

RESEARCH CONNECT @DUBAI NEWSLETTER

ISSUE 2 | 2017

Contents

- 5 Editorial
- 6 Together in Research
- 7 Mission & Objectives
- Research Steering Committee Members & Editorial Board
- 10 Opportunity in the UAE
- 15 Articles
- 44 News & Events
- 54 Highlights of Student and Staff Achievements

Disclaimer

RSC has exercised reasonable care in compiling, editing and presenting information in this newsletter. Whilst the objective of this newsletter is to disseminate research content which is provided by authors and deemed to be accurate at the time of publication, RSC does not take any responsibility for the views / opinions expressed by the authors. No content and pictures should be used for any other purpose without prior written permission from the Chief Editor.



Editorial RSC Newsletter

Many readers will be familiar with an advertising campaign run across international airports by HSBC in the past few years. In billboards and posters, that campaign highlights that different people see the same object in different ways. To one person, a henna tattoo is traditional; to another it is trending fashion. Identifying opportunities for significant growth – whether in business, in education, or in infrastructure – often involves the ability to look where many others have looked and see something that no one else has seen. This is the story of Dubai, particularly in the last few decades. Where others saw a beach, Dubai's leaders saw a palm-shaped island; where others saw sky, they saw the world's tallest building; where others saw desert, they saw land that could be turned into free-zones and freehold property developments to welcome investments from the expatriate families and international businesses around the world.

Living and working in Dubai provides us with a constant reminder that there is opportunity all around us, if only we choose to see it. The new cycling track at Al Qudra is an opportunity to re-teach yourself to ride a bike, or to take your family to a traffic-free pathway for a fun morning out. The Roads and Transport Authority's agreement with Tesla to provide the newest fleet of Dubai taxis will give most of us our first opportunity to try electric, self-driving vehicles. This week Hult International Business School in Dubai will host the regional final of the Hult Prize in which almost 70 international university teams will present their plans for creating a social entrepreneurship business platform that will enable the restoration of rights and dignity to refugee groups globally. Where most people see an endless problem, these teams are looking for a sustainable solution.

Conducting research is also about identifying opportunity. Researchers must look at what is already known and what is already practised, and imagine how this knowledge or behaviour might be improved. This second edition of the Research Connect @ Dubai newsletter brings you news of research activities, projects and achievements happening at some of our local university branches. We hope you enjoy finding out more.



Chief Editor Dr. Amanda Nimon Peters Hult International Business School, Dubai



Supporting Editor Dr. Firdos Alam Khan Manipal University, Dubai



Together in Research

Dubai is witnessing a great moment in higher education and research. International branch campuses are coming together to build a community that will enhance research and collaboration with industry, and contribute to the goals of Expo2020. Research Connect @Dubai is an innovative model to create and showcase research opportunities across Dubai's campuses, ultimately leading to a stronger and more diversified economy.

When we consider the Expo2020 motto of 'Connecting Minds, Creating the Future,' it becomes clear its heart lies in education; in collaboration and in innovation. Reflecting these, Research Connect @Dubai will convene the public and private sectors to conduct research that will lead to greater innovative practices for the benefit of Dubai and its people.

Dr. Warren Fox Chief of Higher Education Knowledge and Human Development Authority

Research Steering Committee (RSC)

Mission

To promote the advancement of research and innovation that serves Dubai and the UAE community at large.

Objectives

- 1. Provide a platform to:
 - a. Share information and experiences that encourage research and innovation
 - b. Forge mutually beneficial partnerships in research and innovation through collaboration of skills, knowledge and resources
- 2. Promote Dubai as a centre of excellence for the advancement of research and innovation
- 3. Facilitate collaboration with industry, government, and other stakeholders to promote multi-disciplinary research
- 4. Seek out opportunities for global engagement in research and development.

Members of the RSC Editorial Board



Dr. Rehan Ahmed Associate Director of Research Heriot Watt University, Dubai Campus



Dr. Amanda Nimon Peters Global Lead for Research Hult International Business School, Dubai



Dr. Firdos Alam Khan Professor & Chairperson, School of Life Sciences Chairman, Research & Development Program Manipal University, Dubai



Dr. Anand Kumar Associate Dean BITS - Pilani, Dubai Campus



Dr. Rajesh Mohnot Senior Lecturer in Accounting and Finance Middlesex University, Dubai



Dr. Boutheina Tlili Associate Professor **RIT, Dubai**

Research Steering Committee Members



Prof. Ammar Kaka Provost & Vice Principal Heriot Watt University, Dubai Campus



Dr. Amanda Nimon Peters Global Lead for Research Hult International Business School, Dubai



Dr. Yousef Al Assaf President **RIT, Dubai**



Dr. Cody Paris Associate Professor, Deputy Director, Chair of the Reseach Committee, Middlesex University Dubai



Dr. Narayanan Ramachandran Pro Vice Chancellor Amity University Dubai



Dr. S. V. Kota Reddy Academic President Manipal University, Dubai



Prof. Ranendra Saha Director BITS - Pilani , Dubai Campus



Abdullah Al Shamsi Vice Chancellor British University in Dubai



Mohamed Salem President University of Wollongong

Opportunity in Dubai & the UAE

Dr. Amanda Nimon-Peters Global Lead for Research Hult International Business School, Dubai Campus

Alexander Urquhart Graduate Research Manager Hult International Business School, Dubai Campus

The history of the UAE is the history of a country that has long been an international land of opportunity. For decades, expats have been enticed to move from every corner of the world and into every field of profession: construction workers, managers, designers, entrepreneurs, academics and other scientists. These were not opportunists, as the term 'opportunist' connotes a negative, or parasitic relationship. The people who flocked to the UAE over the years brought with them the skills, minds, experience, money and workforce that the country sought to fuel its meteoric growth in infrastructure. The relationship has been symbiotic. The newcomers resulted in a more populous, richer country boasting the world's busiest international airport, and in turn they were rewarded for their risks with a comfortable, safe, multicultural existence.



UAE's investment in education is second only to Saudi Arabia in the GCC (image source: Alpen Capital, 2016)

Today, innovative opportunities continue to drive the UAE to world prominence. As science, technology and business come together in cities such as Dubai and Abu Dhabi, new opportunities materialize: opportunities for individual success, opportunities to advance science, opportunities to start a small business or expand a multinational corporation. As the UAE increasingly exports its own knowledge and skill base, these individual opportunities amount to a grand opportunity for the UAE to develop into an international model for the 21st century.





Solar Impulse (image source: Solar Impulse, 2016)

One of the most important signals of expanding opportunity is expanding education, and the UAE is intent on becoming a global hub for educational opportunity. An industry report by Alpen Capital (2016) finds that the country's rate of spending on education is far above the GCC average (Figure 1), and that the government continues to invest in spite of low oil prices. The establishment of the Mohammad Bin Rashid Initiative for Smart Learning (to enhance the role of technology in schools) is only one example. The availability of quality education has resulted in an influx of highly skilled individuals and a student population expected to grow by more than 4 percent per year until 2020 (Alpen Capital, 2016). Between Abu Dhabi and Dubai alone there are over 100 universities, graduate programs, research centers and other institutions of higher education. In this environment, original research in the UAE has taken off.

Education and technological investment tend to attract scientists and engineers from around the world. These people see great opportunity in a country that undertakes such ambitious and pioneering projects as the carbon-neutral Masdar City; the solar-powered Solar Impulse airplane; the biggest solar power project in the world, Mohammed bin Rashid Al Maktoum Solar Park; and (maybe) a "hyperloop" high-speed landbased vacuum tube form of mass transportation. Researchers have poured into the UAE to work on these once-in-a-lifetime opportunities. As



Masdar City in Abu Dhabi (image source: Future-tech, 2016)

they pursue their work, they will modernize infrastructure, change lifestyles and improve quality of life not only in the UAE but around the world.

Opportunity leads to innovation and vice versa, so there is also great excitement about what will emerge from perhaps the biggest opportunity on everyone's mind: Expo2020. Reem Ibrahim Al Hashimi, the Expo's managing director, believes that small and medium businesses especially will receive a strong boost from the activity around Expo2020. The event is expected to create nearly 300,000 jobs in the UAE and bring in close to AED 90 billion (Khaleej Times, 2014). This is an exciting opportunity for local business owners, who will have nearly unprecedented opportunities and exposure to a global audience of interested investors. Many believe that Expo2020 will give them the platform they need to kick-start a business.



Aerial view of Mohammed Bin Rashid Al Maktoum Solar Park (image source: Day of Dubai, 2016)

To this end, the UAE has been working to improve the startup environment in which entrepreneurs must work. The government has established many facilities and programs to facilitate new businesses by providing support services, information and mentorship. Some of these institutions include the Young Entrepreneurs Competition, Dubai SME, and the Dubai Entrepreneurship Academy. In

addition to programs that encourage people to start their own business, the UAE hosts many incubators and accelerators. AstroLabs, the Dubai Technology Entrepreneurship Centre, Afkar.me, and many others can help young businesses get on their feet. Additional incentives come in the form of free zones with special economic and legal conditions (e.g., no export taxes, 100% foreign ownership). Thanks in part to a focus on entrepreneurship, the World Economic Forum ranks the UAE highly in access to venture capital (7th) and loans (3rd) (World Economic Forum, 2016). These conditions, along with the auspicious Expo2020, give local entrepreneurs an enviable opportunity to beat the sometimes daunting odds of small business ownership.



Artist's impression of the HyperLoop outside Dubai (image source: Hanif, 2016)

Opportunities in the UAE take many forms. There are the opportunities afforded by high quality education, the opportunity and resources to pursue cutting edge research, and opportunities around business and entrepreneurship. The government has institutionalized many incentives to attract talent from around the world, and the coming years will be especially exciting for ambitious entrepreneurs. Rich or poor, educated or not, the UAE has become a place where people have the opportunity to develop themselves, seek a better future, and improve the world for the next generation.

References

Alpen Capital (2016). GCC Education Industry, Abu Dhabi: Alpen Capital, 87 pg. Day of Dubai (2016). Al Tayer visited the Mohammed Bin Rashid Al Maktoum Solar Park to assess the progress. Visited 19 February, 2017: http://www. dayofdubai.com/news/al-tayer-visited-mohammed-bin-rashid-al-maktoum-solarpark-assess-progre

Future-tech (2016). IoT: Cities of Tomorrow. Visited 19 February, 2017: http:// www.future-tech.co.uk/iot-cities-of-tomorrow/.

Hanif, N. (2016). Abu Dhabi to Dubai in 12 minutes? World's first Hyperloop coming to UAE: The National. Visited 19 February, 2017: http://www.thenational. ae/uae/abu-dhabi-to-dubai-in-12-minutes-worlds-first-hyperloop-coming-to-uae. Khaleej Times (2014). Expo to provide 277,000 new job opportunities. Visited 19 February, 2017: http://www.khaleejtimes.com/nation/government/expo-toprovide-277-000-new-job-opportunities. Solar Impulse (2017). Solar Impulse. Visited 14 February, 2017: https://www.

solarimpulse.com/

World Economic Forum (2016). Competitiveness Rankings. Visited 19 February, 2017: http://reports.weforum.org/global-competitiveness-report-2015-2016/ competitiveness-rankings/.

Connecting Minds with Opportunities to Create a Future



Dr . Ravishankar Dudhe Associate Professor and Program Coordinator School of Engineering and IT, Manipal University, Dubai ravishankar.dudhe@manipaldubai.com



Ms. Sumathi Ayyalusamy Assistant Professor School of Engineering and IT, Manipal University, Dubai, sumathy@manipaldubai.com



Imagine the day when you have automated brushing and flossing, you bathe in a waterfall at home, a bot suggests how you dress, reminds you of the day's agenda and prepares your breakfast. The sophistications and ease in life will derive from the world of electronics. Semiconductor electronics are now refined with nanotechnology and this is causing revolutionary changes in people's life. Such changes occur at a higher pace in the fastest growing cities like Dubai and under the great vision of His Highness Sheikh Mohammed bin Rashid Al Maktoum Vice President and Prime Minister of the United Arab Emirates and Ruler of Dubai, Vision 2021 was launched in 2010 with the aim of making the UAE one of the best countries in the world. Focused on growth towards 2020, opportunities in the tourism sector demand low cost smart devices to assist people, all the way from the immigration counter where a person needs to find taxis, hotels and restaurants up to a smart personal assistant that can support the person throughout their stay in

However Smart translators could in the future replace human translators and offer everyone the opportunity to understand signs and symbols in other languages.

Life science - as it saves the lives of people - applies technology to frontiers. Nano medicine creates faster results via noninvasive methodology. Nanotechnology in healthcare will mean that dependency on hospital space

> will be reduced and pain will be minimised. Nanotechnology has the opportunity to grow along with the MARS mission of the UAE space agency that has planned to building microsatellites for remote sensing from the lower earth orbits.

Practicing sustainable approaches on every level of technology provides better results. Sustainable practices provide sustainable growth. This helps to create space for future generations. Technology develops every second and this development is harnessed in various sectors like health sciences, engineering, big data and space sciences. To further develop technology, we also need contribution from the youth

The Expo 2020 invites people of all nationalities to learn about predictive safety and security measures which can include the implementation of facial recognition and crowd tracking by using surveillance drones. This technology is currently not ready to understand local Arabic language and translate it into another language.

in addition to experienced scientists, experts and engineers in the UAE. It's time for constructive work together, to make use of the opportunities that are given.

Dubai.

Women's Career Opportunities and Work-Life Balance Experiences in the Gulf Region

Professor Nicolina Kamenou-Aigbekaen School of Management and Languages, Heriot-Watt University, Dubai



This project focuses on women's career opportunities and their experiences of balancing work and personal life in the Middle Eastern context and more specifically in the Gulf (GCC) region. There is increased awareness in the UAE and the GCC overall that if organisations are to succeed in the global market they need to diversify their talent pool and recruit the best candidates available nationally and internationally. This work sheds light in an under-researched area in the Middle-eastern region as there is a dearth of studies looking at women's career opportunities, the glass-ceiling and work-life balance.

Key themes with regard to women's careers are explored through an intersectionality approach (Kamenou, 2008; Kamenou et al., 2013) which acknowledges the effects of the interaction of a number of 'diversity strands' (such as gender, ethnicity, age, religion etc.) on the experiences of women (both Arab and non-Arab women) working at different levels and positions in organisations in the Middle Eastern region. It would be important to explore the diversity of experience for women in this region in terms of career development, career opportunities and experiences in balancing their work and personal lives. A key objective of this study is to explore the factors which can have an effect on both the work experiences of women (in terms of their attitudes to work, career strategies, and ambition and in terms of organisational support through Human Resource policies and practices, mentoring programmes etc.). Their personal life experiences within the home (in terms of balancing work and family commitments, perceptions of their identity as a good mother and wife, expectations from immediate family and extended family members etc.) is also being explored.



The majority of existing work on career opportunities and work-life balance has been criticised for not acknowledging regional, cultural and religious differences when examining work and career experiences and also when looking at conflicts and opportunities in balancing work and family life tasks and responsibilities (for example, Kamenou, 2008; Rana et al., 2008). There needs to be a relevant context within which to investigate work and family life experiences for women working in the middle-eastern region, and specifically the Gulf countries (GCC). It should also be acknowledged however that the concept of work-life balance has been criticised for being almost exclusively associated with gender, childcare and family friendly policies. With few exceptions (for e.g. Kamenou, 2008; Healy et al., 2004; Rana et al., 1998), issues around ethnicity, culture and religion have also been absent from the majority of discussions around balancing work and family life. For example, management research focusing on women's experiences has been wrongly generalised to include all women regardless of ethnicity, nationality, culture, religion or class (Kamenou, 2008).

It is important to recognise diversity of experience based on the above factors and to question the typically western literature on work and family life issues, which focuses on a narrow group of women and men in organisations within the US and Europe. As women's employment rate activities are still low in this region, it is important that governments prioritise programmes and initiatives which engage with encouraging women to enter the labour market. This needs to be supported by instrumental support with regard to childcare and eldercare.

In gaining a deeper understanding of gender issues which may be specific to the Arab/Muslim world, Syed (2010) has argued that there has been little research and engagement on Islam and gender issues in the context of employment, contending that more research needs to be conducted in understanding the role of modesty in Muslim women's work and personal lives. The role of modesty may be an important dimension when examining the experiences of Muslim Arab women within the context of work and family life, which as Syed (2010) argued, may have strong practical implications if women are not effectively utilised as an important component of human resources within organisations and labour markets.

This study therefore aims to shed light on this very under-researched area within the Gulf region and attempts to demonstrate the complexity of the 'life' component of the work-life balance equation for women in this context. This work will question the narrow emphasis of discussions on negotiating work and life, which typically only focus on time management and childcare (Kamenou, 2008) and ignore broader areas such as the effects of work on the family structure, family dynamics and cultural and religious factors. Examining these factors within the middle-eastern context is of paramount importance with strong organisational and governmental implications for family and work policies and practices.

References

Healy, G., Bradley, J. and Mukherjee, N. (2004). 'Inspiring Activists: The experiences of minority ethnic women in trade unions'. In: G. Healy, E. Heery, P. Taylor and W. Brown (eds), The Future of Worker Representation. London, Palgrave.

Kamenou, N., Netto, G., Fearfull, A. (2013) 'Ethnic Minority Women in the Scottish Labour Market: Employers' perceptions', British Journal of Management. Vol. 24 (3): 398-413.

Kamenou, N. (2008) 'Reconsidering Work-Life Balance Debates: Challenging limited understandings of the 'life' component in the context of ethnic minority women's experiences', Special Issue on Gender in Management: new theoretical perspectives, British Journal of Management, 19 (1): 99-109.

Rana, B., K., Kagan, C., Lewis, S., Rout, U. (1998). 'British South Asian women managers and professionals: experiences of work and family', Women in Management Review, 13(6), pp. 221-232.

Syed, J. (2010) 'An historical perspective on Islamic modesty and its implications for female employment' Equality, Diversity and Inclusion: An International Journal, Vol. 29 Iss: 2, pp.150 - 166.

(Paper to be presented at the Equality, Diversity and Inclusion conference, June 2016, Cyprus) Contact details: Professor Nicolina Kamenou-Aigbekaen, N.Kamenou-Aigbekaen@hw.ac.uk Associate Director of Research, School of Management and Languages, Heriot-Watt University, Dubai Campus, Dubai International Academic City.

Articles

Hult International Business School Initiates Global Research Drive

Dr. Amanda Nimon Peters, Global Research Lead Dr. Johan Roos, Chief Academic Officer Hult International Business School, Dubai





Hult International Business School excels at teaching a relevant international curriculum. Our faculty membership consists of highly engaging lecturers who have both strong academic credentials and significant practitioner experience. Our goal is to ensure our graduates are far more effective as business leaders when they leave the School than when they came in. Until now, our full focus has been against classroom experience, and the growth we produce in our students. In September 2016, Hult is launching a new initiative to drive relevant, actionable research with all of our core faculty members globally. This is a major step change for the School and represents an exciting time for Hult staff and professors.

Our Chief Academic Officer, Dr. Johan Roos, has appointed two Global Research Leads. These are Dr. Ted Ladd, based in Boston, who will lead global research projects focused on innovation, technology and disruption, and Dr. Amanda Nimon-Peters, based in Dubai, who will lead global research projects focused on developing leadership and creating positive behavioral change. Both Dr. Ladd and Dr. Nimon-Peters will work with Hult faculty members at all of our campuses (San Francisco, Boston, London, Ashridge (UK), Dubai and Shanghai) on major, multi-stage research projects aimed at delivering practical insights that can be applied to our educational programs, as well as our work with external clients and companies. We look forward to bringing you details of those projects in future editions.

Sleep, Mood, Stress and Academic Performance in Postgraduate Business School Students

Dr. Amanda Nimon Peters, Global Research Lead Hult International Business School, Dubai





The MBA program at Hult International Business School fits the core curricula of two-year MBA programs into a single year, placing students under a necessarily heavy workload. In addition, the average Hult MBA student has seven years of full-time work experience, and has relocated from overseas to attend the School¹, and so he or she faces the pressure of being in a new location, and leaving behind a steady income, as well as the usual student burden of finding a job after graduation. In all, this seems likely to be a high-pressure experience. Students often report feeling under high pressure, feeling stressed, and in particular cutting back on sleep and exercise in order to meet course requirements.

There is significant evidence that a lack of adequate sleep has negative mental and physiological effects both in the short term and the long term (Culpin, 2016; Williamson & Feyer, 2000; Goel et al., 2009). At the same time, pervasive internet access, smart phone technologies and globally dispersed work teams are increasingly creating a business culture in which "always on" and "real time" are the norm (Baer, 2016). Our current understanding of the effects of sleep combined with the "always on" business environment raises complicated questions for business schools endeavoring to prepare students for a professional career. If schools have their students' best interests at heart should they be encouraging students to become habituated to sleep deprivation?

In this study we tracked a cohort of MBA students and measured perceived stress, workload, sleep length, sleep quality, and academic performance. We look forward to bringing you details of those projects in future editions.

¹Hult MBA Admissions Data: 2013-2016: Average 70% relocating internationally; Average seven years work experience (range three to 20 years)

Articles ·

No to Plastic Bags

Dhananjoy Mishra Alumnus - EMBA Hult International Business School, Dubai





Every day when we go to the shopping mall or convenience store, we put our purchases in non-biodegradable plastic bags. More than 30 million bags are used per day in the UAE, and the per capita usage is more than 10 times that of the world average. People use these bags for no more than a few minutes without thinking that by packing our groceries into these bags we continue to worsen an already dire situation for our environment.

The aftereffect of this usage is huge. These bags end up in landfills, or worse, in the stomachs of sea and desert animals. Around 50 percent of camel deaths in the UAE are from ingesting plastics.

However, it is also encouraging to know that if a person who chooses to use reusable bags only can save over 22,000 plastic bags in his or her lifetime. An average reusable bag has a lifespan of over 700 disposable plastic bag.

The government has started working on reducing plastics usage, and encouraging the recycling of plastics. There is huge opportunity for such transition as the requirement of carrying necessities will remain. With awareness, helping organizations in smooth transition and finally development of stricter policies will be required. Mr. Mishra is working towards developing a transition methodology that will outline the framework, help decision makers to strategize & implement the vision. In the future, this could form an integral part of the approval procedures for new businesses and future expansion of existing businesses.



Compact Modular Photobioreactor for Indoor Production of Microalgal Biomass for Applications in Healthcare and Biofuel Products

Radhika Narain, Prakash Kumar B G and Ramachandran S* sramachandran@dubai.bits-pilani.ac.in





Microalgae are used for nutritional supplements and extraction of lipids for biofuels. The most commonly used microalgae production are largescale open ponds and raceway ponds. For applications in hot and arid environments, we have developed a modular photobioreactor (mPBR) for indoor applications and the biomass produced are of high quality due to controlled environmental conditions. The optimization of mPBR biomass production processes were carried out using COMSOL Multiphysics. mPBR was modelled at two different inclinations at 30° and 60°. Based on the simulation, inclination at 60° was found to be optimum for culture mixing and minimal biomass sedimentation during operations. The compact design allows scale up for biomass production of important unicellular and filamentous microalgal strains including *Spirulina platensis, Haematococcus*

pluvialis, Chlorella, Dunaliella salina and other commercially viable strains. Microalgal biomass is a potential source for various nutritional health care products with proteins, pigments, antioxidants, and carotenoids.

Biofuel derived from microalgal lipids are sustainable and environmental friendly, which are alternative for energy sectors. The designed mPBR can be scaled up which creates job opportunities which is one of the focus for Expo 2020.



Exploring Optimal Portfolio Opportunities in Indian Stock Markets

Dr. Rajesh Mohnot Senior Lecturer in Accounting and Finance Middlesex University, Dubai r.mohnot@mdx.ac.ae





It is comparatively easier to structure an optimal portfolio for investors in developed financial markets rather than to do it for investors in developing and emerging markets. Given the promising economic growth in emerging countries, foreign institutional investors have shifted their capital flow to emerging markets especially Indian stock markets. According to MSCI, the 13.2 percent total return in year 2010 is comprised of emerging markets returning 20.2 and developed markets, dominated by Western Europe and Japan, returning only 9.7 percent. On a pragmatic principle of high-risk, high-return', these returns pass through high volatility patterns in the stock markets especially in the developing countries. This research examines whether Indian stock markets provide optimal portfolio opportunities. A risk-return strategy is evaluated using

the Sharpe model to check whether optimal portfolio can be constructed across different sectors.

Mohnot, R. (2016). Exploring Optimal Portfolio Opportunities in Indian Stock Markets. International Journal of Economics and Business Research, Vol 11, Forthcoming 2.3.1. (h-5index 7)

Cloud Performance Evaluation Using Fuzzy Logic

Dr. Krishnadas Nanath Middlesex University Dubai, UAE

Gaurangi Saxena National Institute of Technology (NIT) Surathkal, India







Cloud computing is the latest form of evolution of distributed computing which eradicates the need to own the expensive hardware resources, as the resources can be easily obtained on cloud in pay-per-usage manner. This paper proposes an approach to evaluate the performance of the cloud using the fuzzy logic. Fuzzy techniques have been adapted in this study for the evaluation of cloud performance based on different QoS parameters such as response time, Apdex, throughput and Error-rate observed while delivering the service. Fuzzy systems prove to be useful in describing complex systems with linguistic descriptions. The increasing complexity of a system makes it difficult to describe them mathematically. Since the purpose of this method is to help the users evaluate the performance of cloud and compare different cloud services, fuzzy expert

system proves to be very efficient in this scenario. Through literature review, this paper also provides useful insight on the approaches proposed by other researchers to evaluate the cloud performance, preceded by research methodology, proposing fuzzy system for evaluating cloud performance, giving useful examples and illustrations in support of fuzzy logic before concluding the study and suggesting directions for further research.

This paper is published in IEEE Xplore (ICECCT): http://ieeexplore.ieee.org/xpls/abs_all.jsp?arnumber=7225955&tag=1

Scaling Our Water Impact in Urgent Times

Strategic Plan 2020

Joan Antonio Villanueva Gonzalez Alumnus – MIB Hult International Business School





Leonardo da Vinci noted that "Water is the driving force of all nature". The UAE has one of the highest water stress levels in the world, where the overall water consumption is rapidly increasing on annual basis (%60 agriculture, %30 industrial and %10 amenities) (Water Conservation Strategy, 2010). With the expected population growth and the onset of urbanization, this represents a critical challenge for the UAE. This issue needs coordination from all stakeholders in our society, not only the government, to adopt best practices in water consumption.

Fortunately for us, the environmental movement that started in the 1960's has reached its tipping point with various initiatives, organizations and laws in force

to support the transition to a conscious and smart consumption. To further accelerate this movement, we believe a top down and bottom up approach is necessary. However, the key players of this transition face an urgent challenge, which is 'public awareness' about the importance of water management.

UrbanKinetics, based in Dubai, is a clean technology and sustainability consulting firm. We integrate proven clean technologies to solve environmental challenges and create grass roots initiatives to engage our community. Various startups today are catalyzers towards the same goal to achieve a carbon neutral world while simultaneously making a positive impact on people and economy. We have identified the water crisis to be the largest single global threat faced by present day humanity. Firstly, we are working with various stakeholders on a 'Strategic Plan 2020' to deliver clean water to regions with high water stress levels. Secondly, education and community engagement is a priority whereby several initiatives will be launched to enhance public awareness and understanding. Our vision is to mobilize our respective societies to live in harmony with nature whereby the water crisis will be an issue of the forgotten past.

Development of a Multi-Criteria Sustainability Classification Model for UAE Construction Contractors







It is widely accepted that construction projects' success correlates positively with contractors' qualifications including sustainability performance; this performance has to be measured to inform clients' decisions during pre-qualification stage. While a great number of sustainability evaluation systems has been developed at project level, limited research and practice exists in sustainability evaluation of construction organisations and more specifically contracting companies. This is the main rationale for an ongoing PhD research being conducted with Heriot Watt University, School of Energy, Geoscience, Infrastructure and Society.

The purpose of this research is to develop a multi-criteria classification model of construction contractors based on their sustainability performance. This model

can be adopted by local authorities and would be used by clients as a supporting decision making tool during pre qualification stage and as part of designing their sustainable supply chain. The classification model can also help contractors track their performance and provide clear evidence of their sustainability commitment and competitive advantage in corporate responsibility. The ultimate aim of this study is to push the role of the United Arab Emirates construction contractors in promoting sustainable construction beyond being just brokers and implementers of sustainability strategies set by clients and designers.

Creating a 'Committed' Workforce in 21st Century Business

Prof. Ali Fenwick Professor and Consultant Hult International Business School, Dubai Campus

The current business landscape is characterized as being very globalized, rapidly changing and highly insecure. Organizations are finding it difficult to keep employees engaged or committed as there seems to be an end to organizational loyalty. Therefore, understanding how people can build strong mental connections with their (future) employers is both vital to employee wellbeing as well as to organizational practice. The key leadership question then becomes 'how to create a committed workforce in 21st century business?'. This is a question Ali Fenwick, PhD candidate in Strategic Talent Management at Nyenrode Business University, is currently investigating. According to his research inherited and developed pre-dispositions could provide insight to our ability and willingness to connect with organizations (even before working). He

therefore theorizes that companies need to develop a strong psychological relationship with employees, based on both social exchange and social identity factors, to create a 'committed' workforce in a continuously evolving and uncertain environment. This requires a values-based leadership approach that connects people mainly on the basis of purpose and identity.

Ali Fenwick is also a faculty member at Hult International Business School Dubai where he is currently conducting empirical research on this topic amongst students and UAE based companies. If you are interested in participating in his research please contact Ali Fenwick at ali.fenwick@faculty.hult.edu.

Attitudes Towards Mental Illnesses: Effects of Labels and Associations with Materialism

Humna Azhar, Kausar Mohamed, Annja Perera, Aysha Siddiqua, Najla Ferreira, Lynda Hyland, Jakob Pietschnig

Despite growing awareness, stigma against mentally ill individuals is still prevalent in society. Different labels attached to mental illnesses receive varying amounts of stigma. Moreover, materialistic societies have been shown to display a more negative outlook towards mentally ill individuals while compulsive disorders in general, elicit more negative attitudes. However, there has been only little research on the impact of materialism and the use of labels attached to mental illnesses, in relation to mental illness stigma. The current study focused on effects of materialism and label attachment on mental illness stigma in relation to perception of two compulsive disorders: Oniomania (compulsive shopping) and kleptomania (compulsive stealing).

A multicultural sample of 120 participants was recruited from Knowledge Village, Dubai. Participants were randomly assigned to one of four conditions; oniomania labeled or oniomania non-labeled (questionnaire depicting oniomania with either illness name present or absent), kleptomania labeled or kleptomania non-labeled (questionnaire depicting kleptomania with either illness name present or absent). Materialism and attitudes towards mentally ill individuals were assessed in two self-report questionnaires and participants were requested to watch a video depicting the illness between filling the questionnaires.

No significant influence of materialism or labels on mental illness stigma was found, as ps > .05. However, this study found that illness type appeared to be a stronger predictor of mental illness stigma than the other predictors of materialism and label attachment.

This study suggests that stigma can be reduced more effectively by creating awareness of mental illnesses. Azhar, H., Mohamed, K., Perera, A., Siddiqua, A., Ferreira, N., Hyland, L., & Pietschnig, J. (2015). Attitudes towards Mental Illnesses: Effects of Labels and Associations with Materialism. Gulf Medical Journal, 4, 32-39.

Evaluating Intelligence of a Sustainable Government Building in the UAE

Dr. Hasim Altan Sustainable Design of the Built Environment, Faculty of Engineering & IT The British University in Dubai (BUiD)

With the rapid development of the Information and Communications Technology (ICT), intelligent or smart buildings are drawing attention as part of an ongoing sustainable development sector in the United Arab Emirates. Evaluating a building's intelligence will help in configuring the status of the building to show the functionality level of the intelligent components installed as well as the integration level between

Ms. Hawra Sharif Askari Sustainable Design of the Built Environment, Faculty of Engineering & IT The British University in Dubai (BUiD)

the different systems in that same building's environment where the higher integration between the systems may indicate higher levels of intelligence and functionality.

The research conducted by Dr. Hasim Altan and his MSc student Ms. Hawra Sharif Askari is investigating the intelligence level of a case study building. In this case, a sustainable government building - a three-storey office building of the Dubai Electricity and Water Authority (DEWA) in Al Quoz industrial area. In the study, the similarities and differences between intelligent and sustainable buildings have been compared and a

series of recommendations have been made for enhancing the intelligence level of this sustainable building based on the criteria developed by Hong Kong researchers. Creating a working environment for 1000 employees, the most important feature of this DEWA building is its green credentials and design to attain a USGBC LEED Platinum certification.

The study concluded that the building was matching 36 criteria out of 67, which summed up the total score for all the different aspects assigned to the eight key intelligent indicators. The shortcomings were due to some unclaimed factors, which were mainly related to two key intelligent indicators; either missing or yet to be functional, such as the 'Computerised Maintenance Management System' (9 points)

and the 'Security Monitoring and Access Control System' (12 points). The findings have also shown that the high scores of sustainability aspects does not necessarily mean to provide integration of different parts of the building systems. Thus, may not even include all the eight key indicators required for intelligent buildings' status.

Solar Waste Compactor for Smart Cities

The United Arab Emirates took the lead in organising collection of recyclable materials in the early 1990s. A total of 175,000 tons of recyclable materials were collected in Dubai in 2011. Trucks with an average capacity of 10 tons are used to collect these recyclable/waste materials and transport them to the municipal collection areas, using 17,500 trips, the equivalent of half a million tons of CO2. Collecting recyclable/waste materials using trucks is costly and time consuming, especially at remote locations and high traffic areas. Compaction of waste on-site will result in cost saving as the collection frequency is reduced, which reflects on minimising emissions and the carbon footprint of collection trucks.

The solar waste compactor (SWC) is not a new concept, this goes back to 2004. Construction of solar waste compactors shall be technically and economically feasible, through the use of clean resources of power where other forms of energy are uneconomical and impractical. This idea provides a practical and low cost method for compacting waste and recyclables using clean and plentiful photovoltaic energy.

SWC can also save money by reducing collection frequency, and thus truck travel time, which is considered as an important factor. They are considered an environmentally friendly waste solution, as it may reduce the environmental impact on waste management. SWCs can accommodate 3 to 4 times the amount of recyclable materials more than ordinary waste materials.

As a result Dr Mehdi Nazarinia, Associate Professor in Mechanical Engineering at Heriot-Watt University Dubai Campus, initiated this green and sustainable project and through his MSc Energy student project, Mr Fady Suwan, designed, manufactured and tested the first solar waste compactor prototype for soda aluminium cans in the region successfully.

The aim of the project was to design, manufacture and test a solar waste compactor to utilise solar energy in remote locations and high traffic areas where other alternative power sources are uneconomical or even impractical. There is a great potential to expand this project which ultimately can be used with waste management departments of UAE governmental departments such as DEWA to enhance energy efficiency and sustainability aspects of smart cities which is indeed one of the major themes of Dubai EXPO 2020. The SWC controller system has the capability of implementing wireless system to broadcast the fullness of the bin to the end user, which in fact will enhance the energy reduction of such system.

This project is now shortlisted in the "Future Generation Competition" at Middle East Electricity Awards 2017.

Life Cycle Energy, Environmental Impact, and Cost Analysis of Eight Conventional/Hybrid Cooling Systems in the United Arab Emirates

Tarek M. Sobh & Ghalib Y. Kahwaji Department of Mechanical & Industrial Engineering RIT University, Dubai

The government of the UAE has been implementing new regulations for improving energy conservation in buildings as well as gradually pursuing to reduce its dependence on fossil fuels by increasing the percentage of electricity generated from renewable energy sources.

The study encompassed applying life cycle assessment and life cycle cost analysis methodologies to eight different solar cooling system configurations featuring

conventional and thermally driven refrigeration systems working in six buildings in the UAE. The benefits in terms of total costs, primary energy savings and emission reductions were estimated for each of the systems configurations when used in buildings with various cooling load profiles.

System Description Code Conventional Air-Cooled E С R 1 Conventional Water-Cooled W E 2 С 3 Water-Cooled Assisted Thermal Solar Α w т 4 Water-Cooled Assisted Hybrid Solar Α w н 5 Absorption Single-Effect Thermal Solar т в S 6 Absorption Single-Effect Hybrid Solar в s н 7 Absorption Double-Effect Thermal Solar в D т 8 Absorption Double-Effect Hybrid Solar в D н

The outcome of the LCCA indicated that the Water-Cooled Assisted Hybrid Solar system, AWH, performed the best in all buildings, except for shopping malls. The AWH system achieved an average of %54 reduction in total life cycle costs

System configurations with assigned coding system

compared with Conventional Air Cooled systems in all buildings, and an average of %31 compared with Conventional Water Cooled system. The different systems and their results are summarized below.

considered building

Research scope <u>LCCA + LCA Analysis Featuring</u> • 8 Conventional/Hybrid Cooling System • 6 Buildings with Various Load Profiles

6 Buildings with Various Load Profiles
11 Unique Impact Categories

Sample result Single-Effect Absorption Onliner, governed by Hybrid Solar 50% Total Life Cycle Cart Reductions 87% Primary Energy Savings 88% GHG Emissions Reductions Compared with Conventional Air-Cooled Systems

There are Many Facets of Stigmatization: Cross-Cultural Evidence from Four Samples in the United Arab Emirates

Anita Shrivastava and Jakob Pietschnig Middlesex University Dubai, UAE

Stigmatization of individuals suffering from mental illness has been recognized as one of the most influential reasons for avoidance of seeking professional help, thus posing a substantial concern to public health. Several studies suggest that there are cross-cultural differences in perception and stigmatization of individuals suffering from mental illness. Recent evidence indicates that stigmatization may be better understood as a multifaceted construct, thus making it possible to identify culture-specific causes for and cross-cultural differences in stigmatization. Presently, we provide evidence for cross-cultural differences in stigmatization and help seeking behavior in a sample of 135 African, Asian, Middle Eastern, and Western participants living in the United Arab Emirates. Cross-cultural differences in attitudes towards help seeking behavior and seven distinct domains of attitudes towards mentally ill individuals (stigma) were investigated in a series of ANOVA. Strongest effects were observed for anxiety, beliefs about treatability, hygiene, professional efficacy, and help seeking behavior, whilst non-trivial albeit non-significant effects could be shown for recovery, relationship disruption, and visibility. Our results demonstrate the need for understanding stigmatization processes as culture-specific mechanisms.

Published in Indian Journal of Clinical Psychology, 2015, Vol.42, No.2

Heat Pipes – Theory Design and Applications 6th Edition

David Reay, Peter Kew, Ryan McGlen Butterworth Heinemann, 2014

40 years after the first edition of "Heat Pipes" was published under the authorship of Peter Dunn and David Reay, the 6th Edition of the work remains one of the most comprehensive reference books on the subject. Professor Reay remains the lead author but since Professor Dunn's retirement Dr Peter Kew of Heriot-Watt University, Dubai Campus has taken over his role and, for the latest edition Dr Ryan McGlen of Thermacore, one

of the world's leading manufacturers of heat pipes, has joined the team. For those not familiar with the technology, the heat pipe is a sealed tube containing a working fluid at its saturated condition. If one end is heated it causes the liquid to evaporate and, if the opposite end is cooled, the vapour formed will flow to the cool end and condense. The liquid condensate then returns either under the influence of gravity or via a wick to the heated evaporator. This arrangement produces a device which has a very high effective thermal conductivity that finds wide application including thermal control of electronics and electric power systems, heat recovery in ventilation systems and cooling satellites.

Peter Kew has a spare copy of the book and would like to donate it to the author of the most innovative article in the area of heat transfer in the next issue of the Research Connect @Dubai Newsletter.

Low Organic Matter Strength Reveals that the Gradual Devastation of Soil Stability of Kalathur, Adhanur Soil Series-South East India

Dr.Vijayakumar R Associate Professor, Dept of Chemical Engineering, School of Engineering & IT Manipal University, Dubai vijaykumar@manipaldubai.com

Fertile soil -the healthy soil – that generates good income to the formers as well as the nation. Enough availability of organic matter (OM) in the soil is the primary concern for all supplies of macro and micro nutrients to the soil, hence, the soil is stable in terms of its structure. Kutthalam Taluk is one of eight taluks of the Nagapattinam district in India covering 55 revenue villages and covering 17,087 ha. It occupies 7.35% of the area in the district. Kalathur (KIt), Adhanur (Adn) and Podugai (Pdg) are the three important types of soil series covering the soil. The available Organic Matter (OM) in Kutthalam taluk was ranged from 0.341% (Ananthanallur village) to 0.831% (Peruncherri Village) with the mean value of 0.5435%.

Comparing all values of the research (<1.7 low, 1.7 to 2.6 medium, > 2.6 high) allsamples (100 %) were recorded under low nutrient class as its nutrient index was below 1. The poor OM content in the soil indicates the extraction of mineral and predicts a gradual devastation. The main factors are decomposition and leaching processes and improper management. Stubble retention, rotating crops or the addition of organic residues such as animal manure, litter or sewage sludge are the best practices that will improve the strength of OM so that stability could be improved.

Advanced Baby Care System

Suresh Balakrishnan, Ramaprasad Poojary, Mariyam Milofa & Abdul Jabar Manipal University, Dubai sureshibk@gmail.com

Parenting is not an easy task. Good parenting requires the parent to quickly respond to the needs of their children. Constant monitoring of the child also becomes a necessity, especially up to an age of 18 months. In this work, a mobile robotic device has been designed and developed. This device can help a parent to keep track of their baby and its surroundings without having to check on the baby every now and then. Advanced Baby Care System (ABCS) has a Master Controller (Arduino Mega 2560), which integrates all the different modules of the robot by receiving the necessary signals from the sensor modules and sending signals to the trigger the alarm and the DC motors. The master controller selected for ABCS is the Arduino Mega 2560. It is a microcontroller board based on the ATmega328. This board can be easily interfaced with the CMUCam5 module, used for tracking, as well as other sensors which are being used in the project. This can intelligently follow the baby and alert the parents if the baby wanders off to unsafe locations around the house. This is done merely by the use of the color of the baby's clothes. It also alerts the parent when the baby wakes up, owing to the situation where a parent is in a location where the baby's cries cannot be heard. ABCS is an intelligent, baby friendly system, which integrates many functions into a single device, automatically alerting the parent when it is necessary and allowing them to carry on with their activities uninterrupted. The Project ABCS has won the second runner up prize in IEEE student day 2015 competition held at Petroleum University Abu Dhabi on May 2015. More than 25 universities from all over UAE have participated in this competition. And the project has got good appreciations from various competitions like ADUGSRC competition and the Software Tradeshow at Wollongong University Dubai. This project was published in the (SSRG-IJECE) Journal- Volume 2 Issue 10-October 2015

Wear, Friction and Mechanical Properties of Carbin Fabric/Multi-Wall Carbon Nanotube/ Epoxy Composites

B Shivamurthy School of Engineering & IT, Department of Mechanical Engineering, Manipal University, Dubai b_shivamurthy@yahoo.co.in

S Anandhan Department of Metallurgical and Materials Engineering, National Institute of Technology, Karnataka, Srinivas Nagar, Mangalore, India

Cryogenic treated multi-layered carbon fabric/oxidized multi-wall carbon nanotube/epoxy (CCF/O-MWCNT/E) composite and neat carbon fabric/epoxy (CF/E) composite were prepared by hot compression molding technique. The physical and mechanical properties of the composites were investigated as per ASTM standards. The wear and coefficient of friction behavior were investigated using computer interfaced pin-on-disc test rig at room temperature for varied load and sliding speed. The morphology of worn surfaces of the wear test composite specimens was studied by scanning electron microscope. It is found that the synergistic effect of addition of O-MWCNT to epoxy matrix and cryogenic treatment of carbon fabric improved the wear resistance and mechanical properties. Also, a thin lubricating film developed by the oxidized multi-wall carbon nanotube/epoxy wear debris reduced the coefficient of sliding friction and wear rate.

Miniaturization of the Satellite and Space Communication System Using Advanced Nano and Micro Technologies

Ms. Tithi Desai M.Tech Digital Electronics and Advanced Communication Student, School of Engineering and IT, Manipal University, Dubai tithipdesai@gmail.com

Dr. Ravishankar Dudhe Associate Professor and Program Coordinator, School of Engineering and IT, Manipal University, Dubai ravishankar.dudhe@manipaldubai.com

MEMS device has the advantage of both electronic and mechanical systems. With the development of MEMS devices for satellite, it is possible to establish much lighter and smaller nano-satellites with higher performance and longer life cycle. Mission costs are directly proportional to the total weight, thus the trend will be to replace bulky and heavy components of space carriers, communication and navigation platforms and of scientific payloads. MEMS devices are ideally suited to replace several of these components in the future, first by substituting larger and heavier components (e.g. a gyroscope), then by replacing entire subsystems (e.g., inertial measurement unit), and finally by enabling the micro-fabrication of highly integrated pico-sats. Examples of such miniaturization and successful use of MEMS in space and planetary missions are described in this paper. Examples of miniaturization possibilities for space robots and satellites are given, focusing on the challenges and the enabling technologies. The miniaturization process and the use of advanced nano and micro-technologies in space will have a large beneficial impact in the years to come.

Published in IJECT Vol. 6, Issue 2, April - June 2015 ISSN : 2230-7109

Nanophotonics -Technology for Achieving Efficient Design Applications

Ms. Sumathi Ayyalusamy Assistant Professor, School of Engineering and IT, Manipal University, Dubai sumathy@manipaldubai.com

Dr. Ravishankar Dudhe Associate Professor and Program Coordinator, School of Engineering and IT, Manipal University, Dubai ravishankar.dudhe@manipaldubai.com

Light is one among the vital elements of design and is highly influential in every aspect of life. Current research in the semiconductor technology focuses on quantum dots which exhibit strongly size-dependent optical and electrical properties emitting radiation. Owing to its unique properties, it has become a promising material in the nanophotonic regime for varied applications. They also exist in colloidal nature, facilitating various fabrications. The ability to join the dots into complex assemblies creates opportunities to explore more into the design. In addition to the direct eco-benefits, photonics also impact the product design and manufacturing processes employed. The energy emitted by the nanophotonic LED's is harnessed in the form of light to illuminate and the light to communicate. This electronic and photonic technology synergizes the Green Information Technology. Overall, features of lighting design are subject to be changed in the few years to come with Nanophotonic sources and structures. Much more complex, intricate and beautiful designs are to evolve with the implementation of nanophotonic technology.

This work is published in International Journal of Science, Environment and Technology, Vol. 4, No 6, 2015, 1596 – 1602

Destabilizing of Islamic Finance Futures Market in Derivative Sector

Mr. Rajesh Jayakar Pai Assistant Professor, School of Business, Manipal University, Dubai rajesh.pai@manipaldubai.com

MANIPAL University

Today more than 1340 Islamic Financial Institutions are operating across the globe. The estimate reported by S&P for Islamic Banks Derivative Market is \$ 4 trillion .The purpose of this study is to identify the bounds on futures market, which comes under the purview of Sharia Compatible Futures which comes under the scanner of Islamic Financial Futures undermining investments in islamic derivatives market. This paper assesses the gaining momentum as the instrument reallocates risks among those who choose to trade in futures contract and disseminate the information flow for prices in the spot market. The paper also carries out to differentiate the conventional model of futures pricing with Islamic Model and how the Sharia compatible futures dabble in the futures market with protected risk. Religious freedom encourages broader economy to contribute to positive socio-economic development. When religious groups operate in the free and competitive environment, a religion can play a measurable role in human and social development which can transform to sustainable growth. This paper also assesses the growth of certain types of religious restrictions that directly limit or harm economic activity. A few current examples of the Muslim-majority countries – a set of countries with particularly high religious restrictions - are illustrative of how the lack of religious freedom contributes to worsen economic and business outcomes. Religious restrictions among Muslim-majority countries impacting businesses take many forms. One direct religious restriction impacting economic freedom involves islamic finance. Religious restrictions also include legal barriers for certain import and export industries, such as the halal food market and outright bans of certain blockbusters from the film industry

This paper was awarded the third Best Paper award with a cash prize at the 2nd International Islamic Conference held in Istanbul, Turkey during September 2015. The paper was published in the Journal of Islamic Economics and Finance ISSN -2149-3820 in Turkish, Arabic and English.

Computational Approach Towards Targeting Aggregate Formation in Synucleinopathies

Dr. Mohammad Zeeshan Ansari, Hafiz Mukhtar Muhammad, Zarfishan Shabbir & Sheela Rani Thogaru School of Life Sciences, Manipal University, Dubai zeeshan@manipaldubai.com

Synucleinopathies is a diverse group of neurodegenerative diseases including Parkinson's disease (PD), dementia with Lewy bodies (DLB) and Alzheimer's disease (AD). A common characteristic of these synucleinopathies is the presence of intracellular pathologic inclusions in certain brain cells that are primarily composed of α-synuclein (SNCA). Targeting the initial oligomerization steps remains one of the primary focus areas for therapeutic strategies towards synucleinopathies. Dimerization of SNCA was studied using protein-docking experiments using GRAMM-X and interface interactions that stabilize the assembly were analysed using Protein Interactions Calculator (PIC) server. SCWRL was used to generate a peptide library differing at those positions of 11-mer which were involved in the stabilization of SNCA and best binders were analysed. Sequence and structural analysis of predicted dockings models of SNCA-SNCA and SNCA-11-mer region showed that the 2nd Val, 6th Ala and 10th Val of the 11-mer are primarily involved in the hydrophobic interactions. By comparing binding energies of various peptides differing at these positions in the 11-mer is most critical in dimerization.

Research Initiation and Seed Grants on Technology, Innovation & Sustainability

Dr Neeru Sood, Associate Dean, Academic Research Division BITS Pilani, Dubai Campus sood@dubai.bits-pilani.ac.in

Interdisciplinary research and development at BITS Pilani is constantly growing and expanding at a wider context, with experts from different disciplines contributing their research ideas. BITS Pilani, Dubai campus (BPDC) has instituted financial support in the form of Research Initiation Grants (RIG) and Seed Grants to encourage advanced and applied research focusing on sustainable development. A number of interdisciplinary projects with focus on technology, innovation and sustainability have been granted research funding. One of the projects aims at "Growing and optimizing salinity tolerant high yield grass species for biomass production under arid and marginal environments", through a team of experts from the department of Biotechnology, Chemical Engineering and Agriculture. In this project the Biomass derived from the potential grass species is being tested for application as biomass pellet and bioenergy generation. The research project has also got a technical and research support from the International Center for Biosaline Agriculture (ICBA). The center has provided additional external research support for the project and for field studies to be carried out at their research organization. Two more research projects with researchers from Mechanical & Electrical and Electronic are working on Bio-Tribo-corrosion Evaluation of Ti based Bulk Metallic Glass/ Hydroxyapitite Composites for Bioimplant Applications & Design and Development of closed loop control system to improve the process capability of Incremental Sheet Metal forming". BPDC encourages collaborative research and interaction between different departments, universities and research organizations.

Neighborhood Planning and Social Cohesiveness: The Case Study of 'International City' in Dubai

Ms. Bhakti More Associate Professor, School of Design and Architecture, Manipal University, Dubai bhakti.more@manipaldubai.com

Dr. Mohammed Firoz Associate Professor, Faculty of Arts and Humanities, University of Wollongong in Dubai

Dubai is a home for a large number of the expatriates from diverse sociocultural backgrounds who are the temporary residents of the city for a different number of years. Dubai is a unique example, which houses 90% expatriate population who are residing in the city which offers attractive employment and investment opportunities. As the expatriate population is increasing every year, the pressure on the urban planners to accommodate the influx of migrant population into the city is rising. To what extent contemporary urban housing is socially sustainable is the key concern amongst policy-makers, urban planners, residents and other key stakeholders. A study is based on the concept of 'urban social sustainability' consisting of the principles of urban planning cum design such as accessibility within the city, amenities and their accessibilities, community neighbourhood planning, and design; and socio-cultural factors like sense of community belonging, social interactions and social cohesiveness. The research of Ms. Bhakti More focuses on how 'common spaces' in the neighbourhood planning and design contribute to social interactions and social cohesiveness amongst the residents of mixed-use district, 'International City' in Dubai. The methodology of the research includes a review of literature and a convergent parallel method.

This paper was presented at the 2nd Asian Conference on Social Sciences and Sustainability, 1st to 3rd November 2015 in Fukuoka, Japan.

Evolving a Framework, to Engage and Educate Fresher Students in Architectural Design Studio

Ms Vidya Rao, Bhakti More & Merin Abraham School of Design & Architecture, Manipal University, Dubai vidya.rao@manipaldubai.com

The research of Ms. Vidya Rao explores the role of fantasy projects in architectural design; in this case the house of the fairy tale character Rapunzel. It also examines how the students were immersed in design studio from day one and how enthusiasm was maintained in class to the very end. The faculty based the attempt on analogies derived from first language acquisition studies. Spirit of healthy competition amongst students was inculcated by enrolment in an international competition. Required skills were transferred as and when needed by tailoring and integrating other courses that the faculty separately taught to the same class. The timelessness of fantasy projects to immerse students in the world of architectural design was also tested as it was reintroduced ten years after its previous introduction as a design problem in the same university. The similarities and differences of student output a generation apart, was noted with alumni from the earlier batch now in architectural practice, conducting the jury. In both cases the act of creating a fantasy fairy tale house for Rapunzel empowered the students like magicians with wands and unleashed their creativity. It enabled the faculty to limit the technicalities in design while still introducing a seemingly boundaryless project. The current students, arguably more technology savvy, were found to crochet technology to a greater extent into their concepts in a bid to contemporize the story.

This paper was published in the first bi-annual Journal of Council of Architecture, India, Vol 1/ No.1 on Architecture: Education and Profession.

Environment Management and Sustainability in UAE Aluminum Industry

Abeer Sajwani PhD Student, Construction School of Energy, Geoscience, Infrastructure and Society Heriot Watt University, Dubai as41@hw.uk.ac

Aluminum is the third most abundant element, after oxygen and silicon, and the most abundant metal in Earth's crust. It is widely used in buildings, construction, transport, packaging and general engineering due to its unique characteristics such as corrosion resistance, durability, insulation capability, structural strength and low-weight, which makes it the metal of the future. Aluminum manufacturing is an energy intensive industry and a major contributor to Greenhouse gases such as CO2 and CFC, and PFC. This industry generates huge amounts of waste such as the Bauxite Residue from the Alumina Refinery process and the Spent Pot-Lining (SPL) from the Smelting process. These complex environmental challenges increase the role of environmental management and sustainability in the Aluminum manufacturing industry. According to the World Aluminum annual statistical report in 2014, UAE is the

fourth largest aluminum producer, accounting for over 50% of the Arabian Gulf₂s aluminum production where the UAE Aluminum Industry is on upstream production and not on the downstream industries and uses such as recycling and secondary Aluminum production. The Aluminum production capacity was 2.4 million tonnes a year in 2014 and 300,000 tonnes are presently utilized in the country. Recycling is the key though to continuing environmental improvement in the Aluminum industry sustainability. According to the Aluminum

Association, it takes 92% less energy to produce recycled aluminum rather than producing primary aluminum. Increasing recycling by 10% only reduces energy consumption and CO2 emissions by 15%. This area of research is required in this region on how to reduce Aluminum environmental footprint by studying the life-cycle of Aluminum in the UAE, **Environmental Management practices** that are currently used in this industry and formulating an efficient environmental management framework for a sustainable metal production, which is mainly the intend of this research work.

Middle East Focused Case Centre at Amity University Dubai

Since its inception in 2012, the Middle East focused Case Centre at Amity University Dubai has been publishing cases with an objective to provide a rich and rewarding experience to students on management programmes, and to share the ongoing strategic developments in the Middle East.

Case studies on strategic issues covering important management domains are prepared by the faculty at Amity University Dubai. Case writers identify important economic accelerators, government initiatives, in addition to contemporary sector-specific developments. These cases are hosted at The Case Centre (European Case Clearing House), the largest global repository of management cases, articles, and books.

In addition to providing useful classroom discussions, Case Studies developed at Amity University Dubai, along with Teaching Notes, provide students the necessary skills to identify optimal solutions, supporting them in their quest for corporate leadership as they graduate. Interestingly, these cases are also used by universities across the globe, by the faculty and students on the management programmes - University of Cranfield, University of Maryland and University of the Witwatersrand, to name a few. Organisations like McKinsey & Company, US and StratX US have also made use of some of these business cases.

Global usage, wide readership, and increasing downloads and purchases make some cases unique - 'Nokia: Repositioning Brand in the Smartphone Segment' featured in the top 20 most popular downloaded copies at The Case Centre, while 'iCare Clinics: Landmark's Leap into Healthcare', found its place among the top 20 best selling cases between April to September 2014. Other popular cases include 'Gulf Construction Giant Arabtec: Eyeing Growth Opportunities', 'UAE Free Zones: A Thrust to Economic Growth', 'Luxury Retail in UAE Market: Delivering Value to the Consumers' and 'Takamul - Driving Knowledge and Innovation in UAE', to name a few. The faculty at the Case Centre, Amity University Dubai bring out a compendium of Middle East Centric Case Studies every year, in addition to case studies on leaders in the industry who have made significant contributions to society and the corporate sector. Two such publications have been brought out in the last two years and the next publication aims to focus on Expo 2020, with students across higher education institutions in the UAE participating in this initiative.

Fuzzy Approach to Nodal Reliability Ranking for Radial Distribution Networks

Ms. Roma Raina, Assistant Professor, School of Engineering and IT, Manipal University, Dubai roma.raina@manipaldubai.com

Power distribution systems are exposed to load swings and faults, which can lead to voltage instability and collapse. It's important for a distribution engineer is to identify the sensitive nodes so that corrective action can be taken. This paper presents a fuzzy logic methodology to rank the distribution system nodes based on its reliability. For calculating reliability of nodes, paper defines a new index 'Percentage Reliability', which is a function of Voltage and Voltage Stability Index. The proposed technique predicts nodes critical to voltage collapse and provides inputs information for corrective action. This ensures reliable distribution system. For the load flow calculation purpose, a three phase fuzzy load flow algorithm for unbalanced radial distribution systems is developed, which is based on algebraic recursive expression of the voltage magnitude.

This work is published in the Bonfring International Journal of Power Systems and Integrated Circuits, Vol. 5, No. 1, December 2015

Safety Engineering in Oil Construction Sustainability in UAE

Ghanim Kashwani PhD Student, Civil Engineering School of Energy, Geoscience, Infrastructure and Society, Heriot Watt University, Dubai gak1@hw.ac.uk

According to LEED (Leadership in Energy & Environmental Design), sustainability is the improvement of human life in relation to the optimal use of natural resources. Saving human life from the daily risks that individual may be exposed to in the work environment is an essential element to enforce the sustainability concept in all of its aspects; economic, environmental and social. Oil construction is a very vital industry in United Arab Emirates (UAE), since the crude oil export rate for UAE is 2.7 Million barrels per day (b/d) as stated by Organization of Petroleum Exporting Countries (OPEC) in their 2015 annual statistical report. Oil

construction has a very solid and advanced safety system due to the high risk environment where it is considered the second most risky industry after mining. However, the development of the safety system in the oil construction is the result of historical catastrophes that later provided good lessons learned and professional safety practices to the industry such as Alexander L. Kielland capsize (North Sea, 1980), Piper Alpha Explosion (North Sea, 1988) and Deepwater Horizon Blow Out (Gulf of Mexico, 2010). The loss of Human life, environmental damages and financial loss of these catastrophes lead the oil construction professionals to continuously improve the safety system in this industry. Technical, procedural, and behavioral safety studies and framework have been conducted but, there is lacking of integrated framework that includes these

three areas and embraces the involvement of management and operation in the same time, which explains the frequency of current safety incidents in the oil construction projects worldwide. This area of research in developing integrated framework will help to change the approach from reactive to proactive and give a holistic view for the present safety challenges in the oil construction sustainability in UAE.

Architecture Students and their Approaches to Learning

Ashok Ganapathy Iyer, **Professor – Chairperson, School of Design & Architecture, Manipal University Dubai ashok_iyer@manipaldubai.com**

Students' learning approaches in architecture is captured through their experiences of learning by delving into the hypothesis hidden within this collage of images. 'What are the approaches to learning adopted by the students of architecture in their core design coursework and how theory introduced in the first year design coursework impacts on their learning approaches in the subsequent years? Why do approaches to learning evolves from the first year to the final year of the architecture program?' The research into the approaches to learning has been well-understood in other disciplines but less-researched in the field of architecture. The vehicle of the introductory theory-based model is the most appropriate way of classifying the students' learning approaches instead of history & theory or technology; as the architectural design is central to the design studio. The design studio plays a pivotal role in the students' life through their years of architectural education.

Articles

Encouraging, Nurturing, and Protecting Student Research at Middlesex University Dubai

Dr. Fehmida Hussain Senior Lecturer in Science and Techonlogy Middlesex University Dubai

Dr. Tenia Kyriazi Senior Lecturer in Law Middlesex University Dubai

Dr. Cody Morris Paris Deputy Director Middlesex University Dubai

Dr. Lynda Hyland Senior Lecturer in Psychology, Chair of the Research Committee Middlesex University Dubai

Launched in January 2005, Middlesex University Dubai offers a wide range of undergraduate and postgraduate programmes at its campus in Knowledge Park. We currently have over 2,500 enrolled students, and more than 2,000 students have graduated from this campus since its inauguration. The majority of programmes at Middlesex University Dubai involve advanced research components, illustrating the importance of embedding research within university curricula (Zimbardi & Myatt, 2014). International best practice points towards the promotion of student research and the Student Research Committee (SRC), a Sub-Committee of the Research Committee at Middlesex University Dubai recognizes this as a priority.

The concept of becoming a scientist through active engagement in research has been highlighted by both students and faculty alike (Hunter, Laursen, & Seymour, 2007), and it is accepted that students require guidance in pursuing research activities alongside the proximal need to complete academic assignments. The SRC have developed a tripartite strategy to (1) encourage/promote/support, (2) nurture, and (3) protect student research. The development of students as researchers must be planned systematically with consideration given to how best we, as faculty, can facilitate this growth and increase students' beliefs in their own capability (self-efficacy) as researchers. The development of self-efficacy (Bandura, 2012), hinges upon the mastery of tasks, social persuasion, social modeling, and choice processes. The SRC takes this into consideration and emphasizes each of the aforementioned factors as playing a role in the development of students' research self-efficacy.

Encouraging student research

Over the past three years, in line with Middlesex University Dubai's research strategy, the SRC has organized an annual Student Research Symposium where undergraduate and postgraduate students can showcase research carried out as part of their coursework or dissertations. Students present their work through illustrated posters and discuss their findings with attendees, including peers, family members and university staff. Feedback over the past three installments of the SRS has been overwhelmingly positively. As Youssef Shabaan Ibrahim (M.Sc. Computer Network Management student; 2014 Symposium presenter) commented: *"It was a wonderful event and was a good experience through the interaction between the participants, graduates, and the academic staff, I learned from the event. Thank you so much for allowing me this opportunity to participate."*

Alongside involvement in Middlesex University research events, the SRC encourage student participation in national competitions such as the United Arab Emirates Undergraduate Student Research Competition (UGSRC) held annually in Abu Dhabi University. In 21 ,2015 students from Middlesex University Dubai participated in the UGSRC. The experience of presenting research findings was valued by students, as indicated by student feedback: *"Zaakirah and I were thrilled to participate and represent the psychology department from Middlesex, Dubai in the 3rd Undergraduate Students Research Competition. Even though, participation in the competition involved sleepless nights, continuous number of hours on the laptop and the feeling of anxiety that did not leave us until we were finished with the presentation, it was all worth it! This UGSRC marked the end of a wonderful and memorable experience as final year psychology students in Middlesex, Dubai." (Saba Mirza, B.Sc. Hons in Psychology with Counselling Skills student; 2015 UGSRC presenter). When students are* persuaded to believe in their own capabilities (e.g., social persuasion by faculty), this can increase their selfefficacy, in turn boosting the chance of success (Bandura, 2012). Indeed, the decision to put oneself forward for a challenge such as participating in a conference or research competition is regarded as a choice process which can in itself elevate students' self-beliefs.

Nurturing student research

The SRC recently launched a student research assistant scheme wherein motivated students may be assigned to work closely with a faculty member on a pre-approved research project. This allows the research assistant to gain experience on projects beyond the framework of their programme of studies, essentially acquiring a solid grounding in research. The role can involve tasks at all stages of the research process, from reviewing the academic literature, to data collection, data entry, through to manuscript preparation. All this is conducted under the guidance of the principal researcher who serves as a 'social model'. Students benefit from working with those more experienced in their fields and this can move them "towards more advanced conceptions of inquiry and of themselves as student-researchers" (Levy & Petrulis, 2012, p.98) and towards achievement of task-mastery (Bandura, 2012). Pajares (2003) suggests that beliefs regarding their research ability links students' actual skill acquisition and what they choose to do with this knowledge (i.e., later career choices). The SRA scheme will be brought into effect from September 2015, and it promises to be a positive development for both students and faculty-researchers alike.

Protecting student research

Whilst working under the guidance of experienced researchers can benefit students, evidence suggests a need for ethical considerations, particularly in relation to the often-thorny issue of authorship (Bošnjak, et. al, 2011). In cases where the end product of faculty-student collaboration is a completed manuscript, authorship issues, particularly the ordering of authors can arise. Insufficient guidance in relation to the criteria that merit authorship is another reason for subsequent disputes between collaborators in research projects. It has been suggested that planning authorship during the early planning stages of the research can facilitate unbiased recognition of contributors' efforts (Malicki, et. al, 2012; Nylenna, Fagerbakk, & Kierulf, 2014). With this in mind, the SRC developed guidelines pertaining to the use of data, authorship order, and adherence to the major academic regulatory bodies in collaborators' individual fields. Additionally, a student-staff agreement for research and authorship (to be signed by all involved) was also developed. The purpose of the guidelines is to ensure that all research undertaken by staff at Middlesex University Dubai in conjunction with students is conducted to the highest ethical standards, protecting the intellectual property of both parties.

In conclusion

From a teaching and learning perspective, involving students in research outside the remit of coursework completion can pay dividends in skill acquisition, personal development, and importantly, can impact the academic and professional future of students. For instance, Weldon and Reyna (2015) cite examples of how the research involvement of undergraduate students can improve student acceptance onto postgraduate programmes. Many of today's students will be tomorrow's academics. Thus encouraging, nurturing, and protecting student research, in turn increasing student research self-efficacy, is in the interest of everyone in higher education. It is important that university faculty strive to bridge the gap between the theoretical and practical research experiences of our students, both in terms of student outcomes and the future development of our individual disciplines.

References:

Bandura, A. (2012). On the functional properties of perceived self-efficacy revisited. Journal of Management, 44-9 ,38. Hunter, A. B., Laursen, S. L., & Seymour, E. (2007). Becoming a scientist: The role of undergraduate research in students, cognitive, personal, and professional development. Science Education, 74-36 ,91.

Levy, P., & Petrulis, R. (2012) How do first-year university students experience inquiry and research, and what are the implications for the practice of inquiry-based learning?, Studies in Higher Education, 101-85, 37.

Malicki, M., et. al (2012). Why do you think you should be the author on this manuscript? Analysis of open-ended responses of authors in a general medical journal. BMC Medical Research Methodology, 189,12.

Bošnjak, L., et. al (2011). A systematic review of research on the meaning, ethics and practices of authorship across scholarly disciplines. Plos one, 6, e23477.

Nylenna, M., Fagerbakk, F., & Kierulf, P. (2014). Authorship: attitudes and practice among Norwegian researchers. BMC Medical Ethics, 53, 15.

Pajares, F. (2003). Self-efficacy beliefs, motivation, and achievement in writing: A review of the literature. Reading & Writing Quarterly, 158-139, 19.

Weldon, R. B., & Reyna, V. F. (2015). How to Successfully Incorporate Undergraduate Researchers Into a Complex Research Program at a Large Institution. Journal of Undergraduate Neuroscience Education, 3)13), A192.

Zimbardi, K., & Myatt, P. (2014). Embedding undergraduate research experiences within the curriculum: a cross-disciplinary study of the key characteristics guiding implementation. Studies in Higher Education, 250-233, 39.

Articles -

There are Many Facets of Stigmatization: Evidence from Four Self-Identified Cultural Groups in the United Arab Emirates

Anita Shrivastava School of Science and Technology, Middlesex University Dubai, UAE

Jakob Pietschnig Department for Applied Psychology: Health, Development, Enhancement and Intervention, Faculty of Psychology, University of Vienna, Austria

Abstract

Background: Stigmatization of individuals suffering from mental illness has been recognized as one of the most influential reasons for avoidance of seeking professional help, thus posing a substantial concern to public health. Several studies suggest that there are cross-cultural differences in perception and stigmatization of individuals suffering from mental illness. Recent evidence indicates that stigmatization may be better understood as a multifaceted construct, thus making it possible to identify culture-specific causes for and cross-cultural differences in stigmatization.

Aim/Objective: The present research aimed to assess cultural differences in stigmatization (i.e., relationship disruption, treatability, recovery, professional efficacy, anxiety, visibility, and hygiene) in a multinational sample of residents of the United Arab Emirates. It was hypothesized that there will be significant difference in four cultural groups with regard to stigma components.

Method: Presently, we provide evidence for cross-cultural differences in stigmatization in a sample of 135 African, Asian, Middle Eastern, and Western participants living in the United Arab Emirates. Of the 135 participants, 32 were categorized as African, 32 as Asian, 34 as Middle Eastern, and 37 as Western according to their self-identified nationality. Self-identified cultural differences in seven distinct domains of attitudes towards mentally ill individuals (stigma) were investigated using Day's Mental Illness Stigma Scale.

Results: A series of Univariate analyses of variance were computed. Strongest effects were observed for anxiety, beliefs about treatability, hygiene, professional efficacy, whilst non-trivial albeit non-significant effects could be shown for recovery, relationship disruption, and visibility.

Discussion/Recommendation: Our results demonstrate the need for understanding stigmatization processes as culture-specific mechanisms.

Shrivastava, A., &; Pietschnig, P. (2015). There are Many Facets of Stigmatization: Cross-Cultural Evidence from Four Samples in the United Arab Emirates. Indian Journal of Clinical Psychology, 42(2), 94-101.

Parents as Play Partners, Developing Childhood Learning - the Key to a Sustainable Future

Building a sustainable society requires people with a capacity for sustainable development, which is also the capability for lifelong learning and development. This quest for education for sustainable development has to begin with learning and development in early childhood.

Parents are the most important people in a child's life. Through parental engagement (Hattie 2008) they can support and advance their child's learning and development whilst doing everyday activities as well as providing opportunities for creative play. Professor Charles Deforges (2003) concluded that the more parents and children talk to each other about meaningful subjects, the better students achieve both in the short and long term.

This research explored the meaning of childhood within the realms of play and attachment, drawing upon the work of key theorists including, Bowlby, Athey and Brown. Play in childhood was examined as to why it is such a powerful medium to foster communication and confidence, which are the essential elements for pre-school children. Questions asked included; Do children still play? What do they play with? Do parents play with their

children? How does technology infiltrate play? What happens if play is missing in childhood?

The research involved a pilot study entitled 'Parents as Play Partners', conducted within the UAE, the objective was to highlight how natural schema based play can positively impact attachment and a child's learning and development. A small pilot study involved families being filmed before and after the play intervention and play diaries maintained. The results were powerful and could prove useful to governments and providers of early year's education, as well as parents and practitioners in this field.

The research described in the submission was conducted within the UAE by Dr. Kay Sanderson, Coordinator of Education at Middlesex University Dubai in collaboration with Middlesex University London and was presented at the GCES Conference at the same venue in April 2015.

Predictive Factors of Schizotypy: A Study Upon Creativity, Neuroticism, Extraversion and Gender

Anita Shrivastava School of Science and Technology, Middlesex University Dubai, UAE

Fouzia Siddique Doctorate student of Clinical Psychology, University College London, UK

Institute of Education

A bulk of research in schizotypy has focused on - its comparison with other disorders and susceptibility to psychosis and psychopathological illness Researches that specifically focused on establishing link between schizotypy and other factors, have mainly concentrated on creativity while ignoring other personality and demographic factors.

Data was collected from 91volunteer undergraduate students(30 females and 61 males) of Middlesex University, Dubai using Schizotypal questionnaire (SPQ-A), Creative Analysis Questionnaire(CAQ) and International and Personality Item Pool (IPIP) test.

Pearson's r and subsequent stepwise hierarchical regression analysis suggest significant relationship between schizotypy and extraversion (r = ..449, p < .05); between schizotypy and neuroticism (r = ..378, p < .05). Extraversion, neuroticism and gender appeared to be significant predictors (accounting for 31% variance) of schizotypy. Creativity did not emerge as significant predictor.

Conclusion: The study suggests that factors other than creativity might predict schizotypy and creativity seems to be mediated by other factors of personality and intelligence.

Article published in International Journal of Research in Social Sciences, 2014, Vol.4, Issue 4, 778-789

Knowledge, Attitude towards HIV/AIDS, And Sexual Behavioral Change: A Study On Selected Eritrean College Students

Anita Shrivastava Senior lecturer and Campus program coordinator, Department of Psychology, Middlesex University, Dubai, UAE

Azieb Ogbaghebriel Associate professor and Dean, Department of Pharmacy, Asmara College of Health Sciences, Asmara, Eritrea

Yacob Tewolde Postgraduate student, University of Tennessee, Knoxville, TN, USA

Henok Gebretensae Postgraduate student, Department of Pharmacy, Jamia Hamdard Deemed University, Delhi, India

Abstract

Knowledge and attitude towards human immunodeficiency virus(HIV/acquired immunodeficiency syndrome(AIDS) has been reported important for behavioral change as preventive strategies among youths. Assessing these psychological constructs and observing effectiveness of educational preventing program provides significant contribution to the field of study.

This study aimed at assessing relationship among knowledge, attitude towards HIV/AIDS, confidence in sexual practice, and sexual behaviour change; and further to investigate significant differences among these constructs by demographic groups.

This cross sectional correlation and mean difference study used an opportunistic sample of 294 students of Asmara College of Health Science, Eritrea. Responses on five standardized scales (knowledge, attitude, sexual behaviour change, confidence in sexual practice, and demographic Performa) were analyzed using Pearson 'r', linear regression, and independent sample t-tests.

Sexual behaviour change was significantly positively correlated with knowledge (r=0.19) and confidence in sexual practice(r=0.50). Knowledge and confidence in sexual practices explained 26.5% of the variance in sexual behaviour change. A significant difference was found between those who were and were not sexually active in their sexual behaviour change as t (110.48) =6.187, p<.0125, confidence in sexual practice as t (290)= 5.550,p<.0125, and in the knowledge of those who have and do not have personal acquaintances with AIDS patients as t (292)=2.662, p<.0125.

Knowledge regarding HIV/AIDS and use of preventive strategies as well knowing someone with HIV/AIDS increases level of knowledge play an important role in changing sexual behaviour.

Article published in Journal of Research in Medical Education & Ethics, Vol.4, NO.1,2014 pp-71-77

One Step Closer to Smart Cities: Wind Power Innovation

Arouge Agha PhD Researcher School of Energy, Geoscience, Infrastructure and Society Heriot-Watt University, Dubai aa182@hw.ac.uk

From the Strata in London to the Bahrain Tower, Building Integrated Wind Turbines (BIWT) are becoming increasingly popular. Integrating wind turbines in the built environment is a simple and cost-effective method – where there is wind energy, there is the possibility to generate clean energy. However, intermittencies in wind and power generated have made these examples conceptual rather than realisable. Nonetheless, there exists a solution. Using a Diffuser, wind turbine performance can be improved, thus forming the Diffuser Augmented Wind Turbine (DAWT). The diffuser is able to funnel and accelerate incident air flow to the rotor thereby driving it for a higher power extraction threshold for better control and continuous periods of operation. Currently, power augmentations between 2 and 4 can be achieved for a DAWT compared with a conventional wind turbine of the same swept area. The DAWT is a much-needed addition to the built environment where low wind speeds and large turbulence are common and its quiet and safe operation are an added advantage.

Under the Dubai EPXO 2020 theme of Opportunity, extensive research is being undertaken at Heriot-Watt University to pave way towards enhanced building efficiency and development of smart cities, with the use of renewable technology. A Computational Fluid Dynamics (CFD) study was performed using ANSYS Fluent on a three-bladed roofmounted DAWT using the University Building as a case-study. The findings indicated that the diffuser significantly improved performance on the equivalent bare wind turbine, which was used as a baseline. The maximum power augmentation achieved was 2.5 at very low wind speeds, less than a breeze. In addition, the results showed improved aerodynamic capabilities as wind speeds were significantly increased and better distributed across the rotor.

Social Media in the Airwaves: Redefining Traditional Radio Broadcast in the UAE

Sabir Haque School of Media & Communication, Manipal University, Dubai sabir@manipaldubai.com

Radio Broadcasting came late to the UAE, and it shares a marginal share in the UAE's estimated annual advertising spending. It still can't dampen the optimism that surrounds the radio scene in the UAE. The radio presenter's near celebrity status, level of listener participation, cross promotion coupled with unique marketing strategies now allied with online radio and social media apps has redefined the traditional radio broadcasting arena with new virtual spaces. This study attempts to explain the new form of relationship with audiences online and how it empowers the radio stations to co-generate content and reach out to prospective advertisers. The study will reach out to the most popular Asian Radio Stations playing Bollywood and Western music (ARN Network/Radio 4 Network). Research Methodology employed in this study is a complex instument based on the quantiative and qualitative content analysis of social media accounts of the radio stations. In addition, indepth interviews with multiple hierarchies of social media teams, radio presenters & show producers of the selected radio stations will be held and analysed.

Specific Case Studies of promotional campaigns on social media (Facebook & Twitter) which brings unique listeners to a radio networks will be examined. Given the popularity of social media networks among the youth, the introduction of radio listeners to social media helps connect user profiles with the radio stations with a promise of greater fan base. The research paper will help reveal the unique multi-cultural terrain of the media landscape in the UAE and map how radio stations are adapting themselves to social media networks creating new models of promotion and participation.

This work is presented in the Manipal Research Colliquium 2015 held in Manipal University, India.

Articles -

Influencing Factors of Materialism: The Role of Mortality Salience and Spirituality

Anita Shrivastava School of Science and Technology, Middlesex University Dubai, UAE

Ainey Yousuf School of Science and Technology Middlesex University Dubai, UAE

Jakob Pietschnig Department of Applied Psychology: Health, Development, Enhancement and Intervention University of Vienna, Austria

Abstract

According to the theoretical work on Terror Management theory (TMT), the management of existential insecurity and fears of mortality critically informs human behaviour. The awareness of mortality (mortality salience or MS) has been implicated in consumer behaviour and materialistic aspirations, which are generally considered maladaptive (Burke, Martens, & Faucher, 2010). Most spiritual philosophies render materialistic pursuits incompatible with leading a meaningful life and recently spirituality has been shown to reduce the desire to consume conspicuously (Stillman, Finchan, Vohs, Lambert, & Phillips, 2012).

The aim of the present study was to examine the influence of mortality salience and spirituality upon materialistic thinking. The hypothesis predicts that there will be a significant difference between type of schema (mortality salience, and spirituality) and materialistic thinking.

The sample comprised of opportunistically recruited Psychology student volunteers. Data from twelve out of 72 originally recruited participants were discarded from analysis due to experimental attrition and missing data. Consequently, data from 60 (55f, mean age = 24.44, SD = 6.51) were included in our analyses. A within-subjects design with 3 conditions (mortality vs. spirituality vs. controls) was applied. Conditions were counterbalanced (i.e., 6 different possible sequences) and questionnaires were administered to the participants on the same day of 3 consecutive weeks. The participants were assessed on materialistic thinking after being provided with one of three different quotations in each week – one related to spirituality, one to mortality, and a neutral quotation. We did not find any significant differences in mean self-reported materialism scores between conditions (mortality vs. control) in a repeated-measures analysis of variance (F (2, 58) = 1.143, p = .326, $p^2 = .04$). In view of these surprising results, reflections on the nature of materialism in a diversified domain of cultural and economic viewpoints are offered, along with implications on the conceptual foundations of TMT.

Shrivastava, A., Pietschnig, J., Yousuf, A., &; Kassie, S. (2017). Influencing factors of materialism among residents of the UAE: The role of mortality salience and spirituality. Journal of Articles in Support of The Null Hypothesis, 13(2).

Motives underlying the choice of business majors: A multi-country comparison

Dr. Mohamed Salama, Director of Corporate Executive Relations - Dubai Heriot-Watt University

Middlesex University

This study contributes to this research stream by examining similarities in the consumption behaviour for business education in a four-country setting. The study examines the motives that affect students[,] choice of business majors. Based on a literature review, five motives affecting students[,] choice of business majors were identified and were measured using data collected from undergraduate business students in China, UAE, UK, and the USA. Factor analyses of the four datasets revealed a remarkably similar factor structure indicating that the motives underlying the choices of different major are similar. The results indicate similar relative levels of importance for lifestyle aspirations and developmental skills in all four countries. The only gender differences, reported by exception, show females scoring higher on career outputs and

reputational effects but not for the Chinese sample. These results contrast with classical cultural studies of gender where females show more feminine traits.

The remaining three motives (career outputs, reputational effects, and relative ease of completion) shape the choice of business major across countries variably. The results revealed similar values, especially for the UK and US that support a convergence among geographically distinct physical places. Evidence of cultural fusion more generically post-Hofstede has been attributed to immersion in international cultures from wider social and geographical mobility, greater access and opportunity to education, and Internet exposure. This can be particularly useful for educational institutions going global.

Innovative Construction Delivery: Integration of Building Information Modeling to Project Management Consultants Role

Marwan Abu Ebeid PhD Candidate Heriot Watt University ma970@hw.ac.uk

Construction has always been at interest and in need of mankind. As civilization evolved; the complexity of construction increased significantly. In response to that; new techniques, roles and players have appeared to address the increased complexity of construction projects. Project management consultancy (PMC) has become an integral part of construction professional services (Flanagan et al., 2013) as PMC plays a pivotal role in managing the complexities of today's construction projects by ensuring delivering client's needs (CIOB, 2002).

While the Construction industry is considered one of the key drivers of global economy; the industry has

suffered from poor performance

in comparison with other industries such as manufacturing. There have been some major initiatives to investigate the causes and provide recommendation such as UK initiative "Rethinking Construction" by Sir Egan 1998.

The report effectively paved the way to extensive research and efforts in rethinking construction, developing ways of improving performance, and tackling fragmentation such as introducing a Lean Construction approach. Some of the basic principles of the lean construction is optimizing the design and the process of delivery as well incorporating innovative IT solutions. Building Information Modeling (BIM) facilitates these principles as it involves development of intelligent virtual prototypes of projects

using database information from design, specification, cost and schedule (Leicht and Messner, 2007). BIM offers enhanced collaboration between various parties and assists improving design, quality, communication, and potential construction benefits through the entire lifecycle of projects (Kiviniemi et al, 2005). Consequently, it is important to have an optimum integration of BIM to PMC whose role takes the lead in ensuring ideal and collaborative implementation of BIM in construction projects by outlining objectives, uses and process for BIM implementation throughout each stage of project's life cycle.

Aluminum Cast House Assessments: Cooling Tower Performance and Ingot Molds Lifespan

Dr. Ghalib Kahwaji, RIT - Dubai, Dr. Mohamed Mahmoud, EGA, Dr. Mohamed Samaha, RIT - Dubai, Dr. Wael Abdel Samad, RIT - Dubai

Over the course of one year, researchers from RIT – Dubai have been working on several cast house assessments after being awarded a generous research grant from Emirates Global Aluminum (EGA). The project tackled two main problems encountered at EGA's cast house facility: the first being the corrosion occurring at the cooling towers' surrounding areas and the second being the cracking occurring in the ingot molds. Experimental data including full-field mold temperatures, cooling water temperature,

ambient air temperate, humidity, and wind speed were measured on site at EGA's facility in Al-Taweelah, Abu Dhabi, while two main computational models; a finite volume model using ANSYS and a finite element model using ProCAST, have been developed to simulate and better understand both problems. Results indicated that the cross wind had a drastic effect on the flow fields both at the inlet openings as well as inside the tower. As for the ingot lifespan simulations, results indicated that the mold fabrication itself leaves residual stresses at the center of the mold, a location which gets even further aggravated mostly due to mold preheating before every ingot production cycle. Based on the different scenarios analyzed, the recommendations listed herein were simulated and proven computationally to result in an improved performance: i) introducing a set of diffusers and flaps at the fans exit and inlet windows respectively, ii) closing the horizontal walk way grills, iii) introducing reinforcement bands on the molds, iv) introducing a uniform mold preheating mechanism, and v) replacing the current single taper design for a to taper one.

Sustainability Rating System for Infrastructure Projects in the UAE using Weighted Indicator Scoring

Dr. Rabee Rustum & Amrutha Venugopal Heriot-Watt University Dubai

In spite of huge investments and the vital role infrastructure plays in the economy of the UAE, the country has not yet developed an assessment scheme to measure the sustainability of infrastructure projects/development. We developed a sustainability rating system for infrastructure projects in the UAE using weighted indicator scoring. The identification of the list of 65 indicators was done by content analysis. The sources of content analysis were from government guidelines, research literature and sustainability rating system for infrastructure projects namely BCA Greenmark for Infrastructure (Singapore), ISCA (Australia) and Envision (USA).

These indicators were shortlisted based on their relevance in the UAE. Interviews

and surveys were conducted with a good mix of experts from the industry. The data collected from the interviews were collated to provide suggestive measures for improving infrastructure sustainability. The collected survey data were analysed using statistical analysis techniques to find the indicator weighing. The weighing of the deleted indicators was distributed among the critical clusters identified by Pareto analysis. Finally, a simple mathematical tool was developed as the rating tool by using the calculated weighing for the indicators. Environment is given the highest importance with a weighing of %59. Technical, Social and Economic sharing almost equal weighing of 9,%11,%10 % respectively.

Percentage Weighing of Pillars

Percentage weighing of the pillars after short listing indicators

Ramadan and Tourism Studies – Mapping the Unexplored Connection

Dr. UmmeSalma Mujtaba Husein Assistant Professor, School of Management and Languages Heriot Watt University Dubai Campus u.mujtaba@hw.ac.uk

This article unfolds a clear opportunity that lies ahead of the Event Tourism sector in the United Arab Emirates (UAE), as it gears to embrace the spiritual month of Ramadan every year. There is a deep rooted connection between pilgrimage and tourism studies that the author explores via the month of fasting for Muslims: Ramadan. Currently the theoretical and practical perspectives of Islamic tourism are fixated on conventional pilgrimage that involves physical travel. Nevertheless the aim of this conventional pilgrimage is to visit the inner self and develop' Taqwa' (piety/self-restraint). Interestingly, the ninth month of the lunar calendar offers the same OPPORTUNITY. The seasonal observance of Ramadan is an annual observation that allows equal opportunity to one and all to change the monotonous routine, opening a door to the mystical realm

of the spirit. Ramadan is instated so that Muslims may attain 'Taqwa' via fasting. It is the month of social cohesiveness, the common observance shared by rich and poor like offers the opportunity of social cohesion within the Islamic community ('umma'), leading to scores of further community benefits that Islam sought to achieve through its call on the betterment of society of family bonding and helping the needy and poor. The author explicates the association by bringing the case of UAE that offers a cultural and spiritual environment to facilitate this inner voyage, via community events. This discussion leads to a major chapter within tourism sector: 'Event tourism'. Presently, events like the Dubai International Holy Quran Award (DIHQA), the Sharjah Ramadan Festival, Dubai Ramadan Forum, Ramadan Tents and the Ramadan Night Market align with the inner journey by engaging the community and increasing social awareness. The paper can be seen as an attempt to improvise and develop the operations and social profitability of the Ramadan events. From an academic perspective, the paper provides an emancipated and expanded view of the prevalent definitions of Islamic tourism.

Learning from the Adoption of MOOCs in Two International Branch Campuses in the UAE

Carrie Amani Annabi and Marlene Muller School of Management and Languages, Heriot-Watt University Dubai c.annabi@hw.ac.uk

The UAE government's 2021 Vision incorporates smart learning and technology as a means of harnessing human capital to develop society that is knowledgebased and able to tackle global competition. The Ministry of Higher Education and Scientific Research supports the Vision 2021's principles of innovation and a culture of creativity by balancing curriculum with employment demands. This study looks at how lecturing faculty within two international branch campuses (IBCs) in the UAE regard Massive Open Online Courses (MOOCs) and their opportunity to be used within the curriculum.

This qualitative research assessed 20 lecturers' perceptions of whether MOOCs are seen as innovative learning platforms within IBCs, given that MOOCs offer

virtual global education. Rogers' Diffusion of Innovation (DoI) theory suggested that successful diffusion originates from developed social systems; hence, the theory is used to explore MOOC adoption process. Results indicated that MOOCs were viewed as innovative; however, adoption amongst lecturers is low. This study contributes to research by asking how lecturers in the UAE can address the national needs of technology-driven students within current internationalized higher education.

The abstract can be accessed on: http://journals.sagepub.com/doi/abs/1028315315622023/10.1177

4 Key Elements	5 Characteristics of Innovation	5 Stages of Adoption
Innovation	Relative Advantage	Awareness
Communication Channels	Compatibility	Interest
Time	Complexity	Evaluation
Social System	Observability	Trial
	Trial-ability	Adoption

Source: Authors adaptation of Rogers Diffusion of Innovation Theory (1962, 1975, 1983, 1995, 2003)

Design of Spur Gears Using Profile Modification

Sachidananda, H. K., Raghunandana, K. and Joseph, Gonsalvis School of Engineering & Information Technology, Manipal University Dubai, Dubai, UAE sachidananda@manipaldubai.com

Abstract

In this work profile modification technique was used in the design of spur gears. In this technique the toothsum is varied to obtain the desired contrast ratio and low contact stress for a specified center distance. A program has been developed by using C language to compute the contact stresses by varying the amount of profile shift for a tooth-sum of 100 teeth (\pm 4%). The selected tooth-sum of 96, 100 and 104 gears was subjected to cyclic loading using a back-to-back test rig. The morphology of damaged gear tooth surface after cyclic loading was examined by using scanning electron microscope. The morphological investigation reveals that the degree of damage observed in negative numbers of tooth alteration is less compared to standard and positive alteration tooth-sum due to lower contact stress.

This work is collaborated with St. Joseph Engineering College, Mangalore, India and published in journal Tribology Transactions, Society of Tribologists and Lubrication Engineers; 58: 736-744 (2015).

News & Events

UAE Drones for Good Awards

Aerospace Engineering Student at Amity University Dubai in the Semifinals

UAE is an upcoming aerospace hub with its numerous attempts to succeed in the field. A classic example of an aerospace initiative is "The UAE Drones for Good Award" which supports ideas that explore drone technology. The award aims to transform innovative technologies linked to civilian drones and produce solutions that will improve people's The competition paved way for 664 submissions from 121 countries. The judges evaluated live demonstrations from ten teams that were qualified for the semi-finals of the national competitions. Mr. Ishaq AI Hashmi, a student of the final year Aerospace Engineering at Amity University is one of the semifinalists of the prestigious "UAE Drones for Good Award". His idea is qualified for the national level.

Mr. Ishaq AI Hashmi along with his other team members is a part of the project called "See in Sea". The project highlights the aspect of a fully autonomous drone, which will fly above the sea and pass through certain points with the GPS (Global Positioning System). The targeted areas will be close places to factories and waste management companies where the percentage of oil impairment is very high. The central idea for the realization of the project "See the Sea" lies in the importance of the sea to the UAE. The sea is the major source of electricity, water and food. Thus, any amount of pollution will affect the population to a great extent. The drone constructed by the team works by capturing images using a ultra high-quality camera attached to the body of the drone. The images are stored in a separate file which are examined by a computer using an algorithm that breaks the stored images into RGB level bands. An experimental trial proved that the mechanism of computer analysis to be highly efficient. Six different samples have been tested. An outstanding result has been achieved as the camera reported a detection of a sea impairment every two seconds. A further development of the camera could be the adding of night vision sensors.

The drone's onboard application reports for daily, monthly or annual inspections in order to evaluate the situation of the sea and to find the areas where oil is present. The flight of the drone is absolutely safe as it operates above the sea and far away from human beings. The safety of the drone while flying is additionally ensured through a proper communication with the U.A.E GCAA with a designated altitude and pathway which avoids other flight objects to cross the same altitude level.

Agile Project Management Conference Organised by HWU - Dubai in partnership with Agile ME

On March 19th 2016, the Lean and Agile Middle East Summit 2016, the second annual conference organized by the Lean and Agile Middle East (Agile ME) and Heriot-Watt University Dubai Campus (HWUD), welcomed over 100 attendees from 17 counties at the Hilton Dubai Jumeirah Resort, Dubai including developers, project Managers and other IT professionals interested in Lean and Agile project management. World Lean and Agile

ME Summit 2016 was a one-day event that gathered experts, practitioners and innovators to share experiences, expertise, enthusiasm and knowledge. Dr. Hind Zantout and Mr. Talal Shaikh (MACS), Dr. Taha El-Hag (EGIS) and Dr Maged Youssef (STD) Dubai Campus attended the conference and participated in the workshops.

At the start Dr. Mohamed Salama (SML- HWUD) and Mirza Asfaar Baig on behalf of Lean and Agile ME delivered a welcome speech.

Dr. Mohamed Salama (SML) chaired a debate session about closing the gap between academia and practice.

European Patent Granted in the field of Orthopaedic Implants

A European patent has been granted on the basis of novel coatings for use in biomedical implants invented by Dr Rehan Ahmed and his colleague at Heriot-Watt University. This patent (EP2435602; https://register.epo.org/ application?number=EP10725491&Ing=en&tab=main) which was granted by the European Patent office in March 2016 is aimed at increasing the longevity of orthopedic and dental implants with a view to reduce implant rejection and inflammation.

These aspects are critical in improving the quality of human life. The concepts behind this patent have already led to the formation of a company (Taragenyx;

http://taragenyx.com/about-us/) registered in Scotland. This is a multibillion dollar industry and is thriving to embody new innovative ideas to enhance implant life.

This technology offers a notable platform for the delivery of a range of drugs and biologic therapies within the implant coatings themselves – specifically at the location of the implant. Hence, reducing recovery times and better pain management.

Middlesex Unversity Research Boot Camp

The goal of the MDX summer 'research boot camp' was to provide faculty with the support needed to carry out a research study (individually or collaboratively) culminating with a completed research paper at the end of the program, and pending acceptance, presentation at our 3rd International ERPBSS conference. Going beyond a single staff development workshop, the boot camp provided an ongoing series of workshops meant to guide participants through the research process from start to finish. Boot

camp sessions consecutively built upon each other, and mirrored the stages of the research process, from identification of a research question, through reviewing the literature, collection and analysis of data, through to write-up and publication of findings. The summer boot camp sessions were coordinated by members of the research committee, Dr. Cody Paris, Professor Ajit Karnik, Dr. Fehmida Hussain and Dr. Lynda Hyland.

Dr. Cody Paris is among the most read in the Taylor and Francis group of "Geography, Planning, and Urban Studies" journals

An article co-authored by Middlesex University Deputy Director, Dr. Cody Morris Paris, "Social Affordances of Flashpacking: Mobility Nexus of Travel and Communication" published in the journal Mobilities, was one of the "Most Read of 2015" in Taylor and Francis "Geography, Planning, and Urban Studies"

Journals: http://explore.tandfonline.com/page/pgas/most-read-2015/ social-sciences/geography-planning-and-urban-studies

Middlesex University Students Conduct Research Fieldwork in Rome

Fifteen second year MDX students travelled to Rome, Italy, as part of their "Researching Peoples and Places" module for the BA Honours International Tourism Management programme. The modules main focus is to develop student's knowledge and skills in the collection and analysis of quantitative and

qualitative data. This year's group focused on a range of interesting research questions around the topics of Sustainable Tourism, Urban Tourism, Heritage and Culture.

Dr. Cody Morris Paris, Associate Professor and Deputy Director of Middlesex University Dubai, noted that "there is no better way for students to develop genuine abilities to carry out and understand research than to actually do it in a real world setting. This trip to Rome allowed students to actually collect data through participant observation, interview, and survey methods, as well as deal with the limitations, challenges, ethical considerations and other practicalities."

Rachel Simmons one of the students that joined the Rome trip said: "The experience of being in the field and partaking in research in the real setting was exciting and not easily forgettable. To have this field trip as part of the course is highly beneficial for us students".

The international fieldwork programme has been running at Middlesex University Dubai for second year students, including past visits to Ghana and Singapore, and is led by Dr. Cody Morris Paris, who has also previously led and developed international study and fieldwork programmes to Australia, Fiji, Dubai, Austria, Holland, and the Caribbean, and Ms Lulu Baddar, who has also previously led MDX students to Malaysia, London, Istanbul, and Hong Kong.

Middlesex University Dubai: 4th annual TTRA (Asia Pacific Chapter) conference

From December 2nd to 4th 2016, Middlesex University Dubai hosted the 4th annual Travel and Tourism Research Association (TTRA) Asia Pacific Chapter conference around the theme of "Pushing the Boundaries: Driving Tourism Innovation and Creativity through Research". Organised by Dr. Cody Morris Paris, a long-time member of the TTRA International association, this conference built upon the success of previous TTRA conferences in Japan, Melbourne, and Kuala Lumpur.

Travel & Tourism Research Association Asia-Pacific Chapter

An excellent range of speakers (including the Middlesex University Dubai 2016 honorary doctorate recipient, Mr. Gerald Lawless) discussed issues across a range of topical issues in travel and tourism.

At the conference there were nearly 50 participants from all over the world. Delegates travelled to Dubai from New Zealand, Australia, China, HK, Taiwan, Japan, Seychelles, Italy, Oman, UK, Spain, Iran, Ireland, US, and Jamaica. In total there were about 40 academic papers presented at the conference. Dr. Morris Paris will be organizing 3 special issue journal volumes from these papers in the e-Review of Tourism Research and Tourism Review International.

Dr. Cody Morris Paris appointed to Editorial Board of new journal Applied Mobilities

Dr. Cody Morris Paris has been appointed to the Editorial Board of the cutting edge new journal Applied Mobilities, published by Routledge/Taylor & Francis. Applied Mobilities bridges theoretically ambitious research with applied research and practice-oriented perspectives in mobilities. It focuses on planning, design, technology and culture as a way of fostering an applied outlet for research within mobilities. The journal supports the mobilities turn within social theory and planning practice and the transition of mobility systems towards sustainability. The journal publishes critical and innovative policy-oriented and also applied perspectives to increase the impact of research for the re-thinking of mobilities and developing political and societal strategies and discourses to handle the social, ecological and economic consequences of diverse mobilities on societies.

Middlesex University Dubai faculty Guest-edit a Special Issue of the International Journal of Business and Globalisation

Dr. Alun Epps, Professor Ajit Karnik, and Dr. Cody Morris Paris have recently guest-edited a special issue of a leading international business journal - International Journal of Business and Globalisation (Vol. 16 No. 2). The guest editors selected theme-based quality articles from the 2nd ERPBSS conference (2013) and published them in this special issue. This issue incorporates a range of conceptual and empirical papers, written on a range of topics related to foreign direct investment (FDI), cloud computing in banks, marketing higher education, culture, influence and workplace behaviour as well as financial performance in banks. All papers in this special issue contribute to the development of business management practice in the Middle East.

News & Events

Child Development and Infant Mental Health: Promoting Parental Intelligence

On Thursday April 14th, 2016 the Education Department of Middlesex University Dubai, in partnership with Siena Advisory, held a symposium on Child Development and Infant Mental Health. The event was supported generously by the Al Qasimi Foundation, Ras al Khaimah, allowing the workshop to be facilitated by practitioners from the Emirates, as well clinical specialists from the UK. Dr. Hussain

Dr. Kay Sanderson, Dr. Ken McFayden, Dr. Stefan Peart, Dr. Bryn Williams, Dr. Joshua Carritt-Baker, Ms. Glenys Henry and Mr. Douglas Russell.

Maseeh, Consultant Clinical Psychologist and Director of Social Affairs at Dubai CDA, was joined by Dr. Bryn Williams, Dr. Stefan Peart, Dr. Joshua Carritt-Baker and Dr. Ken MacFadyen, practicing Clinical Psychologists from the UK in order to share knowledge, experience and evidence about young children, families and parenting, to promote and support best practice for those living and working in the UAE and the Gulf. Workshops the following Saturday were well attended and included role play activities related to Theraplay to support young children who may be exhibiting atypical behaviour as a result of attachment issues as well as a discussion and video analysis of how professionals can work with parents to support child development. The event was highly successful in bringing together like minded individuals, who are eager to ensure that children across the Emirates have the best opportunities straight from birth to develop into cognitively, emotionally and socially competent individuals. The Education faculty, Dr. Kay Sanderson, Mr. Douglas Russell and Ms. Glenys Henry would like to extend their thanks to all involved for developing and supporting the event, and to the participants for their input over the two days.

Dr Evangelos Moustakas appointed Research Evaluator for United Nations Habitat programme in the Kingdom of Saudi Arabia

Dr Evangelos Moustajas, Associate Professor in Digital Marketing at Middlesex University in Dubai, was appointed Research Evaluator for UN-Habitat programme in Saudi Arabia. More specifically, United Nations in collaboration with the King Salman Center for Local Governance will work together and conduct social media research on women and youth urban concerns in Saudi Arabia. The aim of the research is to identify the top needs of women and youth within the country. Topics are related to accessibility (this include transportation and traffic), unemployment and availability of jobs, availability of proper housing, open space/public space, and Youth Councils. UN-Habitat is the United Nations programme working towards a better urban future. Its mission is to promote socially and environmentally sustainable human settlements development and the achievement of adequate shelter for all. Cities are facing unprecedented demographic, environmental, economic, social and spatial challenges. There has been a phenomenal shift towards urbanization, with 6 out of every 10 people in the world expected to reside

in urban areas by 2030. Over 90 per cent of this growth will take place in Africa, Asia, Latin America, and the Caribbean. In the absence of effective urban planning, the consequences of this rapid urbanization will be dramatic.

Middlesex

University Dubai

Dr. Cody Morris Paris, Middlesex University Dubai, elected to the board of Travel and Tourism Research Associations -Asia Pacific Chapter

In December 2015, Dr. Cody Morris Paris, Deputy Director of Middlesex University Dubai, was elected to the Board of the Travel & Tourism Research Association's Asia Pacific chapter at the annual meeting in Tokyo, Japan.

Founded in 1970, the Travel and Tourism Research Association (TTRA) is a non-profit association whose purpose is to enhance the quality, value, effectiveness and use of research in travel marketing, planning and development. The Association strives to be a leader for the global community of practitioners and educators engaged in research, information management and marketing in the travel, tourism and hospitality industries. TTRA creates business opportunities for our members and provides a unique multi-sector industry network.

The TTRA Asia Pacific Chapter was is made up of in travel and tourism research academics and professionals from Australia and New Zealand through the Pacific nations, Asia, India and parts of the Middle East. The chapter welcomes members from the region, as well as those from other parts of the world interested in tourism research in this region.

Prestigious American Society of Microbiology (ASM) Recognized Manipal University Dubai Campus as Student International Chapter

The prestigious American Society Of Microbiology (ASM) recognized School of Life Sciences, Manipal University Dubai Campus as an International Chapter. The inauguration ceremony was organized by the School of Life Sciences, Manipal University, Dubai by Dr H. Vinod Bhat, Vice Chancellor, Manipal University, India on 11th January, 2016.

Research Networking Event Evidence Based Practice: Adding Spice to our Work Life

Dr. Anita Shrivastava Kashi Department of Psychology, Middlesex University, Dubai

Ms. Bianca Bertl Department of Psychology, Middlesex University, Dubai

The first Psychology Research Networking Event "Evidence Based Practice: Adding Spice to our Work Life" organized by Department of Psychology, held on 12th December 2015, was a great success. The

event was actively attended by approximately 30 participants. The event involved a panel discussion on the status of psychology research in the UAE. The panel discussion was then followed by two interesting presentations from our Psychology Department; "Converting an idea into publishable work" by Dr. Anita and Ms. Bianca and "Research at Middlesex, psychology students' research, and research collaboration" by Dr. Lynda,

Mr. Douglas and Dr. Eleni. The external participants represented an excellent balance between practitioners and academics, including professionals from UAE University AI Ain, Human Relations

> Institute, and The Lighthouse Arabia. The event, specifically the panel discussion, resulted in the identification of a few needed areas of research, challenges to research psychology, and strategies to overcome these.

The event facilitated networking with fellow psychology professionals and hope it might be beneficial for upcoming psychology conference.

Dr. Cody Morris Paris Keynotes the Annual PhD Workshop at the ENTER 2016 eTourism Conference in Bilbao, Spain

Dr Cody Morris Paris, Deputy Director of Middlesex University Dubai, was recently invited to give a keynote talk at the PhD Workshop of the ENTER 2016 @Bilbao-Spain Conference. Organized by the International Federation for Information Technology and Travel & Tourism (IFITT), the 23rd Annual ENTER conference theme was "eTourism: Empowering Places". The ENTER PhD Workshop is a forum within the annual conference that provides doctoral students undertaking research related to Information and Communication Technology in Travel and Tourism to interactively discuss their research with peers, colleagues, and leading supervisors/scholars in the field.

During the ENTER 2016 PhD Workshop, Dr. Cody Morris Paris gave a keynote titled "Surviving and Thriving during your early academic career," which outlined some key recommendations to for early career academics. The keynote was well received, and complemented the other two eminent keynote

speakers, Professor Ulrike Gretzel "Experimenting in/with Tourism Research" (University of Queensland Australia) and Iis Tussyadiah "Research Trends in eTourism" (Washington State University).

4th United Arab Emirates Undergraduate Student Research Competition (UGSRC)

AE students qualify for the final stage under the supervision of Dr Harpreet Seth

Under the patronage of H.E. Sheikh Hamdan Bin Mubarak Al Nahyan, Minister of Higher Education and Scientific Research, and with the sponsorship of Abu Dhabi Education Council (ADEC), Abu Dhabi University has welcomed visitors to the Fourth Undergraduate Research Competition which was held at Abu Dhabi University, on May 17, 2016. This competition aimed to encourage universities in the UAE to promote scientific research among undergraduate students making it an integral part of university education. It also aimed to instill life-long learning, and to enhance career opportunities for young people as well as foster positive attitudes in education, research, and innovation. The upcoming competition is directly supported by the UAE government's drive toward fostering innovation. The competition, over its short life span, has witnessed an impressive growth in attracting undergraduate students from all over the UAE. The substantial and steady increase in the number of submissions and attendees is an important indicator that the competition has already become the premier and the largest national event of its kind that targets undergraduate students from across all universities

in the UAE and all major disciplines. Heriot Watt students' participation in this competition is an excellent opportunity to interact with some of the country's best new minds, as the leading student researchers from other universities around the UAE will also attend and participate in the competition. Monetary prizes amounting up to a total of more than AED 100,000 will be distributed among winning teams. This year, the participation rose to 230 teams which were competing in 16 different domains from 30 major universities in the UAE. Fourth Year Architectural Engineering students at Heriot Watt Dubai students (4th Year AE students) have been qualified for the final stage that was held on May 9, 2016 at Abu Dhabi University, Khalifa City Campus. Approaches to achieving eco-campuses in UAE through ecological retrofitting Neha Mumtaz Affordable Housing Using Recyclable Materials (such as shipping containers) in Nigeria Abduljalal

For more information visit the website: http://www.adu.ac.ae/ugsrc.html or contact on: ugsrc@adu.ac.ae

Manipal University Dubai Campus Organized a Research Workshop For Faculty and Staff Members

The Manipal University Dubai Campus has organized its 2nd Workshop on the research on the 6th January 2016. Topics like Research@Manipal University Dubai Campus by Dr. S.V. Kota Reddy were discussed. The

workshop began with Research outcome by Dr. Firdos Alam Khan; Research Methodology, followed by Formulating a Research Idea by Dr. Ravishankar Dudhe and Research Methodology. Other sessions were Research Data Analysis & Statistics by Dr. Jason Fitzsimmons and Quality Parameters in the Research Publications by Dr. Firdos Alam Khan. Mr. Nevin Jacob Kosh, Head of Patent Department, United Trademark & Patent Services in Dubai (UAE) attended and delivered the lectures.

51

Centre of Excellence for Research at Heriot-Watt University Dubai Campus

Dr Rehan Ahmed, Associate Director of Research, School of EPS-Dubai, Heriot-Watt University

Scottish Development International (SDI) and Heriot-Watt University (HWU) organised a workshop at its Dubai Campus in June 2016 with a view to establishing a Centre of Excellence to promote research and entrepreneurship.

The workshop was attended by HWU staff, senior Scottish representatives of multinational companies based in the UAE and also the "Global Scots". The workshop aimed to exchange and share intelligence on how HWU and SDI intend to utilise the skills and resources within both organisations to benefit Scottish companies and promote global research engagement. The exchange of ideas in the workshop successfully identified potential areas of research which HWU and SDI can develop, keeping in view the UAE's ambitions of a knowledge-based economy. A follow-up meeting with specific targets for the Centre of Excellence will be held in September 2016.

"It was interesting to note that although disruptive technologies are critical to the transformation and continuous development of UAE's society, research in our understanding of human-machine intervention such as big data and our socio-economic footprint is equally critical in ensuring a direct impact of our research to the society," said Dr Rehan Ahmed who attended the workshop.

Prof Ammar Kaka, Head of Dubai Campus of Heriot-Watt University added "Today's workshop and the goals outlined during this meeting are tangible steps in the right direction as far as research in the UAE is concerned. It is fundamental that the committee prioritises its goals and we are happy that we are already starting to bear the fruit of these endeavours."

"The workshop demonstrated the value of bringing people together from across sectors. Discussion around global challenges such as water and food security, health, data and security reflected the requirement for interdisciplinary and cross-sectoral approaches. This shifted thinking from single areas of research to factors such as innovation and sustainability; quality and safety management; integration of knowledge, data and smart sensors." Ruth Moir, Assistant Principal International at Heriot-Watt University.

Ruth Moir Assistant Principal (International Development) at Heriot-Watt University (left) in discussion with Simon Mycock from Scottish Development International Middle East team, a delegate (right) at the workshop

Qatar-UK Researcher Networking Program: Entrepreneurship 2020: Workshop on Entrepreneurship, Diversity and Leadership

Professor Nicolina Kamenou-Aigbekaen Associate Director of Research, School of Management and Languages, Heriot-Watt University, Dubai N.Kamenou-Aigbekaen@hw.ac.uk

Heriot-Watt University partnered with HEC Paris in Qatar to jointly deliver a workshop funded by the Qatar National Research Fund (QNRF) and the British Council under the Qatar-UK Researcher Networking Program. The workshop engaged early career researchers from Qatar and UK based institutions with interest in the areas of entrepreneurship, diversity and leadership. A key outcome of the workshop was to foster further research collaborations between UK and Qatari-based academics.

The four Professors that organized and delivered the workshop included Professor Nicolina Kamenou-Aigbekaen (Heriot-Watt University, Dubai campus), Professor Laura Galloway (Heriot-Watt University, Edinburgh campus), Professor Wolfgang Amann (HEC Paris in Qatar), and Professor Marios Katsioloudes (Qatar University).

Highlights of Student & Staff Achievements

Hult's MIB Students Work on an International Project

Mélanie Garcia and Olivia Byrd Master's in International Business candidates at Hult International Business School, Dubai.

These two elite students performed research for a global company based in San Francisco, CA. The global project involved collaboration with teams from each of the Hult campuses, and each team covered a specific region that the company wants to enter. This project consists largely of market feasibility and market entry assessments within the hotel apartment industry. The two students have performed one-onone interviews with high level industry experts across different firms as well as visited different apartments and approached various regional competitors. Mélanie and Olivia are also meeting with current serviced apartment residents to better understand their accommodation choice, the benefits of living in such accommodation, as well as their pain points. The data collected, in audio or video format, represents precious sources of information to learn more about current and potential customers and build a strategy around their needs.

The project was coordinated by a team of two students based

in San Francisco who had the difficult task to effectively communicate with teams around the globe. A global call designed to define clear objectives and tasks was set up every week and Skype calls were organized at the request of each team who needed individual assistance. Additionally, the project was supervised by different members of Hult professorial staff.

Middlesex University Dubai Student Wins Multiple Awards for her UG Dissertation Research

Jennifer Osayawe Atu recently completed her BA (Hons) in International Development at Middlesex University Dubai. Her final year dissertation, titled The role of globalization, information and risk perception on global health security: a case study of Ebola, was supervised by Dr. Cody Morris Paris and Dr Belisa Marochi.

Jennifer presented her research at the Third United Arab Emirates Undergraduate Student Research Competition (UGSRC – 2015) at Abu Dhabi University, where it was awarded First Place in the social science category.

Jennifer's dissertation was also awarded the Geoffrey Gullett Memorial Prize as the Best undergraduate dissertation at Middlesex University (all campuses) in International Development or Geographical related subject. To recognize these awards, Jennifer was selected to give the Valedictorian speech at Middlesex University Dubai's graduation ceremonies in November 2015.

Celebrating Student Research at Middlesex University Dubai: Fifth Annual Student Research Symposium

The 5th Annual Student Research Symposium was held on Sunday November 13th in the LGS, Block 4. This annual event provides undergraduate and postgraduate students a forum to share their research findings with an audience of their peers, university staff, and family members. Each presenter discussed their work with the audience, expertly answering questions, and the displayed posters were of very high quality. All presenters were give participation certificates in recognition of the quality of their research, and 'Best Poster' awards were given to the top undergraduate and postgraduate presentations based on feedback from the judging panels. The two undergraduate winners were:

• Ruby Shaniah Oayda, supervised by Tenia Kyriazi "The European Court of Human Rights: Bans on the wearing of religious attire in schools, the workplace and the public sphere"

• Isabel Giannina Feldbauer, supervised by Cody Paris "Investigating tourist's perceptions, attitudes and behaviour towards sustainable development and preservation of the World Heritage Site: The Historic Centre of Rome"

The postgraduate award went to:

• Teneille Saayman, supervised by Muneeza Shoaib "The impact of celebrity scandals on brand image. The rise and fall of sports hero Lance Armstrong: A theoretical and empirical investigation"

Student	Programme	Supervisor	Title
Lakshmi Nair	MBA (Business Excellence)	Mohammad Meraj	Work-life Integration and 'Leaveism' - a study of workplace practices in business excellence award winning organisations in the UAE
Khizar Jave Khattak	MA Marketing Communications	Cody Paris	Effects of Political Campaign advertisements on the destination brand of the USA: A look at Obama and Trump
Teneille Saayman	MA Marketing Communications	Muneeza Shoaib	The impact of celebrity scandals on brand image. The rise and fall of sports hero Lance Armstrong: A theoretical and empirical investigation
Student	Programme	Supervisor	Title
Anna Soboleva	Journalism and Communication Studies	Eve Stubbs	The Differences in Representing Gender and Sexuality in Cosmopolitan Magazine in Various Cultures
Aysha Siddiqua and Ruth Jacob	Psychology	Anita Kashi	"Alhamdulillah, we are still having our culture": A qualitative study among Emiratis in Dubai
Anna Maria Wojcieszek	Psychology	Lynda Hyland	Social media overuse: From gratifications to "addiction". An exploration using Interpretative Phenomenological Analysis
Alia Mohamed Wasfi El- Abiary	LLB	Tenia Kyriazi	Assisted suicide and Voluntary Euthanasia in the UK courts and the European Court of Human Rights
Ruby Shaniah Oayda	LLB	Tenia Kyriazi	The European Court of Human Rights: Bans on the wearing of religious attire in schools, the workplace and the public sphere
Rachel Bianca Simmons	International Tourism Management	Cody Paris	Generation Y's tourist gaze on Rome's cultural destination image
Ujala Tariq	International Tourism Management	Cody Paris	Destination image differences between first-time and return- visitors to Rome
Hamna Ashraf	International Tourism Management	Cody Paris	An analysis of the 'pull factors', used by restaurants, as a motivational factor amongst the urban tourists to try Italian Cuisine
Isabel Giannina Feldbauer	International Tourism Management	Cody Paris	Investigating tourist's perceptions, attitudes and behaviour towards sustainable development and preservation of the World Heritage Site: The Historic Centre of Rome
Cezalyn Gomba	International Tourism Management	Cody Paris	Brand Management of Dubai with relation to Dubai Expo 2020, and the Perception of Tourists towards both
Aysha Haniya Hashim	International Tourism Management	Cody Paris	The Popularity For Authentic Local Culinary in building Rome's Destination Image

Participants in the 5th Annual Student Research Symposium

Text Book Finds International Recognition

The engineering text-book "Communication Theory" published by McGraw-Hill which has been co-authored by Prof. T. G. Thomas of BITS Pilani, Dubai Campus has found international recognition. It is currently being used either as a textbook or as reference book by various universities like Hong Kong Polytechnic University (PolyU); University of Delhi; Kanpur University; Alagappa University; and so on. Incidentally, PolyU is one of Asia's top universities (116th in QS World University ranking 2015/16).

A search of the internet shows that copies of the book are available in university libraries across countries like Indonesia, Malaysia, Thailand, etc. **Author contact details: thomas@dubai.bits-pilani.ac.in**

Outstanding Reviewer Award to Dr Srinivasa Rao

Dr. Srinivasa Rao reviewed 14 papers for the 60th ICSB (International Conference on Small Businesses) Conference, held during June 6-9, 2015 in Dubai, organized by U.A.E. University. He has been awarded as an Outstanding Reviewer and also Session Chair during the Conference. Dr Rao can be contacted at **drsrinivas@dubai.bits-pilani.ac.in**

Heriot-Watt University Dubai Campus Student, Amrutha Venugopal, won second place at the Emerging Engineer Awards from the Institution of Civil Engineers (ICE) UAE

The Emerging Engineers Award is an opportunity for ICE students to present their research and innovative work. The award promotes and rewards outstanding communication of civil engineering research and best practice in projects and design. Amrutha was awarded a prize for her paper entitled "Sustainability Rating System for Infrastructure Projects in the UAE". The paper was based on her MSc dissertation which was developed under the guidance of Dr. Rabee Rustum, Program Coordinator of Civil Engineering and Construction Management.

Amrutha has completed her MSc in Civil Engineering and Construction Management with distinction and is currently working at Atkins in Utilities.

IMechE student chapter in the UAE -The first student chapter launched at Heriot-Watt University Dubai Campus

The IMechE (Institution of Mechanical Engineers) student chapter at the Heriot-Watt University Dubai Campus, the first in the UAE, was launched on 12th of January 2016 with the well anticipated visit of Professor Richard Folkson, President of IMechE and Mr. Tom Owen, IMechE International Business development manager. The student chapter committee members along with the Academic Liaison Officer, Dr. Mehdi Nazarinia, Associate Head of School, Dr. Peter Kew and Vice principal, Professor Ammar Kaka had the opportunity to meet with Richard Folkson and Tom Owen for the official launch of the chapter. As part of the student chapter first activity, seven students from the School of Engineering

& Physical Sciences at Heriot-Watt University participated in a "Speak Out for Engineering" competition where Mr Branden Mabon and Mr Nickshan Cooray, Mechanical Engineering BEng student and Alumni respectively, won the first and runner up prizes.

https://www.facebook.com/IMechEHWUDC

BITS Pilani, Dubai Campus Wins 2016 CFA Institute Research Challenge in UAE

The BITS Pilani, Dubai Campus team represented by Rashi Mohnot, Apoorva Singh and Mathew Abraham, mentored by faculty advisor Pushkala Muralidharan, won the UAE Finals of the CFA (Chartered Financial Analyst) Institute Research Challenge. They represent UAE in the Regional and Global finals in Chicago, Illinois, USA. The team researched and analyzed the financial performance of Aramex to produce comprehensive written equity research reports recommending a 'Buy' decision of their stocks. A presentation of research findings was followed by Q&A session, judged by investment banking experts. With the growth of UAE financial markets, this competition presented an opportunity to university students to assume the role of investment research analysts, objective being honing of research skills among the next generation of investment analysts.

pushkala@dubai.bits-pilani.ac.in rashimohnot@gmail.com apoorvsingh@rocketmail.com matthew1494@gmail.com Best Student Research Paper Award at the International Conference On Biotechnology And Bio Engineering - 2014 (ICBB 2014)

Ms. Sristhi Singh received the best oral presentation award at the International Conference On Biotechnology And Bioengineering-2014 (ICBB 2014), 29-30th October 2014, Dubai, UAE for her paper entitled "Biomarkers: A Novel Approach In Diagnosis Of Cardiovascular Diseases". The coauthors of the paper are Anyaa Mittal, Neeru Sood **Contact details: srishti22@yahoo.co.in**

Best Student Research Poster Award at the International Conference On Biotechnology And Bioengineering-2014 (ICBB 2014)

Ms. Nirupama Dixit received the best poster presentation award at the International Conference On Biotechnology And Bioengineering-2014 (ICBB 2014), 29-30th October 2014, Dubai, UAE, for her poster entitled "Nanoparticles In Drug Delivery And Therapy Of Alzeheimer's Disease". The coauthors of the paper are Anyaa Mittal, Neeru Sood,

Trupti Gokhale, KK Singh The ICBB 2014 conference included more than 82

delegates from UAE, India, UK, Sri Lanka and Bangladesh

who presented their work at the conference. The spectrum of topics included agricultural biotechnology, food biotechnology, cell and tissue engineering, industrial biotechnology, pharmaceutical biotechnology, medical biotechnology, Bio-MEMS and many more **Contact details: nirupama94@gmail.com**

BITS Pilani, Dubai Campus recipient of Emirates Energy Award 2015

In November 2015, BITS Pilani, Dubai Campus won the Emirates Energy Award in the Education and Capacity category. This award was for educational and awareness methods and schemes with employed practices which resulted in measurable behavioural change towards energy conservation and demand reduction measures. There were 112 applications from 12 countries for the 10 categories in this second edition of the award. The award, organised under the patronage of His Highness Sheikh Mohammed Bin Rashil Al Maktoum, Vice President and Prime Minister of the United Arab Emirates, is awarded once every two years. The award was presented by His Highness Ahmed Bin Saeed Al Maktoum, Chairman- Dubai Supreme Council of Energy, Government of Dubai, in a special ceremony and attended by dignitaries from the government of Dubai, industry and academia. The Dubai Campus has also been the recipient of the Conservation-For-A-Better-Tomorrow Award by Dubai Electricity and Water Authority (DEWA) in 2009 and 2012 as well as the Best Student Conservation Team in 2015.

Madhumitha Kedhari Won The Research Scholarship by Dunia Finance

Ms. Madhumitha Kedhari, a PhD student of the School of Life Sciences who has been awarded the "Dunia Young Leaders Scholarship Award" initiated by Dunia Finance, UAE on November 4th, 2015.. She was amongst the 20 students who received an amount of AED 20,000 as the Scholarship award. The Dunia Young Leaders Scholarship program was launched to identify and reward the future research leaders. Ms Madhimitha is doing her doctoral work under supervision of Dr Arif Hussain, co-supervision of Dr Zeeshan Ansari and Dr Firdos Alam Khan.

RTA Best Student Project Award: Ultrasonic Sensor Based System Design for Maintaining Safety Distance Between Vehicles

A research project by the Team of Manipal University Dubai Campus won the Best Student Project Award at the 8th edition of the Dubai Award for Sustainable Transport (DAST) held at the Dubai World Trade Center on 16th February 2016, under Transport safety category. This award was presented by His Highness Sheikh Ahmed bin Saeed Al Maktoum, President of Dubai Civil Aviation Authority (DCAA), Chairman of Dubai Airports and Chairman and Chief Executive of Emirates Airline and Group. This research project was submitted by Ramiz Omar Abdul Sattar, Final Year Mechanical Engineering, School of Engineering and IT, Manipal University, Dubai, under supervision of faculty Mr. Ganesan Subramanian, Assistant Professor, School of Engineering and IT, Manipal University, Dubai.

Best Paper Presentation Award at International Conference in Turkey

Mr. Rajesh J. Pai Assistant Professor, School of Business, Manipal University Dubai Campus won the 3rd best paper award along with cash prize worth of USD 200. His research paper was presented at the 2nd International Islamic Conference held in Istanbul, Turkey, September, 2015 where 64 papers were presented.

Best Paper Presentation Award at International Conference in Dubai

Ms Taramol K.G. Assistant Professor, School of Business, Manipal University Dubai Campus won the Best Session Paper Award for the research paper, entitled "Prospects and Challenges of Expo2020 on the UAE economy – A study on Real Estate, Tourism and Hospitality Sector" at the International Conference on Business Management, Economics and Applied Science Research in Dubai on October 2015.

Book Publication

Dr. Firdos Alam Khan is a Professor and Chairperson of the School of Life Sciences, Manipal University, Dubai, United Arab Emirates (UAE) has published the 2nd Edition of the textbook entitled "Biotechnology Fundamentals" on November 3rd, 2015. The book is published by CRC Press; USA; ISBN-10: 149872342X; ISBN-13: 978-1498723428

Bhakti More is Recognized as The Associate Editor for The International Journal of The Constructed Environment

Ms. Bhakti More, Associate Professor, School of Design and Architecture, Manipal University, Dubai Campus is recognized as Associate Editor of The International Journal of the Constructed Environment, Common Ground Publishing, University of Illinois Research Park, U.S.A.

Collaboration with UAE University & Curator for Venice Biennale 2016

Dr. Shaji Panicker, Associate Professor, School of Design and Architecture, Manipal University, Dubai was invited to collaborate for contribution of sketches for Sha-abi National housing project , Al Ain for the Venice Biennale 2016.

Best Research Paper Award for Sustainability

Dr. Trupti Gokhale has been awarded the Best Paper Award for her paper entitled "Phytoremediation of recalcitrant compounds" at the 3rd Global Sustainable Biotech Congress 2014, 1-5th December 2014, organized by Nothern Maharashtra University, Jalgaon, India. The Conference had over 1000 International and National participants who presented papers under different areas of Sustainability.

The coauthors of the paper are Parvathy B., Revathy Krishnakumar, Vidhya Venugopal, Juweria Anam, Neeru Sood

Contact details: trupti@dubai.bits-pilani.ac.in

Best Student Research Paper Awards

Contact details: gayathriganesh@live.com

Ms. Gayathri Ganesh won an award for Best Presentation at International Conference on Next Generation Computing and Communication Technologies 2015 held on 22nd & 23rd April 2015, Dubai for her paper entitled "Isolation of Copper Resistant Bacteria for synthesis of copper nanoparticles". The conference aimed at providing a platform for researchers in the field of ICT to showcase their solutions to the challenging problems that exist in the Next Generation Computing and

Communication Technologies. Ms. Gayathri also received the best oral presentation award at the International Conference On Biotechnology And Bioengineering-2014 (ICBB 2014), 29-30th October 2014, Dubai, UAE for her paper entitled "Isolation of Copper Resistant Bacteria and Fungi for Synthesis of Copper Nanoparticles".

The coauthors of both paper are Neeru Sood and Trupti Gokhale

Best Paper Award

Dr. Shazi Shah Jabeen, Professor, Department of Humanities and Social Sciences, BITS Pilani, Dubai Campus and Ajay Jesses Thomas, a graduate of Electrical and Electronics Department, BITS Pilani, Dubai Campus received "Best Paper Award of the 2015 International Conference on Education and Information Technology" for their paper entitled "Effectiveness of Online Language Learning" at the World Congress on Engineering and Computer Science 2015 organized by the International Association of Engineers at the University of California, Berkley (San Francisco), USA during 21-23 October, 2015.

shazi@dubai.bits-pilani.ac.in

4th United Arab Emirates Undergraduate Student Research Competition (UGSRC) AE students qualify for the final stage under the supervision of Dr Harpreet Seth

Under the patronage of H.E. Sheikh Hamdan Bin Mubarak Al Nahyan, Minister of Higher Education and Scientific Research, and with the sponsorship of Abu Dhabi Education Council (ADEC), Abu Dhabi University organized the Fourth Undergraduate Research Competition at Abu Dhabi University, on May 17, 2016. This competition aims at encouraging universities in the UAE to promote scientific research among undergraduate students making it an integral part of university education. It also aims to instill life-long learning, and to enhance career opportunities for young people as well as foster positive attitudes in education, research, and innovation. The competition is in direct support of the UAE government's drive toward fostering innovation. The competition, over its short life span, has witnessed an impressive growth in attracting undergraduate students from all over the UAE. The substantial and steady increase in the number of submissions and attendees is an important indicator that the competition has already become the premier and the largest national event of its kind that targets undergraduate students from across all universities in the UAE and all major disciplines. Heriot Watt student's participation in this competition is an excellent opportunity to interact with some of the country's best new minds, as the leading student researchers from other universities around the UAE will also attend and participate in the competition. Monetary prizes amounting to a total of more than AED 100,000 will be distributed among winning teams. This year there was an unprecedented participation, with 230 teams competing in 16 different domains from 30 major universities in the UAE. Fourth Year Architectural Engineering students at Heriot Watt Dubai students (4th Year AE students) gualified for the final stage that was held on 9th May at Abu Dhabi University, Khalifa City Campus.

1. Approaches to achieving eco-campuses in UAE through ecological retrofitting Neha Mumtaz

2. Affordable Housing Using Recyclabe Materials (such as shipping containers) in Nigeria Abduljalal

This issue is designed by Fatima Rahman fatima.rahman80@gmail.com