

Conference Program

January 4-6, 2017

Cebu, Philippines

ICEIT

**International Conference on Engineering and
Information Technology**

APCSSM

**Asia-Pacific Conference on Social Sciences and
Management**

ICSPE

**International Conference on Society, Psychology and
Education**

ICEIT

International Conference on Engineering and Information Technology

ISBN 978-986-5654-11-5

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Asia-Pacific Conference on Social Sciences and Management

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Welcome Message



Dr. P.C. (Pete) Kutschera, PhD

Director and Visiting Professor,
Philippine Amerasian Research Center (PARC),
College of Social Sciences and Philosophy,
Don Honorio Ventura Technological State University, Bacolor,
Pampanga, 2001, Luzon, Philippines

Kumusta at Maligayang! Or, Hello and Welcome to Cebu, the Philippines – historic and captivating “Queen City of the South.” Whether an academic, faculty, doctoral candidate, graduate fellow or professional researcher....we know how hard you toil during the arduous university work year. Congratulations for making a wise choice by joining us this week among some of the sharpest and accomplished scholars anywhere. Cebu is not only an idyllic, world class recreation spot. The archipelago rightfully claims to be home of some of the globe’s most beautiful beaches and tropical settings. Traditionally January is the coolest and driest in the Philippine weather cycle. This should surely make your visit among the cognoscenti here comfortable, pleasant and most memorable.

Tellingly, Metro Cebu is the locus in quo of many of the most well-known and representative flagship colleges and universities in the Central Visayan region. The University of San Carlos traces its founding to 1595 at the Collegio de San Idefonso by Spanish Roman Catholic Jesuit priests. Today it’s School of Law and Governance is nationally ranked and internationally recognized. Cebu Doctor’s University, built from the ground up in 1975, is lauded as a prime incubator of medical doctors of excellence and clinical nurses of distinction. Physical therapy graduates of Cebu’s Southwestern University School of Health and Allied Health Services ply their skills in medical rehabilitation settings worldwide; the University of the Southern Philippines Foundation offers superior clinical social work master’s degrees; its graduates go forward courageously to battle grinding community and human poverty. Unsurprisingly, University of Cebu Maritime College graduates make a legendary contribution to the world’s seafaring and ocean shipping transport trades.

I salute our intrepid and capable Conference organizers – the Higher Education Forum of Taipei, Taiwan-the Republic of China. Once again “HEF” has crafted a creative, challenging and enriching series of presentations examining an eclectic and intriguing array of scientific, empirical and evidence-based research interests. At these fact-filled sessions you’ll be

witnessing cutting-edge research and methodological inquiry and approaches in action. They cover an array of multi-and-inter-disciplinary subject areas: the social sciences, business management and marketing, engineering, information technology, education and humanities, psychology and applied clinical science. We strongly urge you to attend as many lectures as practicable.

All is accomplished in an atmosphere promoting enriching values of global resonance, human accommodation, awareness, civility and friendship. Truthfully, I have been attending and participating in HEF conferences In Singapore, Seoul, Taipei and twice in the Philippines since 2013. There is one attribute of participants and attendees I have always found to be in great abundance. Whether young or senior, regardless of country of origin (and there are always so many represented at HEF gatherings!) it is the consistency of dedication, energy, interest, intensity, resourcefulness and sincerity that is so impressive. Our hope for you is to depart the Philippines later this week intellectually richer, profoundly informed and hopefully more operationally capable and prepared to accomplish your noble avocation as an academic professional. Enjoy!

Faithfully yours,

Dr. P.C. "Pete" Kutschera, Ph.D., MSW, LicMSW

Local Host/International Liaison

General Information for Participants

■ **Registration**

The registration desk will be situated on the **Ground Floor** at the **Cebu City Marriott Hotel** during the following time:

08:40-16:30 Thursday, January 5, 2017

08:40-13:00 Friday, January 6, 2017

■ **A Polite Request to All Participants**

Participants are requested to arrive in a timely fashion for all addresses. Presenters are reminded that the time slots should be divided fairly and equally by the number of presentations, and that they should not overrun. The session chair is asked to assume this timekeeping role and to summarize key issues in each topic.



■ **Certificate**

Certificate of Presentation or Certificate of Attendance

A certificate of attendance includes participant's name and affiliation, certifying the participation in the conference. A certificate of presentation indicates a presenter's name, affiliation and the paper title that is presented in the scheduled session.

Certificate Distribution

Oral presenters will receive a certificate of presentation from the session chair after their presentations or at the end of the session. Poster presenters will receive a certificate of presentation from the conference staff at the end of their poster session.

The certificate of presentation will not be issued, either at or after the conference, to authors whose papers are registered but not presented. Instead, the certificate of attendance will be provided after the conference.

■ Preparation for Oral Presentations

All presentation rooms are equipped with a screen, an LCD projector, and a laptop computer installed with Microsoft PowerPoint. You will be able to insert your USB flash drive into the computer and double check your file in PowerPoint. We recommend you to bring two copies of the file in case that one fails. You may also connect your own laptop to the provided projector; however please ensure you have the requisite connector.

Preparation for Poster Presentation


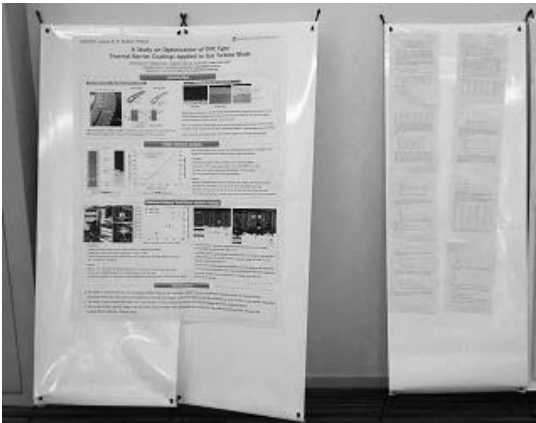
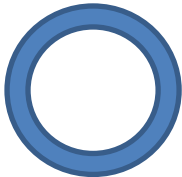

Materials Provided by the Conference Organizer:

1. X-frame display & base fabric canvases (60cm×160cm)
2. Adhesive tapes or binder clips

Materials Prepared by the Presenters:

3. Home-made poster(s)
4. Material: not limited, can be posted on the canvases
5. Recommended poster size: 60cm*160cm



	
<p>A 60cm*160cm poster illustrates the research findings.</p>	<ol style="list-style-type: none"> 1. Wider than 60cm (left) 2. Copy of PowerPoint slides in A4 papers (right)
	

International Committees

International Committee of Nature Sciences

Abdelmalik Serbout	University of physical and sports activities Djelfa Algeria	Algeria
Abdelwahab Elghareeb	Cairo University	Egypt
Abhishek Shukla	R.D. Engineering College Technical Campus,Ghaziabad	India
Ahmad Zahedi	James Cook University	Australia
Alexander M. Korsunsky	Trinity College,Oxford	UK
Almacen	Philippine Association of Maritime Trainig Centers	Philippines
Amel L. Magallanes	Capiz State University	Philippines
Amran Bin Ahmed	University Malaysia Perlis	Malaysia
Anthony D. Johnson	Seoul National University of Science & Technology	UK
Ashley Love	A.T. Still University	USA
Asif Mahmood	King Saud University, Riyadh	Saudi Arabia
Asmida Ismail	University Technology Mara	Malaysia
Baolin Wang	University of Western Sydney	
Byoung-Jun Yoon	Korea National Open University	South Korea
Chang Ping-Chuan	Kun Shan University	Taiwan
Chee Fah Wong	Universiti Pendidikan Sultan Idris	Malaysia
Chee-Ming Chan	Universiti Tun Hussein Onn Malaysia	Malaysia
Cheng, Chun Hung	The Chinese University of Hong Kong	Hong Kong
Cheng-Min Feng	National Chiao Tung University	Taiwan
Cheuk-Ming Mak	The Hong Kong Polytechnic University	Hong Kong
Chia-Ray Lin	Academia Sinica	Taiwan
Chih-Wei Chiu	National Taiwan University of Science and Technology	Taiwan
Chikako Asada	Tokushima University	
Chi-Ming Lai	National Cheng-Kung University	Taiwan
Ching-An Peng	University of Idaho	USA
Chin-Tung Cheng	National Kaohsiung (First) University of Science and Technology	Taiwan
Christoph Lindenberger	Friedrich-Alexander University	Germany
Daniel W. M. Chan	The Hong Kong Polytechnic University	Hong Kong
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Din Yuen Chan	National Chiayi University	Taiwan
Don Liu	Louisiana University	USA
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Ehsan Noroozinejad	Kerman Graduate University of Advanced Technology (KGUT)	Iran

Farsangi		
Farhad Memarzadeh	National Institutes of Health	USA
Fariborz Rahimi	University of Bonab	Iran
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Gi-Hyun Hwang	Dongseo University	South Korea
Gwo-Jiun Horng	Southern Taiwan University of Science and Technology	Taiwan
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Kamal Seyed Razavi	Federation University Australia	Australia
Kazuaki Maeda	Chubu Univeristy	Japan
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Kuang-Hui Peng	National Taipei University of Technology	Taiwan
Kun-Li Wen	Chienkuo Technology University	Taiwan
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Lars Weinehall	Umea University	Sweden
Lee, Jae Bin	Mokpo National University	South Korea
M. Chandra Sekhar	National Institute of Technology	India
M. Krishnamurthy	KCG college of technology	India
Mane Aasheim Knudsen	University of Agder	Norway
Michiko Miyamoto	Akita Prefectural University	Japan
Minagawa, Masaru	Tokyo City University	Japan

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Yuan-Lung Lo	Tamkang University	Taiwan

International Committee of Social Sciences

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Joyce Zhou	Emporia State University	USA
Julia Wong	Family Justice Courts Singapore	Singapore
K. Prakash Vel	University of Wollongong	Dubai
Kaedsiri Jaroenwisarn	Silpakorn Univesity	Thailand
Kanokphon Chantanarungpak	Srinakharinwirot University	Thailand
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Keith H. Sakuda	University of Hawai‘i — West O‘ahu	USA
Kim , Kyung Hee	Mokpo National University	South Korea
Kim Sangho	Ritsumeikan Asia Pacific University	Japan
Kim, Deok Man	Baekseok University	South Korea
Kimble Byrd	Rowan University	USA
Krishna Govender	AAA School of Advertising	South Africa
Kurt W. Ackermann	Hokusei Gakuen University	Japan
Lin, Hsiao-Tseng	Meiho University	Taiwan
Linda Oshita	University of Hawaii	USA
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Maria Cristina M. De los Santos	Kyungdong University-Global Campus	South Korea

Marie Paz E. Morales	Philippine Normal University	Philippines
Masoud Kavoossi	The George Washington University	USA
Mehryar Nooriafshar	University of Southern Queensland	Australia
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Nezaket Memmedli	Azerbaijan National Academy of Sciences	Azerbaijan
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Ruby Ann L. Ayo	Bicol University	Philippines
Sadiq Abdulwahed Ahmed Ismail	United Arab Emirates University	UAE
Sally dhruva' Stephenson	Frosterburg State University	USA
Seonjeong Ally Lee	Kent State University	USA
Shaik. Feroz	Caledonian College of Engineering	Oman
SHANG Songmin	The Hong Kong Polytechnic University	Hong Kong
Shujen Lee Chang	Asia University	Taiwan
Soon SONG	Wonkwang University	South Korea
Suzanne Beasterfield	Idaho State University	USA
Szu-Wei (Chris) Chen	I-Shou University	Taiwan

T.S.Devaraja	University of Mysore, Hemangothri Campus	India
Tan Khay Boon	SIM Global Education	Singapore
Theeraphab Phetmalaikul	Srinakharinwirot University	Thailand
Thoedsak Chomtohsuwan	Rangsit University	Thailand
Vijayaletchumy Subramaniam	Universitas Putra Malaysia	Malaysia
Wang Yu-Shan	National Kaohsiung First University of Science and Technology	Taiwan
Warren Matthews	Belhaven University	USA
Wei-Cheng(Joseph) Mau	Wichita State University	USA
Wen-Pei Sung	National Chin-Yi University of Technology	Taiwan
William Richeson	University of Kentucky	USA
Ye PeiShi	Family Justice Courts Singapore	Singapore
Ying Zhang	Southeast University	China
Yong-Ho Kim	Pukyong National University	South Korea
Yuki Yokohama	Kanto Gakuin University	Japan
Zabihollah Rezaee	The University of Memphis	USA
Zhou Xiao	Fudan University	China

Special Thanks to Session Chairs

Reem Abedulmotaleb Abuiyada	Dhofar University
Sio Tai Cheong	Macao Polytechnic Institute
Anthony David Johnson	Seoul National University of Science and Technology
Rodrigo C. Belleza Jr.	Technological Institute of the Philippines
Surma Jumaide Werble	Mindanao State University – Tawi-Tawi
Retno Dwi Suyanti	Medan State University
Dong Jin Cha	Hanbat National University

Conference Venue Information

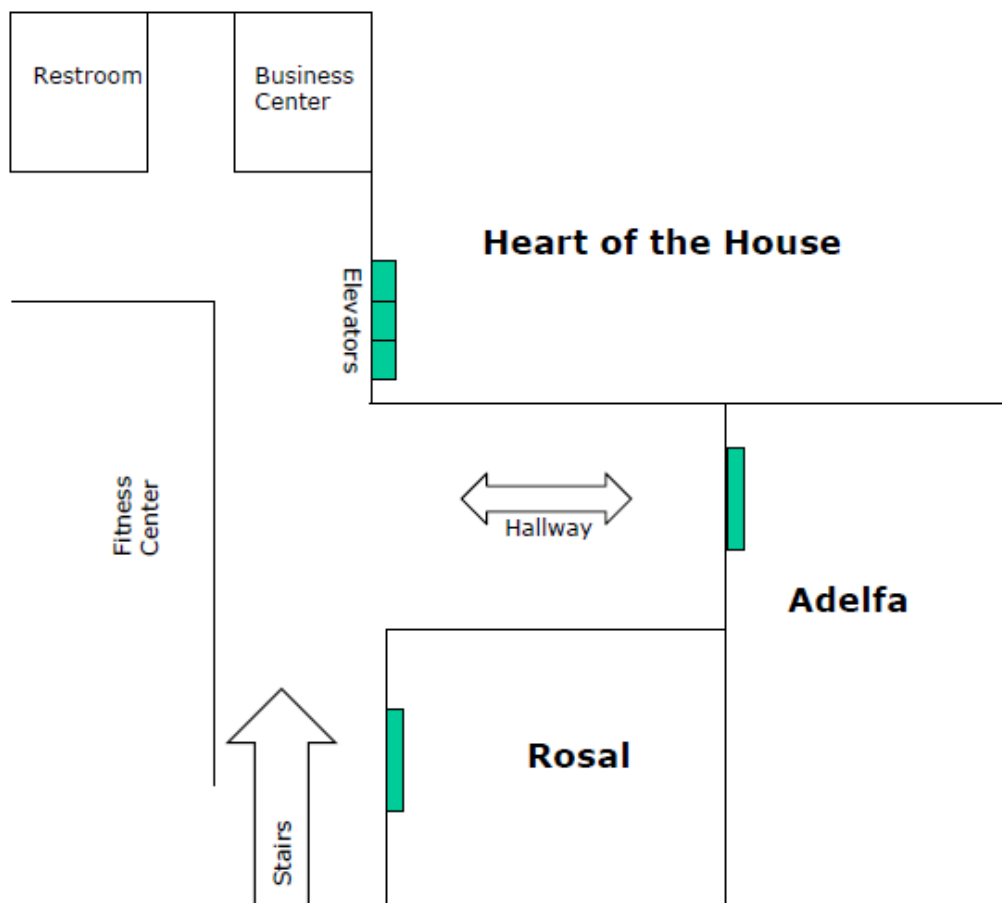
Cebu City Marriott Hotel

Cardinal Rosales Avenue, Cebu City, 6000, Philippines

Phone: +63 32 411 5800

Fax: +63 32 411 5801

Floor Map (Ground Floor)



Conference Schedule

Wednesday, January 4, 2017
Internal Meeting (HEF Staff Only)

Thursday, January 5, 2017		
Oral Presentation		
Ground Floor, Cebu City Marriott Hotel		
Time	Schedule	Venue
08:40-16:30	Registration	Pre Function Area
09:00-10:30	Psychology / Culture / Economics / Society	Rosal
	Information Engineering (1) / Computing Engineering and Technology	Adelfa
10:30-10:45	Tea Break & Networking	Pre Function Area
10:45-10:55	Welcome Speech given by Dr. P.C. (Pete) Kutschera	Adelfa
10:55-12:15	<u>Nature Science Keynote Speech</u> Prof. Anthony David Johnson Seoul National University of Science and Technology <u>Topic: Design for Sustainability (DfS): Synopsis and Approach to Sustainable Product Design</u> ----- <u>Social Science Keynote Speech</u> Dr. P.C. (Pete) Kutschera Philippine Amerasian Research Center (PARC) <u>Topic: The Bizarre Homicide Conviction of U.S. Marine Joseph Scott Pemperton and Implications for U.S. – Philippine Relations in the Era of PRC-China Military Expansion in the South China Sea</u>	
12:15-13:30	Lunch Time	Garden Café (Lobby floor)
13:30-15:00	Civil Engineering / Chemical Engineering	Adelfa
15:00-15:15	Tea Break & Networking	Pre Function Area
15:15-17:00	Information Engineering (2)	Adelfa

Thursday, January 5, 2017	
Poster Presentation	
Ground Floor, Cebu City Marriott Hotel Rosal	
Time	Schedule
13:20-14:20	Poster Sessions (1) Biological Engineering / Civil Engineering / Environmental Engineering
14:40-15:40	Poster Sessions (2) Computing Engineering and Technology / Electrical & Electronic Engineering / Information Engineering and Technology
16:00-17:00	Poster Sessions (3) Education / Psychology

Friday, January 6, 2017		
Oral Presentation		
Ground Floor, Cebu City Marriott Hotel		
Time	Schedule	Venue
08:40-13:00	Registration	Pre Function Area
09:00-10:30	Education(1)	Rosal
10:30-10:45	Tea Break & Networking	Pre Function Area
10:45-12:15	Education (2)	Rosal
12:15-13:30	Lunch Time	Garden Café (Lobby floor)
13:30-15:00	Mechanical Engineering / Electrical & Electronic Engineering	Rosal
15:00-15:15	Tea Break & Networking	Pre Function Area

Nature Sciences Keynote Speech

10:55 - 11:35, Thursday, January 5, 2017, Adelfa, Ground Floor

Topic:

Design for Sustainability (DfS): Synopsis and Approach to Sustainable Product Design

Prof. Anthony David Johnson

Ph.D, M.I.Mech.E, C.Eng, FHEA
Seoul National University of Science and Technology
MSDE Scheme
Gongneung Dong, Nowon gu, Seoul,
South Korea



Abstract

Throughout the 20th century the worldwide environmental protection lobby grew until in 1987 the notion of sustainable development was introduced via the “Brundtland Report” which was the outcome of a United Nations mandated commission. The report was far-reaching and covered many diverse aspects of sustainability from biodiversity to feeding the Earth’s population.

The facet of the report that concentrated on Sustainable Development, focussed on new product development. There has been much discussion and innovation during the intervening years since 1987 and the responsibility for the sustainable product creation has gravitated towards the design function. Many designers, manufacturers and researchers recognise that sustainability starts with a design goal alongside function and form and that only at the design stage can sustainability be truly built in to a new product.

The promotion of environmental awareness among engineers and designers has been slow to take hold but there has been a great emphasis applied by global engineering institutions and universities to new engineering graduates. The need for creating products that have least impact on the environment has become a prominent feature of many undergraduate engineering courses. Indeed, Design for Sustainability (DfS) has become a prominent factor in new product design gaining importance as companies market their “green” credentials.

The basic framework often used to gauge and measure the environmental effects of products, is the product Life Cycle which, used in conjunction with other design techniques allows designers to create analyse and revise their designs to have least environmental impact

This paper describes the aims of DfS and investigates requirements, tools and approaches to achieve successful sustainably designed products.

Brief Introduction of Prof. Anthony David Johnson

After leaving school at 16 years old I joined an apprenticeship scheme in precision tool making with the Royal Navy.

My experience thereafter was in design and sales relating to machine tools, machine knives, and lubrication equipment. At 27 years old I re-educated achieving a 1st Class Bachelor's Degree in Mechanical Engineering (Design). On completion I was offered the post of Assistant Chief Designer where I was managed a busy design office designing rock drills which were generally 45 tonne crawler tracked items of plant requiring analytical, hydraulic, pneumatic and high-level engineering skills and knowledge in their design.

During my 28 year tenure in the post of Professor at the University of Huddersfield I have taught numerous subjects including: dynamics, stress analysis, manufacturing, automotive design and general engineering design. In March 2014 I took up the post of Professor at Seoul National University of Science and Technology with the brief of expanding the research topic of Sustainable Engineering within my department.

During my academic career engineering I have been involved in over 400 design consultancy projects and have written numerous papers and two text books "Foundations of Mechanical Engineering" and "Sustainability in Engineering Design"

I hold several institutional affiliations:

Member of the Institution of Mechanical Engineers

Chartered Engineer

Fellow of the Higher Education Academy

My current research interest is that of Sustainable Engineering Design and more precisely the design kinetic energy storage systems.

My academic duties have expanded beyond teaching and research into external examination for several universities, educational consultancy and participation in British Standards Institute committees. I am also an international educational consultant relating to courses which are taught in the UK and at overseas universities.

Social Sciences Keynote Speech

11:35 - 12:15, Thursday, January 5, 2017, Adelfa, Ground Floor

Topic:

The Bizarre Homicide Conviction of U.S. Marine Joseph Scott Pemperton and Implications for U.S. – Philippine Relations in the Era of PRC- China Military Expansion in the South China Sea

Dr. P.C. (Pete) Kutschera, PhD

Director, Philippine Amerasian Research Center (PARC),
Angeles City,
and Visiting Professor and Research Fellow,
Don Honorio Ventura Technological State University, Bacolor,
Pampanga, 2001, Luzon,
Philippines



Abstract

Our geo-political analysis examines continuing agitation of Filipinos over uncompromising territorial claims and expanding military presence of the People's Republic of China inside the sprawling, contested "9 Dash Line" zone of the South China Sea. In response Philippine policy makers have embraced the long standing 1951 Mutual Defense Treaty with the United States. Yet political scientists have amply recorded the "love - hate" relationship between the North American mother country and its former Philippine colony, World War II "blood ally" and occasionally described Southeast Asia "client state." Indeed, some of the residual bitterness, ambivalence and tensions from the old alliance and Cold War permanent basing years (1947-1992) washed to the surface in late 2015. The reminder came via the bizarre and troubling homicide conviction of Joseph Scott Pemberton, a 19-year-old enlisted U.S. Marine on shore leave in Olongapo City. Pemberton was charged with murder in the grisly slaying of a transgender Filipina he met in a pickup bar within sight of the former Subic Bay Naval Complex. Convicted of the lesser charge of homicide in a controversy addled trial that enthralled the Filipino public, the Pemberton Affair rekindled latent public uneasiness over the stained legacy of perceived inequities and injustices. Such questions include the U.S. command's inability to control its own men and it's apparently continued toleration of soldiers' and sailors'

unlawful dalliances with sex industry workers. Never adequately addressed also is the nearly buried issue of irresponsible or careless military servicemen who fathered tens of thousands of biracial Amerasian offspring left abandoned - a result of socialization and personal relationships with Filipina nationals. Not fully resolved also is a suspected lack of or frailty of legal protection for Philippine citizens when they come in conflict with the U.S. defense juggernaut. Surely it is a new chapter for this unique U.S. and Philippine geo-political narrative given the specter of rising PRC-Chinese national expression cum military accretion and the corresponding demonstration of Philippine eagerness to sign the 2014 R.P. – U.S. Enhanced Defense Cooperation Agreement (EDCA). For it is EDCA that raises the reality of semi-permanent re-basing by granting U.S. defense forces virtually untrammelled access to Philippine military installations nationwide. Lurking anew, therefore, are traces of the “ghosts” of hard times past symbolically if not starkly captured in the Pemberton Affair.

Brief Introduction of Dr. P.C. (Pete) Kutschera

Dr. P.C. “Pete” Kutschera is an independent international researcher and recognized contemporary authority on issues confronting biracial military Amerasians abandoned in the Philippines during the long U.S. colonial and neo-colonial involvement in the archipelago. A licensed social worker and retired U.S. Armed Forces Reserve Lieutenant Colonel, he has presented more than a dozen international research conference papers. He has also authored or co-authored numerous scholarly journal articles on this and related topics including accounts of Pan Amerasians populating other nation-states of East/Southeast Asia. His doctoral dissertation concentrated on poverty, stigmatization and mental health problems facing military Filipino Amerasians left in the wake of 1991-92 U.S. military base closures inside Luzon’s AMO (Angeles, Metro Manila and Olongapo City) Amerasian Triangle – an original term from Dr. Kutschera’s germinal research. He has lectured tirelessly on this controversy invoking international social work and human rights issue since 2012 at major conferences and symposia. These venue sites range from Australia, Canada, Cambodia, Dubai, UAE and Manila and Cebu in the Philippines to Singapore, South Korea, Taiwan-the Republic of China, Thailand and the U.S.A. He is founder of the Albany, New York-based Amerasian Research Network, Ltd. and co-founder of the Angeles, Pampanga, Luzon-based Philippine Amerasian Research Center (PARC), both non-profit organizations dedicated to Filipino and Pan Amerasian human research. Dr. Kutschera is a U.S. citizen and permanent resident of the Philippines and married 25 years to a Cebuana native. They are proud parents of a Filipino American son.

Psychology / Culture / Economics / Society

Thursday, January 5, 2017

09:00-10:30

Rosal

Session Chair: *Prof. Reem Abedulmotaleb Abuiyada*

ICSPE-422

An Experimental Examination of the Relationships between Cultural Self-Construal and Emotion Regulation Effects of Cognitive Reappraisal and Abdominal Breathing Method

Masato Kanai | *University of Tsukuba*

Shintaro Yukawa | *University of Tsukuba*

APCSSM-29542

Students' Attitudes towards Voluntary Services: A Study of Higher Institutions in Dhofar Region

Reem Abedulmotaleb Abuiyada | *Dhofar University*

APCSSM-29559

India's FTAs with ASEAN -Prospects for Economic Integration

Ambili Jayachandran | *University of Kerala*

C. Ganesh | *University of Kerala*

ICSPE-477

Investigation of the Elders' Age Distributions in Association of Southeast Asian Nations and South Asian Countries

Bing-Yuh Lu | *Tungnan University*

Chi Wang | *Tungnan University*

Shu-Heuh Tseng | *Tungnan University*

San-San Sing | *National Taipei University of Business*

Information Engineering (1) / Computing Engineering and Technology

Thursday, January 5, 2017

09:00-10:30

Adelfa

Session Chair: *Prof. Sio Tai Cheong*

ICEIT-2754

Observing the Heavy Metal Concentration near Samgwang Mine by NIR Sensor UAV

Seyoung Kim | *Chungnam National University*

Jaehyung Yu | *Chungnam National University*

Ji Hye Shin | *Chungnam National University*

Sang-Mo Koh | *Korea Institute of Geoscience and Mineral Resources*

Gilljae Lee | *Korea Institute of Geoscience and Mineral Resources*

ICEIT-2755

Spectral Characteristics of *pinus densiflora* Canopies from an Abandoned Heavy Metal Mine in Korea

Ji Hye Shin | *Chungnam National University*

Jaehyung Yu | *Chungnam National University*

Seyoung Kim | *Chungnam National University*

Jeong Hwa Lim | *Chungnam National University*

Sang-Mo Koh | *Korea Institute of Geoscience and Mineral Resources*

ICEIT-3078

***Ad Hoc* Routing Protocol Comparisons Using SUMO- In Vehicular *Ad Hoc* Networks**

Ye-Eun Chae | *Seoul Women's University*

Seung-Seok Kang | *Seoul Women's University*

ICEIT-2669

Research on Strategies of Developing Macao Information and Communications Technologies

Sio Tai Cheong | *Macao Polytechnic Institute*

Xiao Fang Ma | *Chinese Academy of Governance*

Civil Engineering / Chemical Engineering

Thursday, January 5, 2017

13:30-15:00

Adelfa

Session Chair: *Prof. Anthony David Johnson*

ICEIT-2566

Artificial Neural Network Approach to Calculate Stability Number of Tetrapods

Jae Sung Lee | *Seoul National University*

Kyung-Duck Suh | *Seoul National University*

ICEIT-2956

A Preliminary Study of the Use of BIM Technology in the Investigation of Major Occupational Accidents in Construction Projects

Mu-Chun Liao | *National Central University*

Ting-Ya Hsieh | *National Central University*

ICEIT-2753

Hydrolysis of Xylan Substrates by Engineered *Saccharomyces cerevisiae* Strains Expressing the *Trichoderma reesei* Hemicellulases on Their Cell Surface

Ian Dominic Flormata Tabañag | *National Taiwan University of Science and Technology*

Shen-Long Tsai | *National Taiwan University of Science and Technology*

Information Engineering (2)

Thursday, January 5, 2017

15:15-17:00

Adelfa

Session Chair: *Prof. Rodrigo C. Belleza Jr.*

ICEIT-2750

Analyzing 80 Years of Environmental Changes Based on Hydrologic Modeling and Land Cover Changes for Yeonggwang, South Korea

Haein Shin | *Chungnam National University*

Jaehyung Yu | *Chungnam National University*

Dong-Yoon Yang | *Korea Institute of Geoscience and Mineral Resources*

Sungji Bae | *Chungnam National University*

ICEIT-2748

3D-Geological Modeling, and Defining the Ore Bodies; A Case Study of Chungju, South Korea

Jieun Kim | *Chungnam National University*

Jaehyung Yu | *Chungnam National University*

Gyesoon Park | *Korea Institute of Geoscience and Mineral Resources*

Gilljae Lee | *Korea Institute of Geoscience and Mineral Resources*

Seyoung Kim | *Chungnam National University*

ICEIT-2747

UAV Investigation of Heavy Metal Concentration in Plant for Samkwang Mine Area, South Korea

Yongsik Jeong | *Chungnam National University*

Jaehyung Yu | *Chungnam National University*

Sang-Mo Koh | *Korea Institute of Geoscience and Mineral Resources*

Gyesoon Park | *Korea Institute of Geoscience and Mineral Resources*

ICEIT-2752

UAV-Based Measurement for Roundness of Gravel

Sungji Bae | *Chungnam National University*

Jaehyung Yu | *Chungnam National University*

Sang-Mo Koh | *Korea Institute of Geoscience and Mineral Resources*

Yongsik Jeong | *Chungnam National University*

ICEIT-2759**Multiple Pedestrians Tracking for Video Surveillance in Rainy Conditions**

Sang-Hee Jeon | *Kyungsung University*

Jang-Sik Park | *Kyungsung University*

Jong-Kwan Song | *Kyungsung University*

Byung-Woo Yoon | *Kyungsung University*

ICEIT-2773**A Scalable Rule-Based Classification Algorithm for Mining Student Records**

Rodrigo C. Belleza Jr. | *Technological Institute of the Philippines*

Bobby D. Gerardo | *Technological Institute of the Philippines*

Alexis V Pantola | *Technological Institute of the Philippines*

Education (1)

Friday, January 6, 2017

09:00-10:30

Rosal

Session Chair: *Prof. Surma Jumaide Werble*

ICSPE-468

Teachers' Motivational Strategies as Correlate to Linguistic Performance among Freshman College Students in Western Mindanao State University

Surma Jumaide Werble | *Mindanao State University-Tawi-Tawi*

ICSPE-478

Organization and Management of Resources for Guidance Program Development of Secondary Schools in Bongao, Tawi-Tawi

Albiya Idlang Dagbusan | *Mindanao State University-Tawi-Tawi*

APCSSM-29571

Generation of Higher Education Welfare Economics Theory

Elna Ballista Sabornido | *University of Cebu Lapu-Lapu and Mandaue*

ICSPE-493

Assessing University Students' Understanding of Selected Concepts in Evolution Using Images and Graphs

Ian Phil Machete Canlas | *University of Central Asia*

Education (2)

Friday, January 6, 2017

10:50-12:00

Rosal

Session Chair: *Prof. Retno Dwi Suyanti*

ICSPE-428

The Effects of Concept Mapping on Student Nurses' Learning of Medical-Surgical Nursing

Julia Sze Wing Wong | *Tung Wah College*

Baaska Anderson | *University of Liverpool*

ICSPE-431

The Generic Ability Analysis of Interactive Media Development of Learning Collaborative in Inorganic Chemistry

Retno Dwi Suyanti | *Medan State University*

Kristian H. Sugiyarto | *Universitas Negeri Yogyakarta*

ICSPE-461

The Effect of Peer Instruction on Promoting Student Nurses' Learning in Medical-Surgical Nursing

Mei Ki Cheung | *The Chinese University of Hong Kong*

Julia Sze Wing Wong | *Tung Wah College*

Mechanical Engineering / Electrical & Electronic Engineering

Friday, January 6, 2017

13:30-15:00

Rosal

Session Chair: *Prof. Dong Jin Cha*

ICEIT-2712

Influence of Reynolds Number on Coalescence of Droplets with Particle in Flow through a Tube at Low Reynolds Number

Masahiro Muraoka | *Tokyo University of Science*

Yuki Kumagai | *Nisshinbo Holdings Inc.*

Yuta Yatagawa | *Calsonic Kansei Corporation*

ICEIT-2726

Determination of the Reflection Coefficient on a Model Combustor and Its Application for Predicting the Combustor's Stability

Dong Jin Cha | *Hanbat National University*

Woon Joon Song | *Dongshin University*

ICEIT-2600

A Study on the Speed Control of a BLAC Motor by Back-EMF Feedforward Compensation

Donghoon Ban | *Daegu Gyeongbuk Institute of Science and Technology*

Jaeseung Hong | *Daegu Gyeongbuk Institute of Science and Technology*

Sungho Jin | *Daegu Gyeongbuk Institute of Science and Technology*

Seonghun Lee | *Daegu Gyeongbuk Institute of Science and Technology*

ICEIT-2690

Study of PECVD Deposited Silicon Nitride Film Stress

Bo-Eun Jang | *Myongji University*

Sang Jeon Hong | *Myongji University*

ICEIT-3277

A Model Based Estimation for Smart Meter Missing Readings

Daisuke Kodaira | *Kyungpook National University*

Sekyung Han | *Kyungpook National University*

Biological Engineering / Civil Engineering/ Environmental Engineering

Thursday, January 5, 2017

13:20-14:20

Rosal

ICEIT-2804

Surface-Enhanced Platelet Activation

Yeong Seok Jang | *Chonbuk National University*

Hyo Jae Kim | *Chonbuk National University*

Seok Kyun Park | *Chonbuk National University*

Kyoung Chan Lee | *Chonbuk National University*

Jinmu Jung | *Chonbuk National University*

Jong Hyun Oh | *Chonbuk National University*

ICEIT-2805

Controllable Micro-Mixing for Cell-Laden Cylindrical Microgel Fabrication

Dong Hwan Lee | *Chonbuk National University*

Hyo Jae Kim | *Chonbuk National University*

Yeong Seok Jang | *Chonbuk National University*

Kyoung In Kang | *Chonbuk National University*

Min Seok Lee | *Chonbuk National University*

Ji Seon Yu | *Chonbuk National University*

Jinmu Jung | *Chonbuk National University*

ICEIT-2987

Image Enhancement of the Photoacoustic Tomography Using the Emission Spectra of Nanoparticles and Vitamin

Dong Ho Shin | *Chonbuk National University*

Jeong-Hwan Seo | *Chonbuk National University Hospital*

Sang Wook Oh | *Chonbuk National University*

Chul Gyu Song | *Chonbuk National University*

ICEIT-2685**Impact Model Test of a Debris Flow Mitigation System**

KyungSoo Lee | *Dasan Engineering Co.,LTD.*

SungHa Cho | *Dasan Engineering Co.,LTD.*

Jinho Kim | *Dasan Engineering Co.,LTD.*

BoSun Yoo | *Dasan Engineering Co.,LTD.*

KwangHo You | *The University of Suwon*

ICEIT-2758**Study on Flood Analysis and Flood Damage Cost Estimates Busan Marine City
Considering Sea Level Rise**

Heesup Lee | *Hanseο University*

Youngseok Song | *Hanseο University*

Wonseok Yang | *Hanseο University*

Moojong Park | *Hanseο University*

ICEIT-2689**Determination of Optimal Width of Breakwater Caisson by Reliability Based Design
Optimization**

Taeksang Kim | *Seoul National University*

Kyung-Duck Suh | *Seoul National University*

ICEIT-2778**Effects of Fibers' Tensile Strength on Flexural Behavior of Steel Fiber Reinforced
High-Strength Concrete**

Gwon-Young Jeong | *Chuang Nam National University*

Seok-Jun Jang | *Chuang Nam National University*

Ji-Hyeon Kim | *Chuang Nam National University*

Sun-Woo Kim | *Chuang Nam National University*

Hyun-Do Yun | *Chuang Nam National University*

ICEIT-2696**A Comparative Study on the Frequency of Home Modification and the Importance of
Housing Facilities for People with Disabilities**

Kyooil Lee | *Sahmyook University*

Soobum Lee | *Sahmyook University*

Sungjoon An | *Korea Disabled People's Development Institute*

ICEIT-3048**A Study on the Development of Heterogeneity Reinforcing Composite Profile Beam System**

Soo-Hyun Ryu | *Sahm-Yook University*

ICEIT-3052**A Study on the Mechanical Properties of PVA Fiber-Reinforced Cement Composites (FRCCs) with Recycled Fine Aggregates and Fly Ash**

Yi-Hyun Nam | *Chungnam National University*

Sun-Woong Kim | *Chungnam National University*

Jong-Won Lee | *Chungnam National University*

Wan-Shin Park | *Chungnam National University*

Young-Il Jang | *Chungnam National University*

Sun-Woo Kim | *Chungnam National University*

ICEIT-2777**Regional Distribution of Pu isotopes and ^{237}Np in Atmosphere in Spring on Korean Peninsular**

Seong A Yim | *Korea Institute of Nuclear Safety*

Eunhee Kwon | *University of Science and Technology*

Yu Jung Bae | *Korea Institute of Nuclear Safety*

Ju Yong Yun | *Korea Institute of Nuclear Safety*

Kyu Hwan Jung | *Korea Institute of Nuclear Safety*

ICEIT-2725**Feasibility Study on a Co-Fluid Cooling System Using Ionic Liquid and Carbon Dioxide**

Hae Ryong Jin | *Enbion Inc.*

Hyun Jae Lee | *Enbion Inc.*

Ken Oliver Ohlen | *Enbion Inc.*

Bongbeen Yim | *Enbion Inc.*

Min Whee Cho | *Enbion Inc.*

Ji Na Choi | *Korean Research Institute of Chemical Technology*

ICEIT-2672

Fabrication and Performance of Microcolumnar CsI:Tl onto Silicon Photomultiplier

Chan Jong Park | *University of Myongji*

Hye Min Park | *University of Myongji*

Ki Hyun Park | *University of Myongji*

Young Gil Kim | *University of Myongji*

Koan Sik Joo | *University of Myongji*

Computing Engineering and Technology / Electrical &

Electronic Engineering / Information Engineering and

Technology

Thursday, January 5, 2017

14:40-15:40

Rosal

ICEIT-2714

A Study on Efficient Signature Pattern Generation Method by Using Latticed Bounding Box

Ji-Hyeon Park | *Dongguk University*

Hee-Jin Jung | *Dongguk University*

Jin-Woo Jung | *Dongguk University*

ICEIT-2694

A GA Approach to Investigate the Periodic Delivery Problem

Yi-Chih Hsieh | *National Formosa University*

Cheng-Dar Liou | *National Formosa University*

Pei-Ju Lee | *National Chung Cheng University*

Yung-Cheng Lee | *WuFeng University*

Peng-Sheng You | *National Chiayi University*

ICEIT-2772

Pedestrian Tracking Using GPU for Video Surveillance at Night-Time

Min Jung Park | *Kyungsung University*

Beom-Joon Choi | *Kyungsung University*

Jang-Sik Park | *Kyungsung University*

Jong-Kwan Song | *Kyungsung University*

Hyun-Gon Kang | *Kyungsung University*

ICEIT-2749**Moving Angle Compensation Method in the Self-Driving System with 2-Inwheel BLDC Motors**

Jongnam Bae | *Kyungsung University*

Yunchang Kwak | *Kyungsung University*

YeongJun Jo | *Kyungsung University*

Dong-Hee Lee | *Kyungsung University*

ICEIT-2751**Voltage Control of High-Efficiency Generator with PM Exciter**

YeongJun Jo | *Kyungsung University*

Jongnam Bae | *Kyungsung University*

Yunchang Kwak | *Kyungsung University*

Dong-Hee Lee | *Kyungsung University*

ICEIT-2687**A New Motor Parameter Estimation Method for a Surface-Mounted Permanent Magnet Motor**

Hong-Joo Lee | *Hongik University*

Dong-Myung Lee | *Hongik University*

ICEIT-2841**Design of the VSAT Antenna with Hybrid Beam Scanning**

Young-Bae Jung | *Hanbat National University*

ICEIT-2700**A Study on Resonance Properties of a Terahertz Asymmetric High-Q Metamaterial by Using THz-TDS**

Han-Cheol Ryu | *Sahmyook University*

ICEIT-3049**Tetrahedron Origami Antenna**

Sungjoon Lim | *Chung-Ang University*

Syed Imran Hussain Shah | *Chung-Ang University*

ICEIT-3051**Adaptive Relay-Link Selection Scheme Based on Buffer State and Link State Information**

Hyujun Kim | *Kwangwoon University*

Young-Uk Chung | *Kwangwoon University*

ICEIT-3216

Operating the Refrigerated Warehouse System based on the Cold Chain System Using Reality Technology

Gyusung Cho | *Tongmyong University*

Sangil Lee | *Pusan National University*

Siku Kim | *Pusan National University*

Kwangyeol Ryu | *Pusan National University*

Education / Psychology

Thursday, January 5, 2017

16:00-17:00

Rosal

ICSPE-419

Effects of Intensive and House Tutoring on Math Grade of College Students

Soo Jin Yoon | *Yonsei University*

Minje Kim | *Yonsei University*

Kyong-Mee Chung | *Yonsei University*

ICSPE-426

Effects of Core Stability Exercise on Static and Dynamic Balances of Archers

Jun-Youl Cha | *Howon University*

Jeong-Min Park | *Chungnam National University*

Gwang-Suk Hyun | *Chungnam National University*

Yong-Seok Jee | *Hanseo University*

ICSPE-430

Indirect Isotonic Maximum Strength (1RM) at Knee Joint Can Predict to Isokinetic Peak Torque in Health Related Exercise

Jaehyun Yoo | *Sahmyook University*

ICSPE-440

Collateral Effectiveness of Behavioral Parent Training for Children with Developmental Disabilities: Comparison between Successful and Unsuccessful Groups

Saeyeon Seong | *Yonsei University*

Jiyoung Noh | *Yonsei University*

Soojin Kim | *Yonsei University*

Yuna Kim | *Korea Institute for ABA*

Hyunsook Jang | *Korea Institute for ABA*

ICSPE-441

The Effects of Exercise Class vs. Self-Management Class on Reducing Impulsivity in College Students

Seung Ah Lee | *Yonsei University*

ICSPE-485

The Study for the Formation of Consciousness to the Industry Collaboration to the Learners of Intellectual Property Learn in University

Shihori Ahama | *Yamaguchi University*

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