

# PROCEEDING BOOK

**Volume 1, Issue 2**

**ASIEM-APRIL-2019**

**Venue: Mercure Hotel Amsterdam City**

**Date: April 27-28, 2019**



**Institute of  
Applied Sciences  
& Engineering Technology**

# **IAET International Conference on Aerospace Engineering, Applied Sciences, Information Technology, Electrical & Mechanical Engineering (ASIEM)**

Conference organized by:



This conference is dedicated to educators all over the world and to the members of the Institute of Applied Sciences and Engineering Technology (IAET) whose passion for teaching, learning, research, and service are helping to transform the academy in many positive ways.

#### **Mission, Vision, and Core Values**

Research & Innovation, Knowledge exploration and sharing, nurturing novel ideas, addressing challenges to Applied Sciences and Engineering Technology.

Lead the scholarly community through global communication and nurturing innovative ideas, developments and experiments in the field of Applied Sciences and Engineering Technology

We try to give our members a positive network/relation building experience by: 1) We have team building/socializing/gaming sessions where the members mix and talk and share with each other in an informal environment. 2) We arrange various customized events and capacity building activities for higher education institutions. 3) Dedicated and committed team to support individual and corporate members of our scholarly community.

#### **Membership, Conference, Publishing, and Research Information**

If you are interested in serving as the volunteer reviewer for the next conference, please contact:

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## IAET International Conference on Aerospace Engineering, Applied Sciences, Information Technology, Electrical & Mechanical Engineering

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## Welcome Message

The Institute of Applied Sciences and Engineering Technology (IAET) welcomes you to the IAET International Conference on Aerospace Engineering, Applied Sciences, Information Technology, Electrical & Mechanical Engineering (ASIEM)

We are happy you decided to join your colleagues from around the world to explore innovative technologies, pioneering pedagogical strategies, and a sampling of international collaborations that are being used to engage and retain students, researchers and Scholars in the new millennium.

## Scientific Committee

Lobna Ali Al-Khalifa, National Authority for Qualifications & Quality Assurance of Education & Training (QQA), Bahrain  
Lothar Auchter, University of Applied Science, Kaiserslautern, Germany  
Louise van Scheers, Department of Marketing and Retail, University of South Africa  
Magorzata Magdalena Hybka, Pozna University of Economics and Business, Poland  
Marvin O. Bates, Lewis University, USA  
Maria Binti Abdulrahman, Universiti Utara Malaysia, Malaysia  
Michael D. MacColl, Vancouver Island University, Canada  
Mukherjee Farooq Anwar, The University of Lahore, Pakistan  
Dr. Nik Hazimah Nik Mat, Universiti Malaysia Terengganu, Malaysia  
Dr Mourad Mansour, King Fahd University of Petroleum and Minerals Saudi Arabia  
Majid Asadnabizadeh, University of Payam Noor, Bushehr Centre, Iran  
Phongsakorn Methitham, Naresuan University Phitsanulok, Thailand  
Maduranga Pushpika Kumara Withanawasam, University of Sri Jayewardenepura Nugegoda, Sri Lanka  
Rodney Oudan, Worcester State University in Massachusetts, USA  
Roger B Mason, Cape Peninsula University of Technology, South Africa  
Sampath Kumar, University of Wisconsin Green Bay, USA  
Salil K Sen, NIDA Business School, Bangkok, Thailand  
Simon Best, Medgar Evers College, New York, USA  
Yongmei Bentley, University of Bedfordshire, UK

## Acknowledgements

The organizing committee would like to thank all those people who were involved in making the conference a success. A great amount of planning and organizing is required to hold a successful conference, so we are indebted to those who volunteered their time and energy.

We want to thank all the members of the Institute of Applied Sciences and Engineering Technology (IAET) who volunteered their time to help organize the conference.

## **ENGINEERING TECHNOLOGY**

Acoustical Engineering Aerospace Engineering, Agricultural Engineering Biological Engineering and Sciences, Biological Systems Engineering Biomedical Engineering, Bioprocess Engineering Biotechnology, Building Services Engineering Chemical Engineering, Industrial Engineering Information Engineering, Informational Technology Manufacturing Engineering and Technology, Materials Engineering Mechanical Engineering, Mechatronics Nanotechnology and Nanoengineering, Naval Engineering Nuclear Engineering, Technology for Cloud Computing Technology for Community, Technology for Digital Age Technology for Human Use, Technology for Learning Civil Engineering, Computer Engineering Current issues and challenges in Engineering, Electrical Engineering Electronic Engineering, Energy Engineering Environmental Engineering, Food Engineering Genetic Engineering, Geotechnical Engineering Ocean Engineering and Technology, Optical Engineering Petroleum Engineering, Power Engineering Process Engineering, Resource Engineering Sensing Technology, Structural Engineering Systems and Software Engineering, Technology for Big Data Textile Engineering, Thermal Engineering Transport Engineering, Web Engineering Vehicle Engineering.

## **APPLIED SCIENCES**

Artificial Intelligence, Architecture, Astronomy, Biological Sciences, Botany, Chemistry, Design, Earth Science, Ecology, Marine Science, Physics, Space Sciences, Life sciences, Computer Sciences, Logic, Mathematics, Statistics, Systems Science, Electrical Engineering, Information, Technology, Industrial Engineering, Mechanical Engineering, Applied Physics, Health Sciences and Medicine, Ceramic Engineering, Computing Technology, Electronics, Energy, Environmental Engineering Sciences, Engineering physics, Environmental Technology, Fisheries Science, Forestry Science, Materials Engineering Micro technology, Nanotechnology, Nuclear, Technology, Optics, Zoology Transportation

## Conference Schedule

### IAET International Conference on Aerospace Engineering, Applied Sciences, Information Technology, Electrical & Mechanical Engineering (ASIEM)

Mercure Hotel Amsterdam City  
April 27-28, 2019

ASIEM-2019

Saturday, April 27, 2019

#### Day-at-a-Glance

09:00 am - 09:20 am	Registration and Kit Distribution
09:20 am - 09:40 am	Introduction of Participants
09:40 am - 09:50 am	Inauguration and Opening address
09:50 am - 10:00 am	Grand Networking Session
10:00 am - 10:30 am	Tea



## Session 01

10:30 am - 12:00 pm

### Track 01: Business, Economics, Social Sciences and Humanities

The Impact of Management Information Systems on the Quality of Management Decisions

*Speaker: Johnson Olu Egbuniwe — Department Of Business Administration, University of Mediterranean, Karpasia, North Cyprus.*

Desirable Policy Directions versus Decisions for Self-Government Finance: The Example of Selected Central and Eastern Europe Countries (CEEC)

*Speaker: Beata Guziejewska — Faculty of Economics and Sociology, University of Lodz, Poland.*

Australian Solidarity towards Southern Pacific Regional Development

*Speaker: Ruyuan Liu — Institute of Political Science Charles University Student, Prague.*

### Track 02: Engineering, Technology & Applied Sciences

Transfer of the Data Preprocessing Parameters and Forecasting Models

*Speaker: Arthur Stepchenko — Riga Technical University / Ventpils University of Applied Sciences, Latvia*

### Track 03: Medical, Medicine & Health Sciences Sciences

Establishment of the Shariah Framework for the Application of Somatic Gene Therapy in Human

*Speaker: Zakiah Samori — Universiti Teknologi MARA, Shah Alam, Selangor Malaysia*

**Lunch (12:00 pm - 01:00 pm)**

## Conference Attendees

The following scholars/practitioners/educationist who don't have any paper presentation, however they will attend the conference as delegates & observers.

Participant Name: Mrs. Albena Chamurdzhieva

Reference ID: AMS-449-102A

Affiliation: MPharm Bulgaria

Participant Name: Dr Husam Jamil

Reference ID: AMS-229-103A

Affiliation: National Health Service, UK

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**IAET International Conference on Aerospace Engineering  
Applied Sciences, Information Technology, Electrical & Mechanical  
Engineering**

**ASIEM-2019**

**Sunday, April 28, 2019**

Conference second day is reserved for participants own tourism activities.

## **Conference Abstracts**

### **Track 1: Business, Economics, Social Sciences and Humanities**

# The Impact of Management Information Systems on the Quality of Management Decisions

Johnson Olu Egbuniwe\*

Department Of Business Administration, University of Mediterranean, Karpasia, North Cyprus

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The study aims to focus on the reality of the impact of using the administrative information systems (operational, administrative and decision support) in the quality of the administrative decision-making process in the Libyan Almadar Company and to identify the problems and difficulties that affect the decision-making process. As well as the study trays to determine the role of MIS in the quality of decision making in Almadar communication company.

One of the most prominent findings was the strong relationship between the management information systems and the quality of managerial decision-making and the highly significant impact of types of management information systems on the quality of decision-making.

**Index Terms:** Management Information Systems, Decision-Making, Operational Information Systems, Decision Support Systems, Organizational Performance

# Desirable Policy Directions versus Decisions for Self-Government Finance: The Example of Selected Central and Eastern Europe Countries (CEEC)

Beata Guziejewska\*

Faculty of Economics and Sociology, University of Lodz, Poland

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The theory states that local self-governments should have as much financial independence as possible and that so-called own revenues (from local taxes and fees) should be the foundation of local budgets. This contrasts with the solutions adopted in many countries where most local governments are financed by national government transfers and shared taxes that take fiscal responsibility away from them. The study compares the selected problems of fiscal decentralization in selected CEEC. The CEEC countries have been decentralizing their administrative, political and financial systems; they are similar in adopting the adequacy principle and the subsidiarity principle as a basis for fiscal decentralization, but also that they are different regarding some specific solutions. However in both cases there is a gap between desirable policy (theory recommendations) and actual decisions (political will). The systems in CEEC have different operational and specific problems but similar functional and systemic weaknesses. The critical flaw is that shared taxes have the legal status of local governments own revenues even though they are not controlled by them. The systems should evolve towards municipal councillors greater responsibility for making financial and budgetary decisions serving the specific needs and preferences of local communities.

**Index Terms:** Self-Governments, Revenues, Decentralization

# Australian Solidarity towards Southern Pacific Regional Development

Ruyuan Liu \*

Institute of Political Science Charles University Student, Prague

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This paper focuses on the Australian position on regional development. It argues that Australian regional dedication inclines to rationalist perspectives and not much constructivism. The level of solidarity is relatively low comparing to New Zealand. This paper includes a theoretical analysis and specific policy analysis with a comparative study of New Zealand. To illustrate the case, it applies the numeric analysis in aids and qualitative analysis of policy decisions in climate change, regional security and labor issues.

**Index Terms:** Regional Development, Qualitative Analysis, Theoretical Analysis

## **Conference Abstracts**

### **Track 2: Engineering, Technology & Applied Sciences**



# Transfer of the Data Preprocessing Parameters and Forecasting Models

Arthur Stepchenko<sup>1\*</sup>, Jurij Chizhov<sup>2</sup>, Ludmila Aleksejeva<sup>3</sup>

<sup>1,2,3</sup>Riga Technical University / Ventspils University of Applied Sciences, Latvia

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Analysis and forecasting of the life cycle of vegetation are essential in planning agricultural work as well as monitoring of agricultural crops and forecasting their productivity. In practice, vegetation indices are often used that are calculated from the values of satellite image pixels like normalized difference vegetation index (NDVI). Forecasting of this index in precision agriculture allows indicating problems which are related to agricultural crop growth in time and make timely decisions about necessary measures to fix these problems. In the paper transferring approach for data preprocessing parameters and forecasting model is developed that provides forecasting of other normalized vegetation index time series without new preprocessing and training if the Euclidean distance between the time series used in the training and the time series using the data processing parameters and the forecasting model is small enough.

**Index Terms:** Forecasting Models, Normalized Difference Vegetation Index (NDVI), Pixel Grid

## **Conference Abstracts**

### **Track 3: Medical, Medicine & Health Sciences**

# Establishment of the Shariah Framework for the Application of Somatic Gene Therapy in Human

Zakiah Samori<sup>1\*</sup>, Fadilah Abd Rahman<sup>2</sup>

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Human gene therapy is best known as a transfer of nucleic acids to either the somatic cells or germ cells of an individual. It introduces genetic materials which have therapeutic purpose ranging from inherited genetic disorders to certain malignancies and infectious diseases. This medical scientific breakthrough has received lucrative demand worldwide as it offers potential treatment to cure genetic diseases in human at the molecular level. Since then, thousands of people have already participated in the trials thus it is likely to be part of medical practice in the future. This model of Shariah Framework would serve as the ethical basis for the application of somatic gene therapy in Malaysia and beyond (particularly Muslim countries) especially for Muslim doctors, scientists and Muslims at large. Consideration of the position of Somatic Gene Therapy from the Shariah perspective is undeniably crucial in any attempt to regulate Somatic Gene Therapy in any Muslim countries in the future.

**Index Terms:** Somatic Gene Therapy, Shariah Framework, Islamic Principles

## Upcoming Events

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