

# MI-BEST

Bangkok, Thailand

3rd International Conference On  
MULTIDISCIPLINARY INNOVATION IN BUSINESS  
ENGINEERING SCIENCE & TECHNOLOGY

**April 05-06, 2017**

Organized by:



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# **MI-BEST 2017**

## **Conference Proceeding**

### **Book of Abstracts**

**3<sup>rd</sup> International Conference on  
“Multidisciplinary Innovation In Business Engineering  
Science and Technology” (MI-BEST - 2017)”**

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

**Editor:**

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

**Country Director (Global Illuminators Iraq)**

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## Conference Chair Message

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



3<sup>rd</sup> International Conference on “Multidisciplinary Innovation In Business Engineering Science and Technology” (MI-BEST - 2017) serves as platform that aims to help the scholarly community across nations to explore the critical role of multidisciplinary innovations for sustainability and growth of human societies. This conference provides opportunity to the academicians, practitioners, scientists, and scholars from across various disciplines to discuss avenues for interdisciplinary innovations and identify effective ways to address the regional and global challenges faced by our societies. The research ideas and studies that we received for this conference are very promising, unique, and impactful. I believe, these studies have the potential to address key challenges in various sub-domains of social sciences and applied sciences. The scholars attending this conference will certainly find it helpful in refining their own research ideas, finding solutions to basic/applied problems they face and interacting with other renowned scholars for possible future collaborations.

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

A very special thanks to the great scholars for being here with us as 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.

## Type of MI-BEST Papers

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

## Reviewing Criteria

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

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

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

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

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



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

### Acceptance Rates

Full Research Papers				
Submitted Papers	Accepted Papers	Withdrawn	Unqualified papers	Acceptance Rate
60	30	16	14	50%

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## **Acknowledgment**

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

Farooq Ahmed Jam (Ph.D.), Tariq Iqbal Khan (Ph.D.)  
Program Chair & Co-Chair

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## **KEYNOTE SPEAKER**

### **Balachandra S. Sayapathi (Ph.D.)**



Dr. Balachandrar S. Sayapathi is a Senior Principal Assistant Director of Occupational and Environmental Health Section at the Sarawak State Health Department. Dr. Balachandrar initially attained the bachelor degree, MBBS. Subsequently, he obtained his degrees on Master (MPH) and Doctorate (DrPH). He also attained MFOM from Ireland. He was then inducted to the Academy of Occupational and Environmental Medicine, Malaysia. He also acquired Fellowship (FAGE) and Certified Medical Independent Assessor (CMIA). He is registered as an Occupational Health Doctor with the Department of Occupational Safety and Health, Ministry of Human Resources, Malaysia. In 2008, in recognition of his services, he was conferred the Excellence Service Award by the Sarawak Health Department. He also attained the Best Session Presentation Award from the International Conference on Global Trends in Academic Research 2014 and International Conference on Innovation Challenges in Multidisciplinary Research & Practice 2013. He has also chaired sessions in the International Conferences. He has affiliations to various organizations such as the Royal College of Physicians Ireland, Malaysian Society of Occupational Health Physicians, Malaysian Society of Hypertension, Malaysian Medical Association and also Malaysian Diabetes Association (Serian Division).

During his earlier stint, he served at various government hospitals. He previously held office as the Director of Hospital Serian, Chairman of Safety and Health Committee of Hospital Serian, Chairman of Infection Control Committee including Needle Stick and Sharp Injury Committee of Hospital Serian, Chairman of Ethical Committee of Hospital Serian and also Chairman of Quotation Committee of Hospital Serian. His areas of expertise are Occupational Medicine, Medical Review Officer, The effectiveness of applying different permissible exposure limits in preserving hearing threshold level among automobile industry workers and also Public Health Medicine. Dr. Balachandar has published numerous academic papers in ISI-cited journals and as Conference papers. He has also presented several oral and poster presentations at the International Conferences.

## **MI-BEST 2017 Tracks’ Chairs**

### **Business, Management, Economics & Social Sciences**

Tariq Iqbal Khan & Assel Omarbekova

### **Engineering, Technology Studies, Physical Life and Applied Sciences**

Hyun Gyu Kim & Fakhri Naufal Marzuq

### **Health, Health and Medicine Studies**

Balachandar S. Sayapathi & Vinod Lall



## **MI-BEST 2017 Panels**

### **“Use of Bioprocess Technology for Betterment of Society: A literary debate”**

**Moderator: Dr. Tariq Iqbal Khan (Ph.D.)**  
**Kashmery Khan**

This panel discussion frames the response by researchers. The prospects of bioprocess engineering will be discussed in this panel to make everyone understand about the future innovations of bio processing and to build realization that innovations of bioprocess engineering require the collaborative efforts of science, engineering and business. Discussion on the responsibilities and future research perspectives will also be discussed among the scholars from different fields of research.

## **Best Paper Nominee List**

### **Fragility Assessment of the Connection used in Small-Scale Residential Steel House Subjected to Lateral Wind Loads**

*Viriyavudh Sim<sup>1</sup>, Jungkyu Choi<sup>2</sup>, WooYoung Jung<sup>3\*</sup>*

Gangneung-Wonju National University, Gangneung,  
Gangwon, Korea

### **Information Security Policy Mix and Strategic Choice for Information Security Compliance Intention Maximization**

*Hyun Kim*

Kongju National University, Korea South

### **Empowering Self Potential in the Enhancement of Business Management for People with Disabilities in Bandung**

*Zakiy Firosy As Syahid<sup>1</sup>, Zulfa Fauzia<sup>2</sup>, Fakhri Naufal Marzuq<sup>3</sup>, Nafisa Farkhiy Aulia<sup>4</sup>*

Telkom University, Indonesia

### **The Indigenous Aetas in Castillejos, Zambales: Practices and Preservation of Cultural Heritage**

*Emma C. Ventura\*, Daisy Soria and Rose Balario*

*Ramon Magsaysay Technological University*

*Castillejos Campus, Castillejos, Zambales, Philippines*

## **MI-BEST 2017 Best Paper Award Winner**

### **The Indigenous Aetas in Castillejos, Zambales: Practices and Preservation of Cultural Heritage**

*Emma C. Ventura\*, Daisy Soria and Rose Balario*

*Ramon Magsaysay Technological University*

*Castillejos Campus, Castillejos, Zambales, Philippines*

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

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# CONFERENCE PROGRAM

**DAY 01 Wednesday (April 05, 2017)**

**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>Mr. Metha Shahi</b>
09:15 am – 9:25 am	Opening Speech – <b>Dr. Farooq Ahmed Jam (Ph.D.)</b> Executive Director , Global Illuminators Conference Co-Chair
09:25 am – 9:45 am	Keynote Speech- <b>Prof.Balachandar S. Sayapathi</b> University of Malaya, Malaysia
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 (April 05, 2017)**  
**Session 1 (11:00 am – 1:00 pm)**  
**Venue: Room 1**

**Session Chairs: Farooq Ahmed Jam & Assel Omarbekova**  
**Track B: Business, Management, Economics & Social Sciences**

MI-BEST-17-122	Facilities, Inventory, Transportation And Information as Drivers of Humanitarian and Disaster Recovery Supply Chains	Vinod Lall
MI-BEST-17-130	Information Security Policy Mix and Strategic Choice for Information Security Compliance Intention Maximization	Hyun Gyu Kim
MI-BEST-17-159	Constitutional and Participatory Model of Collective Judicial Proceeding: A Critical Study Based on the Theory of Class Actions as Thematic Class Actions	Reginaldo Gomes

**Lunch Break (1:00 pm – 2:00 pm)**

**DAY 01 Wednesday (April 05, 2017)**  
**Panel Discussion Session (2:00 am – 3:00 pm)**

**Panel Discussion on**

**“Use of Bioprocess Technology for Betterment of Society: A literary debate”**

<b>Panellists</b>	Kashmery Khan Rabeya Tafsire Rudhy Dr. Farooq Ahmed Jam
	Prof. Balachandar S. Sayapathi
<b>Participants</b>	All Participants

**\*Description of Panel Discussion:** This panel discussion frames the response by researchers. The prospects of bioprocess engineering will be discussed in this panel to make everyone understand about the future innovations of bio processing and to build realization that innovations of bioprocess engineering require the collaborative efforts of science, engineering and business. Discussion on the responsibilities and future research perspectives will also be discussed among the scholars from different fields of research

**DAY 01 Wednesday (April 05, 2017)**  
**Session 2 (3:00 am – 3:45 pm)**  
**Venue: Room 1**

**Session Chairs: Hyun Gyu Kim & Fakhri Naufal Marzuq**

**Track C: Engineering, Technology Studies, Physical Life and Applied Sciences**

MI-BEST-17-115	Automated Generation of Test Questions from Knowledge-Base	Assel Omarbekova
MI-BEST-17-117	Fragility Assessment of the Connection used in Small-Scale Residential Steel House Subjected to Lateral Wind Loads	Jungkyu Choi
MI-BEST-17-118	Development of Wind Fragility for Window System in Lightweight Steel Frame House in South Korea	Yongju Gwak
MI-BEST-17-152	Prevalence and Risk Factors of Musculoskeletal Disorders in Rubber Tappers: A Case Study in Phatthalung Province, Thailand	Sutee Inraksa

**Tea Break (3:45 pm – 4:00 pm)**



**DAY 01 Wednesday (April 05, 2017)**  
**Session 3 (4:00 pm – 5:15 pm)**  
**Venue: Room 1**

**Session Chairs: Balachandar S. Sayapathi & Vinod Lall**

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

MI-BEST-17-134	Establishment of Transient Transformation Protocol along with Comparison of Regeneration Potential Following Introduction of Antiporter Genes in Peanut ( <i>Arachis hypogaea</i> L.)	Kashmery Khan
MI-BEST-17-135	Isolation of Pathogenic Organisms from Meat	Rabeya Tafsire Rudhy
MI-BEST-17-138	The Indigenous Aetas in Castillejos, Zambales: Practices and Preservation of Cultural Heritage	Emma C. Ventura
MI-BEST-17-149	Site Characteristic of Medicinal Plants for Domestication in South Kalimantan, Indonesia	Yudi Firmanul Arifin
MI-BEST-17-150	Micro Climate Assessment of Medicinal Plant Habitat for the First Step of Domestication	Siti Hamidah
MI-BEST-17-151	Effect of Sub-acute Exposure of the Aqueous Extract of Leaves of Gemor ( <i>Nothaphoebe coriacea</i> ) to Liver and Kidney Function: Toxicity Evaluation Studies	Eko Suhartono

**Closing Ceremony: 5:15 to 5:45pm**

## **DAY 02 Thursday, (April 06, 2017)**

### **“CITY TOUR”**

Gathering of Participants at the Lobby of Holiday Inn Bangkok Silom,  
Bangkok Thailand at 2:00 pm

Departure: 2:30 pm for City Tour

Drop Back at Holiday Inn Bangkok Silom, Bangkok Thailand at 7:00 pm

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



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



## Facilities, Inventory, Transportation and Information as Drivers of Humanitarian and Disaster Recovery Supply Chains

**Vinod Lall\***

Paseka School of Business Minnesota State University Moorhead  
Moorhead, USA

### Abstract

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On November 7, 2013 typhoon Haiyan (aka, typhoon Yolanda in the Philippines) made landfall in Philippines with a maximum ten minute sustained wind speed 167 mph (270 kmph). This was the deadliest hurricane on record killing close to 6000 people in that country alone. According to UN estimates, about 11 million people were affected and many were left homeless. The 7.0 magnitude earthquake that hit Haiti in January 2010 killed between 217,000 and 230,000 and affected close to 3 million people. A call for help in these and other natural disasters results in pledges for numerous countries. One of the biggest challenges in these situations is the fast deployment of financial, equipment, human, medical, food and water resources that are a part of the pledges. The purpose of this presentation is to introduce the supply chain for humanitarian and disaster recovery by comparing and contrasting it to a commercial supply chain. Existing literature on efforts made in recent disasters will then be used to identify critical success factors necessary for the four drivers of a supply chain. These drivers include facilities, inventory, transportation and information. Lastly, metrics will be identified and discussed to measure the performance of a humanitarian and disaster recovery supply chain.

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**Keywords:** Inventory, Transportation, Drivers of Humanitarian

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## Information Security Policy Mix and Strategic Choice for Information Security Compliance Intention Maximization

**Hyun Kim\***

Kongju National University, Korea South

### Abstract

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Based on Theory of Planned Behavior (TPB), this research identified how the different factors of information security strategy orientations influence information security compliance intention of users. With a review of existing literature addressing information security problem, this research introduces a new model, Information Security Strategy Model, with new concepts called Prevention Oriented Policy and Deterrent Oriented Policy

**Keywords:** Information Security Policy Mix, Information Security Strategy

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



## Constitutional and Participatory Model of Collective Judicial Proceeding: A Critical Study Based on the Theory of Class Actions as Thematic Class Actions

**Juliana Maria Matos Ferreira<sup>1\*</sup>, Reginaldo Gomes<sup>2</sup>, Fabrício Veiga Costa<sup>3</sup>, Vicente de Paula Maciel Junior<sup>4</sup>**  
<sup>1,2,3,4</sup> Centro Universitário Estácio de Belo Horizonte, Brazil

### Abstract

The reconstruction of the Collective Judicial Proceeding from the perspective of the Constitutional Judicial Proceeding Model is necessary in the Democratic Rule of Law. The overcoming of the collective judicial proceeding model based on the representative system enables its critical understanding through the participation of all those legally interested parties in building the merits of Class Action Suits. Thus, this research has the objective to present a legal debate about the problematic issue and to discuss the collective judicial proceeding untying it from autocratic and individualistic meanings. It is necessary to systematize all sparse Brazilian legislation regarding to Collective Rights with the purpose of seeking the construction of a legal system to protect the claims of diffused legally interested parties in a democratic way. Aiming at this theoretical context, we have to turn our minds to Class Action Proceedings under the critical view of the Supremacy Clause of the Constitution in order to implement the participation of those interested parties in the decision making according to the Theory of Class Action Suits as Thematic Action Suits. The scientific hypothesis that will lead to the whole study proposed in this research is centered on the following issue: Does the present model of Class Actions Proceedings proposed by the Instrumentalist ideological current corroborate the paradigm of the Democratic Rule of Law? Certainly not, since the fact that Class Action Proceeding have been discussed under the model of representativeness, it is not enough to make feasible the direct participation of diffuse and collective interested parties in the construction of the judicial decision, whose effects of it (decision) will affect all those subjects to whom the right of participation in the debate must be guaranteed concerning to all themes related to the claims initially brought before the Courts.

***Keywords:*** Empowerment, Behavior, Forest Resource Management

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## **TRACK C: ENGINEERING & TECHNOLOGY STUDIES**





## Automated Generation of Test Questions from Knowledge Base

Assel Omarbekova<sup>1\*</sup>, Alma Zakirova<sup>2</sup>, Bayan Abduraimova<sup>3</sup>,  
Duzelbayev Sailaubek<sup>4</sup>

<sup>1,2,3,4</sup> L.N. Gumilyov Eurasian National University, Kazakhstan

### Abstract

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Kazakhstan has a necessity for artificial intelligence application technologies in the development of educational resources and education process. The actual article describes the system development of test questions' automated generation in terms of a knowledge base. This work has an application attitude; provides detailed examples of ontology development and SPARQL-queries in RDF-documents. Additionally, Python programming language-based question generating program's implementation is described with involvement of all required libraries required for RDF-files operation.

**Keywords:** Knowledge Base, RDF-Documents, SPARQL-Queries, Intelligent Systems

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Email: [omarbekova@mail.ru](mailto:omarbekova@mail.ru)



## Fragility Assessment of the Connection Used in Small-Scale Residential Steel House Subjected to Lateral Wind Loads

**Viriyavudh Sim<sup>1</sup>, Jungkyu Choi<sup>2</sup>, WooYoung Jung<sup>3\*</sup>**

<sup>1,2,3</sup> Gangneung-Wonju National University, Gangneung, Gangwon, Korea  
Abstract

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Typhoon disasters risk assessment is needed for small-scale residential houses with less than two stories or less than 500 square meters, since they accounted for about 55% of total buildings in Korea. Therefore, this study was focused on the evaluation of wind fragility for this small-scale lightweight steel frame structure when subjected to lateral wind loads. For this purpose, Monte Carlo Simulation technique was used to derive wind fragility based on random wind load parameters and experimental data of resistance capacity of the connection in this type of structure. Finally, the structural safety of a small-scale lightweight steel house was evaluated, and the fragility was derived. Results show that wind direction parallel to long dimension of structure was the most critical condition. Additionally, the median probability of failure occurs at a very high wind speed. Further research should focus on study with detailed structural analysis to narrow down the uncertainty in this study.

**Keywords:** Lightweight Steel Frame, Monte Carlo Simulation, Wind Fragility

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## Development of Wind Fragility for Window System in Lightweight Steel Frame House in South Korea

**Viriyavudh Sim<sup>1</sup>, Jungkyu Choi<sup>2</sup>, WooYoung Jung<sup>3\*</sup>**

<sup>1,2,3</sup> Gangneung-Wonju National University, Gangneung, Gangwon, Korea  
Abstract

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Recently, due to many natural disasters, the damage of small-scale residential facilities has rapidly increased. Therefore, safety evaluation is very important and necessary in the field of disaster prevention. Especially, small-scale residential facilities required to ensure the safety of their window components under strong winds. In this research, we focused on developing the framework of wind fragility for window system installed at small-scale residential facilities, especially a lightweight steel frame house, in South Korea. The random variables in accordance with wind load parameters and resistance capacity of window system were considered in the process of developing the fragility. To derive the resistance capacity of window system made in Korea, the performance data were obtained from the previous experimental research. Then, based on these demand and capacity parameters, probability of failure for window system could be obtained at various limit conditions. From the results attained, it could be used to evaluate the vulnerability of window in this small-scale residential steel house.

**Keywords:** Lightweight Steel Frame, Monte Carlo Simulation, Wind Fragility

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Email: woojung@gwnu.ac.kr



## **TRACK D: PHYSICAL LIFE AND APPLIED SCIENCES**



## Prevalence and Risk Factors of Musculoskeletal Disorders in Rubber Tappers: A Case Study in Phatthalung Province, Thailand

**Sutee Inraksa\***

Prince of Songkla University, Thailand

### Abstract

This cross-sectional study presents the prevalence of musculoskeletal disorders (MSDs) among rubber tappers in Paphayom District, Phatthalung Province, Thailand. A total of 250 rubber tappers participated in this study. A general questionnaire was used to collect demographic background data and physical work characteristics while modified Nordic Musculoskeletal Questionnaire was used to determine the prevalence of MSDs (within 6 months). Descriptive statistics were used to describe the general data and prevalence. The factors affecting MSDs and odds ratio (OR) were analyzed by inferential statistics at 95% confidence interval. The results showed that most participants were females (56.8%). The mean age of tappers was  $42.1 \pm 12.6$  years. The average work experience and Body Mass Index (BMI) were  $12.6 \pm 8.3$  years and  $22.3 \pm 3.5$ , respectively. The prevalence of MSDs (in any body region) in last 6 months was 36.40 (95% CI 30.42-42.69). The highest prevalence rates of MSDs were reported in lower back, upper back, hip & thigh regions (30.4%, 6.8% and 6.0%, respectively). Risk factors which were significantly resulted in MSDs were age of workers, work experience, and handedness behavior. The significant risk factors related to working conditions were plantation ground level, tapping light, handedness, grip tightness, standing posture, age of rubber tree, and tapping height. This study reveals that rubber tappers were suffering from acute MSD (for the past 6 months) on low back area. Various risk factors were found to be significant. Rubber tappers who were exposed to a combination of risk factors may have an increased risk of developing MSDs. Further study with comprehensive strategy is essential in order to determine the need of appropriate intervention and health promotion for rubber tappers.

**Keywords:** Prevalence, Musculoskeletal Disorders, Rubber Tappers

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## **TRACK E: HEALTH AND MEDICINE STUDIES**



## Establishment of Transient Transformation Protocol along with Comparison of Regeneration Potential Following Introduction of Antiporter Genes in Peanut (*Arachis hypogaea* L.)

Kashmery Khan<sup>1\*</sup>, Aparna Islam<sup>2</sup>  
<sup>1,2</sup> BRAC University, Bangladesh

Abstract

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Peanut is a cash crop having outstanding food values. Therefore, it can be used as a supplementary food for hunger and malnutrition affecting asian countries like Bangladesh. As a result, salt-tolerant peanut has to be improved to ensure better production where the success of conventional breeding was severely hampered due to its cleistogamous nature of pollination. Thus, Present study was examined with three Bangladeshi peanut varieties, such as, BINA Chinabadam 2, BINA Chinabadam 4 and BINA Chinabadam 6 where two explants, named, decapitated half embryo and embryonic leaflet were transformed with vectors, such as, pBI121, pK7WG2\_OsNHX1\_1.6 & pK7WG2\_AtNHX1\_1.6. Decapitated half embryo showed better in vitro regeneration potential than leaflet explant. Hence, transformation study was conducted with 1 day old decapitated half embryo where highest percentage of GUS positive explants were found when OD600 was more than 1 at 60 minutes of infection and 3 days of co-cultivation duration in transient assay. In contrast to this, untransformed control explants were able to resist upto 20mg/l of kanamycin. Moreover, average number of putative transformed shoots was gradually dropped with the increased concentration of kanamycin. Shoots which survived upto 150mg/l kanamycin were transferred into rooting media for root induction. Finally transformation efficiency was evaluated by calculating the percentage of GUS positive plant parts, such as, leaf, stem and roots among the putatively transformed plantlets. In the current experiment, effect of salinity on peanut seed germination was also observed. The germination rate steadily decreased with the increase of NaCl in the media and finally no germination was observed in MS media supplemented with 150mM of NaCl and above.

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**Keywords:** Prevalence, Musculoskeletal Disorders, Rubber Tappers

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## Isolation of Pathogenic Organisms from Meat

**Rabeya Tafsire Rudhy<sup>1\*</sup>, Kashmery Khan<sup>2</sup>, Zubaida Marufee Islam<sup>3</sup>**

<sup>1,2,3</sup> BRAC University, Bangladesh

### Abstract

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The current study has been designed to assess the microbial load in different types of meat in terms of processing and preparation. Meat samples, such as raw, semi-cooked and cooked, were collected from specific places of Dhaka city where student community consumes cheap meat-oriented foods. The meat sample was homogenized in 0.85% salt solution and later on incubated in EC broth for 16 hours. From the incubated solution, samples were streaked on different differential media such as EMB agar, MACconkey, XLD, MSA agar, Blood agar etc. Additional to that, from the same inoculated sample solution 100 ml was taken and streak plate method was done to isolate single colonies of bacteria. Different pathogenic bacteria were isolated and identified through biochemical tests. It was found that raw meat samples were contaminated with 9 different persistent organisms, namely, *Staphylococcus aureus*, *Klebsiella* spp, *Shigella* spp, *Salmonella* spp, *Escherichia coli*, *Proteus* spp, *Serratia marcescens*, *Micrococcus luteus* and *Pseudomonas* spp. Meanwhile, *Enterobacter aerogenes* and *Staphylococcus aureus* were the predominant pathogens found in cooked meat. Moreover, a higher number of *Pseudomonas* spp was observed in semi-cooked meat. On the other hand, *E. coli* is frequent in all types of meat samples. As a result, pathogenic *E. coli* was detected through molecular analysis by achieving STEC indicating band in gel electrophoresis. These small scale findings may lead to the promising broad spectrum research to reflect overall hygiene status of meat production in Bangladesh.

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**Keywords:** Raw meat, cooked, semi-cooked, pathogenic, *E. coli*

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## The Indigenous Aetas in Castillejos, Zambales: Practices and Preservation of Cultural Heritage

**Emma C. Ventura<sup>1\*</sup>, Daisy Soria<sup>2</sup>, Rose Balario<sup>3</sup>**

<sup>1,2,3</sup> Ramon Magsaysay Technological University Castillejos Campus,  
Castillejos, Zambales, Philipipines

### Abstract

This study aimed to understand, document and identify Aeta's cultural practices and their ways of preserving their cultural heritage in Sitio Canaynayan, Barangay San Pablo, Castillejos, Zambales. The cultural practices towards preservation were then taken into account. It also emphasized on describing and documenting some of their cultural practices such as dances, songs and musical instruments, religious beliefs, courtship, marriage and family relationships, education and other beliefs. The study involved the 147 inhabitants/residents of the community. The research used the two approaches of research, quantitative and qualitative approaches descriptive and ethnographic methods. The research techniques used semi-structured interviewing, participant observations and process documentation. Data revealed that majority or 68.71 % of the households originated from the municipality of San Marcelino (Sitio Kakilingan, Cuartel, Ibad, Lumibao), 52.38% speak the language/dialect Zambal-Botolan, most of the households have 5-6 and 3-4 members (29.25%), most of the inhabitants are female (50.69), they are usually engaged in vegetable and rice farming (34.01%), stayed in the place for more than 10-20 years (71.42%) and acquired their land through ancestral domain. The community folks provided information as to their cultural practices and beliefs. The Aeta people loved to dance their native talipe using native gong depicting animals such as monkeys, birds, butterflies or those in their environment. The people happily sang their dorodoh songs grouped as "awada" and "pangamba" using their gitaha or native guitar. They believe on their God as Apo Namalyari as the ruler and creator of everything. They practice "bandi" or bride price such as in the form of cash, in kind or both as early or when the girl reaches puberty.

**Keywords:** Indigenous Aetas, Cultural Practices, Cultural Heritage, Religious Beliefs, SitioCanaynayan, Households

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## Site Characteristic of Medicinal Plants for Domestication in South Kalimantan, Indonesia

**Yudi Firmanul Arifin<sup>1\*</sup>, Siti Hamidah<sup>2</sup>**

<sup>1</sup> Lambung Mangkurat University, Banjarbaru, Indonesia

<sup>2</sup> Center of Excellence Research Consortium for Sustainable Forest  
Management

### Abstract

Based on research of RISTOJA 2012 is that Ethnic Dayak Bukit in Hulu Sungai Selatan Region found 62 medicinal plants, and 60 potions derived from medicinal plants from forests, while the research results of RISTOJA 2015, on Ethnic Harakit in Tapin found as many as 111 species of medicinal plants and 93 potions, of which 82% are derived from forests. Most of them have not done cultivation yet. In reality only 20% of medicinal plants are cultivated, it indicates that the research and development of native medicinal plants is very low. Some result of researches states that domestication is a method to maintain the productivity of natural medicinal plants. Departement of Forestry Republic of Indonesia stated that the direction of the preparation of medicinal plants needs to pay attention to the technical aspects, especially the abiotic environment, including: soil type, pH, soil structure and soil fertility. Based on that, as an initial step in order to achieve domestication of some medicinal plants used by the people of Malinau and Harakit, South Kalimantan, it is necessary to do a study of physical and chemical properties of land from the original habitat of plants, so that later can be developed elsewhere, with state media planting that resembles the original. The results showed that soil permeability of medicinal plant habitat ranges from 0.17 to 4.66 cm /hour, Bulk density ranges from 0.94 to 142 g / cm<sup>3</sup>, including medium density. Particle density (2.28 to 2.84 g / cm<sup>3</sup>) was moderate, including porosity and everything special (minimum 25%). Total N content (from 0.07 to 0.18) was high, organic C (1.17 to 3.74%), including low to moderate P content (9.48 to 47.49 mg / 100 g), including low until high. The degree of acidity of the soil ranged from 4.29 to 6.45, including acidic to slightly acidic, it does show that medicinal plants can grow in less fertile soil.

**Keywords:** Medicinal Plants, Domestication, Physic-Chemical Properties

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## Micro Climate Assessment of Medicinal Plant Habitat for the First Step of Domestication

**Siti Hamidah<sup>1\*</sup>, Yudi Firmanul Arifin<sup>2</sup>, Adistina Fitriani<sup>3</sup>**

<sup>1,2,3</sup> Lambung Mangkurat University, Banjarbaru

<sup>1,2,3</sup> Center of Excellence Research Consortium for Sustainable Tropical  
Forest Management

### Abstract

Indonesia is known as a storehouse of medicinal plants (herbal) called live laboratory. More than 8,000 species of medicinal plants included 800-1200 species that have been used by the community for traditional or herbal medicine. It shows that the research and development of medicinal plants endemic is still low, but on the other hand demand for medicinal plants is increasing in line with the trend of people returning to nature (back to nature). Some research states that one of the research policies was taken out of their natural habitat and very high demand is the domestication of medicinal plants. Domestication is the process of turning wild plants into crops by planting in the new habitat. Based on that, as an initial step in order to achieve domestication of some herbs of Malinau and Harakit in South Kalimantan, it is necessary to do a study on the microclimate of the herb, so that later can be developed elsewhere, with the micro-climatic conditions that can be created like in their natural habitat. The results showed that plants grown at an altitude of 132-223 m above sea level, have a micro climate that is very variable, temperature of 28-41 ° C, humidity 53% - 89%, and light intensity 1-100%. Manggarsih ((*Parameria laevigata* (Juss.) Moldenke) is located on the highest point as well as oil palm plantations, with high temperatures, low humidity and high light intensity, while kayu sisil (*Litsea* sp) and bayuan ((*Coptosapelta tomentosa* Korth.) around the riverbank, with altitude, low temperature, low light intensity and high humidity. Pikajar (*Schizaea digitata* (L) Sw.) and pasak bumi (*Eurycoma longifolia*) with a wider spread of habitat, with an interval of temperature, humidity and light intensity were great. Tambarbisa (*Clausena excavata* Burm. f.) can be found at the site of lowest to highest, but humidity should be high and low light intensity.

**Keywords:** Medicinal Plants, Domestication, Microclimate

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Email:reylitahadi@gmail.com



## Effect of Sub-acute Exposure of the Aqueous Extract of Leaves of Gemor (*Nothaphoebe coriacea*) on Liver and Kidney Function: Toxicity Evaluation Studies

**Eko Suhartono<sup>1</sup>, Purwanto Budi Santosa<sup>2</sup>, Iskandar Thalib<sup>3</sup>**

<sup>1</sup>Lambung Mangkurat University, Banjarbaru, Indonesia

<sup>2</sup>Banjarbaru Environment and Forestry Research Development Institute, Research Development and Innovation Agency, Ministry of Environment and Forestry, Banjarbaru, South Kalimantan, Indonesia

<sup>3</sup>Research and Development Unit of Mutiara Bunda Mother and Child Hospital, Martapura, South Kalimantan, Indonesia

### Abstract

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This present study aims to evaluate the sub-acute toxicity effect of aqueous *N. Coriacea* leaves extract on kidney and liver function. The sub-acute toxicity was conducted using male rats. In this study, the experimental animals received five different doses of aqueous *N. Coriacea* leaves extract (0.1 mg, 1 mg, 10 mg, 100 mg, and 1000 mg per day) for 4 weeks via oral route. After treatment, the level of plasma ureum and creatinine and Aspartat Transaminase (AST) and Alanin Transaminase (ALT) level were measured. The results show that the aqueous extract of leaves of *N. Coriacea* does not statistically change the plasma ureum and creatinine except at a dose of 1000 mg. Also, the result revealed that the extract does not statistically change the plasma AST and ALT, except at dose 100 and 1000 mg/kg b.w. In Conclusion, a short term oral intake of *N. Coriacea* leaves extract caused no toxicity to kidney and liver.

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**Keywords:** Gemor, Kidney, Liver, *N. Coriacea*

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Email:ekoantioxidant@gmail.com

## **FUTURE EVENTS**

## 4th INTERNATIONAL CONFERENCE ON

“Global Trends in Academic Research”  
(GTAR -2017)



**Date:** April 20-21, 2017

**Venue:** San Servolo Convention Center, Venice, Italy

**Email:** gtar@globalilluminators.org

**Abstract Submission Date:** April 5, 2017

**Full Paper Submission Date:** April 10, 2017

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

### Conference Main Tracks

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

For more details visit [www.globalilluminators.org](http://www.globalilluminators.org)

### **3<sup>rd</sup> INTERNATIONAL CONFERENCE ON**

**“New Directions in Multidisciplinary Research & Practice”  
(NDMRP -2017)**



**Date:** May 12-13, 2017

**Venue:** Amalia Hotel Athens, Greece

**Email:** ndmrp@globalilluminators.org

**Abstract Submission Date:** April 20, 2017

**Full Paper Submission Date:** April 25, 2017

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

#### **Conference Main Tracks**

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

For more details visit [www.globalilluminators.org](http://www.globalilluminators.org)

# 1<sup>st</sup> INTERNATIONAL CONFERENCE ON

“Economics And Business At The Interface Of Natural Sciences”(EBINS -2017)



**Date:** July 3-4, 2017

**Venue:** National and Kapodistrian University of Athens, Greece

**Email:** ndmrp@globalilluminators.org

**Abstract Submission Date:** May 20, 2017

**Full Paper Submission Date:** May 25, 2017

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

## Conference Main Tracks

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

For more details visit [www.globalilluminators.org](http://www.globalilluminators.org)



## **4th INTERNATIONAL CONFERENCE ON**

**“Multidisciplinary Innovation Sustainability & Growth”  
(MISG -2017)**



**Date:** July 13-14, 2017

**Venue:** The Federal Hotel Kuala Lumpur Malaysia

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

**Abstract Submission Date:** June 15, 2017

**Full Paper Submission Date :** June 30, 2017

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

### **Conference Main Tracks**

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

For more details visit [www.globalilluminators.org](http://www.globalilluminators.org)

## 4th INTERNATIONAL CONFERENCE ON

“Multidisciplinary Innovation In Academic Research”  
(MIAR -2017)



**Date:** July 27-28, 2017

**Venue:** ibis Astana Hotel Kazakhstan

**Email:** miar@globalilluminators.org

**Abstract Submission Date:** June 15, 2017

**Full Paper Submission Date:** June 30, 2017

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

### Conference Main Tracks

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

For more details visit [www.globalilluminators.org](http://www.globalilluminators.org)

### 3rd INTERNATIONAL CONFERENCE ON

“Multidisciplinary Academic Research & Global Innovation ”  
(MARGI -2017)



**Date:** August 25-26, 2017

**Venue:** Holiday Inn Central Plaza Beijing

**Email:** margi@globalilluminators.org

**Abstract Submission Date:** July 15, 2017

**Full Paper Submission Date:** July 30, 2017

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

#### **Conference Main Tracks**

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

For more details visit [www.globalilluminators.org](http://www.globalilluminators.org)

## 4TH INTERNATIONAL CONFERENCE ON

“Innovative Trends In Multidisciplinary Academic Research”  
(ITMAR-2017)



**Date:** October 20-21, 2017

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

**Email:** itmar@globalilluminators.org

**Abstract Submission Date:** September 20, 2017

**Full Paper Submission Date:** September 25, 2017

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

### Conference Main Tracks

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

For more details visit [www.globalilluminators.org](http://www.globalilluminators.org)

## 3RD INTERNATIONAL CONFERENCE ON

“Regional Challenges To Multidisciplinary Innovation ”  
(RCMI- 2017)”



**Date:** October 05-06, 2017

**Venue:** Radisson Blu Hotel, Nairobi kenya

**Email:** rcmi@globalilluminators.org

**Abstract Submission Date:** September 10, 2017

**Full Paper Submission Date:** September 15, 2017

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

### Conference Main Tracks

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

For more details visit [www.globalilluminators.org](http://www.globalilluminators.org)

## 2ND INTERNATIONAL CONFERENCE ON

“Interdisciplinary Academic Research And Innovation”  
(IARI - 2017)



**Date:** November 23-24 2017

**Venue:** Indonesia Computer University

**Email:** iari@globalilluminators.org

**Abstract Submission Date:** October 5, 2017

**Full Paper Submission Date:** October 10, 2017

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

### Conference Main Tracks

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

For more details visit [www.globalilluminators.org](http://www.globalilluminators.org)

## 5TH INTERNATIONAL CONFERENCE ON

“Innovation Challenges In Multidisciplinary Research & Practice” (ICMRP - 2017)



**Date:** December 15-16, 2017

**Venue:** Hotel Grand Pacific Singapore

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

**Abstract Submission Date:** November 25, 2017

**Full Paper Submission Date:** November 30, 2017

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

### Conference Main Tracks

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

For more details visit [www.globalilluminators.org](http://www.globalilluminators.org)

## 4TH INTERNATIONAL CONFERENCE ON

“Global Issues In Multidisciplinary Academic Research”  
(GIMAR - 2018)



**Date:** February 01-02, 2018

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

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

**Abstract Submission Date:** November 25, 2017

**Full Paper Submission Date:** November 30, 2017

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

### Conference Main Tracks

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

For more details visit [www.globalilluminators.org](http://www.globalilluminators.org)



# CSR



Environment

Charities

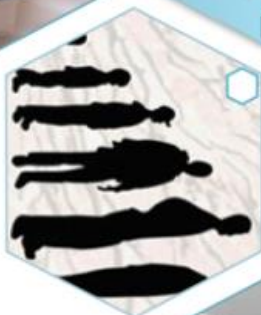
Public Health



Growth and  
Development



Sustainability



## **CSR Activity Conducted By Global Illuminators: Sport Activation for Children against Negative Impact of Internet & Technology**

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



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

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

**Highlights of CSR Activities are given below:**



## **Global Illuminators Malaysia Team conducted its Latest CSR activity at Rumah Charis, Kuala Lumpur, Malaysia Children Home**

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



## **Global Illuminators Indonesian Team conducted its Latest CSR activity in Ramadan for Local Community Welfare, Sharing Happiness and developing Orphan Children**

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

Highlights of this activity are given below:







# 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  
“MULTIDISCIPLINARY INNOVATION IN  
BUSINESS ENGINEERING SCIENCE & TECHNOLOGY”  
(MI-BEST 2017)**

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