method. This paper uses daily closing prices of 12 firms listed in Indonesian Stock Exchange by using LQ-45 Index in Indonesian Stock Exchange from January 2006 to December 2013. Independent sample t-test is applied to examine the significance of the January effect. Results don't support the January effect by using the unconditional method and the conditional method. Otherwise, returns on December are significant higher than returns on January by using the unconditional method and the conditional method (down market). But when using the conditional method (up market), returns on January are higher than returns on December, but not significant. This paper presents new evidences and supplements the finance literature on the January effect for the case in Indonesian Stock Exchange, and also help investors to develop a good investment strategy.

*Keywords:* January Effect, The Unconditional Method, The Conditional Method, Return Of Stock.

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## **Integrating CLMV into the ASEAN Economic Community: Challenges and Opportunities**

**Rakesh Singh<sup>1\*</sup>, Rusha Das<sup>2</sup>**

Durgadevi Saraf Institute of Management Studies, India.

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### **Abstract**

The ASEAN Economic Community (AEC) integration will create a single borderless market ensuring free movement of goods and services, labor and capital encompassing nearly 600 million people. One of the bigger issues facing this effort of creating a borderless market is the integration of the newest members- CLMV economies into the ASEAN Economic Community. Several regional cooperation programs like the Greater Mekong Sub-region program by Asian Development Bank and Mekong-Japan cooperation were initiated to address the development gap. However, the weak institutional framework, rising inequality, uneven spatial development, rampant corruption, backward agriculture but a slowed steady progress are some of the major challenges ahead of their integration into the Southeast Asian Nations with which they not only need to collaborate but also compete. This puts forward an interesting argument that challenge for inclusive integration is broader than stimulating catch-up growth because CLMV has different economic and political history than pre-1995 ASEAN members. This paper evaluates this integration borrowing heavily from Economic Literature as well experience of other such regional integration.

*Keywords:* ASEAN, CLMV, Economic Integration, Transition Economy, Economic Growth.

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**Local population preferences toward restoring ecosystem  
services of a wetland in Thailand**

**Chaikumbung, Mayula<sup>1\*</sup>, Scarborough, Helen<sup>2\*</sup>, Doucouliagos,  
Chris<sup>3</sup>**

<sup>1</sup>Kasetsart University, Thailand. <sup>2,3</sup>Deakin University, Australia.

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**Abstract**

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This paper reports the findings of a choice experiment designed to explore local population preferences toward wetland ecosystem restoration of Bung Khong Long wetland in Thailand. By addressing ecological, socioeconomic and cultural dimensions of ecosystem services, the findings provide policy-makers with a richer insight into the interconnections among ecological, socioeconomic and cultural systems in explaining the value of ecosystem services. Gaining an understanding of the trade-offs associated with different interests in ecosystem uses in this community has the capacity to promote wetland management and enhance land use planning. The study is based on household level data collected from 780 randomly drawn respondents living around the lake and the data are analysed using the Random Parameter Logit model with interactions. The findings indicate that the local population derives positive and significant values from the restoration of wetland ecosystem services, indicating caution is needed in the decision-making processes involving sensitive environments faced with competing uses. Socioeconomic and attitudinal characteristics of respondents are important factors influencing willingness to pay, implying community preferences are important in the effectiveness of environmental conservation efforts in this community. The cultural values associated with the wetland are significant suggesting that incorporating culture preferences may be a key factor in supporting wetland conservation.

*Keywords:* Wetland Valuation; Ecosystem Services; Choice Experiment.

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## Streaming Music, the New Business Model

**Robert Alex Burnett\***  
Webster University Thailand.

### Abstract

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The purpose of this research is to explain the role of streaming in maintaining the music industry. The researcher aims to identify the effects of mediation on the music industry. The research will examine the changing and evolving role of media in relation to the people who create, consume and sell music, in order to explain how the music industry functions today. The research does not address the technical aspects of media, but rather how media fosters relationships between people and music and how these relationships effectively created, what was once a confined local practice, into a sprawling global industry that is rapidly changing in a streaming environment.

*Keywords:* Music, Streaming, Industry, Media.

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## Corporate Digital Identity: Key Factors of Policy and Business

**Katalin Feher\***

Budapest Business School Research Centre, Hungary.

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### Abstract

Digital corporate communication and data sets assume the online identification of company, brand, owner, stakeholder network, investor, supplier, partner, employee, customer, media connection, product and service in local-global context. In an optimal case all of these give a consistent picture and, at the same time, it also determines which features are not consistent with it. Reputation management, engagement process, security design, surveillance solutions and communication crises define a real-time corporate digital identity with ir/relevant, non/distinctive, un/suitable, professional/amateurish solutions. Results depend on prevention, digital skills and strategic thinking - and also on circumstances. Thickening or crisis for companies become normal besides "peacetime": the online visible corporate digital footprints keep vulnerability alive/acute. The company needs a strategy to manage its digital data body to reduce risks and vulnerability. The models and practices of digital identity constitute one of the highlighted fields for management and marketing studies/practice based on multidisciplinary background on social science and on the humanities (among others, Li & Bernoff 2008, Howe 2008, Oravec 2012, Vlasyuk 2013). In my presentation I will provide a short summary of the research trends in this field and I will present case studies/ an overview of the everyday practice in digital identity management based on a work-in-progress insight research.

*Keywords:* Corporate Digital, Policy, Business.

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## Strategies of Thai Companies Overseas in Ready-to-Eat Market: A Comparative Case Study Research

**Metharom, Pinrada\***

Thammasat University, Thailand.

### Abstract

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This paper compared strategies of two Thai companies overseas in the ready-to-eat market that were different in sizes, one was SMEs, another was a large company. The target market of the one company was Japan and another company was Singapore. This study used critical incident to analyze the cases. Key success factors included management commitment, research and development, differential advantage, teamwork with customers and local teams. Both companies were similar in terms of strategies, but different in details: level of management involved, market research conduction, research and development, and local teams. Implications of this study will be useful for companies that are interested in doing business overseas to learn how these two companies became successful in foreign markets.

*Keywords:* Critical Incident, Management Commitment, Differential Advantage.

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## **An Examination on the Zombie Theory: An Agent-Based-Approach**

**Daiki Asanuma\***  
Asahikawa University.

### **Abstract**

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This paper examines the zombie theory which claims the survival of low-productivity firms in Japan has prevented economic recovery since the bursting of the financial bubble in the late 1980s. The existence of so-called “zombie firms” is one reason for the stagnation of the Japanese economy, because they prevent more productive companies from gaining market share and thus reduce productivity gains for the overall economy. This theory easily results in the neoclassical policy statement, that is, the government should not intervene the natural process of firms’ metabolism. So, “doing nothing” is the best way to improve macroeconomic performance. However, if the bankruptcy of one firm affects others through its network, this argument does not hold because networked firms can become embroiled in a bankruptcy chain. This paper assesses the validity of zombie theory using computer simulations within a network economy setting. It finds that governmental policies to save bankruptcy candidates can improve macroeconomic performance in a network economy. In other words, governmental intervention can be effective in this kind of economy by preventing the propagation of a bankruptcy chain that may embroil high-performing firms.

*Keywords:* Bankruptcy Effect, Credit Network, Creative Distraction Process, Bankruptcy Chain.

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## Factors Explaining India's Services Trade: What does it Reveal?

**Vidya C T <sup>1\*</sup>, Prabheesh K P <sup>2</sup>**

<sup>1</sup>Centre for Economic and Social Studies (CESS), Hyderabad, India.

<sup>2</sup>Department of Liberal Arts, Indian Institute of Technology Hyderabad (IIT), Ordnance Factory Estate, Yeddumailaram, Andhra Pradesh, India.

### Abstract

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This paper empirically analyzes the factors that determine India's services exports for the period 1995-2011 using quarterly data. Using ARDL approach to cointegration, a long-run export demand function is estimated and the empirical results suggest that the partner country's income, foreign direct investment, financial sector development and goods exports are the major determining factors of India's services exports. Further our empirical results suggest that the exchange rate does not play any major role in determining services exports.

*Keywords:* Services Exports, Determinants, Financial Development.

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## Development of Lean Six Sigma Model for Hospital Industry

**C Selvan<sup>1\*</sup>, R Raju<sup>2</sup>, S.Kalpna Devi<sup>3</sup>**

<sup>1,2</sup>Department of Industrial Engineering, Anna University, Chennai, India.

<sup>3</sup>Independent Lean Six Sigma Consultant, Chennai, India

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### Abstract

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The differences between operational excellence and business excellence are seldom bridged with productivity benefits and yearly targets by organizations in current scenarios, but they have not significantly touched or made a positive impact bringing delightful and easy customer experience. In recent time's public forum reviews touches upon movies, restaurants and also books, as people today critique their experiences in whatever things and events they interact with in their daily life. In India, Lean Six Sigma as a methodology, has been commonly used to solve simple to complex challenging scenarios predominantly in manufacturing industry, and is not used frequently as a practice evidenced in the hospital industry. The aim of this exploratory research was to assess the status of Lean Six Sigma implementation in hospital (services) industry specifically for India, thereby developing a practical model to facilitate successful implementation of Lean Six Sigma. A mixed method approach of survey and multiple case studies during phases of research was adopted to achieve the aim of the research by answering the following key research questions (RQs):RQ1: What are the Critical Success Factors (CSFs) for implementation of Lean Six Sigma in the hospital industry in India?RQ2: What would be the appropriate model that would assess the readiness to embark the continual improvement and provide a platform for continual improvement journey for the hospital industry in India?The adoption of a mixed method approach not only facilitated in answering the RQs, but also addressed the quality research criteria of reliability and validity for this research.

This exploratory research had made some significant contributions to the theory and practice of Lean Six Sigma research in hospitals.

**Keywords:** DMAIC; Lean Six Sigma Methodology; IMAGE; Critical Success Factor; Financial, Clinical, Operational, Service excellence and Safety.

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## **Development of Customized Lean Six Sigma Framework for Ambulance Management System – Indian Scenario**

**R Raju<sup>1</sup>, C Selvan<sup>2\*</sup>, B Pradeep<sup>3</sup>**

Anna University, Chennai, India.

### **Abstract**

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Ambulance management system is a key challenge and a priority issue for the healthcare industry. An emergency is any event that cannot be tackled with regular routine service arrangements. The scope of this paper is restricted to optimizing of Ambulance Management System (AMS) within a hospital set up. While there are good number of proven studies conducted to meet the specific needs of emergency response management, this study aims to develop an AMS architecture that will enable to deal effectively with the possibility of dynamic change need of patients and customers, very specifically from India perspective. In today's Indian healthcare industry, there is a need for a comprehensive continual improvement methodology that will help realize the benefits of an ambulance management setup. The main goal was to understand and improve the functioning of AMS. In this study, Lean six sigma methodology was adopted to address waste reduction and cost optimization considering the end to end ambulance management lifecycle. One of the multi-specialty hospital was selected and survey was conducted to assess the status of level of utilization of ambulance management system in these hospitals. Value stream mapping was extensively used along with various six sigma tools including the concepts of 5S. Various wastes and bottlenecks were identified and appropriate solution was proposed based on the inputs from various practitioners in the medical fraternity. A customized continual improvement framework using lean six sigma methodology was adopted which led to the development of CARES (Connect, Analyze, Respond, Execute, Stabilize) as a framework to build the ambulance management system. This framework was effectively deployed and the outcome enabled to increase patient services by 25% and overall cycle time was reduced by 30%. This facilitated in enabling value to various stakeholders.

**Keywords:** Ambulance Management System; Lean Six Sigma Methodology; Emergency Response Management.

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## **An Insight into Service Recovery Paradox: The Proposed Model and Propositions**

**Panitharn Juntongjin\***

Department of Marketing, Faculty of Commerce and Accountancy,  
Thammasat University, Bangkok, Thailand.

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### **Abstract**

For decades, researchers have tried to discover methods that deliver successful service recovery results. Service recovery paradox is the situation that overall satisfaction level of consumer after service failure is even higher than when things had gone well at the first place, this could be happened only when firms can achieve successful service recovery results. The concept of customer satisfaction evaluation in service recovery is closely related to consumers' behavioral response; which are needed to consider both cognition and affection. Without the affection, consumers' response to service recovery cannot be fully understood. Mood and emotion have been considered in consumer research as the affective part that plays an important role in customers' evaluation. However, these affective variables seem to get less attention than they should be in the service recovery paradox literature. This article explores the negligence and proposes a conceptual model which comprehensively integrates the cognitive and the affective parts of consumer to better explain the occurrence of the service recovery paradox. Using the proposed model as a guide line, the service managers can deliver service recovery to their customers more effectively than ever before, and the possibility of the service recovery paradox to occur might be increased. Finally, theoretical contributions, suggestions for future research, and managerial implications also discussed..

*Keywords:* Customer Satisfaction, Service Recovery, Consumer Behavior, Service Marketing.

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## **Performance appraisal System of the Academics of Public and Private Universities of Bangladesh: An Empirical Study**

**Mindia, Piana Monsur<sup>1\*</sup>, Akkas, M A<sup>2</sup>**

<sup>1</sup>School of Business and Economics, United International University.

<sup>2</sup>Department of Management Studies, University of Dhaka.

### **Abstract**

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In order to grow and sustain in the globalized economy, organizations need to maximize the performance of their employees. Performance appraisal is a universal human resource management practice. Educational institutions are not in the exception.. But, in our country the practice of performance appraisal system is not very familiar with the educational institutions. Only a few leading private universities of Bangladesh are observed to use the tool of performance appraisal, but here the evaluation is conducted mostly by the students. The management and the higher authority of the Universities are not conscious about accurate application of Performance appraisal tools and techniques. The aim of this study is to evaluate the importance and effectiveness of the Performance Appraisal system to increase performance and motivation of the academics in the Universities. A sample of hundred (100) respondents was drawn from both the public and private universities and cluster, stratified and convenient sampling techniques were used to collect data by using a structured questionnaire from various levels of respondents. Teachers have shown a mixed feeling about student evaluations. Data analysis showed that the university teachers don't see their performance appraisal system accurate and fair because the outcomes are not being used for making decisions on promotion, training and development of the employees. So, the management should review the appraisal system of the Universities and outcomes, so that all the components of their job are evaluated and rewarded.

**Keywords:** Performance Appraisal (PA), Performance Appraisal Tools, Student Evaluation.

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## **Interdisciplinarity and Climate Change Adaptation in Business: the Case of Canada's Largest Wine Region**

**Pickering, Gary James<sup>1\*</sup>, Pickering, Kerrie Theresa<sup>2</sup>**

<sup>1</sup>Brock University, <sup>2</sup>Green Health Global, Canada.

### **Abstract**

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We introduce a network of research and industry partnerships (the Ontario Grapevine and Wine Research Network) formed recently to assist the Ontario grape and wine industry to adapt to the several existential challenges posed by climate change.. Here, we discuss two recent findings to illustrate the breadth and interdisciplinary approach of the OGWRN to climate change adaptation. In the first example, a conceptual framework for understanding the diverse elements of adaptation for a grape and wine industry was developed and applied to the Ontario case. The framework consists of a 3-tiered, hierarchical structure, comprising eight operational and strategic determinants (financial, political, institutional, technological, knowledge, perception, social capital and diversity) that provide insights to the present and future adaptive capacity of the industry. In the second example, we illustrate how the natural and material sciences are being employed to remediate a wine taint that is devaluing many wines and is exacerbated by climate change. Elevated levels of methoxypyrazines (MPs) contaminate some wines, in part due to various extreme weather events and generally warmer winters experienced in many Northern Hemisphere wine regions. We have tested and optimized various food-grade polymers for treating red wines contaminated with MPs; data presented here show up to a 51% reduction in MPs can be achieved using a poly-lactic acid polymer, and 94% reduction using a polydimethylsiloxane (silicone) polymer. We conclude that a holistic and integrated response to climate change across the value-chain is needed for businesses to successfully adapt. This necessitates incorporation of interdisciplinarity as a core strategic principle of research and planning that support this goal.

*Keywords:* Climate change adaptation, wine, grape, interdisciplinarity

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## TRACK B: SOCIAL SCIENCES & HUMANITIES





## **Ecotourism and Value Adding: Source of Livelihood among the Villagers in Basey Samar, Eastern Visayas, Philippines**

**Anita G. Cular\***

University of the Philippines Visayas, Tacloban College.

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### **Abstract**

This paper aims to highlight how ecotourism is contributing additional income to low income and marginal farmers in 2 villages of Basey, Western Samar. This is a case study among the members of the Sohoton Service Association. (SSA). All members were interviewed using an interview schedule in order to elicit information from them. A focused group discussion was also conducted to validate their information. SSA was organized to help in preserving the cave and in order to augment their income. There were 24 members of SSA, whose majority members are women. Findings show that more than 50 percent of the members of SSA were earning an average of PhP500.00 per month from ecotourism while 6 or 31.6% were earning a maximum of PhP1000.00. Three respondents claimed that they were earning an average monthly income of PhP2,000.00. In terms of income contribution, majority of the respondents claimed that their work in Sohoton contributes 25% to 50% to their income. Only one claimed that ecotourism activity contributes the highest share of 76% of the income. However, it is estimated that approximately 15% of their family monthly income is derived from ecotourism activities. While ecotourism is indeed augmenting the income of the farmers in the two villages of Basey, Samar, the members of the SSA should try to create value added in their routine activities at the cave. Value adding, in this case, offering additional service/features to tourists while in Sohoton cave will increase livelihood activities of the SSA members. This will lead to higher income for their respective families, thus increasing their chance of poverty alleviation and improved living conditions. This is the truest sense of ecotourism activities: livelihood and preservation of Sohoton Cave, the natural resource.

*Keywords:* Ecotourism, Livelihood, Value Added.

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## **The Role of Self- Development of Future Specialists in Multilingual Education**

**Gulnur Issabekova\***

Kazakh Turkish International University named after Kh. A. Yassawi,  
Kazakhstan.

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### **Abstract**

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The article is devoted to multilingual education at teaching of young specialists and polycultural individual. So, it investigates the role of self – development of future specialists in multilingual education in comparison with educational system. So, it describes opportunities of multilingual education at teaching of a competitive specialist.

*Keywords:* Future Specialist, Competitive Ability, Multilingual, Polycultural, Education on The Basis of Three Languages.

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**Exploring the learning style preferences used by accounting students in a University of Technology in South Africa: implications for teaching accounting**

**Madoda Cekiso\***

University of Fort Hare, South Africa.

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**Abstract**

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The purpose of this study was to explore the learning style preferences used by accounting students at an institution of higher learning in order to tailor teaching methods, classroom activities and assessment that cater for students with different learning style preferences. Kolb's Learning Style Inventory (LSI) was used to identify the learning style preferences of the first, second and third year accounting students. A purposeful sample of 232 students was used in this study. The findings of the study revealed that students were mostly Convergers and the least popular group was that of Divergers. When the data were compared by the levels of study, the findings showed a significant rise in percentage of divergers from 1st to 2nd year. In addition, Assimilators, Convergers and Accommodators decreased slightly from 1st to 2nd year. During 3rd year, all group percentages were constant. This means that the Convergers were predominant throughout all the levels. When the data were compared by gender, the results indicated that there was no statistical significance between male and female students in their choice of learning style preferences.

*Keywords:* Learning styles, Learning style inventory, Accounting students, Tertiary institutions, Teaching styles, Individualism.

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## **VibrioBase: A Model for Next-Generation Genome and Annotation Database Development**

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### **Abstract**

To facilitate the ongoing research of *Vibrio* spp., a dedicated platform for the *Vibrio* research community is needed to host the fast-growing amount of genomic data and facilitate the analysis of these data. We present VibrioBase, a useful resource platform, providing all basic features of a sequence database with the addition of unique analysis tools which could be valuable for the *Vibrio* research community. VibrioBase currently houses a total of 252 *Vibrio* genomes developed in a user-friendly manner and useful to enable the analysis of these genomic data, particularly in the field of comparative genomics. Besides general data browsing features, VibrioBase offers analysis tools such as BLAST interfaces and JBrowse genome browser. Other important features of this platform include our newly developed in-house tools, the pairwise genome comparison (PGC) tool, and pathogenomics profiling tool (PathoProT). The PGC tool is useful in the identification and comparative analysis of two genomes, whereas PathoProT is designed for comparative pathogenomics analysis of *Vibrio* strains. Both of these tools will enable researchers with little experience in bioinformatics to get meaningful information from *Vibrio* genomes with ease. We have tested the validity and suitability of these tools and features for use in the next-generation database development.

**Keywords:** *Vibrio*, VibrioBase, Comparative Genomics, JBrowse, PGC, PathoProT.

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## **YersiniaBase: A Genomic Resources and Analysis Platform for Yersinia Research Community**

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**Heydari<sup>7</sup>, Guat Jah Wong<sup>8</sup>, Siew Woh Choo<sup>9</sup>**

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### **Abstract**

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*Y. pestis*, *Y. enterocolitica* and *Y. pseudotuberculosis* are the three known species in the *Yersinia* that can cause infection in human while the remaining species are still considered as non-pathogenic to human although a few papers have reported that the latter might cause infection by different pathways. With the advances in sequencing technologies, many genomes of *Yersinia* have been sequenced. However, there are no well-defined repository and specialized platform to hold the fast-growing *Yersinia* genomic data and provide analysis tools particularly for comparative analyses, which may provide a better insights into their biology, evolution and pathogenicity. To facilitate the ongoing and future research of *Yersinia* especially those generally considered non-pathogenic species, we developed the YersiniaBase, a robust and user-friendly *Yersinia* resource and analysis platform for the analysis of *Yersinia* genomic data. YersiniaBase has a total of twelve species and more than 230 genome sequences. We created hyperlinks to other common databases or resources, including NCBI, GOLD and UniProt to facilitate and enhance downstream analysis. In order to smoothen the process in searching genomic data in large database, we implemented AJAX-based real-time searching system in YersiniaBase. We also incorporated existing tools (JBrowse, BLAST) and in-house developed tools.

**Keywords:** *Yersinia*, Comparative Analysis, Database.

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## **The Relationship between Social Networks Addictions In Terms Of Self-Management and Key Variables: The Case of Omani Youngsters**

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**Sultan Qaboos University, Oman**

### **Abstract**

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**Purpose** - The purpose of this study was to examine the effect of and relationship between the use of Social Networking sites (SNS) by Omani high school students in terms of time self-management and the following variables: Gender, study achievement, information technology skills, education level of parents. **Design/methodological/approach**-. A survey was conducted among 237 Omani high school students (118 males, 119 females), using a questionnaire, which was developed based on the literature. **Findings**- Findings revealed that there were no significant differences between male and female students in using Social Networks in terms of their self-management. Results also exposed that there were no significant differences between students' scholastic achievement levels in using SNS related to self-management. However, the respondents' level of IT skills had an effect on their self-management while using the SNS applications. On the other hand, respondents' parent educational level had no effect on their self-management while using the SNS applications. **Research limitations/implications**- The generalization of the study results would require a larger population and the replication of the study in different cultures. Additional research could help to provide a deeper explanation of some of the research findings. **Practical implications**- Based on the results of this study, future research in this area could be conducted to answer other questions such as those related to the symptoms of SNS addiction among high school students. Moreover, as the findings of the study reached to a conclusion that there is a problem of misusing the social network sites by students, realizing the problem, then, will help finding the solutions.

**Keywords:** Social Networks, Study Achievement, Internet Addiction, Self-Management, Oman.

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## Exploring the Experience of Virginity Testing By Female Adolescents In The Uthungulu District Of Kwazulu-Natal, South Africa

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### Abstract

Virginity testing is the practice that is common in KwaZulu- Natal amongst the Zulus as part of their culture. This practise forms part of the three –day ritual of appeasement dedicated to Nomkhubulwana, a goddess once prominent in Zulu cosmology (Scorgie, 2002:57). The Zulu King, Goodwill Zwelithini views virginity testing as the core of the Zulu pride (Vincent, 2006:18). Virginity testing refers to the practice of inspecting young girls if they are sexually chaste. Members of the South African Human Rights and Commission on Gender Equality have condemned the practice of virginity testing. They argued against the practice on the basis of the constitutional laws that protect the right to equality, privacy, bodily integrity and sexual autonomy (Hugo, 2012:2). According to the Government Gazette (2006), Chapter 2 of the Children’s Act (Act NO. 38 of 2005), under Social, Cultural and Religious practices talks about virginity testing, Section 12 states that virginity testing of children under the age of 16 is prohibited. The Zulus and other proponents of virginity testing believe that by continuing to perform virginity tests, the practice helps to curb teenage pregnancy and the spread of HIV/AIDS. They argue that it also encourages abstinence, which prevents a variety of deadly diseases. However, many opponents of virginity testing assert that these tests subject girls to degrading public spectacles and those girls who do not pass, can face emotional scarring (Khoza, 2013:2). It is clear though, that because there is no consensus, this situation is problematic in that it poses both physical and emotional harm to those young girls who engage in the practice, as observed by the South African Human Rights Commission, as well as the Commission on Gender Equality and other experts

*Keywords:* Adolescents, Virginity Testing.

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## Mathematical Modeling of Drying Kinetics of Black Pepper In A Spouted Bed Dryer With And Without Non Porous Draft Tubes

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### Abstract

A conventional spouted bed dryer and a spouted bed dryer fitted with a non-porous draft tube were used to analyze the drying kinetics of black pepper. Minimum air velocities required for black pepper spouting were determined for both bed configurations and drying experiments were conducted at minimum spouting conditions. The minimum air flow rate required for spouting of non-porous draft tube fitted spouted bed is lower than that of the conventional bed. The highest drying rate was achieved when black pepper was dried without draft tube at highest drying temperature. A new thin layer drying model is proposed and experimentally determined drying kinetic data were fitted to the proposed model and compared with five commonly used models. Goodness of fit was evaluated using statistical parameters reduced chi square, root mean square error and coefficient of determination. Statistical analysis showed that drying behavior of black pepper in spouted bed dryer is best fitted to the Verma et al. model and the proposed model. Model parameters were calculated and presented.

**Keywords:** Black Pepper, Spouted Bed, Drying Kinetics, Thin Layer Models.

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## Internet and Law (Special reference to Sri Lanka)

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### Abstract

The Internet or most commonly referred net is one of the most amazing invention of human race. The Internet can be known as a kind of global meeting place where people from all parts of the world can come together & share information. Castells define network as “Network is a set of inter connected nodes. Nodes may be relevance to the network”. (Castells, 2009, p.19). The benefits people can reap by using the Internet is massive. Due to the rapid expansion of the Internet common mass get the assistance of Internet more and more in to their day to day life Another significant feature of the internet is not only it has abundant of rewards; it also consists of plentiful of disadvantages also. Advent of the internet crate a new path to the criminals to commit crimes. Traditional laws were not adequate to curb these complicated crimes. Hacking, virus, Identification theft, unauthorized aces to the restricted information, Trojan, are some of so called sophisticated cyber felonies. The internet is a global network, so its regulation could not be left to the one country or an institute, collaborative effort is a must for prevent the internet crime. . US department of Commerce. (Castells, 2009, p113)This research studied the Sri Lankan Cyber laws and international laws about cyber space and cybercrimes. Further it proposed a mechanism on curbing the internet crimes. Major limitation identified on this research was lack of effective law to protect Human rights in the cyber space in Sri Lanka. Objectives are refer cyber laws in Sri Lanka and studied selected cases related to cybercrime in Sri Lanka. Further it Suggest new solution to protect the human rights through the malicious usage of the Internet.

*Keywords:* Internet, Cyber Crime, Net Work, Information, Human Right.

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## The psychological study of Mukhagali Makhatayev's creativity

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Zhanna Kenzhebekovna<sup>4</sup>, Ospanova Gulmariya Turysbekovna<sup>5</sup>**  
Al-Farabi Kazakh National University

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### Abstract

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What is the point of analyzing poetry? One simple answer is that the more we know about anything the more interesting it becomes: the thought of the poet is different from that of the ordinary man of action, and is closely related to that of the dreamer. Associative thought and voluntary or purposive thought. The poetic vision, like the ordinary dream, is concrete, while at the same time it derives its material only indirectly from the senses; this vision is the source of true poetry. The poets are in general excellent psychologists, and where the question concerns the working of their own minds they are the best. Psychology must obtain most of its facts ultimately from introspection. This paper presents psychological analysis of M. Makhatayev's poetry, the process of poetic creation, in the poet's personality; his ability to work plays an important role. In our study, we try to analyze the poet M. Makhatayev and his poetry. Consciousness, educational impact, the role of cognition, psychological processes of the poet's soul, inspiration, M. Makhatayev's imagination in poetry and full consideration in helping the mentally ill are the subject of this work.

*Keywords:* Art, Creativity, Inspiration, Perspective, Self-Expression.

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## **Transferable Skills Development and Engineering Education – Is there a Gap?**

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### **Abstract**

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Education System in the Sultanate of Oman is just 40 years old and the nation is making significant strides in raising the standards of education to develop its human resources so that more young Omanis are able to take on leadership roles at workplace. This paper aims to look at the transferable skills needed in the job market in Oman and analyses the perceptions of teaching faculty, students and industry representatives on the presence of or lack of these skills among the graduates. The study will further analyze the skill gap if any and presents related model for transferable skills development at the Higher Education System across the country so that the graduates have greater ability and confidence to contribute to Oman's economic development. The findings reveal the need to enhance and promote the transferable skills competency based assessment strategy when designing curriculum. The authors draw inferences from the findings of the study and identify areas for future research

*Keywords:* Transferable Skill, Engineering Education, Gap.

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## Energy Security as a Political Problem of the Republic of Kazakhstan

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### Abstract

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Nowadays energy security of a state has become essential for sustainable economic development and political stability. Rapid growth of energy consumption, high sharply fluctuating prices of crude oil and petroleum products in the market, growing dependence of energy-consuming regions on energy imports are at the focus of attention of all countries in the world. In today's globalized world a simple increase of oil production cannot meet the increasing demand for energy. High-capacity refinery has become one of the most important conditions of the global energy security. This article analyzes the causes of the growing interest to energy security as a political issue in the context of globalization. It reviews some aspects of the influence of the oil and gas industry of the Republic of Kazakhstan on the country's energy security.

*Keywords:* Energy Policy, Energy Resources, Energy Security, Political Stability, Oil and Gas Sector, Energy Investment, Oil Refining Industry, Oil Market, Government Regulation.

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**Assessment of efficiency of a simplified cost-effective  
modified biosand filter for the removal of iron, turbidity and  
coliform bacteria from ground water**

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**Abstract**

Ground water is the major source of drinking water in rural communities of Khordha district of Odisha. It contains 0.5 – 12.6 mg/l Fe (II). A study has been carried out at the pilot scale in the field aiming at designing, constructing and evaluating efficiency of a cost effective modified biosand filter. The filter has seven layers containing gravel, sand, black carbon mat and charcoal mixture which played a key role during the filtration process. The efficiency of biosand filter was evaluated to remove iron, turbidity, chloride, calcium, magnesium and coliform bacteria from iron rich ground water and highly turbid river water. The filter in which bamboo, coconut and wood charcoal mixture acted as filter media showed 100% removal of turbidity after filtration. The filter in which bamboo and coconut used as filter media, bamboo filter showed better removal efficiency of turbidity compared to coconut filter. The values of turbidity in filtered water of both the filter were below less than 5 NTU which is the permissible limit of drinking water according to World Health Organization. The flow rate was maintained in the range of 0.9 to 1.2 L/min (lower turbidity, 10-100 NTU), 0.7 to 1.0 L/min (medium turbidity, 100-150 NTU) and 0.5 to 0.8 L/min (higher turbidity, 150-200 NTU). The flow rate was higher in the beginning first hour and slowly decreased with time. Filtration of high turbidity water resulted in a significant decrease in the flow rate of the biosand filter as the filter is continuously used. The highest iron reduction efficiency achieved by bamboo, coconut and wood mixture charcoal as filter media is 98% followed by bamboo charcoal at 96% and coconut charcoal at 94% respectively. The modified biosand filter showed removal efficiency of turbidity (96-99%) and coliform bacteria (95-98%). Filter needs careful washing after two months of continuous usage.

**Keywords:** Biosand, Cost Effective, Ground Water.

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## **The Comparative Study of Islamic Philosophy and Indian Philosophy in the Matter of Reincarnation**

**Mohammad Hasan Borhanifar\***

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### **Abstract**

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Reincarnation is considered to be one of the primeval significant matters of philosophical psychology that became a theological matter. The followers of many great religions, in the East, like Hinduism, Buddhism, and the different sects have unshakeable faith in reincarnation. Most Islamic intellectuals have rejected the reincarnation, and have attempted, to verify and proof its accuracy. According to the Quranic verses and hadiths of the Prophet Mohammad (Saw) and the twelve Shia Imams (Ra), the commentators of the Holy Quran, the Islamic canonists and philosophers, especially those who are acquainted to a certain extent with the Holy Quran, believe that reincarnation is not only against the teachings of the Holy Quran and the Sunnah, but also oppose the Islamic discipline. Among the Islamic philosophers, Avicenna the shining personage of the Peripatetic philosophy, Sohrevardi the pioneer of the school of Illumination, Mulla Sadra, the founder of the transcendental philosophy, cogently discussed the matter of reincarnation in detail and ratiocinated. They analyzed the subject in question and studied all its types and categories precisely, and thereafter accepted some types and refused the others. Reincarnation has been a controversial subject among the Eastern philosophers, particularly philosophers and philosophical schools in India. However, it has been accepted by all of them as an ideological discipline. But they are in conflict with each other over the matter of its occurrence. Buddhism, which has been emerged from India and nowadays is widespread in some countries such as China and Thailand, and Hinduism, that has the most followers in India, both have faith in reincarnation more than other schools and religions, thus have spread this ideology among their own followers. In this article an effort has been made to compare, contrast and to clarify the significant similarities and differences of reincarnation in two schools of Islamic and Indian philosophy.

*Keywords:* Reincarnation, Islamic, Indian.

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## Interdisciplinary Practice in the Theatre Industry in Malaysia

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### Abstract

This paper will discuss the interdisciplinary practice in the field of performing arts and focusing on theatre in Malaysia in order to fulfill career prospect. The emergence of new entertainment medium of arts that exists to some extent, provide great competition for graduates and practitioners of performing arts professionals. Displacement and transformation of the career path in this field should be seen by looking into the opportunities for interdisciplinary field of varieties arts such as film, theatre, music, visual arts, animation, broadcasting, and creative writing apart to strengthen its scope of conventional work of performing arts that has existed since 240 BC in Rome. Academician, artists and especially arts graduates have a big role in preparing themselves, from theoretical and practical (interdisciplinary skills) in order to seek for career opportunities that available not only in the field of performing arts but also in other related fields. In a world without borders, it is the responsibility to the arts activists to share hybrid characteristics of diversity and cultural fields to ensure the values and local artistic can be sustained even in any way it was presented. Suggested the findings of this discussion will provide an overview to all those involved in the performing arts in placing themselves as a versatile art activist and talent to meet the needs of competitive arts industries and related fields

*Keywords:* Interdisciplinary, Performing Arts, Creative Industries.

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## TRACK C: PHYSICAL LIFE & APPLIED SCIENCES





## Decision Support for Milk Blending: A Raw Milk Collecting Centre in Thailand

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### Abstract

Milk is a high nutrient food source. Its major composition includes water, fat, protein, sugar, vitamin and minerals. In Thailand, milk consumption has been promoted through school dairy project. This leads to uneven nutrient composition due to different agricultural practices, feed, and environments. Then, the study of factors affect the nutrient compositions in raw milk should be implemented. Then, the royal Thai government should encourage farmers to GAP so that the nutrient of raw milk is complied with the national standard. The collecting center has an important role to inspect the nutrient composition to pass the specification before delivery to milk plants. In addition, raw milk price depends on the fat content. The collecting center will collect raw milk from farmers twice a day. From survey, we found that milk composition of raw milk collected in morning and afternoon has different nutrient compositions. Raw milk in the morning has less fat than that in the afternoon. After raw milk is delivered to the collecting center, it will be cooled down and kept in the storage tank. Then, it must be delivered to the milk plants on daily basis. Hence, our objective is to formulate the mathematical model to determine how to blend raw milk collected in the morning and afternoon such that the total cost of raw milk is minimized while the nutrient composition specification is satisfied. Then, the model is solved by solver in Microsoft Excel and the decision support system is proposed so that the quality control supervisor can use it to determine how to blend raw milk daily.

**Keywords:** Blending Problem, Decision Support, Raw Milk, Nutrient Composition.

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## Distribution Strategy for an Organic-Chemical Fertilizer Industry in Kalasin

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### Abstract

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The organic-chemical fertilizer has been proved that it had more benefit than pure chemical or organic fertilizer. In addition, an organic-chemical fertilizer owner in Kalasin province said that the need of organic-chemical fertilizer has an increasing trend. This research focused on a solving a logistics distribution network for an organic-chemical fertilizer supply chain in the Kalasin province in the Northeastern Thailand in order to reduce the logistics cost while fulfill the future need. First, we collected the related data from a factory, retailers and the Department of Lands such as distances, transportation and land cost, factory establishment cost and land usage. Second, we estimated the demand for fertilizers in Kalasin by ArcGIS for Desktop 9.3. Third, we formulated an integer programming called the two echelon capacitated plant location problem (2E-CPLP) consisting a set of capacitated fertilizer plants and retailers. Then, we determined the best locations for settling organic-chemical fertilizer manufacturers in order to minimize total cost composed of fixed cost of founding a plant and land cost, and transportation cost from a plant to retailers. Then, we solved the problem by IBM ILOG CPLEX. After that, we solved the routing problem of each established location using solver in Microsoft Excel. Finally, we compared the distribution strategies between the current and proposed model in terms of cost, distances and service coverage. The results showed that the proposed strategies could satisfy the future demand and the transportation cost was reduced by 36.52%.

*Keywords:* Two-Echelon Distribution Network, Location Allocation Problem, Routing Problem, Integer Programming, Organic-Chemical Fertilizer.

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## Organic Chemical Fertilizer Blending Optimization Considering Nutrient Degradation and Uncertainty

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Department of Agro-Industrial Technology Management, Faculty of Agro-  
Industry, Kasetsart University.

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### Abstract

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Currently, there is no decision tool to determine the right blending formula of organic chemical fertilizer industry in Thailand so that the raw material cost is minimized and nutrient composition is conformed to the specification. Our research aimed to reduce the raw materials cost of organic chemical fertilizer industry while increase the conformance probability of nutrient composition. In addition, we determined whether nutrient composition degrades by time. Next, we kept the fertilizers for eight months and measured the nutrient composition every two months with two replications. Next, we performed ANOVA and determined the nutrient composition model degraded by time. Then, we formulated the chance-constrained programming (CCP) to determine the optimal organic chemical fertilizer blending. After that, we verified the optimal formula by Monte Carlo simulation. Finally, we compared the current formula and optimal formula from CCP in terms of total raw material cost and probability of non-conforming. The result showed that CCP could reduce the cost by 27.46% and reduce the probability of non-conforming to 0.001. In addition, farmers can reduce the chemical residues in soil while Thailand can reduce the import volume of chemical substances such as Ammonium Sulfate, Di-Ammonium-Phosphate and Potassium Chloride. In summary, this research had a great impact for manufacturers, farmers and Thai economy.

*Keywords:* Organic Chemical Fertilizer, Chance-constrained Programming, Blending Problem, Monte Carlo Simulation, ANOVA.

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## Simulation for Production Line Balancing of a Large-Sized Frozen Chicken Manufacturer

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### Abstract

This study aimed to improve the productivity of a large-sized frozen chicken manufacturer in Thailand. The production process was analyzed based on work study principles by using simulation. We developed four models for the chicken preparation process. The current and proposed production systems were simulated using Arena software. We found that with the current system, we could reduce the number of workers at some stations to reduce the wages, but we could not reduce the total time. By implementing the ECRS method, we combined two stations into one station (e.g. handling and weighing, or weighing batter and mixing it with chicken). Then, the “simplify” concept was implemented at job E, or transporting chicken using a cart instead of walking. This method could reduce both the cycle time and the number of employees. We were thus able to increase worker utilization while reducing the number of employees by 11 persons, thus lowering labor cost by 279,840 baht per year.

*Keywords:* Simulation, ECRS Concept, Process Improvement, Frozen Chicken Manufacturing.

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## TRACK D: ENGINEERING & TECHNOLOGY





## **Development and Validation of a Smartphone Addiction Questionnaire (SPAQ)**

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<sup>1</sup>Doctorate student at SQU, <sup>2,3</sup>Sultan Qaboos University

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### **Abstract**

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**Purpose:** The purpose of this study was to identify the psychometric properties of a Smartphone addiction questionnaire (SPAQ) given to Sultan Qaboos University Undergraduates. **Design/Methodology:** This study explored the levels of Smartphone addiction among university students through three parts: the level of Smartphone usage, the level of addiction to different Smartphone activities and applications; and the level of Smartphones' addiction symptoms' appearance. The dimensional structure of the questionnaire was investigated with a sample of 140 SQU undergraduates (37.1% males and 62.9% females). **Findings:** Based on factor analysis results, the questionnaire emphasized five factors: disregard of harmful consequences, preoccupation, inability to control craving, productivity loss, and feeling anxious and lost. The internal consistency and concurrent validity of SPAQ were verified (Cronbach's alpha= 0.764). SPAQ and its factors were significantly correlated with Smartphone Addiction Scale (SAS). The reliability of SPAQ has been tested using Test-Re-Test method and revealed a significant correlation of (0.667) between the two applications. This questionnaire was proved to be relatively reliable and valid. **Practical implications:** The researchers developed a questionnaire to measure the levels of Smartphone addiction among SQU undergraduate students by assessing: 1) The amount of time they allocate for the use of Smartphones, 2) The amount of money they spend on the performance of a number of activities through the use of Smartphones, 3) The frequency of appearance of Smartphone addiction symptoms. Based on the overall average, the users were classified into three levels (causal, moderate and heavy). **Originality/value:** This paper tried to provide a comprehensive understanding of Smartphone addiction problems among university undergraduates. Hence, it developed the first questionnaire to measure this addiction among university undergraduates in Oman.

**Keywords:** Smartphone Addiction, University Undergraduates, Oman.

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## Performance of Selection Combining Technique in Energy Detection

**Haci Ilhan\***

Yildiz Technical Univesity

### Abstract

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In this paper, a comprehensive performance analysis of the energy detector with selection combining over cascaded Nakagami-m fading channels with antenna diversity reception is developed in which all terminals are considered as vehicles. For the diversity case, with the selection combining, expression for the probability of detection is derived by using probability density function method. The validity of theoretical analyses was shown by comparing numerical results with Monte-Carlo simulations. The results indicate that the detection performance for cascaded Nakagami-m fading is even worse than the conventional Nakagami fading, which can be improved by diversity.

*Keywords:* Spectrum Sensing, Energy Detection, Cascaded Nakagami-M Fading, Probability Density, Function, Selection Combining.

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## **A Study on How to Improve the Performance of K-Mean Data Mining Algorithm in a Parallel Environment**

**Gunasekara R.P.T.H<sup>1\*</sup>, Wijegunasekara M.C<sup>2</sup>, Dias N.G.J.<sup>3</sup>**

<sup>1</sup>University of Sri Lanka, <sup>2,3</sup>University of Kelaniya

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### **Abstract**

The k-mean algorithm is widely used clustering algorithm for large datasets. But there are limitations when k-mean is used for significantly large datasets. This study is carried out to enhance the performance of the k-mean data mining algorithm by using parallel programming methodologies. In this Work, mainly two methods of parallelizing k-mean clustering algorithm were compared. They are, k-mean clustering on parallel and non-parallel execution in WEKA, and k-mean clustering on implemented program using message passing interface (MPI) for parallel k-mean algorithm. Firstly the cluster building ability of WEKA Parallel over non-parallel WEKA for very large datasets was investigated. The experiment was done on three real sets of data consists of 80000, 50000 and 30000 data entries with 65 attributes. It was identified that there is a significant improvement in performance of the WEKA Parallel. Further WEKA parallel can be applied to very large datasets which were failed to work with WEKA. Secondly the k-mean algorithm was implemented in C programming language and its performance with non- parallel WEKA was compared. According to that the time taken to build clusters was almost similar for small datasets. Then the above C program for k-mean algorithm was improved to parallel k-mean using Message Passing Interface (MPI) programming on distributed computers. To measure the performance of parallel k-mean over non-parallel k-mean the above datasets were used and above experiment was repeated for the constructed MPI program. Here the dataset was partitioned into several segments and those segments are sent to distributed processors and then it applies the k-mean algorithm separately for each segment. This process is repeatedly executed until the smooth clusters are formed. Further, we compared the performance of the constructed parallel k-mean algorithm and the k-mean in WEKA parallel for very large datasets.

*Keywords:* k-mean, WEKA, MPI.

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## **Rice Bran Oil Extraction: A Study on Leaching Kinetics and Cross Flow Extraction**

**Amarasinghe B.M.W.P.K<sup>1\*</sup>, Kodithuwakku D.S<sup>2</sup>**

University of Moratuwa, Moratuwa, Sri Lanka

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### **Abstract**

Rice bran is highly nutritious due to the presence of lipids, protein, minerals and vitamins. Rice bran oil has a high medicinal value and hence is used in many pharmaceutical manufacturing processes. Rice bran oil was extracted from six rice varieties used in Sri Lanka using Iso propyl alcohol as the solvent. Results show that the rice bran contains 11 to 18 weight % oil for the types of bran tested. Three stage cross flow extraction experiments conducted for the selected types of bran shows approximately 50% of the oil is extracted in the first stage, followed by 30% and 20% of the oil extraction in the second and third stages respectively. Extraction kinetic data were fitted to kinetic models and model parameters were determined. Analysis of the results revealed data fits to second order model, Weibull's equation and power law model with correlation coefficients ( $R^2$ ) and root mean square values in the range of 0.989 to 0.996 and  $\leq 0.0132$  to  $\leq 0.05$  respectively. Initial extraction rates predicted from the second order model were 0.052 min<sup>-1</sup> and 0.063 min<sup>-1</sup> and the diffusional exponent ( $n$ ) in the power law model were 0.267 and 0.213 for BG 352 and AT 307 respectively. Scale parameter ( $\lambda$ ) in the Weibull's equation which represents the time needed to accomplish approximately 63% of the extraction were 54 and 60 mins for the two types of rice bran, BG 352 and AT 307, tested respectively. Predicted maximum extraction yield from the second order equation and the scale parameter from the Weibull's equation were in good agreement with the experimental results

**Keywords:** Rice Bran Oil, Extraction, Kinetics.

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## **Improvement of Bearing Capacity of Strip Footings on Dune Sands Using Geogrids**

**Mohammed Y. Al-Aghbari<sup>1\*</sup>, Yahia E-A. Mohamedzein<sup>2</sup>**

Department of Civil Engineering, Sultan Qaboos University, Oman.

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### **Abstract**

Laboratory model tests were carried out to study the behaviour of strip footing resting on a geogrids-reinforced dune sand. The tests were performed on a rigid steel tank having glass side with inner dimensions of 1 m by 0.64 m by 0.23 m. The footing was made from a metal plate with dimensions of 75 mm by 230 mm by 180 mm. The footing was placed centrally across the tank. Different instrumentation were installed such as Linear Variable Displacement Transducers (LVDT) to measure the vertical displacement of the footing. The applied load was measured by using a providing ring with strain gages placed at the top of the footing. A hydraulic machine as used to apply the load. Footings were placed at different depths from the surface of sand. Geogrids were placed at different depths below the footing starting at 0.25B to B (where B was the width of the footing). The sand was placed in the tank using raining method. The use of geogrids improved the bearing capacity of strip footings by a factor of up to 3.5 times. The improvement depends on the number of the geogrids layers and the depth of the geogrids below the bottom of the footings. The geogrids modified the load-settlement curve for the footing by increasing the strain at failure. The bearing capacity increases as the depth of the foundation increases. From the tests, the best depth of the geogrids which gives the higher bearing capacity is at 0.75B for one layer. For two layers the optimum locations are one geogrid at 0.25B and the other one at 0.75B.

*Keywords:* Bearing Capacity, Dune Sands, Geogrids, Settlement, Strip Footing.

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**Educating self-Detection and risk factor assessment model for breast cancer: computing perspective and knowledge transfer issues- case of Omani women**

**Aljabri.Maryam.Gharib <sup>1\*</sup>, Saini.Dinesh.Kumar <sup>2</sup>, Rufus. Elizabeth <sup>3</sup>**

<sup>1,2</sup>Sohar University, <sup>3</sup>Middle East College

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**Abstract**

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Breast cancer risk assessment model will tack external risk factors such as family medical history (including gens (BRCA1, BRCA2), number of first degree relative with breast cancer),number of previous breast biopsies, menstrual period, previous chest radiation, the woman's age when she had the first child, weight, height, whether she has breast-fed, physical activity and working at night as input. It displayed as a percentage likelihood of developing breast cancer as result. In addition, it will transfer input information to hospital to determent eligibility of clinical treatment and book appointment for breast cancer treatment They will categorize to two groups, one of them is women with greater than 40 years old who have not family history of breast cancer and anther is women with greater than 35 years old who have family history of breast cancer. The main purpose of this research is to study and make an analysis of all external risk factors leading to breast cancer and to design a tool for self- detect breast risk factors than can lead to breast cancer, connect system with hospital to be under consultant doctors and enable women to book an appointment through the model for breast cancer treatment, transfer input data to the hospital and measure by doctor, increasing public awareness of breast cancer risk factors in Oman, it will give health care in Oman tool to assist breast cancer risk factors and determine eligibility for clinical treatment, simplify the breast cancer clinical treatment appointment process, computing percentage likelihood of developing breast cancer as result for Omani women, develop an algorithm that will taking external risk factors.

**Keywords:** Assessment Model, Breast, Cancer, Risk Factor, Computing.

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Email: [mjabri@soharuni.edu.om](mailto:mjabri@soharuni.edu.om)







## **Potential Costs of Construction and Demolition Waste Recycling Program Implementation in Bangkok, Thailand**

**Dat Tien Doan<sup>1\*</sup>, Thanwadee Chinda<sup>2</sup>**

Sirindhorn International Institute of Technology, Thammasat University.

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### **Abstract**

Construction and demolition (C&D) waste is a major problem in many countries around the world, especially in developing economies. Thailand is not an exception. To satisfy the needs of the rapid development of economy, a huge amount of money is invested in the construction industry. Thailand is, therefore, seeing the increase trend in a great deal of C&D waste. However, very few construction companies are focusing on the C&D waste recycling program implementation owing to the lack of experience in the C&D waste management. Therefore, this research tries to improve the current status of recycling by concentrating on economic feasibility. All types of costs are paid by construction companies when applying to a recycling program in Bangkok will be indicated. The result shows that approximately 2.5 billion Baht is needed to invest in the C&D waste recycling program. This paper suggests that the government ought to encourage construction companies to participate in recycling program by reducing tax or subsidizing partially the capital for them because of the large amount of investments at the beginning years.

**Keywords:** Construction and Demolition Waste, Recycling Program, Bangkok.

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## Using Semantic Hypergraph to Present the Computer Network Ontology

**Askarova Sandugash Askarovna<sup>1\*</sup>, Sharipbay Altynbek Amirovich<sup>2</sup>**

L.N. Gumilyov Eurasian National University, Kazakhstan.

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### Abstract

This paper considers the use of hypergraphs in representing conceptual knowledge in the field of computer networks. Formalization of knowledge on computer networks is carried out using the ontology editor Protégé. The last few decades, ontologies have become one of the most popular topics in Computer Science. Their purpose is to serve as explicit conceptual knowledge models, which make different domain knowledge “understandable” to computers [Grimm et. al, 2011]. Ontologies are most important part of the Semantic Web technologies as they provide the semantic vocabulary for machine interpretation of websites in a meaningful way. They are applied to impart knowledge in different fields of Information Technology, many of them were created for various domains, for example, biology, medicine, physics, chemistry, and mathematics [Murugan et. al, 2013]. However, there is a very little work done in development of ontologies for computer network and its presentation in the form of semantic hypergraph. Ontology created for educational purposes [Jiang et. al, 2008] considers some concepts of computer network, but the relationships between these concepts are weak not clearly defined. Another work [Murugan et. al, 2013] attempts to create the full ontological model of computer network, but it does not present its hypergraph. By considering the literature on selected topic and adding more concepts into the available ontologies, this paper attempts to create hypergraph for computer networks and illustrate its applications.

*Keywords:* Ontology, Computer Network, Semantic Hypergraph.

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## Timber Waste Generation: Factors Affecting From Various Perspective

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Shahida Binti Sharipudin<sup>5</sup>, Herda Balqis Bt Ismail<sup>6</sup>**

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Mara, Shah Alam, <sup>6</sup>Universiti Teknologi Mara, Pulau Pinang, Malaysia

### Abstract

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Malaysian construction industry had shown a robust growth nowadays and it gives positive impact to the nation. However, the negligent of construction waste generation should be overwhelmed since it is not only effecting the environment but also on the profit margin of the company. Among the various types of waste generated from the construction activities, timber had identified as one of the most generated based on the experience of the various person in the construction industry. Hence, this paper is intended to show the effectiveness of the identified factors to the waste generation based on point of view of various key personnel who directly involved in construction industry such as Site Supervisor, Site Engineer, Project Manager, Project Engineer and Quantity Survey. The structured questionnaire surveys were distributed among those respondents which located in Kuala Lumpur and Selangor only. It was found that there are various taught on this matter and it shows that difference key personnels are stressing on different factors in handling their project in order to minimize the waste generation.

*Keywords:* Construction Waste, Factors, Timber.

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## Development of Estimation Model of Timber Waste Materials for Housing Construction Project

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Mohd Ridzuan<sup>3</sup>, Zulkiflee Yusof, Ismail Atan<sup>3</sup>, Raja Nor Husna  
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Mara, Shah Alam, <sup>6</sup>Universiti Teknologi Mara, Pulau Pinang, Malaysia

### Abstract

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Even though there are many records offer for a better waste management system in Malaysian construction industry, only a few recorded on construction waste generation. Thus, this paper highlighted the development of a model to estimate the amount of timber waste which generated from a construction site specifically to housing construction project. The adjusted R-square value of 0.851 is indicate for this model. In addition, the performance of the model was evaluated by using Mean Absolute Percentage Error (MAPE) which good model shows value less than 20% . As for the model of timber waste, the value of MAPE is 15.478% and this can be considered as good. This model is believed can be used by the construction practitioners mainly the contractors as a tool to assist in estimating the timber waste which may be generated from a housing construction project. This may help them in preparing the proper waste management at the construction site, thus indirectly reduce the cost and achieve the sustainable development.

*Keywords:* Timber waste, MRA, Residential Project

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## TRACK E: HEALTH & MEDICINE STUDIES





**Comparative Genomic Analysis of Mycobacterium Iranicum  
UM\_TJL Against Representative Mycobacterial Species  
Suggests Its Environmental Origin**

**Joon Liang Tan<sup>1\*</sup>, Yun Fong Ngeow<sup>2</sup>, Wei Yee Wee<sup>3</sup>, Guat Jah  
Wong<sup>4</sup>, Hien Fuh Ng<sup>5</sup>, Siew Woh Choo<sup>6</sup>**

<sup>1,2,3,4,5,6</sup>University of Malaya, Kuala Lumpur, Malaysia.

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**Abstract**

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Mycobacterium iranicum is a newly reported mycobacterial species. We present the first comparative study of M. iranicum UM\_TJL and other mycobacteria. We found M. iranicum to have a close genetic association with environmental mycobacteria infrequently associated with human infections. Nonetheless, UM\_TJL is also equipped with many virulence genes (some of which appear to be the consequence of transduction-related gene transfer) that have been identified in established human pathogens. Taken all together, our data suggest that M. iranicum is an environmental bacterium adapted for pathogenicity in the human host. This comparative study provides important clues and forms the basis for future functional studies on this mycobacterium.

*Keywords:* Genomic Analysis, Virulence Factors, Gene Transfer.

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## Health of Captive Elephant Keepers in Sri Lanka

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Dissanayake<sup>3</sup>, Bannehakka BMHSK<sup>4</sup>**  
<sup>1,2,3,4</sup>University of Peradeniya, Sri Lanka.

### Abstract

Except for very few, the current population of approximately 100 captive elephants in Sri Lanka, have been brought from the wild. Their keepers play a significant role in management and health of the elephants though they have never been formally trained. In this study, health status of captive elephant keepers, was examined using a dental and medical mobile clinic August in years 2010 and 2011, to understand the current status to design a health education program for them. From the health clinic results (n=78), 52% had musculoskeletal disorders, 21% had dermatitis and 8% had respiratory tract disorders. Twenty (20) had symptoms of Chronic Obstructive Pulmonary Diseases (COPD) but avoided attending follow up clinics, except 5. One was confirmed as tuberculosis, a disease reported in humans and elephants in Sri Lanka. The relationship between smoking and COPD was significant ( $P < 0.05$ ). Twelve had, elevated Serum Glutamic Oxaloacetic Transaminase (SGOT, Mean = 77.7 units/l) and Serum Glutamic Pyruvic Transaminase (SGPT, Mean = 83.1 units / l), evidence of liver disease possibly due to frequent alcohol consumption. Though the keepers did not know, 1 was diabetic, 5 had severe protein urea and one had hematuria. Only 64 attended the dental clinic out of which 12 had never consulted a dental surgeon. The average number of missing teeth in keepers was 5.8, while one was totally edentulous. Early cancer lesions were found in one, possibly due to continuous beetle chewing, who died even before histopathology report arrived. The observed personnel neglect among elephant keepers need to be corrected promptly with health educational programs, if authorities expect them to provide better care and welfare to remaining captive elephants in Sri Lanka.

*Keywords:* Elephant Keeper, Tuberculosis.

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**Reasons and social effects of chronic kidney disease (CKD)  
patients in North central province Sri Lanka (With special  
reference to Padawiya area)**

**Wasantha Subasinghe\***

Dep. of Sociology, University of Kelaniya, Sri Lanka.

**Abstract**

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Chronic kidney disease is a one of worldwide public health problems. Chronic Kidney Disease (CKD), also known as chronic renal disease or chronic renal failure, is a degenerative, progressive condition marked by the gradual loss of kidney function. Optimally, CKD are treated with dialysis or kidney transplant. Chronic kidney disease of unknown etiology has emerged as a major health care problem in the North - Central of Sri Lanka during the last few decades. The aim of this study is to determine the prevalence of kidney disease and the identifying the responsibility of the government other authorities regarding solving this burning issue. Research problem is "reasons and social impact of CKD patients in North central province?" Survey was conducted to identify the research problem and data was collected using questionnaires, Key Informant interviews and focus group interviews. Research area was Padawiya in Padawiya Divisional secretariat. In developed countries, the most common causes of CKD are obesity, high blood pressure, and diabetes. But in Sri Lankan context there is a significant high rate of kidney patients in north central province. Many researches were conducted to identify the causes and effects of the disease. Deferent researchers have identified different causes including insecticides, fluoride water, poisons, arsenic, dehydration, drugs, smoking, affect from hard metals. Research findings including spreading rate, sex ratio, geographical and environmental relations, food patterns, livelihood patterns, water resources are make a path to open a new discussion on these issues.

*Keywords:* Chronic Kidney Disease, Environmental Impact, Social Responsibility.

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**Hypoglycemic, Hypocholesterolemic and Cytoprotective  
Effects of Persea Americana Mill (Family Lauraceae) Seed  
Extract on Diabetic Rats**

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Centro Escolar University.

**Abstract**

The hypoglycemic and hypolipidemic effects of aqueous extract of avocado seed were investigated on normal and alloxan-induced diabetic rats. Likewise, the effects of the avocado seed extract on the pancreatic Islet cells and liver of rats were also assessed. Diabetes was induced using a single dose (120 mg/kg body wt.) intraperitoneal injection of alloxan monohydrate (1%). The extract was administered to the rats of both normal and hyperglycemic groups at a dose of 1000 and 2000 mg/kgbw. Blood samples were collected from the tail of the rats using sterile blade. Blood glucose and total cholesterol were determined using the EasyMate® GCU. A significant decline in the blood glucose level was seen for the diabetic rats treated with 1000 mg/kgbw (20% reduction) and 2000mg/kgbw (42% reduction). The reduction was comparable to that of the standard drug glibenclamide ( $p = 0.58 > 0.05$ ). Histological studies showed that alloxan caused a degenerative effect on the pancreatic islet cells of diabetic rats. However, after treatment of the rats with avocado, an improvement of the histo-morphological structure of the Islet cells of the pancreas was noted, suggesting restorative (protective) effect of the extract on pancreatic islet cells as well as cytoprotective in the development of fat deposition in the liver parenchyma of diabetic rats. These data suggest that administration of aqueous extract of avocado seed may be safely used in the treatment and management of diabetes. The isolation of the active component responsible for the hypoglycemic and hypolipidemic effect and its cytoprotective action, is therefore warranted.

**Keywords:** Hypoglycemic, Hypocholesterolemic, Cytoprotective.

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## FUTURE EVENTS

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**Date:** July 29-30, 2015

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**Abstract Submission Date:** May 25, 2015

**Full Paper Submission Date:** May 30, 2015.

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**Abstract Submission Date:** June 20, 2015

**Full Paper Submission Date:** June 30, 2015.

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**Conference Email:** mtar2015@globalilluminators.org

**Abstract Submission Date:** July 20, 2015

**Full Paper Submission Date:** July 30, 2015.

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**Date:** October 05-06, 2015

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**Conference Email:** RCMI2015@globalilluminators.org

**Abstract Submission Date:** June 15 2015

**Full Paper Submission Date:** May 15, 2015

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

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**“Innovative Trends in Multidisciplinary Academic Research”**  
**(ITMAR-2015)**



**Date:** October 20-21, 2015

**Venue:** Istanbul Gonen Hotel, Istanbul, Turkey.

**Conference Email:** mtar2015@globalilluminators.org

**Abstract Submission Date:** August 20, 2015

**Full Paper Submission Date:** August 30, 2015.

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**Venue:** Trans Resort & Hotel, Bali, Indonesia.

**Conference Email:** [etar2015@globalilluminators.org](mailto:etar2015@globalilluminators.org)

**Abstract Submission Date:** September 20, 2015

**Full Paper Submission Date:** September 30, 2015.

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**Conference Main Tracks**

- Business , Management and Economics Studies
- Health and Medicine Studies
- Engineering & Technology Studies
- Social Science & Humanities
- Physical Life and Applied Sciences
- Regional and Religious Studies
- Multidisciplinary and Interdisciplinary Studies

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**3<sup>rd</sup> INTERNATIONAL CONFERENCE ON**  
**“Innovation Challenges in Multidisciplinary Research &**  
**Practice” (ICMRP-2015)**



**Date:** December 15-16, 2015

**Venue:** Novotel Hotel, Singapore.

**Conference Email:** icmrp2015@globalilluminators.org

**Abstract Submission Date:** October 20, 2015

**Full Paper Submission Date:** October 30, 2015.

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

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**2nd INTERNATIONAL CONFERENCE ON**  
**“Global Issues in Multidisciplinary Academic Research”**  
**(GIMAR-2016)**



**Date:** February 01-02, 2016

**Venue:** Hotel Grand Flora Dubai, UAE.

**Conference Email:** [gimar2016@globalilluminators.org](mailto:gimar2016@globalilluminators.org)

**Abstract Submission Date:** October 30, 2015

**Full Paper Submission Date:** December 15, 2015.

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

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# MISSION

“Our mission is to persistently nurture the values to promote the human rights, institutional and academic development through quality research contributions. Our unique human capital with constructive attitude is committed to bring change in all spheres of life by using innovative research and intellectual skills. We are here to research and promote the development, prosperity and transparency across the globe without any discrimination”.

# VISION

“Researching and Developing for Humanity”

3rd International Conference on  
“TRENDS IN MULTIDISCIPLINARY  
BUSINESS AND ECONOMIC RESEARCH”  
(TMBER-2016)

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