

PROCEEDING BOOK



Volume 1, Issue 4

CITM-JUNE-2019

Venue: Mercure Hotel Amsterdam City

Date: June 28-30, 2019



**Institute of
Applied Sciences
& Engineering Technology**

IAET International Conference on Engineering, Computing, Information Technology, Applied Sciences & Smart Material (CITM)

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:

mail: contact@institute-aet.com

Web site: <http://institute-aet.com/>

IAET International Conference on Engineering, Computing, Information Technology, Applied Sciences & Smart Material

Table of content

Welcome Message	5
Scientific Committee	6
ENGINEERING TECHNOLOGY	7
Conference Schedule	8
Conference Abstracts	13
The Impact of HR Practises on Organisational Performance:	
Evidence from the Healthcare Sector	14
How to Call over a Waiter/Waitress in Japanese, Korean, and Thai:Cognitive Linguistic and Cross-cultural Studies	15
The Meaning of Work for Tutors in Distance Education	16
Does Free Higher Education Make Economic Sense in South Africa?	17
Exploring the Impact of Professional Identity on the Application of Evidence to Practice	18
Management of Human Resources as a Competitive Advantage	19
Students Perceptions of Teaching Excellence Online: A Tradeoff Analysis	20
Existing Health Care System of Pakistan: A study of responsiveness towards Sexual and Reproductive Health & Rights of young people and Sustainable Development Goals especially (Goal 3.71) with special focus on youth.	21
Course Scheduling and Test Scoring: Evidence from a 4-Year Public University in the U.S.	22
Analyzing Mission and Vision Statements for Universities	23
Conference Abstracts	24
Development of Smart Applications for Landslide Risk Reduction	25
Cardiac Arrhythmia Diseases Prediction Model Based on Classification Algorithms	26
Catalytic Wet Air Oxidation of Industrial Wastewater over Ceria based Nanocatalysts	27
Fabrication of Supercapacitors with High Power Density and High Volumetric Specific Capacitance Using CO2- Activated Holey Graphene/Activated Carbon	28
Barriers Affecting the Adoption of E-Government in Developing Countries	29
Upcoming Events	30

Welcome Message

The Institute of Applied Sciences and Engineering Technology (IAET) welcomes you to the IAET International Conference on Engineering, Computing, Information Technology, Applied Sciences & Smart Material (CITM)

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 Engineering, Computing, Information Technology, Applied Sciences & Smart Material (CITM)

Mercure Hotel Amsterdam City
June 29-30, 2019

CITM-2019

Saturday, June 29, 2019

Day-at-a-Glance

09:00 - 09:20 am	Arrivals, Doorstep and Handshake
09:20 - 09:40 am	Introduction of Participants
09:40 - 09:50 am	Welcome Remarks (Mr Bashar)
09:50 - 10: 15 am	Keynote Speech (Dr. Chhaya Sharma, Department of Paper Technology IIT, Roorkee, Saharanpur Campus. Saharanpur-247001, U.P., INDIA)
10: 15 - 10: 30 am	Tea - Grand Networking Session/ Group Photo

Session 01

10:30 am - 11:45 am

Track 01: Engineering, Technology & Applied Sciences

Development of Smart Applications for Landslide Risk Reduction

Speaker: Martina Greco — Faculty of Engineering and Architecture, University of Enna Kore (Italy)

Cardiac Arrhythmia Diseases Prediction Model based on Classification Algorithms

Speaker: Dr. S C Sharma, Ravinder — Department of Paper Technology, IIT Roorkee, Saharanpur Campus, Saharanpur India

Fabrication of Supercapacitors with High Power Density and High Volumetric Specific Capacitance Using CO₂-Activated Holey Graphene/Activated Carbon

Speaker: Ching-Yuan Chang—Yuan Ze university Taipei, Taiwan

Barriers Affecting the Adoption of E-Government in Developing Countries

Speaker: Suleman Danladi Prince—Management Information System, Cyprus International University, Nicosia North Cyprus

Session 02: 11:45 am - 02:00 pm

Session Chair: Dr. S C Sharma

Track 02: Business, Economics, Social Sciences and Humanities

The Impact of HR Practises on Organisational Performance: Evidence from the Healthcare Sector

Speaker: Tamer Darwish — The School of Business and Technology, University of Gloucestershire Cheltenham, England

How to Call over a Waiter/Waitress in Japanese, Korean, and Thai: Cognitive Linguistic and Cross-cultural Studies

Speaker: Wirat Siriwatananawin — The School of Business and Tecnology, University of Gloucestershire Cheltenham, England

The Meaning of Work for Tutors in Distance Education

Speaker: Y. Neves — Fundacao Getulio Vargas (BRAZIL)

Does Free Higher Education Make Economic Sense in South Africa?

Speaker: Eloise de Jager — School of Accountancy, Stellenbosch University Cape Town, South Africa

Exploring the Impact of Professional Identity on the Application of Evidence to Practice

Speaker: Dean Bartlett — Guildhall School of Business and Law, London Metropolitan University, London

Session 02

11:45 am - 02:00 pm

Track 01: Business, Economics, Social Sciences and Humanities

Management of Human Resources as a Competitive Advantage

Speaker: J. Liedkeh — EBAPE (Rio de Janeiro - BRAZIL)

Students Perceptions of Teaching Excellence Online: A Tradeoff Analysis

Speaker: Stephen L. Baglione — Professor of Marketing and Quantitative Methods, Saint Leo University, Donald R. Tapia College of Business_MC2011 Saint Leo, Florida

Course Scheduling and Test Scoring: Evidence from a 4-Year Public University in the U.S

Speaker: Tingting Liu & Hio Loi — Southern Illinois University Carbondale & The University of Tennessee at Martin

Existing Health Care System of Pakistan: A study of responsiveness towards Sexual and Reproductive Health & Rights of young people and Sustainable Development Goals especially (Goal 3.71) with special focus on youth

Speaker: Sana Iqbal — Sustainable Development Management, RheinWaal University of Applied Sciences, Krefeld, Germany

Analyzing and Classifying Business Transformations

Speaker: Dr Khaled Al Falah — College of Business Administration, Imam Abdulrahman Bin Faisal University Dammam, Saudi Arabia

Lunch (02:00 pm - 03:00 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: Ahmad Montazeri Najafabadi

Reference ID: RAME-69-06

Affiliation: Banker (Bank Keshavarzi Employee), Iran

Participant Name: Ponnle Lawson

Reference ID: RAME-69-23

Affiliation: University of Dundee, UK

**IAET International Conference on Engineering, Computing, Information
Technology, Applied Sciences & Smart Material**

CITM-2019

Sunday, June 30, 2019

Conference second day is reserved for participants own tourism activities.

Conference Abstracts

Track 1: Business, Economics, Social Sciences and Humanities

The Impact of HR Practises on Organisational Performance: Evidence from the Healthcare Sector

Tamara Mohammad ^{1*}, Tamer Darwish ², Satwinder Singh ³

^{1,2,3}The School of Business and Tecnology, University of Gloucestershire Cheltenham, England

Corresponding email: tdarwish@glos.ac.uk

This is a study of the impact of specific set of HRM practice on organizational performance within a Middle Eastern emerging market. Both, HR and hospital managers were targeted in all private and public hospitals operating in the country through two separate questionnaires. It was found that three of HR practices are significantly related to organisational performance: recruitment and selection, training, and internal career opportunities. With regard to the remainder of the practices of HR (performance appraisal and compensation and benefits), the results are not indicative of any distinctive contributions in terms of their relationship with organisational performance. The results indicate that good selection of employees with suitable qualifications and characters will allow for improvement in the performance of hospitals. The current findings also suggest that if employees get the appropriate training programmes that they need in the hospital and that such training is related to their job, this will enhance employee satisfaction and wellbeing and that the investment in training that a hospital makes indicates to employees that they are of a great value. The training makes for a supportive place of work. Employees may thus obtain access to training they would not have otherwise known about or have sought after. The study also indicates that internal career opportunity had a significant impact on the level of performance. It indicates that promoting the employees internally leads to improvement in the performance of the hospitals. Overall, it could be argued that such results would potentially add value to the scarce literature in relation to HRM in the Middle East in particular and emerging markets in general. The theoretical and applied implications of these findings are explored.

Index Terms: HR Practices, Organisational Performance, Middle East, Healthcare

How to Call over a Waiter/Waitress in Japanese, Korean, and Thai: Cognitive Linguistic and Cross-cultural Studies

Wirat Siriwatananawin*

Department of Thai, Faculty of Arts Silpakorn University Nakhon Pathom, Thailand

Corresponding email: wiratosensei@yahoo.com

This article aims to analyze the way Japanese people, Korean people, and Thai people call over a waiter/waitress in their language. As well as cross-cultural communication, 3 devices in cognitive linguistics, namely, figure-ground organization, image schema, and metaphor, are applied in order to explain the different usage among those three languages. Japanese people mostly call over a waiter/waitress by 1 word: /sumimasen/ excuse me. It is assumed that CALLING IS MOVING/BREAKING INTO PRIVATE SPACE metaphor and RESPONDING IS OPENING/MOVING OUT OF PRIVATE SPACE metaphor affect Japanese way of thinking. Korean people mostly call over a waiter/waitress interchangeably by 2 words: /yeogiyo/ here and /cheogiyo/ there, depending on each ones favorite choice. CALLING IS SENDING A VOICE and RESPONDING IS MOVING TO CALLER metaphors and figure-ground organization relate to Korean way of thinking. Thai people mostly call over a waiter/waitress by 2 words: /nong/ younger sibling and /phi/ older sibling, depending mainly on the age of speakers and listeners. Thus, A WAITER/WAITRESS IS A FAMILY MEMBER metaphor is involved in such usage. In conclusion, calling over a waiter/waitress in different languages relates not only to different cultures, but also to different cognitive systems.

Index Terms: Cognitive linguistics, Cross-cultural Communication, Japanese, Korean, Thai

The Meaning of Work for Tutors in Distance Education

Y. Neves ^{1*}, H. Irigaray ², J. Liedke ³

¹Fundacao Getulio Vargas (BRAZIL)

^{2,3}EBAPE (Rio de Janeiro - BRAZIL)

Corresponding email: yviana.neves@fgv.br

The meaning of work has been the object of various researches under different visions, including the different types of employment bonds. However, there is still a gap for those professionals who work as tutors in DE (Distance Education) and how they find meaning in their jobs. In this sense, this work did empirical research using the qualitative method in which 30 tutors of Distance Education from an HEI (Higher Education Institution) were interviewed. Those interviews were transcribed and submitted to discourse analysis. The content of those interviews was analyzed based on the categories defined by Morin (2001). Additionally, new categories that emerged from the interviewees responses were registered. This study found that the meaning of work for the tutor is similar to the categories listed in Morins (2001) research. Specifically, in the case of Distance Education tutors, it was discovered that tutoring is not the first or the only career choice of the interviewees, this is due to the fact that a feeling of belittlement has been attributed to this field. Also, it also lacked a sense of belonging within the interviewees, who attributed this reaction as a response to the lack of employment within the HEI. Researches over the meaning of work for tutors in Distance Education can contribute to the academy in order to expand the debate and the discussion over the subject and enabling future studies and debates that investigate if the new categories identified in this research can be found in other types of Education Institutions.

Index Terms: Meaning of Work, Tutor, E-Learning, Higher Education, Distance Education

Does Free Higher Education Make Economic Sense in South Africa?

Eloise de Jager *

School of Accountancy, Stellenbosch University Cape Town, South Africa

Corresponding email: edejager@sun.ac.za

In South Africa, students have been protesting to demand free higher education. In 2015 there was a huge campaign named FeesMustFall which highlighted the unresolved issues in the higher education system. Most of these issues are regarding the inequalities due to the apartheid era in South Africa and include insufficient state funding of higher education, the increase of tuition fee and unpaid student debt. Even though free higher education would increase student numbers and in return boost the workforce of South Africa, the question is whether implementing free higher education would make economic sense in South Africa. A questionnaire was sent out to all the commerce students at one South African university to investigate their perceptions regarding the economic feasibility of free higher education and how it might affect the South African economy. The questionnaire included both closed and open questions and aimed to give a descriptive analysis of their perceptions. Gaining understanding into student perceptions can be invaluable, as they are considered the customers of higher education institutions. The results indicate that the commerce students do not think that free higher education would make economic sense in South Africa. Their main reasons include that the economy is too weak and there is too much corruption and wasteful spending in government. They also responded that the economy will be negatively affected by free higher education as there will be an increase of the financial burden on the South African economy and tax payer. Furthermore, they regarded other government services to be of greater importance than implementing free higher education. The findings might not be generalisable beyond the scope of the particular institution, but it does create a platform for the continued debate on the importance, economic feasibility and implementation of free higher education in South Africa. All in all, the FeesMustFall movement did make a statement which cannot be ignored anymore.

Index Terms: Institution, Protesting, Campaign

Exploring the Impact of Professional Identity on the Application of Evidence to Practice

Dean Bartlett *

Guildhall School of Business and Law, London Metropolitan University, London

Corresponding email: d.bartlett@londonmet.ac.uk

This paper explores how issues of professional identity impact upon the application of an evidence-based approach to practice in the field of management. Much of the existing literature locates evidence-based practice within the rigour-relevance debate in business and management studies which attempts to incorporate insights from research evidence into everyday management practice, but there is little empirical work on this. A grounded theory study was designed to explore how practitioners attempt to do this in practice and this revealed that issues of professional identity impact on how practitioners bring evidence to bear in their practice. One approach has been described in the literature as Evidence-Based Management (e.g. Rousseau, 2006; Morrell, 2008; Briner, Denyer and Rousseau, 2009), where it has been observed that there was a poor uptake of management practices of known effectiveness, along with the persistent use of practices known to be largely ineffective and suggested that contemporary managerial practice was based largely upon personal preference and experience, rather than the best available research evidence (Rousseau, 2006; p. 258). Evidence-based management is a way of addressing the research-practice gap and can be considered either as a knowledge production problem or as a knowledge transfer problem and also involves debate around the relevance of academic research findings which has become increasingly important in relation to the focus upon research impact. In designing management interventions such as human resource development, the importance of professional identity is often overlooked and this paper therefore contributes to the literature by exploring exactly how professional identity impacts upon management interventions in terms of both design and implementation, but even prior to this in terms of problem formulation.

Index Terms: Rigour-Relevance, Problem Formulation, Management

Management of Human Resources as a Competitive Advantage

J. Liedke ^{1*}, H. Irigaray ², Y. Neves ³

¹EBAPE (Rio de Janeiro - BRAZIL)

^{2,3}Fundacao Getulio Vargas (Rio de Janeiro - BRAZIL)

Corresponding email: julianaliedke18@gmail.com

This work intends to serve as contribution to the knowledge of how Human Resources Management can generate a competitive advantage for the organizations. The quantitative research used the statistical analysis, through the simple correlation of the indexes of happiness with work (IHW), as well as the subitems that compose it, the index of the Personnel Management Quality (IPMQ) and the index of quality of work environment (IQWE) with net profit EBITDA Sales growth (%) of the best and largest companies in Brazil. The researchs results showed a weak correlation between these indexes. However, it was possible to identify that internal communication and employee participation/autonomy are the Human Resources Management practices that demonstrate some kind of impact on sales growth. This research was limited to analyzing the historical series from 2013 to 2016 of the yearbooks published by the magazines Exame Best and largest companies and the 150 best companies to work for from - Voce S/A, both carried out by the Abril publishing house. The results identified through this study will serve as a contribution to companies to develop initiatives aimed at improving their sales and thus generate a competitive advantage. For people, for demonstrating their importance in companies and to the academia, when it makes possible the questioning and development of future studies on this topic.

Index Terms: Human Resources Management, Competitive Advantage, Net Profit / EBITDA / Sales Growth.

Students Perceptions of Teaching Excellence Online: A Tradeoff Analysis

Stephen L. Baglione *

Professor of Marketing and Quantitative Methods, Saint Leo University, Donald R. Tapia College of Business_MC2011
Saint Leo, Florida

Corresponding email: Stephen.Baglione@saintleo.edu

Using conjoint analysis, traditional-aged college students examined the variables associated with teaching excellence from the Educational Testing Services Student Instructional Report (SRI). SRI has been shown to be related to student evaluations. The SRI constructs were used as attributes in evaluating teaching excellence. The results indicate teaching excellence is a combination of traits and no reliant on one entirely.

Index Terms: Teaching Excellence, Students Perceptions, Higher Education Quality, Conjoint Analysis

Existing Health Care System of Pakistan: A study of responsiveness towards Sexual and Reproductive Health & Rights of young people and Sustainable Development Goals especially (Goal 3.7) with special focus on youth.

Sana Iqbal *

¹Sustainable Development Management, RheinWaal University of Applied Sciences, Krefeld, Germany

Corresponding email: sanaiqbal.pk@gmail.com

The research aims to highlight the responsiveness of existing health care systems in Pakistan towards addressing Sexual and Reproductive Health & Rights (SRH&R) concerns of young people with the lens of Sustainable Development Goal (SDGs) especially (Goal 3.7) with the focus on youth. This descriptive research will use the inductive approach of theory and fixed qualitative design to be completed. In this research the health care system of 2 provinces along with 1 district in each province will be carried out by the review of the available secondary data resources e.g official documents, reports, website and online resources of the relevant departments and organizations. By using the iterative interpretation technique for data analysis and maintaining high standards of ethical consideration and academic writing, the research will provide insight into the significant programs and interventions as well as policies implemented including gaps and challenges in health care system in Pakistan for addressing SRH&R concerns of young people and contribution in achieving SDG especially (Goal 3.7) with the special focus on youth. This research will be helpful for the federal and provincial government for understanding and developing policy reforms and initiatives to address the issue of youth SRH&R and achieving SDG (Goal 3.7) with the special focus on youth at country and provincial level as well.

Index Terms: Interpretation, Challenges, Organizations

Course Scheduling and Test Scoring: Evidence from a 4-Year Public University in the U.S.

Hio Loi ^{1*}, Tingting Liu ²

¹The University of Tennessee at Martin, Tennessee

²Southern Illinois University Carbondale, United States

Corresponding email: hloi2@utm.edu

Universities in the United States typically schedule courses either two days a week or three days a week. A set of questions have often been asked among educators and other university professionals: Does student achievement depend on course scheduling? Do students learn more when courses are scheduled more frequently? The answers to those questions are valuable for university administrators, faculties, and students to make wise decisions regarding course offerings and course selections. This study employs quantitative methods to examine the relationship between course scheduling and student achievement as measured by multiple test results from a small and public university. Prior studies investigate similar issues based on multiple majors and instructors. In those cases, student performance may be affected by different levels of difficulties across majors and different teaching styles among instructors or either of these factors. To minimize the impacts of such factors, data of this study are collected based on the same course in the same semester that is taught by the same instructor. Three sections of this course are observed—students meet their instructor three times a week in one section and twice a week in another two sections. The time length of each section remains the same. Furthermore, ordinary least squares regressions are used to estimate the empirical results. The results show that there is no significant relationship between course scheduling and student achievement. This is an interesting finding for university administrators, faculties, and students since one type of course scheduling is not necessarily effective than the other. For instance, two-days-a-week classes, being longer, imply pedagogical values including more flexibilities and innovations in lesson planning. Implications of this finding are discussed concerning pedagogical, educational policymaking, and assessment practices in higher education.

Index Terms: Class Length, Student Achievement, Course Scheduling

Analyzing Mission and Vision Statements for Universities

Dr Khaled Al Falah *

College of Business Administration, Imam Abdulrahman Bin Faisal University Dammam, Saudi Arabia

Corresponding email: kaalfalah@iau.edu.sa

The purpose of this paper is to analyze vision and mission statements of universities in Saudi Arabia. Top 50 universities of Saudi Arabia were selected for this study and their vision and mission statements were collected from their official websites. The methodology adopted for this qualitative research paper was Content analyses. Content analysis or textual analysis is any technique of making inferences by objectively and systematically identifying specified characteristics of messages. The findings reveal clusters of universities sharing similar characteristics of their mission and vision statements. Major themes in vision statements include (1) Education; (2) National; (3) University; (4) Community; (5) International; (6) Research; (7) Excellence; (8) Leadership; (9) Scientific; and (10) Services. Major themes in mission statements include (1) Education; (2) Community; (3) Development; (4) Research; (5) National; (6) Contribution; (7) Quality; (8) International; (9) Creativity; and (10) University. The length of vision statements varies from 7 to 62 with an average 24 (number of words) while length of mission statements varies from 4 to 199 with an average 41 (number of words). Most frequently used keywords in vision statements include; (1) Research; (2) Community; and (3) Education; while top three keywords used in mission statements include; (1) University; (2) Research and (3) Knowledge. This also warrants development of separate criteria to evaluate mission and vision statements for academic institutions. One limitation of this research is that conclusions are drawn based on content found in publicly available official websites.

Index Terms: Mission Statement, Vision Statement, Academia, University Education, Saudi Arabia

Conference Abstracts

Track 2: Engineering, Technology & Applied Sciences

Development of Smart Applications for Landslide Risk Reduction

Martina Greco^{1*}, Francesco Castelli²

^{1,2}Faculty of Engineering and Architecture, University of Enna Kore (Italy)

Corresponding email: martina-greco21@hotmail.it

The advances in cloud computing have opened new opportunities in disastrous natural early warning and emergency management issues. The scientific community has recognized the added value of a geo-analytic approach in complex decision, making processes for critical situations due to natural events such as coastal erosion and landslides. In this contest, the paper describe the progress in the development of ITC dissemination systems for population (boaters, fishermen, swimmers, etc.) through an on App, in order to promote within the preparedness toward the coastal risk.

Index Terms: Coastal Erosion, Landslide, Early Warning System, Smart Technologies

Cardiac Arrhythmia Diseases Prediction Model Based on Classification Algorithms

Dr. S C Sharma^{1*}, Ravinder²

^{1,2}Department of Paper Technology, IIT Roorkee, Saharanpur Campus, Saharanpur India

Corresponding email: scs60fpt@gmail.com

Arrhythmia is one of the chronic diseases in the world. An early detection of this disease can save many lives. Many other health issues may be generated if this disease is not diagnosed or unidentified. Machine Learning techniques are now used in various fields like education, healthcare, business, recommendation system, etc. Healthcare data is high in dimension and contains irrelevant information due to this prediction accuracy is low. Cardiac Arrhythmia dataset consisting of 452 records with 279 attributes. There are sixteen classes in this dataset from 1-16, one represents not having diseases having 245 instances and other fifteen represents subtypes of arrhythmia having 207 instances. In this authors have applied six feature selection techniques (Random Forest, Variance Threshold, Analysis of Variance, CHI-2, dropping correlated features, and Recursive Feature Elimination) are applied in combination with fourteen classification algorithms (Support Vector Machine, Logistic Regression, Decision Tree, Random Forest, Gradient Boosting, Bagging, Naive Bayes, K Nearest Neighbor, LightGBM, ID3, Stacking, Maximum Voting and Averaging) have been applied using python language. The aim of this paper is to compare different classification algorithms to predict cardiac arrhythmia diseases. The performance parameters taken are accuracy, precision, recall, and f-score. Our study finds that Random Forest and maximum voting are giving highest accuracy of 75.27%, precision 80.21%, recall 80.21%, and f-score of 80.21% with ANOVA feature selection technique.

Index Terms: Chronic Diseases, Algorithms, Cardiac Arrhythmia

Catalytic Wet Air Oxidation of Industrial Wastewater over Ceria based Nanocatalysts

Dr. Chhaya Sharma^{1*}, Anushree²

¹Department of Paper Technology, Indian Institute of Technology Roorkee, India

²Department of Chemistry CCS Haryana Agricultural University India, 125004, India

Corresponding email: chhaya.iitr@gmail.com,

A real industrial wastewater under atmospheric pressure has been studied for catalytic wet air oxidation for Nano-sized ceria. The catalysts have been prepared by co-precipitation procedure. The physicochemical properties have been studied by XRD and N₂-sorption techniques. The mixed oxide nanocatalysts has been interestingly found to be higher than ceria in catalytic activity. The Ce₅₀Cu₅₀ nano-catalyst with crystallite size of 4.3 nm, specific surface area of 110 m²g⁻¹ and pore volume of 0.38 ccg⁻¹ has been observed to be most efficient with 62% COD, 74% color, 60% AOX and 61% TOC removal

Index Terms: Wastewater Treatment, Industrial Wastewater, Wet Air Oxidation, Nano-Catalyst

Fabrication of Supercapacitors with High Power Density and High Volumetric Specific Capacitance Using CO₂-Activated Holey Graphene/Activated Carbon

Ching-Yuan Chang^{1*}, Nen-Wen Pu,² Yih-Ming Liu³

Ming-Der Ger,⁴ Jeng-Kuei Chang⁵

^{1,2,3,4,5}Yuan Ze university Taipei, Taiwan

Corresponding email: shine178584@gmail.com

In this study, we successfully prepared a supercapacitor with high volumetric specific capacitance and high energy power density using CO₂-activated holey graphene nanosheets (CHGNS) mixed with activated carbon (AC) as the electrode material. The holey graphene nanosheets (HGNS) were produced with an ultra-rapid thermal reduction/exfoliation step followed by high temperature post-annealing. The holey surface morphology was further enhanced by CO₂ activation. Coin cell supercapacitors were fabricated using CHGNS/AC or HGNS/AC with 1M TEABF₄/PC organic electrolyte, and finally, their electrochemical characteristics were measured. The volumetric specific capacitance of CHGNS/AC (19 F/ml) was 90% higher than the value of HGNS/AC (10 F/ml) at a current density of 20 A/g. At a high power density of 31 kW/kg (or 12 kW/L), the energy density was still as high as 23 Wh/kg (or 9 Wh/L), which was 50% higher the value of HGNS/AC. The EIS analysis showed that the charge transfer resistance of CHGNS/AC was reduced by 40% compared to HGNS/AC. We believe our method is capable of mass-production at a lower cost, and it can solve the problem of low specific capacitance in the commercial AC supercapacitors.

Index Terms: Porous Graphene, Activated Carbon, High Temperature Annealing, CO₂-Activation, Organic Electrolyte, Coin-Cell Supercapacitor

Barriers Affecting the Adoption of E-Government in Developing Countries

Suleman Danladi Prince*

Management Information System, Cyprus International University, Nicosia North Cyprus

Corresponding email: Dan16th@Gmail.Com

Several studies have examined the use of gamification in an organisation. However, graduate business students who are prospective managers concern about the use of gamification is limited in the literature. Therefore, this study investigated factor affecting prospective managers intention to use gamification. survey questionnaire instrument was employed to collect data from 352 graduate business students in a university in North Cyprus. Descriptive statistics and multiple learning regression (ANOVA) test were used to analyse the responded data. Results revealed that perceive engagement (mean=4.29, SD=0.710), perceive immersion (mean=4.16, SD=0.675), and perceive challenges (mean=3.95.08, SD=0.79) factors affection the use of gamification in an organisation. The study provides graduate business students, opportunity express their willingness and regarding the use of gamification in an organisation.

Index Terms: Graduate Business, Literature, Questionnaire

Upcoming Events

<http://institute-aet.com/cisa-19/>

<http://institute-aet.com/cens-19/>

<http://institute-aet.com/tedcs-19/>

<http://institute-aet.com/bsin-19/>

<http://institute-aet.com/asiem-19/>

<http://institute-aet.com/emca-19/>

<http://institute-aet.com/siase-19/>

<http://institute-aet.com/citm-19/>

<http://institute-aet.com/tees-19/>

<http://institute-aet.com/msam-19/>

<http://institute-aet.com/bcat-19/>

<http://institute-aet.com/ciss-19/>

<http://institute-aet.com/icde-19/>

<http://institute-aet.com/sami-19/>

