Welcome to the 2018 edition of the UBT Research Electronic Newsletter. The Research E-Newsletter is being published for its third year to share, celebrate, and recognize the research work of UBT faculty members and students, their publications, their inventions, and their awards. In this issue, you will know more about services that facilities your study and research, you will find opportunities, and you will be inspired to excel.

HIGHLIGHTS

- Summer Programs, apply before June 2019
- Aeronautics/Aerospace training, apply by April 2019
- Participate in Mecca Cultural Forum
- 3D Printing Course in France, Apply before July 2019

DATES TO REMEMBER

- Welcome Dr. Ghadeer and Dr. Samar P. 3
- Students at GEC P. 5
- National and International Visitors P. 7-8
- UBT Signs eight MOUs P. 12-14
- UBT Wind an Honorary Award P. 16
- UBT student Graduation Projects P. 20-24
- Research Publication P. 25
- Researcher of the Month P. 28
- Economic Development P. 39
Who We Are

The Deanship of Scientific Research

Brings together faculty members, staff, and students, unifying their efforts to develop interdisciplinary approaches to goal-oriented problems.

DSR, through its Research Development Department, Economic Development Department, Publication Department, and Consultancy services link researchers and the industry together, providing an opportunity to solve current issues facing the Saudi community and economy, improve current materials, or develop new ones. Moreover, DSR looks for the industrial potential that will support the economic development of the kingdom through startups and economic development projects.

The Team

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Research Development Department

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Working for Research Development

University of Business and Technology, aiming to support the research process have collaborated with a number of agencies that will fund innovative research projects of faculty and staff under one of the Research Flagships. The Research Development Department offers many services to assist with funding the research including:

- Support proposal preparation
- Support budget development
- Negotiating research-related contracts with external parties
- Checking grants terms and conditions
- Contracts amendments
- Contracts negotiation
- Manage the sponsored research projects

- Guide the PIs to comply with the award terms and conditions
- Manage the invoices, reports, budgets, etc.
- Internal and external audit
- Liaise with finance

In addition, The Research Development Department has a Financial Affairs Office that supports researchers in:

- Reimbursement of publication fees for open access journals
- Follow-up with the payments for the funded research
- Audit the receipts and the payment of the funded research

Please contact DSR for more information or support on:
dsr@ubt.edu.sa
Welcome on Board

Dr. Ghadeer Kayal, Vice Dean of Deanship of Scientific Research

Dr. Kayal is an Assistant Professor and HOD of the Marketing Department at the College of Business Administration (CBA). She also teaches graduate level students at the MBA and MSC programs. Her research interest includes consumer behavior, emotions, cross-cultural research and online consumer behavior.

Education:
- PhD Degree Swansea University Business Management – Marketing concentration
- Master Degree University of Kent Business Management- Marketing concentration
- Bachelor Degree (Honors) King Abdul-Aziz University Islamic Art Education

Contact Dr. Ghadeer on:
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Dr. Samar Shoaib, Consultant of Scientific Research and Graduate Studies

Dr. Samar Mohammed Shoaib is an educator, researcher, and adult education consultant. She works with various organizations in the education industry around the world in developing and providing programs while realizing initiatives that focus on exceptional experiences ensuring quality of education.

Dr. Samar Shoaib holds a PhD in Interdisciplinary studies from the University New Brunswick, Canada; specializations within her PhD include Adult Education, English Second Language, and Socioeconomics. She also holds an MA degree in theoretical and socio Linguistics and numerous certifications. She has worked in the field of higher education for over 15 years, part of which she worked in Canada. Her research interests can be divided into various areas each of which have diverse degrees of overlap – linguistics, English second language, education management, gender, culture, adult education, socioeconomics, technology, research, theory, and multiple methodologies.

Contact Dr. Samar on:
s.shoaib@ubt.edu.sa

Mr. Zaid Sabbagh, Research Assistant Economic Development Department

His work experience in the HR department, as it is his field of expertise and educational background as an HR coordinator, which was focusing on the completion of competences analysis and workload analysis that is meant to measure the capacity of the workers workload and the actual need of the position, as well as the measurement of the competencies needed for each task in the position to make a profile of each job and how many hours needed to fulfill the need of the position in the department, as well as comparing the internal manpower with external capabilities. He graduated from UBT from the field of human resources management as a bachelor degree and recently graduated from master degree in HR as well. He looks forward to be promoted in his work and to enhance his career experience in any field of expertise especially in the field of human resources management as well as looking forward to establish a sensible improvement change of the business that he works for.

Contact Mr. Zaid on:
Z.sabbagh@ubt.edu.sa
The University of Business and Technology hosted the 10th Gulf Education Conference and Exhibition on 24-25 February 2018 under the patronage of the Ministry of Education and the organization of Gulf Conference Ltd. for the third consecutive year.

The notion of the Green Economy is gaining international traction at an accelerating pace. It is directly or indirectly related to no fewer than 10 of the 17 UN Sustainable Development Goals. It is capturing the public imagination through specific initiatives, such as the war on plastics. It is challenging businesses and public authorities through initiatives such as sustainable procurement, corporate social responsibility and in some sectors the ‘triple bottom line’ which involves accounting in social and environmental terms as well as financial outcomes in the investment decision making process. Hence, recognizing their responsibility to society, now and in the future, it is a topic, which is becoming of central importance to universities.

The Conference extended on two days and the schedule included speeches from keynote speakers who discussed Green Economy from a variety of perspectives. Chairman of Board of Trustees Dr. Abdullah Dahlan gave his welcoming speech to start the conference.

Followed were the following sessions:

**Keynote address**

- H.E. Dr. Saad Al Fehaid, Deputy Minister of Education for private Education
- H.E. Prof. Abdulrahman Al Youbi, President of King Abdul Aziz University, KSA
- H.E. Mr. Ryan Gilha, United States Embassy
- H.E. Eng. Ibrahim Mahlab, Former Prime Minister, Egypt
- H.E. Mr. Mostafa Mihraje, Consul General of France in Jeddah
- Dr. Laila Al-Safdi, Education Sector Consultant, Monshaat
- Dr. Ghinwa Jaloul, Technology Touch, Lebanon
- Professor Osama Jannadi, Rector of University of Business and Technology, KSA

**The Higher Education Challenge in the Region (Universities as exemplars in the Green Economy)**

*Introduced and Chaired by: David J. Lock, Education Director, Gulf Education Conferences*

- Panel comprising:
  - Professor Yousef Al-Assaf, Rochester Institute of Technology
  - Professor Zainuddin Abdul Manan, Universiti Teknologi Malaysia
  - Professor Georges Santini, n+i
  - Professor James Reade, Reading University

**University Start-ups towards Sustainable Development**

*Chaired by: Dr. Basma EL zein, Dean of Scientific Research*

- Panel comprising:
  - Dr. Jamal Al-Akkad, EVC3
  - Dr. Youssef Jalloul, Torch Academy, Lebanon
  - Eng. Haithem Abumansoor, MODON

**Contributions of university-based energy and power research to societal green economy goals**

Professor Phil Hart, Director of Energy & Power, Cranfield University, UK

**Higher Education and Research to promote Green Economic Growth: the role of Interdisciplinary training**

Professor Badri Narayanan Gopalakrishnan, University Washington-Seattle, Mckinsey

**Approaches to energy research and engaging with society**

Professor Phil Hart, Director of Energy & Power, Cranfield University, UK

**Corporate social responsibility – by and towards universities**

*Chaired by: Dr. Mohannad Dahlan, Chief Executive Officer at UBT Company*

Maher Hadrawi, King Salman Humanitarian Aid and Relief Center

Sara Al Shaibani –Tamer

**Aligning the interests of business and universities for the benefits of both and the green economy**

*Chaired: Dr. Mahmoud Baissa, Vice Rector Academic Affairs*

Dr. Weam Tunsi, Vice Rector of Quality

Dr. Salah Abounar, Dean of College of Business Administration - UBT

Dr. Yusra Jamjoom, Dean of College of Business Administration - UBT

Dr. Jawad Al-Suliman, Dean of College of Engineering-UBT

Dr. Haneen Shoaib. Dean of Jeddah College of Advertising-UBT

Dr. Hani Aljahdali, Dean of College of Law-UBT
U BT, as a way of engaging and enabling students, have allowed for them to take part in the conference in so many different ways.

Firstly:
There were two sessions especially dedicated for students by the Director of Students Organizing for Sustainability Charlotte Bonner: The Potential for Students to Act, and Student initiatives and engagement: international case studies

About the Speaker:
Charlotte has been working to embed sustainability in the education sector for nearly fifteen years and is a behavior and cultural change expert. She currently works in the sustainability team at the National Union of Students in the UK. NUS represents 7 million students across the UK and the mission for its sustainability work is to see all students, regardless of discipline, leaving formal education with the knowledge, skills, attributes, and values needed to create a more just and sustainable future.

She is now responsible for innovation and incubation of new projects and programs. Before this, she oversaw the growth of NUS’ flagship sustainability program Green Impact from a grant-funded project to an international, award-winning, self-funding program training nearly 1000 students a year and reaching over 250,000 people.

She’s also a director of SOS – Students Organizing for Sustainability – a global student charity working to catalyze sustainability through education, student and youth leadership development. She has a MSc in Energy and Environmental Technology and Economics, a BA in Linguistics, and is a Senior Teaching Associate at the University of Bristol. She’s a member of both the Institute of Environmental Managers and Assessors and the International Society of Sustainability Professionals.

Secondly:
Students took a big part in “planning-organizing” more than 100 of students volunteered to assist in registration, as guides, and as chaperones in the conference and the exhibition. The University rewarded these students by counting hours sent into their community services.

Thirdly:
Students have attended workshops and seminars on both days, and were encouraged to submit a summary or proceeding in were they can express their opinions, understanding, ideas, or proposals regarding points discussed. Colleges have rewarded participant students with five grades that goes into their grades.

Students’ participations is a unique chance for them to learn beyond academia. They get to experience planning, organizing, public speaking, analyzing and deploying knowledge, and most importantly, engage with the real world and be effective members in their societies.

The 10th Gulf Education Conference and Exhibition was a very successful event and was attended by more than 15,000 attendees ranging from professors, Doctors, lectures, and students.
The following findings, from presentations to the 2019 Gulf Education Conference on the theme ‘Mega Trends in education towards the Green Economy’, and recommendations were declared during the closing session.

By choosing this theme and inviting local and international speakers from prominent universities, UBT recognizes its responsibility to society and is keen to work towards teaching, researching and liaising with the community to address local and global environmental concerns. Further it urges other universities and schools to continue to develop this theme.

‘Towards the Green Economy’ is defined as ‘a transition to a sustainable and just future, as outlined by the United Nations Sustainable Development Goals (SDGs) which the KSA government has endorsed’. The development of higher education has been one of the triumphs in the region. Higher education is being responsive to the needs of society and contributing to the achievement of the UN Sustainable Development Goals but can be more responsive and make a greater positive contribution to sustainability and the Green Economy.

Universities should make plans and take actions to contribute to sustainability and the green economy by:

- Ensuring that their strategies include action in this respect, ideally with SMART objectives (Specific, Measurable, Achievable, Resourced and Time-bound) against which progress can be measured
- Reviewing the delivery of these by adding them to the specific matters monitored by institutional advancement offices,
- Considering the establishment of a ‘Green Economy’ (or similarly named) department or cross-cutting academic support unit,
- Integrating sustainability themes into their curriculum and possibly adopting inter-disciplinary and other pedagogic approaches to enhance education for sustainable development (ESD),
- Determining their research agenda to address sustainability issues by linking academic research with sustainability practices,
- Reviewing their administrative processes (including, for example, procurement),
- Training academic and other staff and students in sustainability issues and responses
- Engaging with other universities in side and outside the Kingdom, encouraging staff and students to take initiatives which contribute to greening themselves
- Engaging with their stakeholders to share their experience and enhance the relevance and impact of their initiatives
- Demonstrating more widely the value of the contribution that universities do, and can, make to achieving sustainability in the changing environment.

The Ministry is asked to:
- Establish a capability to collect and communicate data on KSA’s environmental performance for the purpose of public reporting, policy development and performance relative to those policies,
- In line with the need set out in the Minister’s speech, which was delivered by the Deputy Minister on 24 February, to develop a comprehensive national strategy for sustainability education, from early years through to adult learners, that reflects its position as a leading oil producing country,
- To establish a ‘think tank’ with higher education, private sector and civic society membership to do this,
- Engage with Students Organizing for Sustainability (SOS) to understand and learn from successful practice and support individual universities to engage with or develop SOS’s initiatives,
- Establish a long-term sustainability endowment fund to fund youth action on the SDGs,
- Develop and resource the implementation of a strategy to enable university leaders to understand sustainability issues and the national strategy such that they are able to implement it in their universities,
- Encourage professional bodies and teacher training institutes to embed sustainability in their work,
- Employers and stakeholders of universities should:
- Engage with universities and support their endeavors,
- Encourage their staff to contribute to teaching, research and case studies to aid learning,
- Provide relevant internships for students,
- Assist with the development of entrepreneurial skills related to sustainability,
- Engage with the academic community to develop action-based research and provide real-life research challenges.

These recommendations should be considered by the think tank proposed at 3(c) above, developed into SMART objectives and disseminated to universities and others with the position and resources to implement them.
RDO, Ministry of Education

Research and Development Office (RDO) form the Ministry of Education (MOE) visited UBT on the 20th of February to discuss research. Dean of Scientific Research explained the research process at UBT, and the discipline which the Research Flagships offers to unify efforts, and the Research Road Map that allows for projects to make a real contribution to Saudi Economy.

MOE representatives, Mr. Hassan Hamed the Executive Director of PR Management, and Ms. Rasha Al-Hammad appreciated UBT efforts in promoting for interdisciplinary research in line with Vision 2030. Currently the RDO only supports state universities, but they assured that UBT will be one of the first Private universities to get their support. Together, we can fulfill one of the Kingdom’s of Vision 2030 and be among the top 10 countries in Global Competitiveness Index and have Saudi universities among top 200 universities in international rankings by 2030.

University of Technology Malaysia (UTM)

UBT was honored to host a delegation from University of Technology Malaysia (UTM) for two weeks in late January to discuss possible agreements, first meeting was held on the 30th January.

The delegation met with the Dean of Scientific Research where the research approach at UBT was explained to find mutual research projects. The delegation also conducted more than one meeting with UBT faculty and staff where they explained in detail the process of applying for a PhD at UTM, the Colleges and disciplines they offer, and options of study available.

Since January, DSR hosted/visited more than 10 industry and education institutions to promote for research and to provide collaboration opportunities.
ASCOT and SHAHIG Company to Collaborate with UBT

ASCOT is an Italian manufacturing company that operates internationally in the power energy sector. ASCOT believes that along with water and air, energy is one of the vital resources on this planet that we must respect and preserve. It is committed to helping humanity generate energy while respecting the environment and achieving harmony between the elements while supporting the world’s energy needs. Furthermore, Ascot aims to bring light and energy to parts of the world where electricity is unavailable and provide standby power where technology cannot last without back up energy. Everyone is looking for an energy source that is tailored to fit precise purposes. Ascot’s vision is to deliver the “energy that you want” – green energy that is customized for specific use in variable quantities.

SHAHIG CO established over 27 years ago, headquartered in Dammam & Branch Office in Jeddah, Shahig Co has developed chain of distribution & service agreements with kingdoms Major clients in Oil & Gas, Power, Petrochemical Markets throughout the Kingdom. The company has large local inventories and a staff of more than 150 professionals across the Middle East, customers experience a consistently high-level of service no matter how diverse their needs are. Shahig Co range of industry solutions conform to both US (ANSI | NEMA | NEC) and European IEC specifications. It continues to represent internationally renowned brands and continues to developed an ongoing program, which aims to expand its brand portfolio and product range of quality, innovative and competitive solution.

CEO of ASCOT Industrial Mr. Michele Greca and Marketing Manager of SHAHIG CO Mr. Mohammed Haneef visited the DSR on the 18th of March to discuss areas of possible cooperation. The companies will sign an MOU with UBT which will provide faculty and students with many research and industrial projects.

Cranfield University

Cranfield University’s mission is to create leaders in technology and management, to unlock the potential of people and organizations by partnering with business and governments to deliver transformational research, postgraduate education and professional development.

Cranfield University is a leading in research excellence; 81% of Cranfield’s research is ‘world leading’ or ‘internationally excellent’.

Cranfield’s education portfolio is renowned for its relevance to business and industry. The university is the largest UK provider of master’s-level graduates in engineering and offer a flagship MBA, extensive world-class customized executive education and professional development programs.

The research and consultancy carried out at Cranfield for industry, government and business provides students with a real-world learning environment, allowing them to develop as professionals and then transfer their knowledge to the global economy.
Dr. Georgios Kapogiannis visited UBT from University of Nottingham Ningbo China. Dr. Kapogiannis is from department of Architecture and Built Environment, Faculty of Science and Engineering. As an expert in the area of Digital Construction Engineering-Management, Dr. Kapogiannis investigates how to improve collaboration in construction (project) management by using the state of the art of Digital Technologies such as: Gamification (Series Games), Unified Modelling Language (UML), Virtual Reality, Mobile Technologies, Internet of Things (IoT), Simulation, BIM and Augmented Reality.

During his 3 weeks at UBT, he presented the following workshops and seminars:

24th January: Building Information Modeling and Management
Towards the silk road to smart cities there is a requirement to integrate people, process and technology. The new paradigm of Building Information Modelling and Management (BIM) aims to contribute towards this direction. This workshop aims to introduce the concept behind BIM and how could shape the future of our cities.

27th January: Digital Construction Engineering and Management
The BIM inclusion in the Construction Project Process in one of the major contribution in the Digital Construction Engineering and Management. The presentation and workshop aims to explain how BIM is used during the project management life cycle, RIBA 2013 Plan of works and its impact to the benefit of the client.

6th February: Innovation in Digital Construction
The future of the Digital Construction Engineering and Management could be either in social, business, technological, legislation etc. The lecture and workshop will show how Blockchain and BIM could be integrated. In addition students will be able to see how BIM and Facilities Management could be integrated and add value to the operation of a Healthcare Organization

11th February: Integrating Building Information Modelling and Smart Cities
The full-day session was in collaboration with professors from national and international universities, as well as engineers from the best engineering firms around the world.
Visiting Professor - Dr. Georgios Kapogiannis (continued)

Integrating Building Information Modelling and Smart Cities towards a Knowledge Based Economy and Society in the Kingdom of Saudi Arabia

<table>
<thead>
<tr>
<th>Program of the day</th>
<th>Speaker Name</th>
<th>Title</th>
<th>Organization</th>
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<tbody>
<tr>
<td>10:00</td>
<td>Prof. Osama A. Jannadi</td>
<td>Keynote</td>
<td>Rector University of Business and Technology</td>
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<td></td>
<td>Dr. Basma El Zein</td>
<td>Keynote</td>
<td>Dean of Scientific Research University of Business and Technology</td>
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<td>Dr. Jawad Al Suliman</td>
<td>Keynote</td>
<td>Dean of College of Engineering University of Business and Technology</td>
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<tr>
<td>10:50</td>
<td>Dr. Georgios Kapogiannis</td>
<td>Integrating BIM and Smart Cities</td>
<td>Assistant Professor in BIM University of Nottingham Ningbo China</td>
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<tr>
<td>11:10</td>
<td>Dr. Leonardo Romel</td>
<td>Communication forming digital transformation</td>
<td>Assistant Professor / Vice Dean Of JCA University of Business and Technology</td>
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<tr>
<td>11:30</td>
<td>Dr. Ahmad Baik</td>
<td>BIM and Heritage in the Kingdom of Saudi Arabia</td>
<td>Assistant Professor King Abdulaziz University</td>
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<tr>
<td>11:30</td>
<td>Dr. Yasser Almutiri</td>
<td>Smart Cities in the Kingdom of Saudi Arabia</td>
<td>Assistant Professor at The School of Architecture Faculty of Engineering/ Al-Baha University</td>
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<td>11:50 – 12:00</td>
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<td>Refreshments</td>
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<tr>
<td>12:20</td>
<td>Eng. Youssry Salman</td>
<td>BIM Addressing Healthcare Facility</td>
<td>BIM Senior Manager Saudi Binladen Group (SBG)</td>
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<td>12:20</td>
<td>Eng. Ali AlMakrabi</td>
<td>Construction Challenges</td>
<td>Director at AECOM</td>
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<td>12:40</td>
<td>Eng. Alyn Raslan and Eng. Azam Raslan PhD Cand.</td>
<td>Micro Construction Projects and the need for digital transformation</td>
<td>Director and Engineer in Modern Cities Engineering and Consultants PhD Candidate The University of Nottingham Ningbo China</td>
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<tr>
<td>13:00</td>
<td>Dr. Georgios Kapogiannis</td>
<td>Construction Business and Entrepreneurship</td>
<td>Assistant Professor in BIM University of Nottingham Ningbo China</td>
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<td>13:00</td>
<td>Eng. Mohammad Alharkan</td>
<td>Rendering Process in Digital Architecture in the KSA: A case study</td>
<td>Lecture University of Business and Technology</td>
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<td>14:00 – 15:00</td>
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<td>Pray and Refreshments</td>
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<tr>
<td>15:00</td>
<td>Dr. Hafidh S. Alsamarral</td>
<td>Computer Society and Technology Engineering Management in the context of Smart Cities</td>
<td>Vice Chair – Western Saudi Arabia IEEE Section Chair Computer Society and Technology and Engineering Management</td>
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<td>15:00</td>
<td>Eng. Mohammed Ansari</td>
<td>Bentley and BIM Solutions for Smart Cities</td>
<td>BIM Consultant Nahil Computer Co</td>
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<td>16:00</td>
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<td>Summary – Discussion</td>
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<td>16:30</td>
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<td>Closure</td>
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Monday 11th Feb, 2019
Session start at 10:00 am Session end at 16:30 pm
Prince Sultan Auditorium
UBT Dahban campus

DSR Deanship Of Scientific Research
CE College Of Engineering
Al-Muallem Mohammed bin Ladin Chair for Creativity and Entrepreneurship, in collaboration with UBT hosted Dr. Liliana Perez-Nordtvedt to present a seminar titled “New Studies on Entrepreneurship” on the 20th of March. Dr. Liliana Perez-Nordtvedt is an associate professor of strategy and international business at University of Texas, Arlington. Dr. Perez-Nordtvedt is also a consultant for Al-Muallem Mohammed bin Ladin Chair for Creativity and Entrepreneurship.

The Al-Muallem Mohammed Bin Ladin Chair for Creativity and Entrepreneurship, in collaboration with University of Business and Technology, cordially invites you to “New Studies on Entrepreneurship”.

Liliana Perez-Nordtvedt, Ph.D.
Associate Professor of Strategy and International Business
University of Texas at Arlington
Consultant, Al-Muallem Mohammed Bin Ladin Chair for Creativity and Entrepreneurship
General UBT - MOUs

University of Business and Technology signed a total of seven MOUs with national and international educational institution during the Gulf Education Conference and Exhibition. These are:

University Technology Malaysia

UTM is a leading innovation-driven entrepreneurial research university in engineering, science and technology. UTM as the biggest postgraduate research university in technology has also established a reputation for innovative education and cutting-edge research, with a vision towards the development of creative human capital and advancement technological innovation.

2018/2019 (QS) World University Rankings
- Ranked #228 in the world
- Ranked #18 in the “Top 50 under 50”
- Ranked 47 in Asia
- Asia Top 10 Young Universities
- Ranked 5 Stars Overall Rating for QS Star Rating

University of Canada, Egypt

University of Canada currently hosts the branch campus of the University of Prince Edward Island (UPEI). Each of the top-ranked programs that UPEI offers through the UofCanada branch campus in Egypt is identical to the program it offers to Canadian students in Canada. At the end of their program, students studying at UPEI hosted by UofCanada in Egypt will be granted exactly the same degree as students studying in Canada. So, for example, a student studying business at UPEI’s branch campus hosted by UofCanada will earn the same business degree as a student attending UPEI in Canada. This means students will graduate with a Canadian degree recognized around the world. The degree is also accredited in Egypt and recognized by the Syndicates. What’s more, students studying at UPEI hosted by UofCanada can transfer and study in Canada. Students simply leave their classes in Egypt and pick them up again seamlessly in Canada.

Effat University

Academically renowned and internationally connected, Effat University is the first private institution of higher education for women in Saudi Arabia. Everything we do stems from Queen Effat’s lifelong work and vision. Seen as the founding mother of education in KSA, she broke new ground in establishing it as one of the cornerstones on which our nation is built.

Queen Effat believed passionately that education should be holistic and go hand-in-hand with traditional Islamic values and respect for all human beings. She embraced extra-curricular activities as part of a well-rounded education, understood the importance of keeping abreast of modern technological advances and of what could be learned from, and shared through, international partnerships. Her legacy of excellence and passion for education lives on in Effat University today.

Effat provides a protective, safe environment in which our students are inspired and motivated to acquire that same passion for life-long advancement, which is passed on from generation to generation.
The Network "n+i" is a consortium of over 50 French higher education establishments. For 20 years it has been the biggest network in France. The Network "n+i" has created a complete program (known as path to success) to help science and engineering students and young engineers wishing to study for a Masters or a PhD in France.

Technology SARL
Established since 2001, Technology SARL is a leading company in Software, Consultancy, Development and Owner/ Tech Partner of startups with leading mobile apps. Technology provides services in the following areas:

- Web and Mobile Development, all platforms and devices
- IT Consultancy in digital transformation
- Digital and Social Media (Facebook, Twitter, LinkedIn, etc).
- Solution provider in E-learning, E-commerce and more...
- Custom tech solutions to suit your business and entrepreneurial requirement

Rochester Institute of Technology
Founded in 1829, Rochester Institute of Technology is a diverse and collaborative community of engaged, socially conscious, and intellectually curious minds. Through creativity and innovation, and an intentional blending of technology, the arts and design, we provide exceptional individuals with a wide range of academic opportunities, including a leading research program and an internationally recognized education for deaf and hard-of-hearing students. Beyond our main campus in Rochester, New York, RIT has international campuses in China, Croatia, Dubai, and Kosovo. And with more than 19,000 students and more than 125,000 graduates from all 50 states and over 100 nations, RIT is driving progress in industries and communities around the world. At RIT, we are always on to something amazing.

RIT Dubai was established in 2008 to provide world-class university programs in the United Arab Emirates for students and professionals from the Middle East, North America, Africa, and South East Asia. The campus is strategically located in the heart of Dubai Silicon Oasis, one of the world’s leading centers of advanced electronic innovation and design. RIT Dubai offers 10 undergraduate and six graduate programs.

Asia Hope Camp Organization
The Asia Hope Camp Organization (ACOPIA) is a project spearheaded by the young members of Korean society, that aims to highlight and emphasize the many volunteer opportunities that can be found all over the world. The Asia Hope Camp Organization is officially registered on Seoul Metropolitan Government.

ACOPIA has the following goals:
- Create an environment for cultural exchange:
  It encourage the youth from all over the world to come to Korea and share their cultural knowledge to increase global interaction and make Asia Hope Camp a "truly International Work Camp".
- Break Barriers through Volunteerism:
  ACOPIA aims to contribute in the alleviation of poverty in impoverished regions in Asia through the promotion of outreach and social activities.
In addition, UBT signed an MOU with the Lebanese Al Jinan University on the 13th of March.

Al Jinan University

Jinan University is a private institution of higher education with two campuses in Lebanon. Jinan has an elite academic and administrative staff using modern curricula, methodology and technology recognized worldwide. Jinan University has never been limited to the Lebanese students. Due to its global culture and good relations with Arab, Islamic and international surroundings, Jinan has become the destination for students, scholars, thinkers and specialists coming from different countries and nationalities. This has enriched Jinan with a diversity of thoughts, perspectives and knowledge. The intimate presence of these unique human components features Jinan with the aspect of the global connectivity in broad meaning. Students gain a special experience and excellent relations which they can never find, but in the universities that have a universality aspect.

Dr. Bassam Barake, President of Jinan University visited UBT on the 13th of March to sign an MOU that would benefit both universities in the near future.
‘How to Set an Example’ Initiatives

UBT participated in the national campaign How to Set an Example under the patronage of HE Prince Khalid Al Faisal for 10 days starting from the 27th of September 2018.

UBT participation was under the title “How to develop our cities to serve in Hajj and Umrah” which composed of three initiatives:

Women Empowerment in Hajj and Umrah
Which aims at facilitating Hajj and Umrah by providing information, and sociological and logistic support for women through a smart app.

– Recycling in the Holy Mosques
Which aims at raising awareness among Saudi citizens and them applying it in the Holy Mosques and religious locations as it has a positive affect on people on general, on the environment, and on planning and management.

- First impressions last
Which aims at providing a better experience for travelers from the moment they arrive. Students participated by assisting visitors and supporting their needs at arrival and departure gates.
Arabic Literature Forum

Jeddah Literary Cultural Club, in collaboration with UBT organizes a reading forum every year since 2000. This year, UBT hosted the Arabic Literature Forum 15, and Dr Adbulla Dahlan named a hall in the campus “Jeddah Literary Cultural Club Hall”

Holy Quran competition has been a big success, as students have competed on the level of Makkah region for the past 9 year. The contest is organized by University of Jeddah in order to guide students to compete in Holy Quran through memorization and quality of reading. It also aims to promote the spirit of moderation in thought and behavior, to have students with high moral and educational values derived from Quran, and to raise the spirit of competition. As UBT also believes in the importance on the competition, it is one of the major supporters and sponsors.

Following the 10th competition final ceremony, HE Prince Mishal Bin AbdulAziz, Governor of Jeddah, awarded UBT for its, and its students’ contribution to the success of the competition this year.
Our Willing, Our Talent

UBT, represented by Education Support Center (ESC) participated in the First International Conference for Talented People with a Disability from 3-5 February. The conference contributes to open a new horizon in the field of research for people with disabilities by constructing the relationship between giftedness and disability. Conference covered the following topics:

The relationship between disability and talent
The scientific methods to evaluate talent of people with disabilities
Role of the family in developing the talent of people with disabilities
Role of the society in developing the talent of people with disabilities
How can technology improves the talents with disability
Stories of successful people with disability

Conference Goals:

• Answering all the questions related to the relationship between Talents and Disability
• Aware Families with the affective ways to deal with their kids who are talented with disability
• Provide good examples of talented people with disability
• Unveil the latest technologies to assist people with disabilities in different fields of their talents
• Raise the awareness in society of the talented people with disability
• Create a strong database of researched related to talented people with disabilities and share their experience easily
• Design a standard system to measure talents of people with disability in scientific ways
• Dean of Student Affairs stated that this participation is to activate UBT’s role in community service and student support. In addition, the ESC is making a constant effort to stress on UBT’s role serving the community and in supporting students with disabilities.

Educational Support Centre (ESC) was established in June 2016 in order to enhance student wellbeing inside UBT. The Centre provides a variety of services designed to promote college adjustment and academic success.

ESC’s main goal is to empower students’ learning in the classroom by engaging them in campus life. ESC provides its services free of charge to all UBT students.

ESC strives to provide distinctive student services that meet students and community expectations.
IAA Meeting:

A delegation from UBT head by Dr. Haneen Shoaib, Dean of JCA visited the World Congress of Advertising organized by the International Advertising Association’s (IAA) in Kochi, India from the 20th to 22nd of February. The trip was aimed to align with the IAA community. This had been possible through various meetings with the Chairman and the World President of the IAA, Mr Srinivasan Swamy and his international team. The new developments of the IAA to offer educational assistance to Universities and Colleges were discussed and still their procedures are under study by the IAA. The most important development was regarding establishing an IAA Saudi Chapter under the umbrella of Jeddah College of Advertising (JCA). This was attempted before, yet due to non-committed members it was not possible. Yet, with the support of Dr. Abdullah Dahlan this effort will be taken up again in search of committed and reliable members to start this Chapter. The aim is to establish the Chapter and announce it by the World President of the IAA during JCA’s graduates’ exhibition “Forward” on the 24th of April, along with honoring graduates with their IAA diplomas. Also, there were serious discussions regarding the IAA’s support of JCA’s symposium to take place in October 2019, especially if the Saudi Chapter was established in April. This will result in an easier access to the pioneers in the field to come as guest speakers.

IAA Conference:

In relation to the Conference itself, the main focus was on Brand Dharma that is brands needs to exhibit values, ethics and righteousness. This had led that most speakers focused on human links, emotional ties, storytelling and society serving through brands. The green economy and contributing to a better world was also on the agenda for marketing communications.
UBT at Taif University

Taif University (TU) invited a renowned speaker from UBT on the 12th of February to attend the "First Knowledge Enrichment Program" among many other universities.

The Center for Innovation and Entrepreneurship at TU organized the event to meet specialist in innovation and entrepreneurship in order to enrich knowledge and develops innovations solutions.

TU vision is to be an academic institution with a unique role to achieve Saudi Vision 2030 in building the individual and community.

The university’s mission is developing locally competitive competencies that contribute to the production and transformation of knowledge into a drive for development.

During the event, Dr. Basma El Zein gave two workshops, entitled “University from Research ideas to industry” and “Scientific Research and vision 2030”. TU collaborating with UBT will allow both universities to have a greater contribution to the axes of Saudi development.

Makkah Region Governance Visit


The parties discussed the following topics:

- an MOU between University of Business and Technology and the Makkah Region Governance
- Research strategy at UBT
- Increase collaboration between UBT and Makkah Region Governance

Eng. Fawaz has elaborated on the idea of an MOU and its aims. It is in the aim to collaborating with UBT to develop research projects that benefits developmental projects at Makkah region.

Following, Dr. Basma El Zein explained the research approach at UBT, and UBT collaborations with many education and industry institutions.

The parties have agreed to sign an MOU in the near future.
College of Business Administration (CBA), ladies campus, have hosted its fourth CBA Business Days on the 11th and 12th of March under the theme “Together towards a Better Tomorrow”.

The event is an academic open house opportunity for internal academic customers, potential customers such as recruiters, and the invited public officials and business professionals to see the offering at CBA. The main aim of this event was to give the CBA undergraduates a platform to present their projects as well as share their experiences and knowledge with others. Above all, the event emphasizes how UBT’s educational programs refine students’ skills to become future businesswomen and leaders.

In addition, the event held around 30 workshops and 7 different panel discussions given by distinguished professionals who have shared their experiences and up-to-date insights about the business and economy. There was also a special session titled “Meet the Alumni” where selected CBA graduates have shared their professional experiences with UBT students.

CBA Business days also held a graduate exhibition with around 30 students’ projects where showcased. The exhibition attracted thousands of visitors from reputable schools, educational institutions and companies. Students’ projects covered the following areas:

- Audit & Assertions
- Data Analytics
- Transition from SOCPA Standards to IFRS
- Pending in Bank Reconciliation
- The Impact of Foreign Investment Inclusion on the volatility of Tadawul
- The Impact of Credit Risk Management on the Commercial Banks Performance in Saudi Arabia
- Balance Of Payment Analysis
- Financial Analysis of SADAFCO
- Off-boarding Process
- Saudization & Changing culture view of the service jobs of hospitality
- DSS Application
- Referral campaign
- Finding opportunities to accelerate sales growth
- Smart Booking’s Business Analysis
- Investigating the Issues Related to Low Usage Rates of Bupa’s Application
- The Impact of Miscommunication on Supply Chain’s Productivity and Enhancing Warehouse Operation at USC Co.

It is worth noting that CBA is proud to state that students were a crucial part in organizing and running this event. They were in charge of many significant tasks like guiding the guests and advising potential students of the CBA’s various majors.
round 18 final-year students have participated in the Senior Project Poster Session showcased in the CE building in Dahban in November 2018. Student’s projects were:

**Construction Project Management Study For College of Applied Medical Sciences In Al-Taif New University**

By: Mazen Al-Zahrani, Fadel Al-Fadel, Omar Al-Deer, Hashem Al-Sayed  
Project Stakeholders:  
- Owner (Employer or Client) - Consultant (Engineer) - Contractor  
Types of Contracts: Traditional Contracts (Ex. Lump sum, unit price, Cost plus Fee)  
- Non Traditional Contracts (Ex. Design Built Contracts, Private Financing)  
Project Management Objectives:  
- Minimize Project Duration - Minimize Project Cost - Maximize Project Quality

**Construction Management and Bill of Quantities**

By: Abdullah Alaqeel, Ramy Mohy, Nayef Mohy, and Bassam Nteifah  
Supervisor: Assoc. Prof. Remon Eskander.  
Abstract:  
Construction management is a professional service that uses specialized, project management techniques to oversee the planning, design, and construction of a project; from its beginning to its end. At this project, we have;  
- Discussed all the Construction Management and Quantity Surveying.  
- Got all the Bill Of Quantities for this project using the Auto-CAD drawings.  
- Collected the project’s data (Production rates and prices).  
- Sketched A Work Breakdown Structure based on the project’s details.  
- Got the proposed contract that is signed between the office and the owner.  
- Used Primavera to see how the relations are in range after each task (term).  

**Intelligent Robot for Landmine Detection**

By: Mohammad Fayoumi, Abdulaziz Alsagaf, Hashim Kattan, Ali Almagrabi, Abdulaziz Makkawi  
Supervisor: Dr. Mohammed Alqarni  
Abstract:  
During warfare landmine detection is most crucial to prevent life victimization in enemy territory. This research work proposed a prototype model of a smart landmine detection robot which can be operated automatically. Soldiers or main battle tanks can follow the path of pilot tank to avoid distraction of the battle tanks and defense causalities. In addition, deploying a landmine detection robot can detect mines planted during war, which can prevent causalities. Additionally, to make this intelligent robot very useful in the battlefield, it consumes power using solar energy.

**Crazy Rider-Mobile Video Game Application**

Prepared by: Salman Mousa, Amro Jamjom, Hattan Kattan  
Supervisor: Rami Nahas  
Abstract:  
Our project is about a car video game. In 1974, Atari company established the first car video game. Car video games are well-known for their captivating gameplay, a variety of tracks and cars and unique aesthetics. This type of video game relies heavily on the physics interactions between the car and the track, creating challenging moments. In order to do a car racing video game, you need to look up for a good game engine, the game engine is a software development which helps the developers to build their own game, providing them the tools and method. We chose the Unity game engine in our project. Unity is a cross-platform game engine. This engine enables the developer to work on both 2D and 3D, it offers a primary scripting API in C#; for both the Unity editor in the form of plugins, and games themselves, as well as drag and drops functionality. C# is a programming language which used for some purpose such as encompassing strong type, imperative and functional. Our project will show how we developed our car video game.

**Structural Design of A Residential Building**

By: Mahmoud Wafik Alasber, Salman Mazen Katmah, Abdulrahman M. Dowaydri.  
Supervisor Name: Dr. Wael Fawzy  
Abstract:  
Structural engineering is that part of civil engineering in which structural engineering are educated to create the ‘bones and muscles’ that create the form and shape of man made structures. Structural engineering need to understand and calculate the stability, strength and rigidity of built structures for buildings and nonbuilding structure. The structural designs are integrated with those of other designers such as architects and building services engineer and often supervise the construction of projects by contractors on site. They can also be involved in the design of machinery, medical equipment, and vehicles where structural integrity affects functioning and safety. In the last few years, the need of building an economic structure has risen due to increases in materials and equipment costs. Every project manager now is concerned about having such uneconomic design of constructing any type of structure within the budget limit provided. The main contribution of our project is to give best solution in selecting the proper structural systems with ultimate economic concrete sections calculated according to American Code Institution (ACI). The main objective of this project is having an Eco-Friendly, economical and sustainable structure.

**Reinforcement Concrete Analysis, Design and Quantity Surveying Project for Residential Building**

By: Feras Mohammed AL Hariri, Shadi Mohammed Wanli  
Supervisor: Dr. Wael Fawzy Mobarak  
Abstract:  
Structural engineering dates back to 2700 B.C.E. when the step pyramid for Pharaoh Djoser was built by Imhotep, the first engineering in history known by the Pyramids. The most common major structures were built by ancient...
Civilizations because the structural form of a pyramid is inherently stable and can be almost infinitely scaled. Over the ages, the profession of structural engineering began to be understood in the re-invention of concrete. The shape with the Industrial Revolution, the profession of civil engineering can be almost infinitely scaled. Of a pyramid is inherently stable and safe for their users and to successfully fulfill the function they are designed for (to be serviceable). Due to the nature of loading conditions.

Construction Project Management For Residential villa

By: Yazeed Alharthi, Mohya Alotaibi, Molham Alasadai, Khalid Alharazi, Hussain Al Halaby
Supervisor: Assoc. Prof. Remon F. A. Eskander

Abstract:
Project Name: The project is a residential villa
Owner: Mohammed Gazily
Consultant: Spine to engineering consultancy – Cairo
Project Location: north Abhur in prince Abdullah Alfaisal street – Jeddah
Project Details: basement and ground floor plus first floor plus roof
Building Area: The project area is 1008 m²

Impact of Poor Power Quality on Voltage Profile in Radial Distribution Feeder Medium Voltage 33KV and Remedial Measures – Case Study

By: Abdulrahman S. Almashhor, Supervisor: Dr. Mohammed Kanan

Abstract:
Poor Power Quality seriously problematic for residential, commercial, agricultural, industrial, governmental consumers. During this study, analysis of poor power quality in rural distribution system during load flow in radial distribution feeder 33kv, Al-Urfan substation 132KV, Taeeb area is presented. The purpose of this study is to enhance the power quality of radial distribution feeder in Taeeb area by analyzing quantitative type of data of feeder; possible consumption solutions and create income statement to calculate net income statement , payback period and benefit to cost ratio to find out the optimum and economic result of solutions. This study shows the practical analysis of different cases of radial distribution feeder, which has important loads with high power quality disturbances. Through the study, analysis of voltage drop and power loss is calculated during simulation. Also, recommendations for optimization solution by using voltage regulator, capacitor bank to reduce these abnormalities and cost of poor power quality have been discussed. The distribution feeder has been drawn as built in order to simulation and analysis using CYMEDIS RAM software.

Assessment of Sea Water Pollution in Khaleej Salman Coastal Area (North Jeddah)

By: Mishari Mohamed, Abdul Salam Alderea, Osamah Ayoub
Supervisor: Dr. Maged Daoud

Abstract:
The pollution loads reaching to the north Jeddah coastal area (Khaleej Salman) were investigated. The high load of nitrogen and phosphorus is resulting in the production of algal growth in the coastal area. The presence of large mats of algae indicates the unsatisfactory quality of the seawater. Based on the results of study, the high concentration of various pollutants at the northern coastal area of Khaleej Salman clearly shows the introduction of high pollution loads from the sewage of resorts and residential area. Proper collection and treatment of sewage and strict control drainage to the public beaches and small treatment plants are recommended.

Structural Design and Estimating Quantities

By: Raed Saggat, Mayyar AL-Helfawi, Supervisor: Dr. Wael Fawzy

Abstract:
our project is to make Structural design and analysis a building with area ( 858 ) m² of four floors, where will studying the following items :

1- Columns.
2- Beams.
3- Footings.
4- Slabs.

Also, estimating their quantities to know the actual price for using the materials of the project.

Electric Energy Saving in Khannis Mshait Hospital

Done: Mohammed Mofareh Alqahtani
Supervisor: Dr. Issameddin Abdullah.

Abstract:
In this study, the idea of using modern Technologies to ensure the rationalization of electricity consumption within Khannis Mushayt Hospital for Delivery and Children. Three methods of energy saving were studied:

- Use of LED lighting system than the light of the old Fluorescent.
- Deployment system of sensors and equipment to control the light And Air Handling Units ( AHU ) outside the working hours.
- Installation of solar panels to save energy instead of relying entirely on fossil fuels resources.

The results show that the use of a combination of the three methods mentioned above is possible and results in saving about 12% through the LED lighting system and 2% through the deployment of sensors to control and 12.848 million SAR by using solar panels until 2030.
Effect of Geofoam on Slope Stabilizing

By: Fadel E. Alfarra, Zayed S. Alyafei, muhanad M. Albow
Instructor: Dr. Essam Attaia

Abstract:
Slope stability is one of the most important problems in geotechnical engineering because failure could cause catastrophic environmental and human disaster, in addition to large economical losses due to such failure. There are different techniques used for stabilizing slopes and to increase the slope safety factor, such as rubble, slope stabilizing piles. Slopes could fail under different types of external loads, changing in the surrounding environmental conditions such as the water table and many other reasons could cause such failures in the slope. The simplest solution to handle with slope failures is to avoid the failed zones and choose safer locations to move the projects which are decided to be constructed nearby the failed slopes. But this solution could not be applied in most cases with the increase of populations and the construction activities. For this reasons, many stabilizing systems were introduced in order to stabilize slopes and to increase the slope safety factors to avoid expected failure. The choice of an adequate stabilizing system should be based on geological and hydrological explorations and a comprehensive site investigation considering the most economical system and materials availability.

Analysis of Slope Stability Using Geofoam

By: Tamim S Maddah, Sultan S Hammoodah, Saleh D Mahrous
Instructor: Dr. Essam Attaia

Abstract:
The stability of earth embankments or slopes, as they are commonly called, should be very thoroughly analyzed since their failure may lead to loss of human life as well as colossal economic loss. The primary purpose of slope analysis in most engineering application is to contribute to the safe and economic design of excavations, embankments, earth dams etc. The failure of a mass of soil located beneath a slope is called a slide. It involves a downward and outward movement of the entire mass of soil that participates in the failure. The failure of slopes takes place due to the action of gravitational forces, and (i) seepage forces within the soil. They may also fail due to excavation or undercutting of its foot, or due to gradual disintegration of the structure of the soil. Slides may occur in almost every conceivable manner, slowly or suddenly, and with or without any apparent provocation.

Applications of Construction Project Management for AL-HarameenResidential Building

By: Mohammad Wanli, QasemAl nabulsı, Abdullah Bader
Supervisor: Assoc. Prof. Remon F. A. Eskander

Project Stakeholders:
A. Owner (Employer or Client)
Types: Public (Enterprise) or Private (Person or Company)
Responsibility: Have an Idea & Financing
B. Consultant (Engineer)
Types: Designer or Planner (Structural, Architectural, Electro-mechanical)
Responsibility: Feasibility Study & Designing & Tendering & Tracking & Approvals
C. Contractor
Types: Main-contractor or Sub-contractor
Responsibility: Site Investigation & Implementing & Constructing

Tracking Performance System (TPS), in BRF Company
Ahmed Alzahrani, Abulaziz Khabti, Turki Alshehri, Ahmed Jakhthami, Osama Alnouri, Osaied Alwazzan

Abstract:
Key performance indicators (KPIs) is a business metrics, utilized by organization executives and different managers to trace and analyze factors considered crucial to the success of a company. Effective KPIs specialize in the business processes and functions that senior management view as most vital to progress towards meeting strategic goals and performance targets. One of the leading companies in the food industry, BRF, was struggling in tracking their first line employees performance. So, the company’s head of retail wanted to monitor and enhance the employees performance. Therefore, we seized the opportunity to create a new tracking performance system (TPS).

Quality Management in Tunnels

By: Whid Atiyyah, Ahmed Seraj adin
Supervisor: Dr. Hussien Reda

Abstract:
Quality in tunneling means knowledge. Knowledge is necessary to answer correctly to the requirements of the Design that has been prepared for an underground work, planned for a solution in civil, environmental or industrial fields. Knowledge is necessary to learn and “copy” better what the previous Designers have done to find new solutions for tunnel construction. Knowledge is necessary to spread all over the technical world both the reasons of failures and the keys for success. Experience, good contracts, professionalism, self-responsibility and simple rules are the basis to reach the objectives fixed in the Design, that is to perform the underground work following the Quality procedures.
Jeddah College of Advertising (JCA), an affiliate of the University of Business and Technology (UBT), held its fourth graduate exhibition on Wednesday and Thursday. Osama Jannadi, rector of UBT, patronized the event in the presence of Ibrahim Mohlab, consuls of Egypt and Germany, and senior officials of the university. Okaz and Saudi Gazette were the media sponsors of the exhibition, in which final projects of 58 students from a batch of 130 students, both male and female, for this year, were showcased.

The exhibition provides opportunities for the graduates to connect with the entrepreneurs and senior executives of companies who visit the event to learn closely about the creativity of students in line with the requirements of the labor market. During the event a number of projects were put on display related to advertising, content creation and corporate social responsibility, in addition to real-world projects from business clients. This year’s event marked a qualitative leap because of the introduction of Saudi robotics project, as a result of the cooperation between the engineering and advertising colleges.

The exhibition was hosted by Bab Rizq Jameel and Leo Burnett Worldwide, representing the International Advertising Agency. These companies offered jobs to a number of students who have proved their skills. For her part, Dr. Haneen Shoaib, dean of JCA, underscored the importance of the exhibition in achieving the strategy of the college to connect students with the employment market and build bridges of communication between the academic and business sectors, and thus facilitating active participation of young people in the labor market.
Mathematical Model for the Encapsulation of Alanine Amino Acid inside a Single Walled Carbon Nanotube
By: Hakim Al Garalleh, Mazen Garaleh & Ghassan Alabadleh
Journal of the International Adsorption Society

Abstract
Carbon nanotubes play a significant role in facilitating and controlling the transportation of drugs and biomolecules through their internal and external surfaces. Carbon nanotubes are also selective nano-devices because of their outstanding properties and huge potential use in many bio-medical and drug delivery applications. The proposed model aims to investigate the encapsulation of Alanine molecule inside a single-walled carbon nanotube, and to determine the minimum energy which is arising from the Alanine interacting with single-walled carbon nanotubes with variant radii $r$. We consider two possible structures as models of Alanine molecule which are a spherical shell as a continuum configuration and discrete configuration modelled as comprising three components: the linear molecule, cylindrical group, and CH$_3$ molecule as a sphere, all interacting with infinite cylindrical single-walled carbon nanotube. The adsorption of Alanine amino acid and magnitude of total energy for each orientation calculated based on the nanotube radius $r$ and the orientation angle which the amino acid makes with central axis of the cylindrical nanotube. Our results indicate that the Alanine molecule encapsulated inside the nanotubes of radius greater than 3.75 Å, which are in excellent agreement with recent findings.

Keywords Carbon nanotube (CNT) · Alanine amino acid (ALA) · Encapsulation · Potential energy · Van der Waals Force and Lennard-Jones potential.

Integration between different construction bidding models to improve profitability and reduce prices
By: Remon F. Aziz a,b,*; Yasser M. Aboelmagd
Alexandria Engineering Journal

Abstract
Unbalanced construction bidding covers different allocations of mark-up between contract project items to attempt and increase win chances with unbalance but without changing of total bid price. Many models have been developed to increase both the systemized execution and detection of unbalancing but, although unbalancing is thought to be widespread in general, substantially not known it use. Proposed unbalanced construction bidding models of many researchers neglected part of improve profitability. This paper inspects and integrates the construction bidding models techniques for determining price of each unit quantity and take advantage of bidder benefits, then all proposed mathematical models is studied carefully and more modifications will be done to tries to be fair and equitable for providing owner quantities that impact directly on items prices.

Finally it was concluded that the maximum/minimum models are preferred for many world cases. At end of paper, a case of study will be presented to demonstrate the use of proposed models for optimizing project bidding. Also, this paper will serve as a guide for construction project stakeholders with effective management to perform a competitive level of project pricing.
Dr. Basma El Zein, Participated in the Mena New Energy in the Panel, Renewable energy market in the MENA region.

She emphasized on the role of Academic and research institutions in the development of the renewable energy sector. She focused on the new technologies, innovations and knowledge generated in these institutions and how it will effect the future of the Renewable energy market. Universities and research institutes are working on transferring ideas to the market, may innovations are in process of being commercialized to enter the market. Business research, investment research and economical impact still needs to be elaborated in the MENA Region.

The 19th Scientific Meeting Discusses Engineering and Urban Ideas and Technologies, and Their Applications for Serving Pilgrims

The Potentiality of Biogas from Landfilling of Solid Waste in Madinah, KSA
Dr. Faisal Osra
Department of Civil Engineering

Abstract
Unsafe disposal of solid waste causes many environmental, social and economic problems, which leading researchers to investigate and develop alternatives to solid waste management and utilization. Extraction of energy from solid waste is an important way, especially when the solid waste was landfilled. With reference to increasing economic development and increasing global demand for energy, which created a pressure on existing energy resources, and in promoting the concept of sustainable development, alternatives to safe and renewable energy such as biomass generated from municipal solid waste landfills is preferred. Therefore, this research discusses the potential of biogas production from the landfills of solid waste in Madinah, and transforming the solid waste from environmental load to added value of energy. There are several ways to extract energy from solid waste by different techniques, including the anaerobic digestion in the landfills, which opens the prospect of benefiting from solid municipal waste landfills as a source of bioenergy throughout the world. There is no sufficient separation and sorting of recyclable solid waste in most countries around the world. For sustainable environmental development, as well as providing the latest waste sorting techniques to be used in conjunction with biogas generation systems from solid waste landfills.

The total solid waste generated from Al Madinah, KSA is about 1.69 million tons per year, which includes municipal, trees, transit stations and slaughterhouses waste. During Ramadan, solid waste reaches 140,000 tons by a rate of 8.3%, while during the Hajj season it rises to more than 350 thousand tons by a rate of 21.2% of the total waste in Medina. Biogas is the product of the decomposition of anaerobic landfill for solid waste, depending on the quantity and composition of biodegradable components of solid waste in Madinah. The amount of biogas (methane) produced from the solid waste landfill of Madinah, located in Old Yanbu Road, was calculated based on the proportion of biodegradable solid waste that in this landfill annually. To estimate the amount of biogas and CO2 produced from the landfill, LandGEM was used. The estimated amount of methane was more than 850 million m3/yea, where the Carbon Dioxide more than 650 million m3/year.
Dr. Basma El Zein’s talk was on *Nanotechnology for Sustainable Renewable Energy—Photovoltaic Applications*

**Abstract**
Meeting the world’s energy demand in an environmentally sustainable way is the most important technological challenge facing us today. During the Photovoltaic technology development, various materials have been investigated in order to obtain high quality photovoltaic cells, evaluated by two fundamental criteria: efficiency (ratio of the electric power output to the light power input) and production cost. According to these criteria, cells have been developed following three main ‘generations’ in the industry, defined by the types of semi-conductors and manufacturing techniques used.

The present used technologies are limited, inefficient and expensive to deploy. In this context nanotechnology and nanomaterials are expected to play a disruptive role in providing clean and sustainable energy.

Recently, an increased motivation was noticed that employ nanostructures in solar cells in order to improve the performance of conventional solar cells, to obtain relatively high conversion efficiency from low grade (inexpensive) materials with low production cost and low-energy consumption, and to obtain a conversion efficiency higher than the theoretical limit of conventional p–n junction solar cell.

The cell designs and enhancements are categorized by the type of nanostructure and the nanomaterials utilized. Contribution of nanomaterials and nanostructures to photovoltaic applications will be addressed in this talk.

Dr. Basma El Zein also participated as a panelist; Women Empowerment in Engineering

**Jeddah College of Advertising**

**International conference of Journalism, PR and Media Trend**

**Popular companies’ communication, and advertising reactions in KSA, after the removal of the women driving ban.**

Dr. Leonardo Romei

**Abstract:**
A Royal Decree, announced in October 2017, and executive since June 2018, removed the ban for women to drive in Saudi Arabia. When a major change like this happens, popular companies need to deal with it. In doing that, they have different options: from one extreme – ignoring it and continue their communication as usual – to the other one: try to lead or “ride the wave”. This presentation intends to describe and analyze the first communication responses of different key companies, and in particular the way in which the relationship between Saudi women and the act of driving was represented. The objects of analysis are the first audiovisual advertisements spread in the first week after the removal of the ban. The analysis is based on textual analysis and on a semiotic approach.
Each month, the Deanship of Scientific Research acknowledges the efforts of faculty and staff and honors them by nominating a researcher of the month and features them on the website, and in the DSR E-Newsletter. The selection is made by the researcher’s publications if they have received an award, their innovative ideas, and their citation index.

January, 2019
Dr. Mazen Garaleh
College of Engineering

February, 2019
Dr. Remon Eskander
College of Engineering

March, 2019
Dr. Faisal Osra
College of Engineering

April, 2019
Dr. Leonardo Romei
Jeddah College of Advertising
Research Workshops

How to Write a Successful Proposal

Dean of Scientific Research Dr. Basma Elzein presented the How to Write a Successful Proposal for UBT members in way to support them in their applications to universities, grants, funds, or projects. The workshop took place at the UBT Executive Education center on the 24th of January and it covered the following topics:

- Concept of a successful proposal
- Importance of a proposal when applying for a grant
- General process of grant application for an internal/external grant
- how to reflect the motivation in applying for a specific grant
- General parts of a proposal
- Tips and hints

Building an effective Teaching Portfolio and Developing a Winning Research Statement

Dr. Basma Elzein presented the Teaching Portfolio workshop on the 14th and the 21st of March. Dr. Elzein started her workshop by different brainstorming exercises followed by tips and hints to build teaching portfolios and research statements.

Teaching Portfolio and research statement are becoming increasingly importing for tenure processes and hiring any faculty member. In order to help the employer and the reviewers to conceptualize the faculty members approaches and experiences of teaching and research.

In way to support UBT faculty members, Dean of Scientific Research
Facilitating Ph.D. Studies

UBT, as a mean of professional development to its precious lecturer, is supporting all master holders to continue their Ph.D. through the Deanship of Scientific Research. Dean of Scientific Research Dr. Basma El Zein, and Scientific Research and Graduate Studies Consultant Dr. Samar Shoaib met with UBT members on the 10th of January. Dr. Basma explained the process of Ph.D. applications, proposals, obtaining offer letters from national and international universities etc. Following, Dr. Samar introduced herself, and elaborated on ways in which the DSR can support members in their Ph.D. studies.

DSR will assist in choosing the right university, and the best supervisor for every case individually. Once proposals have been approved and offer letters are received, DSR also supports faculty and staff in all legal requirements between the hosting university and UBT. During their studies, DSR also provides support through the progress reports and supervisors evaluations. In addition, one-on-one meetings are held with the Consultant Dr. Shoaib to discuss any issues.

Moreover, DSR organizes many workshops that support researchers, such as how to write a successful proposal, how to write an abstract, how to interpret and analyze data, etc. Another meeting was arranged with the presence of Dr. Abdullah Dahlan on the 21st of March. UBT members had a change to have a one-on-one meeting with Dr. Dahlan so each one can discuss concerns and inquiries.

Research Block

On the 21st of March, Dean of Scientific Research Dr. Basma El Zein met with UBT faculty and staff at the library in Sari campus to explain the concept of the research block. She elaborated on:

- What is a research block
- How to make use of a research block
- Who qualifies for a research block
- What is expected from you when you allocate a research block
- How to apply for a research block

Members who did not have a chance to attend can request a research block from the following link:
Research Block

Further Support in Sari Campus

DSR arranged another meeting with UBT faculty who are working to get their Ph.D. on the 11th of April where Dr. Basma elaborated on further Ph.D. opportunities in France and Europe.

During the first hour of the meeting Dr. El Zein explained who one can easily find the perfect research opportunity, in their desired university, and without missing on funding opportunities.

During the second hour, more faculty joined to welcome Dr. Ghadeer Kayal as the Vice Dean of Scientific Research in Sari Campus. Dr. Kayal will be available to strengthen the bond between the deanship and UBT members in Sari. She will contribute to the research development strategy and support the development of international research by being closer the faculty.

In addition, she will supervise the Research Flagships, monitor their activities and collaborate with Research Operation Officers to facilitate research for members in Sari, limiting the need to commute between campuses frequently.
The University of Business and Technology hosted the 3rd Research Symposium- Poster session, an annual event to showcase the research in the university, present each published and undergoing research in each college, and to offer opportunities for UBT researchers to meet, discuss ideas, share knowledge and get feedback.

This year, there were 10 posters from CBA, 8 from CE, 3 from JCA, and for the first time College of Law participated with 1 poster.

Posters have been evaluated by the Deans, Dr. Salah Abounar, Dr. Yussra Jamajoom, Dr. Jawad Alsulaiman, And Dr. Hani Aljahdali. In Addition to Dr. Ali El Rashidi and Dr. Ghadeer Kayal.

**Winners are:**

**From College of Business Administration Sari Campus**

*Determinants of Auditor Choice in Emerging Markets: Evidence from Saudi Arabia*

**Dina S. Fadaly**

**Abstract:**

Purpose- This study aims to analyze the choice of auditor in Saudi Arabian firms. The study investigates the main audit characteristics that influence firms decision to go for either ‘Big Four or a local audit firm.’

Design/methodology/approach- the design and research method are empirical using a questionnaire survey to collect data on the determinants of the choice of auditors. The study adopted Oxera (2006) questionnaire. A representative sample of 124 firms out of a total of 183 listed firms in Saudi stock market have been selected. The questionnaire was distributed to members of audit committee to ensure reliable responses regarding the selection process.

Data analysis-data collected were analyzed using both descriptive and inferential statistics-Logistic Regression Analysis method.

Findings – only four variables were proved significant in the selection decision; namely; auditor fees, audit firm reputation with investors, geographical proximity and long-term relationship with current auditor.

Research limitations/implications – difficulty to generalize the findings of the study due to the uniqueness of the Saudi economic, political, educational and culture environment.

Practical implications – the increased competition in the audit market in Saudi Arabia called for the necessity to understand what influences the selection decision. Most researches were conducted in developed countries and little in emerging markets; so, this study will help auditor identify their competitive advantage in Saudi Arabian market.

Originality/value – this study contributes to better understanding of the firms’ auditor choice and will stimulate further research in the same vein to investigate other factors on the side of the firm characteristics that affect the auditor selection decision. As well as more comparative analysis with other emerging markets in the Middle East.

**From College of Business Administration Dahban Campus**

*Alignment of Undergraduate Business Student’s Competencies with Saudi Market Requirements*

**Nasser AlKathani , Abdul Malik Syed**

**Abstract:**

The Saudi Arabian Higher Education has witnessed phenomenal changes during the past decade or so with massive investments into the public education system (Saleh, 1986; Krieger, 2007; Alamri, 2011). With the establishment of several new universities and variety of programs or disciplines they offer, expectations of the stakeholders is at its zenith. More and more students join to get a quality education. However, employers expect these graduates to
Events

4th Research Symposium (continued)

possess knowledge and skills to meet the ever-changing market place (Alfawaz et al., 2014). There is a considerable effort on the part of National Commission for Academic Accreditation and Assessment (NCAAA) to ensure that the quality of higher education is in line with the international standards (Darandari et al., 2009). To better meet the needs of labor market and to ease students cross-border movements, NCAAA introduced Saudi Arabian National Qualifications Framework (NQF) in line with other developed countries (Onsman, 2010; Young, 2003; Young, 2005; Chakroun, 2010). Despite these efforts, wide gaps are found to exist between what is taught in academia and what the skills and competencies that the labor market demands (Alfawaz et al., 2014).

From College of Engineering

Study of Droplet Evaporation of CNT-Nanofluids
Andika Aji Wijaya, Basma El Zein, Souad Harmand

Abstract:
Heat transfer efficiency is one of the key roles in energy saving as well as to meet the demand of the advancement of technology which requires higher power and smaller size of the devices. Traditionally, pure liquid such as water has been widely used as the working fluid in the two-phase cooling system, due to its stability, high latent heat, low viscosity, and also low cost. However, the maximum heat transfer efficiency is limited by base fluid thermal properties. From the available studies, it shows that using nanofluids as a coolant greatly enhance the thermal conductivity and therefore increase conduction and convection coefficients, allowing more heat transfer. The objective of this research is to develop advance cooling system using nanofluid to improve the heat transfer efficiency and to be applied in commercial use. In this preliminary work, we are interested to study the heat transfer performance on Carbon Nanotubes (CNT) – based nanofluids droplet in terms of spreading behavior, evaporative rate, and evaporation mode.

From Jeddah College of Advertising

Personalized advertisement using big data for local brands
Eiman Yahya Kurdi and Saleh Altakrouri

Abstract:
The aim of this research is to show the power of understanding user data and using it in the right way to advertise for a brand. Attention to data is key to promote a campaign or to use data to understand the minds of their users/consumers. The hypothesis is that big data can offer a huge aid for marketers to come up with creative, personal advertising. Data driven campaigns can fuel a unique creative insight that is universally relatable across markets.

From College of Law

Gambling on My Life and My Right to Live Law
Mahfuz

Abstract:
Right to life is a fundamental right of a person. This right is affected by the practice of insurance in many countries. Whilst, insurance itself is considered as safety net for the life of an insured. Consequently, there is clear contradiction between the purpose of an insurance and the practice of it. This problem can be solved through the development of law.

The Deanship of Scientific Research, organizer of this event, took this opportunity and stressed on the importance of scientific research. The Dean, Dr. Basma El Zein have encouraged researchers to conduct more research and to publish in peer-reviewed journals to lift the university’s ranking to be among the top universities worldwide, known for scientific and applied research, and to serve Vision 2030.
Influence of Social Media Marketing on Consumer Purchasing Disunion in Saudi Fashion Industry
Maryam Al Samkari, Abdelhamid Mahboub

Abstract:
Marketing in social media plays a vital role in influencing the decisions and choices of customers in the fashion industry in Saudi Arabia. Social media is so important for businesses as customers prefer companies that use various platforms of social media to market their products. The paper will evaluate the influence of social media on the fashion industry in Saudi Arabia. People over the years have developed a positive attitude towards digital marketing. In Saudi Arabia people receive social support from other customers while making their decision to purchase a certain product that is being marketed or sold in any social media platform. Data on the targeted population were initially analyzed qualitatively and quantitatively to project the effect of social media on customer decisions, while purchasing their fashion items. The preliminary results indicated that the adoption of social media by small and medium enterprises and e-commerce by businesses led to the growth of the businesses and economic growth of the country. It was seen that the success of businesses and future success in the fashion industry are highly dependent on and related to social media.

Benchmarking as a tool for quality improvement in College of Business Administration: An application of Analytic Hierarchy Process (AHP)
Abdul Malik Syed, Mohammad Naushad

Introduction:
Higher education institutions (HEIs) globally face many challenges in formalizing and systematizing benchmarking. Many HEIs simply imitate the best practices without consideration for the level playing field; which ultimately results in mismatch and brings chaos instead of improvements. The present study provides a framework for formal benchmarking as a tool by using Analytical Hierarchy Process (AHP) for adapting the best practices for quality enhancement in College of Business Administration (CBAK). The survey administered in this study revealed interesting results and found majority of respondents hold forth that the most challenging task is selection of benchmarking partner. The AHP model constructed in this study is to choose an ideal benchmarking institution for CBAK; Pre and post performance & dynamic sensitivity analysis identified College of Industrial Management, KFUPM and Business School, National University of Singapore as the ideal benchmarking partners. With the proposed benchmarking framework CBAK can assess itself how well they are in relation to these identified colleges and identify the good practices and adapt them for quality enhancement.

The Impact of Inclusion of the Foreign Investment on the Volatility of TASI
Farah Durani, Jumana Al Andanosi

Abstract:
The Saudi stock market after allowing Foreign Institutional Investors into the stock market would like to see the impact on its volatility. The apparent benefits of foreign investors investing in a stock market remain improved liquidity, efficiency, transparency and practice of better Portfolio management. However, entry of foreign investors in stock market is believed to cause higher volatility due to flow of hot money and can potentially create an issue of liquidity management for the central bank we explore the impact of inclusion of foreign direct investment on Tadawul All Shares Index volatility of Saudi Arabia using the annual data of the time series, spanning January 2013 to the first quarter of 2018. we find that data do not support high volatility theory and Saudi Arabian institutions such as SAMA has tools available for managing liquidity concerns.
Involvement as an Appraisal of Guilt
Ghadeer G. Kayal, Antonis C. Simintiras & Nripendra P. Rana

Abstract:
Consumer behavior researchers have long acknowledged the importance of guilt. Despite guilt’s significance, the appraisals that characterize guilt in the context of consumer behavior have not yet been adequately examined. Appraisals enable marketers to devise appropriate messages and strategies to gain desired emotional responses and consumption decisions of consumers. This study seeks to understand the role of involvement as an appraisal of guilt in consumer behavior. The rationale for utilizing involvement as an appraisal is based on its well-known evaluative nature. The results of the study indicate that involvement in a product class successfully predicts consumer guilt especially when interpersonal aspects are absent in a consumption situation. Managerial and theoretical implications of the study are discussed and directions for further research are offered.

DUAL-USE SPYWARE ‘STALKING’
Mohammed Minhajuddin

Abstract:
Stalking is generally a course of conduct directed at a specific person(s) that would cause a reasonable person feel fear. Stalking behavior includes but not limited to spying on a person. Research shows that, in United States an average 7.5 million people are stalked each year. In Germany, 11.6% of all people will be victims of stalking at least once in their lives (Dreßing, 2005). Over the last 20 years, the incidence of stalking through the use of information technology has sharply increased. Survivors of stalking increasingly report that abusers install spyware on devices to stalk, cause emotional and physical harm. This paper study the ecosystem of stalking using overt, covert and dual-use (have a legitimate purpose) spyware stalking. Massive online resources are available to abusers for stalking. The developers promoting their appuse via advertisements, blogs, and customer support services. Anti-virus and anti-spyware tools, fail to identify dual-use apps as a threat. Ultimately we identify several hundred such stalking apps.

“Exploring Social Media Users’ Insights and their Uses Patterns in Saudi Arabia”
Mohammad Zulfeequar Alam

Abstract:
As social media rely on millions of users around the world. This media gained confidence by communicating at a deeper level. Local and international companies recognized the marketing through social networks as a potential marketing platform and they used their innovations to run their marketing campaigns through social networks. Marketers/influencers adopt this as a weapon to compete with their counterparts. Despite the widespread dissemination of social networks and the adoption of various communication tools, there are lack of studies in this area, and therefore the objectives of the study to explore the social media user’s insights and using patterns of social media users. The survey of 226 respondents was collected through online (through Google Forms and monkey survey). To analyze the descriptive statistics frequency distribution), were applied and results were discussed.
The use of Electronic Resources and their Impact on Academic Achievement

Case Study of the University of Business and Technology
Maram Miralam, Hawazen Metair

Abstract:
The study dealt with the field of survey methodology and the actual reality of electronic information sources and their use in by the students of the University of Business and Technology in Jeddah and to monitor the difficulties and problems facing them. This is achieved through the preparation of the data collection tool (questionnaire) Intellectual production directly related to the subject of the study, which consists of (7) questions.

The Impact of Upcoming Cryptocurrencies on the Financial Industry
Mohammed Saharti

Abstract:
This research paper looks into cryptocurrencies and its impact on the financial industry globally. Cryptocurrencies are defined as a digital currency built with cryptographic protocols that make transactions secure, they are considered a potential solution for accessibility, exchange, fraud, and inflation in financial industries. The adoption of cryptocurrencies differs from country to country. Their prices are constantly fluctuating due to the increasing demand relative to its supply. Consequently, there are numerous positive and negative impacts on the financial industry globally when using cryptocurrencies.

Intelligent decision system for responsive crisis management
Mhammed Khouj

Abstract:
Disaster mitigation of severe catastrophic events depend heavily on effective decisions that are made by officials. The goal of disaster management is to make decisions that properly reallocate and redistribute the scarce resources produced by the available interconnected-critical infrastructures (CI's).

This research investigates the application of Monte Carlo (MC)-based policy estimation in reinforcement learning (RL) to mount up experience from a massive number of simulations. This method, in conjunction with an optimized set of RL parameters, will help the RL agent to explore and exploit those trajectories that lead to an optimum result in a reasonable time. It shows that a learning agent using MC estimation policy, through interactions with an environment of simulated disastrous scenarios (i2Sim-infrastrucutre interdependency simulator) is capable of making informed decisions for complex systems in a timely manner.
4th Research Symposium (Participations)

**Task Allocation and Analysis of Common Manufacturing Processes for Humans & Robots**
Hussein M.A. Reda

**Abstract:**
The objective of this paper is to provide a data base to assist in task allocation between humans and robots and to analyze some common manufacturing activities. To accomplish this, the capabilities and limitations of humans, as well as the characteristics of robots, are discussed. General guidelines are offered for the process of task allocation between humans and robots. A definition of task analysis is given and several common manufacturing processes are described. In the task analysis, a determination of those traits required by a human or robot to perform the given task are described. Also given are the results of an investigation into the type of robot capable of performing a given manufacturing activity.

**Studying the performance of both MBR and RBC systems for grey water treatment by using simulation mathematical model**
Amr Abdelkader

**Abstract:**
Grey water is the major part of household water consumption in volume. Grey water should be treated to complying reuse specifications and standards for several purposed such as toilet flush, landscaping irrigation and agricultures. The performance and treatment efficiency of both MBR and RBC systems were investigated by using verified mathematical model. The GPS-X (version 6.0) simulation program was used to simulate both MBR and RBC systems. Simulation model is based on Activated Sludge Model 1 (ASIM1). The results of the MBR plant showed that, the removal efficiencies of the grey water were: 95% for COD; 95% for BOD$_5$; 96% for TKN; 92% for NH$_4^+$ and 99% for TSS. Whereas, the results of the RBC showed that, The treatment efficiency based on BOD removal was ranged between about 93.0 to 96.0 %, and for the total SS removal was ranged between 84.0 to 95.0 %. The MBR system provides complete nitrification and suspended solid removal. Whereas, the RBC system provides less nitrification process and suspended solid removal. Also, it could be concluded that the grey water can be properly treated by RBC system and reused after disinfection and sand filtration whereas, it needs only disinfection when treated by MBR system.

**A device to consolidate different output signals from wearable sensors for healthcare applications**
Mohamed Shajahan, Rami Nahas

**Abstract:**
This research will develop a wearable sensors device to used for vital signs monitoring in healthcare, wellness and medical applications. The data from the sensors will be transferred continuously to the smartphone in real-time for further processing Index Terms: Thus it can be used for life saving activities because it can be used to store vital information about the person that can be used during life threatening situation. Modern smartphones possessed various functionalities that make it the appropriate device for data capture and processing.

**Collaborative Wormhole Attack in Wireless Mobile Adhoc Network**
Syed Muqtar, Louai Maghrabi

**Abstract:**
A Wireless Ad hoc network is vulnerable in nature and open for several types of cyber attacks. One of the most dangerous attack is wormhole attack in which two or more malicious nodes could establish a tunnel between them and attract all the neighbors to send the packets though that tunnel by assuring that packet would be delivered to destination through the optimal-route and with less-time delay. Most of the proposed methods to guard against wormhole attack uses either clock synchronization or round-trip time technique but our proposed method uses hop-to-hop count technique.
4th Research Symposium (Participations)

**Artscaping Public Places: Jeddah, the City of Urban Art College of Engineering**  
Mona Helmy

**Abstract:**  
This paper argues that Urban Art is an inclusive conception to the contemporary placemaking, which has contributed significantly to (re)shaping the notion of public places in an unprecedented dimension, perception, and scale. This process has greatly transformed not only the way of making and/or remaking places, but extends to new horizons of perceiving, and interacting of both public place and public arts by users in their tangible and intangible terms. The paper will examine the case of “Jeddah: The City of Arts”, and will explore its (re)making process of public places under modern interpretations of aesthetical values, where qualities of excitement, livability, vibrancy, spectacularity, are manifested in the city’s place making process.

**CREATIVE PLACES AS A STRATEGY FOR THE DEVELOPMENT OF CITIES**  
Mona Helmy

**Abstract:**  
This paper attempts to clearly define what is meant by a creative place? What are the benefits for a place to be creative? Why do some places seem more creative than others? More important, what is the relationship between the city development and creative places? How do cities create, shape, use, manage and market creative places, and how can those places in return shape the city image, and influence its future development? The paper will introduce concepts of creative places as mean to develop cities in a variety of strategies. It argues that cities, which successfully harness creative places as an integral part of a broader development strategy, will achieve generating wider cultural, social and economic benefits.

**FESTIVALIZATION OF HISTORICAL PLACES**  
Mona Helmy

**Abstract:**  
The main objectives of this paper is to conceptualize why festivals, events, and spectacles are increasingly becoming important city development tools/policies, as well as to investigate how creative approaches to the regeneration and revitalization of city spaces can enhance cities’ positions through the quality, experience, performance, and representation of the city space. The paper identifies the main approaches of remaking of historical public spaces under the “excitement”, “fantasy”, “communication” and “exchange” qualities of festivalization processes, while, in the same time integrating the authentic and integral qualities of the historical city space. Thus, the research paper seeks to establish a new perspective for reading, interpreting, and revitalizing historical city spaces through festivalization.
Events

4th Research Symposium (Participations)

Jeddah College of Advertising

Cultural Identity and City Branding. The case of Jeddah between Preservation and Innovation. A multimodal study
Cristina Greco, Safa Merheb, Saleh Al-Takrouri

Abstract:
The project intends to develop a complex research outline aiming at multilayers and independent elements and processes related to the construction and perception of the city identity. More specifically, by applying a multimodal study, the research intends to reflect on the cultural identity and on the different attributes and factors that are influencing the transformation of the city of Jeddah in the light of the new cultural openness to the touristic, entertainment and creative industries in line with the “Vision 2030”. In the case of Jeddah, the loss of the identity and the creation of multiple and undefined images highlights the need to reflect on its socio-cultural values and prospects offered by the contemporary use of the emerging media and, at the same time, by the preservation of the food culture, architectural heritage, and historical places. As a consequence, the specific objective is to document the city thought a database of geo-tagged images and the creation of an identity of the city from a location to an enchanting destination.

The emerging of trend advertising in Saudi Arabia: NEOM Case Study
Eiman Kurdi and Sara Fakieh

Abstract:
The research will look at the possible creative strategies for Advertisers to use in a new smart city such as NEOM. The vision of NEOM is, “the land of the future, where the greatest minds and best talents are empowered pioneering ideas and exceed boundaries in a world inspired by imagination.” Unrivalled in concept, Unmatched in intelligence, unconstrained by history and built on humanity’s greatest resource: imagination.
In collaboration between UBT and Innovation Management Team of G.I.C Germany, Dr. Waleed Mohammed Abdelfattah presented a total of five inventions to be patented on the 31st of January. In addition, he also presented some technical proposals that would develop existing products. Many of the proposed inventions will be manufactured in Saudi Arabia. The Economic Development Department is supporting the project wishing Dr, Waleed and his team all the luck.

Meeting with Dr. Waleed brings Collaboration opportunities

The innovation unit provides support in obtaining patents and in technology transfer. The Patent & Technology Transfer is responsible for:

- Managing the Intellectual Property resulting from research
- Protecting new inventions with invention disclosures
- Licensing the created technology
- Leading the results of research into the market
**Announcement**

**Summer Programs**

SR, Head of Architecture Department Dr. Mohammed Baleha, and Dr. Ahmed Hashmi met on the 16th of April 2019 with Manager of ITL Leisure Tourism and Travel Company MR. Mohmoud El Dirani to arrange a summer training trip for architecture students during summer 2019.

**Target:**

Architecture Students

**Time:**

July

**Duration:**

10 days

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**Meeting with Students**

Later the same week, Dr. Basma El Zein met with CE students to provide details on opportunities for summer training.
Announcement

Mecca Cultural Forum

In response to the directions of His Royal Highness Prince Khalid Al Faisal bin Abdulaziz, Governor of Makkah Region, UBT takes this opportunity to encourage you to participate in the program to highlight the University’s status and research contributions.

The theme of the Mecca Cultural Forum "How to be an example" for the year 1441 is "How to be an example in the language of the Quran". To promote the use of the Arabic language, and promotes scientific research in the sciences of Arabic.

To apply visit the Makka Governance website.
Announcement

Additive Manufacturing of Complex Shapes for Construction (3D Build 2019)

SUMMER SCHOOL • LILLE, FRANCE • 1st-26th JULY 2019

A strong academic programme
in line with top-tier research centres in architecture and civil engineering
& leading specialists in additive manufacturing for construction

A university city always on the move
lively, easy-living, with a rich history & heritage, centre of arts & cultures

In forward-looking Higher Education institutions
with high-standard on-campus accommodation,
& welcome services, great facilities & vibrant hall life

In the strategic, most dynamic area in North-West Europe
at the heart of a high-performance academic & economic hub that makes innovation a priority

A consistent French language & culture training programme
opening access to the francophone world
& making friends internationally

HIGHLIGHTS
LACTH Research Laboratory (ENSAPL) & Civil Engineering & Environmental Research Centre of the INPTDL
➡ 60th in English
• Top scientific conferences, lectures, seminars & meetings with leading researchers in the fields of concrete 3D printing & architecture
• Workshops, demonstrations of cutting-edge equipment & scientific visits
• Introduction to research projects
• Perspective to integrate a PhD in France
International Academy (Compel LMF)
➡ 60th in English & French
• French language, culture & society
• Intercultural communication
• Cultural visits & social events
• Receptions & full welcome services
Final Assessment
Certificate of Completion & 6 ECTS credits

APPLICATION
Admission Criteria
Master level students.
Excellence academic results & in-depth knowledge in architecture or civil engineering.
Advanced English.
Registration Deadline
For Chinese students: March 17th 2019.
For other nationalities, please contact us.
Maximum number of enrolments: 25.

PROGRAMME FEES
Accommodation, meals & transportation provided
(except flights: tickets R & B from Paris).
For China: 35,000 CNY per person.
For other countries: please contact us.

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LACTH: Design, History, Territory & Materiality Laboratory
ENSAPL: National School of Architecture & Landscape Architecture of Lille
INPTDL: Institut Mines-Télécom Lille Douai
Compsel LMF: Lille Norman France Higher Education & Research Institutions Association

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MICROWAVE- RADAR Training Center

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The objectives of MRTC is to train Engineers, technicians, and students in 3 engineering fields:
- Microwave
- Optical
- Radars

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Training is adjustable from 1 week to 8 weeks
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Target: Engineers, technicians, and students

Location: France

Duration: 1-8 weeks