

Conference Proceeding Book of Papers

International Conference on "Contemporary Research in Engineering, Science, Information Technology and Applied Sciences (CEITA-2019)"

Editor:

Dr Ahmad Saddam Ph.D., Country Director (Global Illuminators Iraq)

ISBN: 978-969-695-055-4

Printed and Published by: Global Illuminators Malaysia

CEITA 2019 Conference Organizing Committee

Conference Chair Farooq Ahmed Jam (Ph.D.) *Executive Director (GI Engineering, technology, Applied Sciences Forum)*

Conference Co- Chair Tariq Iqbal Khan (Ph.D.) Director Global Operations (*GI Engineering, technology, Applied Sciences Forum*)

Conference Co-Chair Muhammad Abbas (Ph.D.) Director Policy & Research (GI Engineering, technology, Applied Sciences Forum)

On Chee Hoong *Manager Operations (GI Engineering, technology, Applied Sciences Forum)*

Conference Coordinator

Dr. Renan P. Limjuco (Ph.D.)

Director of Research University of the Immaculate Conception (UIC), Davao City, Philippines

Conference Coordinator

Prof. Dr. Sylvia J. Pidor (Ph.D.)

Dean of Graduate School, University of the Immaculate Conception, Philippines Davao, Philippines

Editor Conference Proceeding Ahmad Saddam Country Director Iraq (GI Engineering, technology, Applied Sciences Forum)

Conference Chair Message

Farooq Ahmed Jam (Ph.D.)

International Conference on "Contemporary Research in Engineering, Science, Information Technology and Applied Sciences (CEITA-2019)" 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 withus 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. Iam 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 CEITA Papers

For this year, CEITA has two types of papers: *Empirical Studies* and *Insight*. Research papers meet the needs of researcher and reviewed on the basis of highest academic standards. The objective of the academic paper is to contribute in the scientific body of knowledge. Contrary, Inside papers meet the needs of policy makers and professionals and reviewed on the basis of high practical standards. The objective of the Insight is to identify the real world problems and how can solve with the help of information systems.

Reviewing Criteria

In CEITA all papers are used to judge on the criteria (relevance, significance, originality, validity and clarity). However some criteria differ between the Research papers and Insight papers.

Relevancy: Relevancy 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	Accepted	Withdrawn	Unqualified	Acceptance Rate
Papers	Papers		papers	
8	4	2	2	50%

Copy right Agreements

In CEITA 2019 proceedings all authors are agreed on the copy right agreement. This agreement shows that only authors can retain copyright. It also permits that nobody can use for non-commercial purpose such as to download, print out etc of an article published in the CEITA 2019 proceedings. All credit is given to the authors and they have copyright agreements. This copyright agreement and use license ensures, among other things, that an article will be as widely available as possible and that the article can be included in any scientific archive.

Acknowledgment

A huge numbers of people helped in conducting the conferences. First of all thanks to all the members of the Conference and Program Committee and representatives of the CEITA board and their helpers. We also want to thank all the Track Chairs, Track Co-Chairs and reviewers, as well as all the member 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 CEITA tradition.

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

Program Chair & Co-Chairs

CEITA 2019 Scientific and Reviewers Committee

BUSINESS, MANAGEMENT AND ECONOMIC STUDIES

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

Mej Mohd Noor Azli bin Hj. Ali Khan (PhD) University Technology Malaysia.

Prof. Ravindran Ramasamy (PhD) Graduate School of Business, UniRazaK, Kuala Lumpur, Malaysia

Prof. Madya Raja Roslan Raja Abd. Rahman (PhD) Human Resource Development/Management, University Technical Malaysia Melaka,

Ludmila Mládková (PhD) Faculty of Business Administration, Department of Management University of Economics Prague,

Mohd Norfian Alifiah Faculty of Management, Department of Accounting and Finance, Universiti Teknologi Malaysia, Malaysia

Ahmed Saddam (PhD) Country Director- Iraq Global Illuminators

Mohammad Hamad Khalef AlKhresheh (PhD) Country Director-Jordan Global Illuminators

Dr. Suresh B.Gholse (PhD) VatarMeherbaba College, Rtm Nagpur University, Nagpur, India

Tahir Masood Qureshi (PhD) College of Business Administration American University in the Emirates, UAE

Ghulam Rasul Awan (PhD) UCP Business School, UCP Lahore Pakistan

Lau Wee Yeap (PhD) Faculty of Economics & Administration, University of Malaya, Kuala Lumpur, Malaysia

Vignes Gopal Faculty of Economics and Administration University of Malaya

J. A. Arul Chellakumar (PhD) Head Department of Economics Bharathidasan University Tiruchirappalli, Tamilnadu, India

Girish Karunakaran Nair (PhD) Programme Leader International Hospitality Management Faculty Stenden University, Qatar

Galla Venkata Rama Krishna Acharyulu (Phd) School of Management Studies, University of Hyderabad, India.

Santi Rahmawati School of Business and Management, Institut Teknologi Bandung, Indonesia

Amir Hossein Dastaviz (PhD) Institute of Graduate Studies, University Of Malay, Kuala Lumpur, Malaysia

Syed Ahmed Salman International Islamic University Malaysia, Gombak, Selangor, Malaysia

Dr. Wurim Ben Pam (PhD) Federal University, Dutsin-ma, Katsina State- Nigeria

Wang, Yu-Mei Asia University, Taiwan

Aglis Andhita Hatmawan STIE Dharma Iswara Madiun, Indonesia

Hasnun Anip Bin Bustaman University Teknologi MARA Malaysia

Bertin Chen Vanung University, Taiwan

Susan Irawan Rifai

Centro Escolar University, Philippine

Jihoon Kim Ehime University, Korea, South

Chien-Tu Jeff Lai National Chengchi University, Taiwan

Haykel Hadjs Alem LEM, University of Lille FRANCE,

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

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

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

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

Ismail BİLGİÇLİ Sakarya University Karasu MYO,Turkey

Tack Hyun Shin Seoul National University of Science and Technology, Korea, South

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

Vicent Stanslaus The Open University Of Tanzania

Partha Ray Indian Institute of Management Calcutta, Institute of Management Technology, Ghaziabad, India

SOCIAL SCIENCE AND HUMANITIES

Sailesh Sharma (PhD) Deputy Vice Chancellor (Academic & International) University of Malaya, Kuala Lumpur, Malaysia

Siamak Khodarahimi (PhD) Islamic Azad University, Fars Province, Iran

Rex Balena (PhD) Oceanographer and Education Specialist University of the Philippines in the Visayas

Dr. A B Sharangi HOD,Research Scholar, Agricultural University

Jayson E. Lannu Jose Rizal University, Philippines

Amandha Boy Timor Randita Faculty of Medicine, Sebelas Maret University, Indonesia

Gogoberidze George Russian State Hydrometeorological University (RSHU),Russia

Krittawaya Thongkoo Chiang Mai University, Thailand

Tzu-yi Lee Chung Yuan Christian University, Taiwan

Renan Limjuco(PHD) University of the Immaculate Conception Davao City, Philippines

Kankan Kasmana Departemen Visual Communication Design-Indonesia Computer University, Indonesia

Monique Musni- Tagaytay, MA. Ed University of the Immaculate Conception Philippine, Philippine

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

Sultanbayeva Gulmira Al-Farabi Kazakh national University Kazakhstan

Emilio A. Cruz Bulacan State University, Malolos City , Bulacan Philippines

Si,Li

Wuhan University, China

Dr. Nessreen A. Elmelegy Royal University for Women, Kingdom Of Bahrain, Bahrain

Dr. Shusil Kumar Das Daffodil International University, Dhaka, Bangladesh

Dr. Rovelina B. Jacolbia Polytechnic University of the Philippines

Sathiamoorthy Kannan Institute of Educational Leadership, University of Malaysia

Dr. Isabella Musyoka-Kamere Maasai Mara University, Kenyatta University Kenya

Hadi Ebadi Universiti Teknologi Malaysia 2. Razi University, Iran

Dr. Shusil Kumar Das Daffodil International University, Dhaka,Bangladesh

Botabaeva Ademi Erkebaevna Eurasian National University named after L.N. Gumilyov, Kazakhstan

Girma Y. I. Menelik Penza State University Russia,K.Satbaev Kazakh National Technical University Kazakhstan

I-Ju Chen Ling Tung University Taiwan

Wen, Yvonne, Ying-Ya National Formosa University, Taiwan

PHYSICAL LIFE AND APPLIED SCIENCES

Yan LI (PhD) Nanyang Technological University, Singapore

Md. Saleh Ahmed (PhD) Department of Mathematics & Statistics Sultan Qaboos University, Muscat, Oman

Saon Banerjee (PhD) OIC, AICRP on Agrometeorology, State Agricultural University

Mohd Nizam Omar

Universiti Utara Malaysia, 06010 UUM Sintok, Kedah, Malaysia

Amina Bakhrouf

Laboratory of Analysis, Treatment and Valorisation of Environment Polluants and Products, Monastir, Tunisia

Shatrova, Olga

Russian State Hydrometeorological University (RSHU), Russia

ENGINEERING AND TECHNOLOGY STUDIES

Nurul Akmar Binti Emran (PhD) Faculty of Information Communication Technology Universiti Teknikal Malaysia Melaka

Chee-Ming Chan (PhD)

Civil and Environmental Engineering Universiti Tun Hussein Onn, Malaysia

Zhaparov Meirambek Kazimovich (PhD)

Head of Micro learning Research Centre Suleyman Demirel University, Kazakhstan

Noor Zaman (PhD)

College of Computer Science and IT, King Faisal University, Saudi Arabia

Kelly Whealan George (PhD)

Embry-Riddle Aeronautical University (ERAU), USA

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

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

Prof. Dr. Hj. Dwi Kartini, SE. Spec. Lic (PhD)

University of Computer Indonesia (Unikom) Bandung Indonesia

Mira Rahayu Telkom University Indonesia,Indonesia

Ony Widilestariningtyas Universitas Komputer Indonesia,Indonesia

Yully Ambarsih Ekawardhani

UNIKOM, Institut Teknologi Bandung, Indonesia

Emel Zeray Selcuk University Geomatics Department, Turkey

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

Tashenova

L. N. Gumilyov Eurasian National University, Kazakhstan

Farah Jemili Department of Computer Sciences, Highe Institute of Computer and Communication Techniques, Sousse University, Tunisia

Nahid Sanzida Bangladesh University of Engineering and Technology (BUET) Bangladesh

HEALTH AND MEDICINE STUDIES

Balachandar S. Sayapathi (PhD) Faculty of Medicine, University of Malaya

Ahmed Kaid Naji Allow (PhD) Head of Dept. of Human Physiology College of Medicine and Health Sciences Sana'a University, R. Yemen

Prof. Dr. drg. Andi Zulkifli, M.Kes Faculty of Public Health Hasanuddin University, Makassar, Indonesia

Fauzie Rahman

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

Helia Rahbari

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

Dr Narjis Rizvi Aga Khan University, stadium road – Karachi – Pakistan

Dr. Elvira Urgel(PHD) Centro Escolar University, china

Maria Bea Lao Medical Technology/Medical Laboratory Science University of the Immaculate Conception Philippine

Nima Kasraie Children's Mercy Hospital United State

Haseen Fariha Bangabandhu Sheikh Mujib Medical University, Bangladesh

Der-Hsiang Huang Graduate Institute of Professional Development in Education, Da-Yeh University, Taiwan

kazushi Okamoto Aichi Prefectural University japan

Abolhassani Shahla Shahrekord University of Medical Sciences, Shahrekord, Iran

Dr. Umme Kulsum Rima Hajee Mohammad Danesh Science & Technology University Dinajpur, Bangladesh

Mohammad A. H. Khan Faculty of Veterinary Science, Bangladesh Agricultural University

Enayatollah Kalantar

Dietary supplements and Probiotic Research Center and Department of Microbiology and Immunology, School of Medicine, Alborz University of Medical Sciences, Karaj, Iran

Cahit Canbay Yeditepe University, Turkey

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

Cheng-Chi Chang

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

Bodin Oleg N Ling Tung University Taiwan

Zahra Godarzi Tehran University of Medical Sciences Iran

Zhou Rui-Hua School of Public Health, North China University Of Science And Technology

CEITA 2019 Keynote Speakers

Dr. Sylvia J. Pidor (Ph.D.)

VP-Academics/ Dean, Graduate School Program

Her Bachelor of Science in Biology, Master of Arts in Science Education and Ph.D. in Education Leadership give diversity to her profile as an educationist. Besides teaching science subjects for several years, she was given supervisory position being the Department's Academic Coordinator and Chair Person at University of Immaculate Conception Davao. Due to her dedication in work, she is assigned as the Dean of the Graduate School and as the Vice-President for Academics. She has several affiliations to various organizations in Davao Region, nationally and internationally. She is the president of the Curriculum and Instruction Area of the Davao Association of Colleges and Universities Network (DACUN), President of the Council of Deans for Teacher Education (CODTEI), Region XI, President of the Philippine Association for Graduate Education (PAGE), RegionXI and member of several other national and international organizations. She became a member of the Commission on Higher Education (CHED) Regional Qualification Assessment Team (RQAT), who monitors schools in Davao Region. She has delivered speeches and keynote lectures at various international platforms. She is a member if Global Illuminators scholarly community.

A compassionate and dedicated leader as others describe her is someone who loves to travel not only to experience different cultures in other countries but to expand her horizons in learning

Assoc. Prof. Dr. Ariffin Abdul Mutalib

Schools of Multimedia Technology and Communication, Universiti Utara Malaysia

Dr. Ariffin started his academic career as a tutor in 1999, after finishing his Bachelor of Information Technology study in Universiti Utara Malaysia (UUM). He obtained his Master in Interactive Multimedia from Heriot-Watt University, Scotland in 2001. Then, he was appointed as a lecturer. In 2007, he began his PhD study in UUM and finished in 2009. Since 2002 until now, he has secured various research grants, funded nationally and internationally. Nevertheless, he has also been appointed as a consultant for projects by industry players. Not only he excels in research works, his postgraduate supervision is also excellent. From his first PhD supervision in 2011, eight of his students have graduated. More interestingly, four of them graduated on time. Through his research works, he has published more than 30 articles in Scopus journals, and more than 15 articles in ISI journals. All these have enabled him to be seen around the world, which eventually attracts various major conferences to appoint him as a technical reviewer. On top of that, he has also been appointed as a keynote speaker and invited speaker in various conferences. He just finished his term as the Dean of School of Multimedia Technology and Communication (SMMTC). His administrative career began in 2013 when he was appointed as a Quality Manager in UUM.

Having served for two years there, he was appointed as the Head of Department at SMMTC. Then, he was appointed as the Deputy Dean in the following year, before upgraded into the Dean in 2017. His research interests include Interaction Design, Usability, Multimedia for teaching and learning, Emergent technology, and Game-based learning. As a reflection of his contributions and

achievements, he has been awarded with "Best Professor in Multimedia Technology" in The Golden Globe Tigers Award 2018, "Education Leadership Award" in Asia's Education Excellence Awards, CMO Asia 2018, and "100 Most Dedicated Professors" in World Education Congress 2018.

CEITA 2019 Track's Chairs

Business, Management, and Economics Studies

Edna T. Salva & Thelma O. Alderite

YuLing Liu & Ridwanul Alam

Social Sciences & Humanities

Ariffin Abdul Mutalib & Sylvia J. Pidor

Ronald P.Lambayan & Rona Vic O. Gutierrez

Engineering, Technology, and Public Health Studies

Ariffin Abdul Mutalib & Sylvia J. Pidor

Best Paper Nominee List

SMES' Activities According to Dimensions of Entrepreneurial Marketing

Thirarut Worapishet

Kasetsart University, Bangkok, Thailand

Participation and Involvement of Local Communities in Relation to the Extent of Implementation of Sustainable Ecotourism Development in Davao Region

Presentacion C. Acosta

University of the Immaculate Conception, Philippines

Risk Assessment of Heavy Metals from Edible Mushrooms

Prapat Pentamwa^{1*,} Jitlada Chimmai²

Suranaree University of Technology, Nakhon Ratchasima, Thailand

CEITA 2019 Best Paper Award Winner

Risk Assessment of Heavy Metals from Edible Mushrooms

Prapat Pentamwa^{1*}, Jitlada Chimmai²

Suranaree University of Technology, Nakhon Ratchasima, Thailand

List of CEITA 2019 Academic Papers

1. Business, Management and Economic Studies

ID: MSHTR-19-107 SMES'Activities According To Dimensions of Entrepreneurial Marketing *Thirarut Worapishet** Kasetsart University, Bangkok, Thailand

ID: MSHTR-19-108 Relationship between Istiqamah and Job Satisfaction with Organizational Commitment to Employees of Call Center Banking in City X *Dzikri Hijriarahmah*^{1*}, *Fatkhuriah*² ^{1,2} Islamic University of Indonesia, Indonesia

2. Social Sciences and Humanities

ID: EBINS-19-137

Academe's Role in the Community-Based Rehabilitation and Aftercare Program (Cbrap): A Sequential Exploratory Approach Nelca Stephany Umblero-Amatong

University of the Immaculate ConceptionDavao City, Philippines

3. Engineering and Technology

ID: CEITA-19-105 Risk Assessment of Heavy Metals from Edible Mushrooms *Prapat Pentamwa*^{1*,} *Jitlada Chimmai*² Suranaree University of Technology, Nakhon Ratchasima, Thailand

CEITA Conference Committee

Conference Chair Farooq Ahmed Jam (Ph.D.) *Executive Director (GI Engineering, Technology, Applied Sciences Forum)*

Conference Co- Chair Tariq Iqbal Khan (Ph.D.) Director Global Operations (*GI Engineering, Technology, Applied Sciences Forum*)

Conference Co-Chair Muhammad Abbas (Ph.D.) Director Policy & Research (GI Engineering, Technology, Applied Sciences Forum)

On Chee Hoong Manager Operations (GI Engineering, Technology, Applied Sciences Forum)

Conference Coordinator

Dr. Renan P. Limjuco (Ph.D.)

Director of Research

University of the Immaculate Conception (UIC), Davao City, Philippines

Conference Coordinator

Prof. Dr. Sylvia J. Pidor (Ph.D.)

Dean of Graduate School, University of the Immaculate Conception, Philippines Davao, Philippines

Editor

Dr Ahmad Saddam (Ph.D.)

ISBN: 978-969-695-055- 4

Printed and Published by: GI Engineering, Technology, Applied Sciences Forum. Malaysia