

Third Issue, 2017

School of Applied Technical Sciences

SATS Newsletter



SATS NEWSLETTER

THIRD ISSUE



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Open Day

On Tuesday 23 May 2017, The School of Applied Technical Science organized an open day where many scientific and Clubs activities, workshops and student's projects were presented.



The school took the opportunity to open the Robotics Lab under the patronage of the president of GJU Prof. Natheer Abu Obied, who valued the Scientific days, since it represents the achievements of the university, expressing his excitement to witness the last four years' achievements during his presidency. From his side the Dean of the School of Applied Technical Science Dr. Ala'aldeen Al - Halhouli appreciated the efforts of all the school's family who worked together for this day, stressing the school's belief in dialogue approach that encourages the

student's ideas and work to implement them in reality. He highlighted some of the school's plans in expanding its programs beside increasing the cooperation with Germans, and consider projects as part of the curricula.



The Robotics Laboratory was opened by GJU President Prof. Natheer Abu Obeid, and Vice

President Prof. Manar Fayyad. The lab had various mechatronics and robotic projects on display by Dr. Nathir Rawashdeh and Dr. Jumana Abu-Khalaf, including some from the student Robotics Club.

At the day number of sessions and workshops were conducted on the subjects of Microfluidic diagnostics for low-resource settings, Recent advances in the Nano lab, Blood-Brain-Barrier on a Chip - a Variation of Fabrication, and Fabrication and evaluation of a deterministic lateral displacement device suitable for stereoscopic μ PIV measurements.



At the end of the day Dr. Al-Halhouli honored the most distinguished Students and Employees by distributing certificates of excellence to them.

Workshops

Socio-Economic Impacts of Renewable Energy and Energy Efficiency in Jordan



This workshop was organized by the School of Applied Technical Science within DESIRE project, Co-funded by the Erasmus+ program of the European Union to develop higher education teaching modules on the Socio- Economic Impacts of the Renewable Energy Implementation

The Dean of School of Applied Technical Sciences, Prof. Ala' Aldeen Al-Halhoulis stressed the importance of the renewable energy subject as a top priority in Jordan, indicating that the theme of the workshop comes in line with the university's vision and mission of the importance of applied sciences, adding that communicating with industrial and commercial sectors is essential to produce a qualified competitive forces capable of serving the needs of our beloved country.

Prof. Halhoulis explained that this project is one of DESIRE's projects that is managed by GJU and aims to develop teaching modules for Bachelor

and Master programs on the Socio- Economic Impacts of the Renewable Energy Implementation, and Energy Efficiency, also to raise awareness, conduct trainings and workshops for academics, students and researchers in the field, with the collaboration of partners from Germany, Italy, Cyprus, Egypt and Syria.

Quality Control & Six Sigma

Between 8 and 19 May 2017, Dr. Safwan Altarazi supervised the subject "Quality Control and Six Sigma" as a two-week intensive course at the Faculty of Business and Industrial Engineering in FHWS.



Prof. Dr. Bremer explains the ideas behind the logistics laboratory Dr. Altarazi, who is "positively surprised" "Photography: FHWS Schweinfurt, Simone Friese".

This faculty exchange cooperation came to enhance the ties between GJU and one of its major German University partners-FHWS. Each year, FHWS accepts tens of GJU students to complete their compulsory "Germany semester". During his stay in FHWS, dr. Safwan visited the logistics and virtual reality labs in FHWS and the 6200-emplpoyess production facility of Schefter in Schweinfurt. Various ways for future cooperation between GJU and FHWS were discussed during the

visit with Faculty of Business and Industrial Engineering in FHWS.

HORIZON 2020 Framework Program

Researcher Muna Zaqsaw, in the International Cooperation Department of the Higher Council for Science and Technology, presented the lecture saying that Horizon 2020 is the biggest EU Research and Innovation program ever with nearly €80 billion of funding available over 7 years (2014 to 2020)



She also introduced the work programs that are prepared by the European Commission within the framework provided by the Horizon 2020 legislation and through a strategic programming process integrating EU policy objectives in the priority setting.

She gave tips and instructions to the attendees on how to prepare and apply online for their proposals to secure eligibility and raise acceptance points. At the end of the lecture, a question and answer session was held for more clarifications on the topic.

Aramex Motivational speech to GJU's Students



Operation Manager, Engineer Ahmad AlTamimi explained the importance of starting any career from scratch, to gain a comprehensive understanding of the process, core of the business and company's culture.

He also, spoke about his personal journey in Aramex highlighting the difficulties and challenges that he went through, directions and tips on how to overcome these challenges.

Eng. AlTamimi presented some projects were implemented inside Jordan by Jordanian employees and suppliers, where they could build systems and machines to enhance the work flow, time, money and effort which as a result reflected on better customer experience.

At the end of the gathering the students engaged with the guest in a discussion clarifying with him several matters.

The Prospect of Magnetic Resonance Microscopy to Determine Metabolomics Rates in Vivo



The Director of the Institute of Microstructure Technology at Karlsruhe Institute of Technology (KIT), Prof. Jan Korvink, presented a lecture on "The Prospect of Magnetic Resonance Microscopy to Determine Metabolomics Rates in Vivo" for GJU students. He presented recent research contributions of his research group, where he focused on his research on the development of ultra-low cost micro manufacturing methods, microsystem applications in the area of magnetic resonance imaging and spectroscopy, as well as the design and simulation of micro and Nano systems.

On another hand, Prof. Korvink met with the Dean of SATS, Prof. Alaaldean Al-Halhouli, together with Other professors and researchers from SATS, and other GJU schools to discuss research collaboration opportunities between GJU and KIT in the area of microsystem.

The seminar was attended by many GJU faculty members and students and was followed with an informative Q&A session.

Building Tomorrow Lecture



Dr. Mohammed Hajjiri , Co-Chair Harvard Arab World Conference- USA, delivered an informative lecture entitled " Building Tomorrow " at GJU on Wednesday, 4th of January , 2017. The lecture was organized in collaboration between the School of Applied Technical Sciences and the Deanship of Student Affairs.

Dr. Hajjiri started his lecture by interacting with students and asking them as an Arabs, how would they identify themselves with their race or their nationality? Some would think of themselves by their nationality first, while others think of themselves based on their race and their nationality. In addition, some would only think about being Arabs when they are reminded about it by others. That was the key Dr. Hajjiri used to start talking to students and other audience from deans and professors, to explain more about the Harvard Arab Alumni Association (HAAA), which is focusing on two main objectives: strengthen the Arab Voice in Harvard and building a strong network of Harvard Alumni with interest in Arab World.

Conferences

NYU Biomedical & Bio systems Conference



Prof. Al-Halhouli talk presented the recent advances in microfluidic research at the NanoLab at GJU including the development of Lab-on-chip and Lab-on-disc for liquids mixing and for the separation of particles/cells. The talk was concluded with an outlook that highlights potential development and applications of the presented microfluidic platforms.

The demand for compact, inexpensive, disposable, and high throughput devices that can be implemented in various biomedical, biotechnological and chemical fields has led to novel multifunctional microfluidic platforms. The ability of such platforms to manipulate small amounts of fluid (on the scale of microliters and below) in miniaturized channels has significantly decreased the required samples and reagent volumes. This enabled the production of commercial chips and devices that are widely used by non-trained people at low cost.

2017 IEEE International Conference on Information Technology (ICIT), (ICIT 2017)

Dr. Mariam Wajdi Ibrahim participated in the "2017 IEEE International Conference on Information Technology (ICIT), (ICIT 2017)", which was held in Al-Zaytoonah University of Jordan, in a joint effort with University Sains Malaysia, Malaysia. May 17-18, 2017. The ICIT 2017 is a forum for scientists,



engineers, and practitioners to present their latest research results, ideas, developments, and applications in all areas of Information Technology. The presented paper of Dr. Mariam entitled "A Resiliency Measure for Communication Networks", introduces a resiliency measure for communication networks under two different attack scenarios, determined by examining: (i) the Level-of-Stability-Reduction (LoSR), as captured by percentage of "IP traffic dropped", (ii) the eventual Level-of-Performance-Reduction (LoPR), as measured by percentage of reduction in application Quality-of-Service (QoS), namely, latency, and (iii) Recovery-Time (RT). Measuring the resiliency level may aid system engineers to revisit the network design for achieving satisfactory metric.

Roadmap to sustainability Conference

Dr. Ismael Al-Hinti was invited as a keynote speaker to the Roadmap to sustainability Conference which was held in Tripoli, Lebanon on 29 April 2017. The conference was jointly



organized by the Lebanese Green Building Council and the Lebanese Order of Engineers and Architects as part of the 3rd Lebanon Green Week. Dr. Al-Hinti presented his keynote presentation titled "Fast track capacity building for Sustainability, Jordan as a role model for the MENA region" in which he highlighted the achievements and lessons learned from Jordanian experience in building the capacity of engineers and professionals in the fields of renewables and energy efficiency to enable the accelerating progress that is being witnessed in Jordan in these vital fields.

In addition to his participation as a keynote speaker, Dr. Al-Hinti was also invited as a special guest at the launch of the Lebanese Chapter of the Association of Energy Engineers (AEE) on 28 April.

Achievements

MoUs between GJU and Mideast Aviation Academy



Two Memorandum of Understanding (MoU) were signed with Mideast Aviation Academy (MAA) represented by its General Director, Mr. Abdallah Twerish. The aim of the agreements is to allow both parties to collaborate in the development of a joint training program and promote collaboration in field training program.

Under the first MoU, both parties agreed on equipping the students with the knowledge and practical skills in the aviation industry allowing them to gain the proper knowledge and skills in short time.

The second MoU is for GJU graduate Engineers who are interested in pursuing careers in aviation industry, where the academy provides six months of training program customized for them.

MoU between GJU and Jordan Engineers Association



A Memorandum of Understanding was signed with the Jordan Engineers Association JEA. According to the MoU, GJU will participate in organizing the 9 th Jordan International Mechanical Engineering Conference that will be held from 17-19/ October/2017, the university is going to support the conference and encourage the academic staff from GJU and German universities abroad to participate in submitting scientific papers to the conference.

SATS Little Professors learn to program Microcontrollers

"The School of Applied Technical Sciences (SATS) has conducted a 15-hour Microcontroller Programming workshop for kids of its faculty and staff between the 12 and 20th of June 2016. The young participants enjoyed learning about how to connect electronic components to a microcontroller and program it to implement various sensor and actuator applications.

The workshop was taught by Eng. Mohammad Ayash and Eng. Marwa Alfaouri, two Research and Teaching Assistants at SATS over 5 days.



At the end the workshop, the kids presented their completed projects and received participation certificates.

The goals of this workshop include introducing young kids to science and engineering, offer them a chance to socialize with other children and see to the university where their parents and relatives work."

Honors & Awards

Dr. Ismael Al-Hinti honored by the Emirates Green Building Council



Dr. Ismael Al-Hinti was recently honoured by the Emirates Green Building Council at the MENA Green Building Awards Ceremony for his contribution as a judge for this year's Awards.

Dr. Al-Hinti represented Jordan in the Awards Judging panel and evaluated more than 50 entries in nine different categories of the award. MENA Green Building Award is the most prestigious regional award in the fields of sustainability and is organized annually by the Emirates Green Building Council in Association with the World Green Building Council to recognize the most innovative projects, products, and institutes in the field of sustainability and green buildings.

It is worth mentioning that Dr. Al-Hinti is a board member of the Jordan Green Building Council.

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A new MSc in Engineering Management, which will be hosted by the industrial engineering department, has been accredited by the ministry of higher accredited it is expected to start accepting students in 2018.

Within the 10th National Technology Parade, SATS got the second position in the track of Engineering.

Dr. Rafat Al-Waked attended the 4th Annual Conference on Engineering and Information Technology in Japan.

Dr. Nathir Rawashdeh attended the 2017 SAE World Congress Experience in, Detroit, Michigan, USA.

Dr. Nathir Rawashdeh and Dr. Hisham Elmoaqet helped organize the 10'th National Technology Parade held at GJU in May 2017.

The Jordanian Engineers Association honored Qamar Al-Tarawneh for multi awards that she won.

GJU won the first place under the mid - level in the area of Engineering Disciplines and Visual Communications in the university proficiency exams.

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Have a
Great
Summer
Semester!



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