

# College of Engineering Community

A quarterly Newsletter Published by the Vice Deanship of Development and Quality

Issue No.3– Feb 2014; Rabie II 1435 H

## College of Engineering Welcomes New Students

The College of Engineering, represented by the Unit of Academic Advising for non-specialized students, received its freshmen for the academic year 1434/1435 H for three days, from 25 to 28/10/1434 H. The students were welcomed by the unit head, Engineer Abdul Bari Arifi and the rest of the members of the unit as well as by the Student Council. A corner was formed at the College entrance that contained booklets and brochures to provide students with everything they need such as instructions, laws, regulations of the College for course registration, sites of lecture rooms as well as the rest of the College facilities. The corner was visited by the College Dean, Dr. Khalid bin Ibrahim Humaizi accompanied by Vice Deans who were briefed on the activities of the reception, met some of the students and listened to their opinions about what they found during the reception



The Dean welcomed the new students, congratulated them on the occasion of the new academic year and urged them to work hard and seek excellence. The Vice Dean for Academic affairs and the Vice Dean for

Development and Quality also reaffirmed the keenness of the College to facilitate everything that would promote the spirit of belonging and ambition that would push everyone to compete in achieving the vision and mission of the College.

## Partnership Between the College and BAE systems

As part of the ongoing cooperation between the College of engineering and the Saudi Company BAE SYSTEMS, six students from the departments of mechanical engineering and electrical engineering were selected to join the company's program for sponsoring outstanding students. The total number of students who have joined the program is 30 students.



This program aims to develop students' skills and knowledge through lectures organized by the company over the course of the school year and the training of students in the company. The program offers a range of incentives, which include a monthly stipend and others for academically outstanding students. In this year, more than one hundred students have applied to the program and undergone evaluation by the standards set by the company, which include English language exam and a personal interview. This batch of new students is to

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replace six students who already graduated from the program since its inception.

## **The Board of Directors of Prince Sultan Advanced Technology Research Institute (PSATRI) Reviews Research Achievements**

The Board of Directors of Prince Sultan Advanced Technology Research Institute (PSATRI) held its meeting at the headquarters of the Institute at King Saud University in the presence of the chairman of the board of directors of the Institute, His excellency Lt. Gen. Fayyad bin Hamed Al Rwaiili, commander of the Saudi Royal Air Force, and his excellency the Rector of King Saud University and General Supervisor of the Institute Prof. Dr. Badran bin Abdulrahman Alomar. At the start of the meeting, His Excellency the commander of Royal Saudi Air welcomed the participants and praised the role of King Saud University for its support of the Institute as an academic, research entity and also a practical training center that matches the world renowned centers. Prof. Dr. Badran Alomar stressed the importance of the Institute and its responsibility in transforming technical research to smart investment projects, with tangible yields. His excellency the rector also stressed the new and distinguished phase of the Institute characterized by the participation of the armed forces represented by Saudi RAF. The meeting was attended by the Vice Rector of King Saud University and member of the Board of Directors Prof. Dr. Abdulaziz Bin Salem Al Ruwais, the executive Director of the Institute Dr. Sami bin Mohammed Al-Hamidi, and retired Major General Abdullah bin Mohammed Al

Ghurair, board member and Chairman of the Executive Committee, Prof. Dr. Saleh bin Abdullah Shubaily member of the Board of Directors, and Colonel Dr. Mansour bin Abdul Aziz Eid member of the Board of Directors and Manager of project PEACE in the air Force.



The Executive Director of the Institute, Dr. Hamidi presented the achievements of the Institute and the tasks performed which include the provision of modern technologies, the assistance in the transfer and localization of technology, building a bridge between academia and industry and providing IT consulting and solutions for national defense. The chairman of the board of directors was briefed on a number of topics of the agenda. Subsequently, His Excellency the Commander of Royal Saudi Air Force and his entourage went on a tour of the various labs of the Institute to survey the latest developments in its activities.

## **Honoring Outstanding Graduation Projects of the First Semester 1434/1435 AH**

Under the auspices of the Dean of the College of Engineering Prof. Khalid bin

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Ibrahim Alhumaizi and Dr. Abdulatif bin Mohammed Al Sheikh Senior Manager, Head of the Office of CEO of BAE Systems Saudi Arabia, the College Vice Deanship for Development and Quality organized on Wednesday, 14 Feb 1435 an exhibition and a ceremony in honor of the distinguished graduation projects for the first semester 1434/1435 AH. During the ceremony, awards offered by the company and certificates of excellence were presented to 24 students. Were also honored the supervising professors of the projects. The ceremony saw the participation of the departments of civil, electrical, mechanical, oil and gas, and industrial engineering.



## Summer Training for Engineering students and Areva Company

The College Vice Deanship for Development and Quality organized in collaboration with companies Areva and EDF a presentation for opportunities of training of college students outside the Kingdom as well as providing grants to outstanding students. The company Areva is a French company specialized in the field of sustainable energy.

The presentation was attended by a large number of students who were provided with

an official e-mail of the company to send their resumes so as to choose qualified students for external training in the summer of this academic year. The presentation was made by Engineer Omar Oteishan (Industrial developer of Areva) and was attended by Dr. Ali Nouri director of the company for the Middle East and Dr. Solomon Nusir general manager of EDF Riyadh Branch, in addition to the College Dean and Vice Deans and a number of faculty members.



## Workshop on Excellence in Petrochemicals: Local and International Perspectives

Under the patronage of His Excellency Prof. Dr. Badran Alomar the University Rector, the College of engineering and the College of sciences organized a workshop on (Excellence in Petrochemicals: Local and International Perspectives) on Feb 12, 2014 (12 Rabii I, 1435) at the university Driyah Hall. The organization of this workshop comes within the execution plan of the sixth initiative for the implementation of the first strategic plan of the university (Proficiency in all areas and excellence in specific areas), for which the dean of college of engineering was assigned to implement.



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The workshop started with a welcoming word from the dean of college of engineering, Dr. Khalid Alhumaizi, then a word from Dr. Iqbal Darandari the vice dean for development for girls sections, followed by a word from Dr. Ahmed Alamri, the vice rector for graduate studies and scientific research.



After that, a series of lectures were presented successively by Dr. Abdelhamid Ajbar the coordinator of the initiative (College of engineering vice deanship of development and quality), Dr. Saeed Alzahrani, the supervisor of SABIC Polymer Research Center at KSU (college of engineering), Dr. Salem Al-Theyab supervisor of Petrochemical Research Chair (college of sciences), Dr. Alamgir Karim Associate Dean of Research and Institute Director of the College of Polymer Science and Polymer Engineering at the University of Akron, USA, Dr. Robbie Burch, professor

at the school of chemistry and chemical engineering at the Queen's University of Belfast (Northern Ireland), professor David Rooney, the Director of Research Centre for the Theory and Application of Catalysis at the School of chemistry and chemical engineering at the Queen's University of Belfast (Northern Ireland) and Dr. Madhukar Garg, the Director of Indian Institute of Petroleum - Council of Scientific & Industrial Research (India). Trophies were presented afterwards to the lecturers and an open discussion was held about the outcomes of the workshop.

The workshop showed a heavy attendance by the University faculty members researchers, graduate students as well as by interested personal from outside the university.

## **Dr. Mamdooh Al-Saud Appointed as New Supervisor of the SEC Chair**

Dr. Mamdooh S. Al-Saud has been appointed as the new supervisor of the SEC Chair. Dr. Al-Saud has been working at King Saud University since 1997 where he is currently an Associate Professor in the Electrical Engineering Department. He is also the Vice-Dean for Administrative and Financial Affairs at the Advanced Manufacturing Institute. Dr. Yasir Alturki, the former Supervisor, keeps his active participation in the Chair research and development activities

## **Launching of the Award of Engineer "Tariq Alqosaibi" for Excellence in Civil Engineering in Saudi Arabia**

Engineer "Tariq Alqosaibi" award for Excellence in Civil Engineering in Saudi Arabia was launched during a meeting that was held on Wednesday on 12/25/1434 in

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the Office of the Dean of the College and in the presence of Dean of the College of Engineering and Dr Ahmed Alqosaibi being the representative of the sponsor of the award as well as the head of the Department of Civil Engineering and the head of research unit.

## Overview of the Award

The award is supported by Engineer Tariq Alqosaibi and is given to outstanding Applied Scientific Research that meets real requirements of the community in a creative way in the field of civil engineering in all its branches in the Kingdom.

The value of the prize is 50000 SR , and is awarded annually. The award will continue for five years, subject to extension. The prize is awarded in an annual during the fourteenth week of the second semester in the presence of the sponsor

## Committee of Trustees

It is the supreme committee supervising the award and is based in the College of Engineering at King Saud University and consists of:

- Prime sponsor of the award
- Dean of the College of Engineering, King Saud University as a member
- Vice Dean of Graduate Studies and Research at the College of Engineering, as member
- A representative of the Saudi Council of Engineers as member

## Organizing Committee

The organizing committee of the award is based in the College of Engineering at King Saud University and consists of:

- Chairman of the Department of Civil Engineering at the College of Engineering at King Saud University as president

-Chairman of the Research Unit in the College of Engineering, King Saud University as member

-Assistant Head of the Department of Civil Engineering at the College of Engineering at the University of King Saud as a member

## Career opportunities for Engineering Graduates from Samsung

In the framework of cooperation with global engineering companies, the College of Engineering hosted the Korean Samsung (C & T) company during 8-10 Muharram 1435H (11 to 13 November 2013 m) for the purpose of providing jobs for new graduates students in the different branches of the company.



The company was selected by the Kingdom for the implementation of several important projects including Riyadh train project (metro) and a power plant project in the Eastern Province. The exhibition was coordinated by the Department of Civil Engineering, represented by Dr. Khalid Al Qahtani - head of the department - and Dr. Hisham Foley. During the exhibition, the College Dean Dr. Khalid Alhumaizi, the Vice Dean Dr. Abdulmohsen Baddah and Dr. Abdelhafeez Chenawi of Civil Engineering department met with officials from Samsung to discuss the possibility of benefiting from the company in the field of

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summer training for the College students . The exhibition was held in the College Hall 1B10, and was attended by more than 150 students from different departments of the College

## Summer Training for Students

The College provided in the summer of the academic year 1433/1434 H, opportunities for the external training of 18 students from various Departments in four different locations in the United States and Canada in distinguished international companies and research institutes. Priority was given to outstanding students in terms of grade point average and the level of the English language.

It is worth mentioning that the College has begun the external training program since the summer of 1431/1432H, and has provided training opportunities for 6 students at the Max Planck Institute in Germany, and provided other opportunities for a number of students from the Department of Electrical Engineering in the summer of 1432/1433 H.

## Workshop on Improvement of Teaching of Tutorials and Labs

Under the auspices of the College Dean Dr Khalid bin Ibrahim Alhumaizi, the College Vice-Deanship for Development and organized a workshop for the first part of the Project on the *Development and Improvement of the process of Teaching Labs and Tutorials for Engineering Students*. The workshop was organized Tuesday 25 November 1434 H . The project, approved by the University Vice President for Development and Quality is one of the development projects that are implemented

to achieve the strategic plan of the College. The first part of the project consists in developing plans and programs for improvement as well as the execution plan. The workshop included a speech by the College Dean and a presentation of the project by Dr. Waleed Zahid, the College Vice Dean for development and quality. An open floor discussion followed the presentation.

The workshop was also attended by the Dean of the University Deanship of development Dr. Salem Al-Qahtani and a number of College faculty members, TAs, laboratory technicians and students.

## How to Get a Patent

Under the initiative from the University Program for Intellectual Property and Technology Licensing, the College Vice Deanship for Development and Quality organized a lecture entitled "The patent and the program's role in obtaining, protecting and marketing it", on Wednesday, the 3rd of Muharram 1435 H. The lecture was presented by the supervisor of the program, Dr. Khaled Saleh.



## Honoring Distinguished Administrative Staff of the College

The Dean of the College Engineering Prof. Dr. Khalid bin Ibrahim Alhumaizi organized a meeting with the administrative staff of the college sections and units on Wednesday 8 Safar 1435 H. The meeting was attended

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by the College Vice Deans and the College Director for administrative affairs.

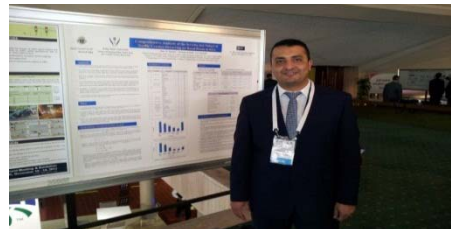


The meeting included a word by the Dean who stressed the importance of commitment to official work hours, the need to improve work efficiency at the college and to provide good service to employees of the college. He also stressed the importance of knowing the exact tasks assigned to each employee according to regulations and instructions and the carrying out of these tasks in an optimal way. A discussion was opened during the meeting and the Dean listened to the views and proposals of the attendance, in addition to discussing job performance and obstacles.

At the end of the meeting, the distinguished employees of this semester were honored. These include Mr. Abdullah Saeed Saran (College workshops), Musaad Sultan (College Administration), Abdulrahman Howaish (Student affairs), Abdulrahman Al-Othman (Department of Petroleum and Gas Engineering), Ahmed Wateed (Department of Mechanical Engineering) and Ahmed Foulous (Computer Center). It is worth mentioning that the College Dean meets with the staff each semester in order to stimulate continuous communication between the College administration and staff, and to affirm the importance of their role in the educational process and the services they provide to employees of the college.

## Participation of Chair of Prince Mohammed bin Nayef for Traffic Safety in the Conference of the International Road Federation (IRF) in Riyadh.

The "Prince Mohammed bin Nayef Chair for Traffic Safety" participated in the activities of the seventeenth International Road Federation conference, which was held in Riyadh Intercontinental Hotel in the period from 10 to 14 November 2013, under the auspices of His Excellency the Mayor of Riyadh Region Engineer Abdullah Almuqbal. Dr. Hani Hassan, chair advisor of transportation and traffic engineering presented a scientific paper. The paper explained the characteristics and causes of traffic accidents along the roads located outside the cities in Saudi Arabia, how to reduce the number of these incidents and the negative effects caused by them.



## KSU Researchers Working on Blast Resistant Construction

In collaboration with University of Melbourne in Australia, researchers working at Specialty Units for Safety and Preservation of Structures, in cooperation with Mohammed Bin-Laden (MMB) Chair for Research and Studies in Strengthening and Rehabilitation of Structures, have developed an advanced risk and vulnerability assessment methodology and framework for buildings in Riyadh against blast generated waves. The methodology and framework would be useful for the assessment of blast resisting potential of



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structures and deciding the remedial measures either post construction or at design stage. The program was sponsored by the international twinning program of the university.

## The Sustainable Energy Technologies (SET) Center Received Funds and Reaches out to Community

The Sustainable Energy Technologies (SET) center was awarded four new funded projects from The National Plan for Science, and Technology (NPST). The projects were directed to biomass, solar and hydrogen energies. This makes the total number of projects awarded to SET 11 projects.

The center also received an important Japanese delegation from Fukushima Renewable Energy Institute, Japan Electrical Safety & Environment Technology Laboratories, Mizuho Information & Research Institute, Inc. and Photovoltaic Power Generation Technology Research Association. The Committee discussed the on-going collaboration links and their promotions in the solar energy field.

Renewable Energy Awareness Program was also conducted successfully at one of schools in Riyadh on December 11, 2013.



The visit was conducted to follow the sustainable energy technologies tagline of

“for better tomorrow”. 150 students attended the event from 5th grade up to 9th grade and they were given lectures on renewable energy resources and their importance to the community. Also, practical demonstration of the equipment that works with wind, solar and hydrogen energy in addition to different types of bio-fuels were shown to the students. Writing and painting competitions were held to encourage the students and several prizes were distributed among the winners.

## Prince Sultan Advanced Technology Research Institute (PSATRI) Receives a Group of Trainees from the Royal Saudi Air Force

Prince Sultan Advanced Technology Research Institute received on Saturday, 07/29/1434H (08/06/2013 AD) the first batch of trainees of Royal Saudi Air Force, in order to complete their summer training in the laboratories of the Institute.



The trainees were greeted by Dr. Sami bin Mohammed Al-Hamidi, the Executive Director of the Institute, and Prof. Dr. Saleh Shubaily the board member and the supervisor of the center of technical innovation of radio and photonics, by Mr. Garam Allah Alghamdi, Deputy Director for operations and by a number of members of the faculty and staff of the university.



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Dr. Sami delivered a speech in which he expressed his delight for the presence of trainees. Then Dr. Saleh Shubaily accompanied the trainees on a tour inside the corridors of the institute. It is worth mentioning that the summer training program falls within the strategic cooperation between the Air Force and Prince Sultan Advanced Technology Research Institute, which aims to transfer and localize the technology in the Air Force.

## Civil Engineering Professors Honored by Rector for their Invention

At a glittering ceremony organized by Intellectual Property and Technology Licensing Program of King Saud University on Sunday 22 December 2013, researchers (Professors Husain Abbas, Yousef A. Al-Salloum, Saleh H. Alsayed and Mohammad S. Alhaddad) of the Specialty Units for Safety and Preservation of Structures and Moa'alam Mohammed Bin-Laden (MMB) Chair for Research and Studies in Strengthening and Rehabilitation of Structures at the Department of Civil Engineering, were honored and awarded medals by Prof. Badran Al-Omar, the university Rector, for their recent invention which has been recognized internationally through the grant of US patent for improving fire endurance of concrete-filled steel tubular columns used in high-rise buildings. The rector congratulated the researchers for their innovation and emphasized the need to commercialize the product for the benefit of the society.

## Impact Research Laboratory Established in Civil Engineering Department

With a research grant from the National Plan for Science and Technology (NPST), researchers working at Specialty Units for Safety and Preservation of Structures and Mohammed Bin-Laden (MMB) Chair for Research and Studies in Strengthening and Rehabilitation of Structures, have established a laboratory for conducting research on materials and structures under impact loading. The laboratory is equipped with a 75 mm diameter Split Hopkinson Compression Tester for testing materials and a gas gun for testing structures under the impact of projectiles with velocity of up to 300 m/s. The laboratory, first of its kind in the Kingdom would be useful for researchers and engineers in studying the impact behavior of different materials and structural elements.



**Participation in an Exploratory Study for Sustainable and Affordable Housing in KSA**  
Researchers working at Specialty Units for Safety and Preservation of Structures and Mohammed Bin-Laden (MMB) Chair for Research and Studies in Strengthening and Rehabilitation of Structures, participated in an exploratory study for low-cost

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construction of residential buildings in KSA for making housing affordable for citizens. The study was supervised and sponsored by King Abdulaziz City for Science and Technology (KACST). A database of building systems available around the globe was created and the criteria were developed for the selection of the most appropriate low cost building system for KSA. A sample villa was planned meeting the requirements of Saudi families and a cost effective scheme for its construction was suggested which was most optimal among all internationally invited quotations. Besides the prime objective of cost control, the study was aimed at preserving a multitude of values: ecological, environmental, social, economic, financial, physical and aesthetic.

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