



Office of
Vice President
for
Research

The endeavor that took three years & costed about KD 3 million

Engineering & Petroleum Faculty opens three core labs for pursuing advanced research in the fields of Nanotechnology, Semiconductors and Petroleum Fluids

The Research Administration took a further step towards the actualization of its mission of developing state-of-the-art infrastructure, facilities and model labs across Kuwait University's faculties, under its General Facilities program, with the ceremonial opening of yet another core lab, Engineering Scientific Facilities (ESF), at the Faculty of Engineering & Petroleum. The facility was formally inaugurated on April

26, 2010, by Prof. Fahed Al-Thakeb, Vice President for Research, amidst the presence of the faculty Dean, Prof. Taher Al-Sahhaf, Assts. Vice President for Research, Prof. Haitham Lababidi and Prof. Nejb Smaoui, and Vice Deans for Academic/Research Affairs, Prof. Abdul-Lateef Al-Khalafi, Engineering & Petroleum, and



Dr. Azza Mussallam, Faculty of Science, in addition to professors, researchers and technical staff.

(Contd. on ... P. 12)

Consultants submit a duly endorsed Report to the Vice President

External Experts Panel outlines a feasible strategy for RA to implement Performance Evaluation Report recommendations

RA's Performance Evaluation Report, submitted to President in July 2008, provided a holistic view of the research sector's performance, listing a series of recommendations deemed necessary for strengthening the institutional research process, and in achieving international standards of quality and scientific distinction. For RA this was the beginning of looking beyond,



for an action plan that was feasible and implementable in turning the recommendations into practical goals to be achieved. This provided an appropriate basis for the formation of an independent

(Contd. on ... P. 27)

Intel cluster installed at Kuwait University IT Center

Preparations underway for organizing a workshop on "high performance computing" for the benefit of faculty members

The Research Administration's continuous endeavors in extending the benefits of high performance computing (HPC) to researchers and graduate students in accomplishing their research objectives with speed and efficiency, is firmly moving towards the phase of familiarizing faculties with the immense potential, operational

(Contd. on ... P. 2)

Research Administration signs MOU with Ecophile for scientific cooperation

Carrying forward its mission of research cooperation with external institutions, the Research Administration entered into collaborative partnership with Ecophile Co. Ltd, the Korean company that specializes in soil remediation and water treatment. A joint agreement for research cooperation between the Research Administration and Ecophile was formalized in the form of Memorandum of Understanding (MOU) on January 5, 2010, at the Office of Vice President for

Agreement paves the way for advancing research and technological collaboration



Eric Kim, Head of International Business Development. From Research Administration, the event was attended by Prof. Haitham Lababidi and Prof. Nejjib Smaoui, the Assts. Vice President, and Prof. Ibrahim Abu Ellail, the Legal Consultant.

The joint agreement would open the door for advancing research and technological collaboration through scientific cooperation, particularly related

contamination control and research, making their technology particularly relevant in high salt concentration areas. The company, supported by the government body, is interested in advancing its R & D activities with a competent body, such as Kuwait University, in Kuwait. The immediate activity following the signing of agreement would be the exchange of researchers to explore potential projects and to understand local environmental issues. A team of researchers from KU would be visiting Ecophile's research facilities at Korea, and explore areas of collaboration, with an agreement for further collaboration to be drafted. The team would also explore collaboration possibilities with other institutions and universities in Korea. The visit is planned towards the end of academic year 2010. ■

Research. The agreement was signed by Prof. Fahed Al-Thakeb, Vice President for Research, and Mr. Martyn Canavan, representing Ecophile, and the Managing Director for Middle East & North Africa Region. Also, present at the signing ceremony was Mr.

to projects that concern soil remediation and water treatment, the area where Ecophile ranks 3rd in terms of project size and 2nd with regard to technology and patents. The company is a spin off from a government body specializing in coastal

Intel cluster installed at Kuwait University IT Center...(From.... P.1)

power and functionality of the recently acquired Intel® cluster. The advanced system includes 16-Node High Performance Computing (HPC) Cluster, based on Multi-Core Intel® Xeon® processors, hosted at Kuwait University IT Center. The cluster has been installed, connected to

the network, and storage capacity provided. The facility has been commissioned, and a workshop will soon be conducted by the Intel experts, who would demonstrate the system's configuration, and introduce its amazing powers to the faculty members in accomplishing multitude ap-

plications by running programs that require high speed and computer power. A Steering Committee has been formed by the RA to administer, follow-up and plan the development of advanced computing facilities. The Committee is headed by Prof. Haitham Lababidi, Asst. Vice President for Research,

(Contd. on ... P. 26)

Boeing Delegation visits OVPR for exploring research possibilities in the areas of *Photovoltaics* and *Renewable Energy*

The Office of the Vice President for Research (OVPR) recently received a delegation from Boeing for a meeting with the Vice President for Research, in addition to Prof. Fahed Al-Thakeb, and his Assistants, Prof. Haitham Lababidi and Prof. Nejib Smaoui, Prof. Taher Al-Sahaf, Dean of College of Engineering & Petroleum, and Dr. Ali Al-Mutairi, Chairman of Electrical Engineering Department to explore possibilities for research collaboration in the critical areas of Photovoltaics and renewable energy. The visit provided opportunity for the delegates to meet Kuwait University President Prof. Abdullah Al-Fuhaid, and to tour KU's facilities for advanced experimentation and research, especially the recently inaugurated Engineering Scientific Facilities (ESF) housing world-class technology and equipment assets for the pursuit of complex, in-depth and precision studies, and to develop institutional R & D potential and capabilities for scientific

innovation and discovery.

It is significant to recall here that the collaborative talks with the Boeing delegation had been going on since November 2009, when they last visited the Research Administration for exploring collaborative possibilities. Thereafter, ongoing communication through emails and conference calls effectively matured into their expressed desire for assessing KU's infrastructure, R & D activities and capabilities in the spheres of PVCs and renewable energy, the areas which RA has already earmarked for priority attention. While, the delegates were overtly impressed by KU's infrastructural strengths and state-of-the-art equipment resources, the occasion also provided opportunity for a technical presentation by Prof. Mustafa Ghannam on

RA meets Boeing Delegation for undertaking collaborative projects



the subject.

The meeting resulted in a highly productive interaction between the two sides, RA and Boeing. This collaboration is expected to lay the basis for an enduring cooperation, hopefully contributing towards the establishment of Renewable Energy Center at the new Sabah Al-Salem university campus at Shadadiya. The alliance is also being viewed as potentially significant for undertaking collaborative projects to be implemented through the Offset program. ■

RA receives an experts delegation for gathering requisite information on establishing *Nuclear Reactor Center* for research and training in the GCCC

Following the recently held workshop on Nuclear Energy in the Gulf Cooperation Council Countries (GCCC) at the Kuwait Institute for Scientific Research (KISR), during May 3-4, 2010, the Research Administration (RA) received on May 4, 2010, an experts' delegation from the International Atomic Energy Agency (IAEA), KISR, as well as researchers from the Gulf countries for the purpose of gathering and analyzing technical and security information,



essential for establishing a Nuclear Reactor Center for research and training in the GCCC. The delegation included Mrs. Francois Maloosar, Dr. Steve Ress, Mrs. Jose Lolish from IAEA, Dr. Alham Al-Qarathawi from

Qatar, Dr. Khalid Al-Eesa from the Kingdom of Saudi Arabia, Dr. Hussain Al-Jasim from Bahrain, and Dr. Dhari Al-Ajmi, Dr. Yahya Al-Hadban, Dr. Ahmad Al-Mulla and Dr. Aadil Qabazard from KISR. A requisite program was organized by

RA for taking the visiting delegates on a tour of General Facilities Labs at the faculties of Engineering & Petroleum, Science, and Health Sciences Center, as well as Mubarak Al-Kabir teaching hospital.

(Contd. on ... P. 11)

RA holds special orientation on *Research Initiation Grants (RIG)* on April 5, 2010

RIG Session introduces new Kuwaiti Asst. Professors to prevailing scientific environment at KU, and opportunities for pursuing research through RA's Research Support System

The Research Administration organized a special session on Research Initiation Grants (RIG) on April 5, 2010, to introduce newly

inducted Kuwaiti faculty members, joining various faculties and departments at Assistant Professor level, to the prevailing scientific environment at Kuwait University, and opportunities for pursuing scientific research through RA's Research Support System. The session was chaired by the Vice President for Research, Prof. Fahed Al-Thakeb, amid the presence of Prof. Nejib Smaoui, Assistant Vice President for Research and Mrs. Mariam Al-Shemali, Director of the Research Administration. Prof. Fahed Al-Thakeb welcomed the new faculty members and provided a briefing on research programs, as well as the funding support available to faculty members under nine categories; These included: University Research Projects for original research, External Research Projects for joint research with external institutions, General Facilities Projects for developing research infrastructure and central Labs at KU faculties, National Research Projects for addressing strategic and national issues through the formation of special teams of experts, Priority Research Projects for issues of direct impact on the State and society (such as diabetes, air and drinking water pollution, alternative energy, etc.), University Services Research Projects for facilitating the

development of services at KU, Graduate Research Projects for providing grants to Master's and Ph.D students for research, and



GCCC Research Projects for joint research with the GCC research institutions/centers.

In addition, the Research Initiation Grants (RIG) aimed at facilitating new Kuwaiti faculty members to initiate their participation in KU's research activity, acquire familiarity with RA's research programs, and advance their creative potentialities through the pursuit of basic, applied and humanities research. Looking back, RA introduced the RIG program seven years ago, in 2003/04, and since then a total of 199 RIG grants have been approved. Of these, 131 projects have been successfully completed, 33 projects are ongoing, 2 have been approved, and 33 projects terminated. It is significant to note, that 62 faculty members, having completed their RIG projects, have advanced to wider, more elaborate projects as PIs, and additional 24 faculty members joined other projects as CoIs. This shows how RA's initial

motivation to researchers in the form of RIG grants, is leading towards the deepening of their interest, innovation and involvement in more

comprehensive research, an objective which is central to the RIG awards program, so that new Kuwaiti faculty members become active participants in mainstream research.

RIG projects are regulated by specific conditions. The

grants are awarded to new Kuwaiti Assistant Professors, who did not complete two years at Kuwait University. The grant is offered only once to faculty members who did not previously avail any other funded research. The recipient of RIG grant, becomes the project's PI, but no CoI. (whether resident or non-resident) is allowed. There is no provision of manpower, travel or transfer of budget from one fiscal year to the other. The maximum budgetary limit for RIG projects is KD 2000/-, and the project is for one year duration. The starting date for RIG projects is April 1st of each fiscal year, and on project's completion the researcher must submit a final report. Prof. AlThakeb added that RA's current policy encourages developing research cooperation and partnerships with external institutions, an activity which falls within the purview of RA's Office of External Research Collaboration. Already, RA shares effective partnerships with several local and external institutions,

(Contd. on ... P. 29)

Approved decision on elevating the quality of research at KU comes into effect from April 1, 2010

RA's Funding Committee makes significant recommendations during its Third, Fourth & Fifth Meetings for the academic year 2009/10

The fundamentals of the RA's research support system provide the regulatory framework for rendering grants to faculties in pursuing high quality research. The system entails standard procedures and review mechanism, uniformly applicable to all projects, clearing the deck for requisite funding decisions concerning the award of grants. It is the funding decisions that are vital in paving the way for researchers to implement their projects, by using diverse project-related services, resources and requirements, essential for research implementation. The funding decisions are invariably taken at the level of two committees -- *Implementation Committee, and Funding Committee*, that facilitate appropriate decision-making for a project's clearance.

The Implementation committee reviews and approves small budgeted grants at the RA level, while the Funding committee involves collective decision-making process for larger grants, with the participation of faculty Vice Deans for Research. For researchers information, Implementation Committee meetings are held weekly, and Funding Committee meetings are held once a month, both meetings are chaired by the Vice President for Research, and the venue remains the Office of the Vice President for Research.

Funding decisions for small and big budgeted projects are taken during the course of these committee meetings, which also provide opportunities for discussing vital research and policy concerns to facilitate research implementation, and streamline procedural regulations. It is precisely

PIs of small budgeted projects now have the freedom of opting for one external or internal referee for the refereeing of their research project

in this context, the recent Funding Committee Meetings provided congenial grounds for major decisions concerning several grant approvals, in addition to research regulatory and policy concerns. Hence, during the course of *Third, Fourth & Fifth Funding Committee Meetings*, as many as **15 projects were granted approval**, at the **total budget of KD 1,451,751/-**. In addition, recommendations concerning the refereeing process and improving research quality, and related aspects of research, were also made, and are listed below:

In the *Third Funding Committee Meeting*, **seven projects were approved** at the **total budget of KD. 334,351/-**. In addition, matters concerning the purchase procedures were addressed, especially the mandatory conditions for the purchase and use of consumables on research projects, requiring researchers' adherence to the following conditions:

- Amount allocated for consumables in a research project must necessarily be used for the purchase of requisite materials and chemicals needed for the same project. The budget earmarked for this category cannot be used for other projects.
- Consumables purchased from the budget of a research project, can not be used for carrying out experiments or analysis for other research projects, unless prior approval of the Research Administration has been obtained.

- Researchers must refrain from the tendency of purchasing consumables in large quantities, not actually needed for a research project.

The *Fourth Funding Committee Meeting* resulted in the **approval of five projects at the total budget of KD. 998,550/-**, in addition, the following three major recommendations were made:

1. Proposed reformation in project refereeing process for first category of grants (Up to KD 2,500/-)

The Funding Committee unanimously approved giving PIs the freedom of choice in opting for either an internal or external referee in the refereeing of their original research project, submitted for funding support. This freedom of choice, however, is confined only to this category of projects.

2. Work of Scientific Research Committees

The Funding Committee approved the authorization of RA's Implementation Committee to oversee the activities of the Faculty Scientific Research Committee during the summer period (from June 1 to October 1) of each academic year; for the first category of projects (up to KD 2,500/-).

(Contd. on ... P. 7)

Faculties invited to submit proposals in priority areas

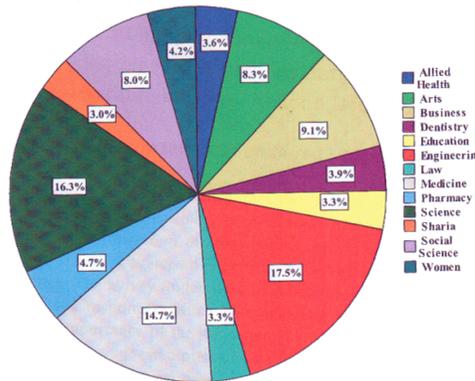
RA started implementing the new areas of priority research from April 1, 2010

On December 6, 2009, RA presented the results of the priority research survey to the Funding Committee members for requisite information, review, and discussions. At the center of debate and decision were the ten newly determined priority areas, based on the survey findings, which were ranked in order of faculties priority preference, and subsequently approved by the funding committee. The details of the research priorities survey report has already been published by RA in the November/

December 2009 edition of the OVPR Research Newsletter. Following the endorsement of suggested priorities by the Funding

Committee, all faculties were informed about newly designated areas of priority research.

Respondents (Faculty Members) by Faculty



Presently, RA has opened the door for inviting faculties proposals in addressing new priority areas, with the programs implementation that has just started April 1, 2010. Faculties are invited to actively participate in pursuing research in priority areas, and take advantage of the associated benefits.

New Areas of Priority Research

1. *Health Services efficiency requirements and obstacles*
2. *Air and water pollution*
3. *Appropriateness of education system and training institutions outputs to labor market needs.*
4. *Diabetes and its relation to obesity, nutrition and dental caries.*
5. *Food and water security.*
6. *Traffic problems with regard to information systems, educational awareness and legislation.*
7. *Developing techniques for desalination and purification of water, and its indigenization.*
8. *Studying the effect of pollutants on environment.*
9. *Energy Conservation.*
10. *Health and pandemic effects on people residing in the vicinity of energy generation stations and oil refineries.*

For researchers information, priority research proposals are to be submitted on RA's research support application meant for priority projects, which could be accessed on RA's website under the Forms category (<http://www.ovpr.kuniv.edu/research>).

The Table alongside, provides first hand view of the new areas of priority research, listed once again for the researchers information/reference and proposal submission. ■

RA's Funding Committee makes significant recommendations ...(From.... P.6)

- ▶ 3. Proposal for elevating quality of scientific research at Kuwait University

ing the proposal's details and guiding principle concerning the matter of research quality.

The Funding committee members were informed that the President's Executive Committee had approved RA's proposal concerning elevating the quality of scientific research at Kuwait University, requisite announcement of which was made in OVPR's Research Newsletter; Volume 1, Nov/Dec. 2009 Issue, provid-

The approved decision that has come into force from April 1, 2010, and is automatically applicable to all research projects that started from April 1, onwards.

Likewise, the *Fifth Funding Committee Meeting* resulted in the **approval of three projects**, at the total budget of **KD. 118,850/-**.

Overall, these funding committee recommendations reflect **RA's budgetary commitments for 15 projects**, clearing the passage for the researchers to proceed with the project implementation process, involving the utilization of resource allocations and professional services offered by RA, that are critically needed by researchers for implementing their projects over the approved time-frame. ■

This year's Posters events see significant emergence of the notion of coordination across faculties, with joint participation in Posters activity

Science, Engineering & Petroleum and Women's Colleges join hands in observing year 2009/10 Scientific Poster events with the display of 80 Posters

Carrying forward its initiative of involving the faculties in holding annual scientific poster day events, the Research Administration (RA) observed significant enthusiasm among faculties in presenting their research accomplishments through the scientific Posters' platform. This year's posters event saw the significant emergence of the notion of coordination across faculties, with joint holding of the event by Science Faculty, together with the Faculty of Engineering & Petroleum, and Women's College, on April 12-14, 2010.

Likewise, the 4-faculty Health Sciences Sector collectively observed its 15th Annual Posters Conference, that opened on April 20, 2010, with the joint participation of the faculties of Medicine, Dentistry, Pharmacy and Allied Health Sciences, while



the Humanities sector's 6-faculty participation is scheduled for May 2010. For RA this is a welcome

Six-faculty Humanities Sector all set to hold 3-day poster event

development, as it has been vigorously promoting the concept of scientific coordination across faculties, encouraging them to come together in the joint pursuit of high quality research that generates distinguished outputs.

The holding of scientific poster day, is seemingly providing the much needed platform for the faculties to coordinate their research activity

development, this year's Posters activity assumes special significance with scientific activity revolving around three focal points in the display of posters, with



joint events organized by the Science Faculty, Health Sciences Center, and Arts & Humanities Colleges.

For the Science Faculty year 2009/10 marks the observance of its Third Poster event, held in coordination with the Faculty of Engineering & Petroleum, and the Faculty for Women, and inaugurated on April 12, 2010 at the Conference Hall of the Administrative Building. Held under the patronage of Prof. Bader Naser Al-Saqabi, Dean of the College of Science, amid the presence of Vice President for Research, Prof. Fahed Al-Thakeb, and his Assistants Prof. Haitham Lababidi and Prof. Nejib Smaoui, and

Science, Engineering & Petroleum, and Women's Colleges join hands in observing this year's Poster Day

in a manner that could bring researchers from diverse disciplinary streams in the common display for their research activity, and in creating an environment that encourages

scientific innovation and creativity.

Given this welcome

(Contd. on ... P.9)

the Deans of the Faculty of Engineering & Petroleum, and College for Women, Prof. Taher Al-Sahhaf, and Prof. Kassem Saleh, the event attracted a major turnout of professors, researchers, graduate students, participants, and the sponsoring companies.

Organized as 3-day activity, the inaugural event had the distinguished presence of Prof. Emeritus EB Gareth Jones, from the Bioresource & Biotechnology Unit, Biotec, Nasada, Thailand, especially invited for the keynote address on "*Marine fungal diversity for biotechnology and bioremediation.*" Special lectures were also organized on each day of the event, which included a talk on "*Lasers: Who Needs Them?*," by Dr. Jahja Kokaj, from the Physics Dept., and a talk on "*At the crossroads of current and future research preparative/analytically parolysis (PAP Chemistry),*" by

Prof. Osman Eldisoqi from the Dept. of Chemistry.

Speaking on the occasion, Dr. Azza A. Al-Musallam, Vice Dean for Research, Faculty of Science, welcomed the distinguished gathering and outlined a brief recount of the coordinated efforts in response to RA's initiative that led to the organization of the First Poster event in 2007/08, followed by the second, more wider event in 2008/09, and the current far wider and representative third event, bringing together multi-faculty researchers at the Posters common platform. She also spoke at length on the research facilities and research activity in the Faculty of Science, highlighting the faculty's current plans for restructuring the General Facilities laboratories.

The inaugural talk was followed by a documentary on state-of-the-art technology and equipment assets

of the faculty, acquired under the General Facilities umbrella, for which she thanked and appreciated RA's whole-hearted support.

The 2010/11 science faculty posters event displayed over 80 posters, which included 49 posters by the Faculty of Science, 18 by the Faculty of Engineering & Petroleum, and 13 by the Faculty for Women. All posters were reviewed by members of the Technical Committee, leading to the declaration of top three best posters from the participating faculties, who were awarded certificates and cash awards, marking the closing of a highly successful poster event. The winners of the posters, along with the title of their research is presented in the Table along side.

(Contd. on ... P. 28)

Faculty of Science Posters Winners

1. Dr. Mustafa Marafi, Afrousheh, Makdisi & Mathew
Dept. of Physics
Study of spectral line shapes of rydberg states of alkaline earths due to rare gas collisions. (KD 500)
2. Dr. Ali Bumijdad, Sami Ali & Asha Mathew
Dept. of Chemistry
Effects of water/surfactant ratio and surfactant concentrations on Fe₂O₃ nanoparticles prepared by microemulsion route. (KD 300/-)
3. Dr. Amani Al-Adsani, Zoa Burke & David Tosh
Dept. of Biological Sciences
Transdiferentiation of pancreatic AR42JB13 cells to hepatocyte and ductal phenotypes. (KD 200/-)

College of Engineering Posters Winners

1. Dr. Essam Al-Awadhi,
Mechanical Engineering Dept.
Forced convection flow in a wavy channel with a linearly increasing wavines at the entrance region. (KD 500/-)
2. Dr. Khaldoun Rahal and Dana Drobiova
Civil Engineering Dept.
Behavior of reinforced concrete beams subjected to two different shear loading conditions. (KD 300/-)
3. Dr. Khaled Al-Fadallah
Mechanical Engineering Dept.
Characterization of grain boundaries in copper using EBSD. (KD 200/-)

College for Women Posters Winners

1. Dr. Tasleem Ara Zafer, Fatima Al-Hassawi, Fatima Al-Khulaifi, Ghanima Al-Rayyes,
Dept. of Family Sciences
Effects of chickpea flour supplementation on the organoleptic properties of white flour bread, Blood glucose responses and subjective appetite in young Kuwaiti female. (KD 500/-)
2. Dr. Nidal Rahman, Anwar Al-Yatama, and Kassem Saleh
Dept. of Computer Engineering
Comparison of clustering algorithms and protocols for wireless sensor network. (KD 300/-)
3. Dr. Abdur Rahman, Sareej Attur, Saju Simon Jacob, Islam Khan, Khalid Mohammad Khan
Dept. of Family Sciences,
Dept. of Anatomy & Dept. of Biochemistry,
Health Sciences Center
Effect of lead exposure on the activity and expression of serine /threonineprotein phosphatases in the brain of young rats. (KD 200/-)

Speakers highlight latest developments and potential benefits of nuclear energy to Kuwait

Research Administration organized a seminar on “Nuclear Energy in the State of Kuwait”

Carrying forward its mission of holding seminars in areas of emerging scientific interest and significance to Kuwait, the Research Administration recently organized a seminar on "Nuclear Energy in the State of Kuwait," on April 19, 2010, at Kuwait University, that highlighted latest developments in the area, and its potential for benefiting Kuwait. The Seminar was hosted by Prof. Fahed Al-Thakeb, Vice President for Research, and moderated by Prof. Haitham Lababidi, Asst. Vice President for Research. The key speakers of the seminar included Dr. Ahmed Bishara, Secretary General of the National Commission on uses of Nuclear Energy for Peaceful Purposes, Dr. Nader Al-Awadhi, Deputy Director General/Information at Kuwait Institute for Scientific Research (KISR) & Liaison Officer at International Atomic Energy Agency (IAEA), and Dr. Tareq Al-Rifai, Director, Center for Environmental Radiation at Kuwait University Faculty of Science.

Addressing a huge gathering of Faculty Deans, Vice Deans, academic, research, clinical and technical staff, Prof. Lababidi, in his opening remarks, drew attention to nuclear energy as one of the alternative energy options being adopted by the Gulf Cooperation Council Countries following the summit held in Riyadh in 2006, and as a result of the initiative presented by the State of Kuwait to organize

a joint Gulf program for nuclear energy usages. For this purpose, the National Commission on uses of nuclear energy for peaceful purposes was formed, to

study the feasibility of a viable nuclear energy program in the State of Kuwait. He also mentioned the Kingdom of Saudi Arabia's recent plans to establish a new research complex for developing nuclear energy technology and alternative energies, reportedly the second Gulf country to adopt the nuclear energy program after UAE, and in this endeavor will the State of Kuwait be the third? He then invited the key speakers to enlighten the audience on the nuclear energy option and the associated challenges.

The speakers addressed various aspects of nuclear energy uses, nuclear cooperation and environmental radiation. Using nuclear energy for peaceful purposes was the core of the presentations, especially for meeting Kuwait's outstanding needs concerning the generation of electricity and water, reducing emission of environment polluting gases, boosting applied research, expediting knowledge &



Using nuclear energy for power generation was the core of presentations

technology transfer and creating job opportunities. Dr. Bishara's talk centered on the most challenging issue of venturing into nuclear energy activity in Kuwait, a strategic option that required full attention, including its dimensions, goals, costs, whether present or future.

This aspect required study and evaluation for entering into the realms of nuclear energy for peaceful purposes, as well as to diversify electrical energy sources for meeting future demands, while ensuring economic development and citizens welfare. He also said that the National Commission was established by the Amiri Decree a year ago, and with the responsibility of Dr. Bishara said that these showed Kuwait has largest CO₂ emissions.

The primary studies also reflected on the available choices, clearly indicating that the generation of electricity through nuclear

(Contd. on ... P. 11)

energy was a competitive option commercially, as well as promising in terms of environment, with propensity for huge futuristic contribution to the economy and security of energy in the State of Kuwait, a subject which is to be studied thoroughly in the near future. Presently, the commission is engaged in several studies concerning demand and usefulness of nuclear energy program in Kuwait, as well as policy concerns, nuclear energy law, international agreements and preparation of the national work force, etc.

Overall, the commission was actively involved in specific consultative and strategic studies concerning the nuclear energy option as an element of electrical energy in Kuwait, and its commitment to complete transparency in nuclear energy operation, banning nuclear proliferation, and achieving highest standards of safety and security. The Commission would be working directly with the IAEA, and committing to standards specified in establishing the local program for nuclear energy for peaceful purposes. The Commission also looked forward to international cooperation, through the participation of institutions, State governments, and non-governmental organizations having experience

in the field, with the objective of working and dealing with any local program concerning generation of nuclear energy for peaceful purposes that ensures long-term sustainability. Dr. Nader Al-Awadhi, spoke about nuclear cooperation with IAEA for development, especially in the context



of nuclear applications in Kuwait, and focused on a broad picture of IAEA activities, including its technical cooperation program. He also highlighted nuclear energy applications in the industrial, health, and oil sectors, emphasizing the significance of research as being vital for the program. He also underlined the importance of nuclear safety and nuclear power, and reflected on IAEA's core competencies, which broadly concerned technology, safety, verification, and technical cooperation.

Dr. Tareq Al-Rifai reflected on environmental radiation, stating that the issue had two key concerns -- *radiation and environmental radiation*, and concerned *alpha* (α), *beta* (β) and *gamma* radiation, each of which required different levels of protection. Radiation could damage cells and tissues, and affect humans, either through external or internal exposure. The environmental radiation could either be natural or man-made, and the latter could be *industrial, military or medical*. Dr. Tareq also showed how the Environmental Radiation Unit was actively involved in testing products and materials to determine the product's safety aspects, concerning its radiation content. The seminar concluded with panel discussions, in which a number of important issues were raised, leading to an interactive question/answer round, with the key speakers answering the participants' questions, marking the end of an immensely successful scientific session. ■

RA receives an experts delegation...(From.... P.3)

The visit provided opportunity for the delegates to meet specialists in fields of radiological and nuclear materials, as well as to acquire an understanding as regards KU's research and academic capabilities in the field of nuclear energy.

The establishment of a nuclear reactor for research and training in the GCCC is a regional need and a dire necessity for realizing the objective of building well trained and quali-

fied national cadres, well-versed in the use of nuclear energy techniques for implementing research projects in diverse industrial fields, discover disease causes and treatment regimens, and harness the power and potential of this energy resource in agriculture, environment and related fields.

The visit will be followed by IAEA issuing a special question-

naire that would require participation of all concerned state sectors, involved in the use of nuclear energy, such as Kuwait University, to gather, document and analyze technical information on scientific and peaceful applications of nuclear energy, which the State of Kuwait could adopt. In addition, critical fundamental information would also necessarily be needed as regards safety and security measures concerning the operation of nuclear reactor. ■

“Engineering Scientific Facilities” inaugurated ...*(From.... P.1)*

Speaking on the occasion, Prof. Al-Sahhaf, welcomed the participants on the opening of the General Facilities Research Laboratories at the College, established with funds provided by the Research Administration. Essentially, there were three core Labs, which included Kuwait University Nanotechnology Research Facility (KUNRF), Kuwait University Semiconductor Research Facility (KUSRF), and Petroleum Fluids Research Center (PFRC), constituting the backbone of experimental research infrastructure to serve researchers in conducting advanced research in the fields of nanotechnology, materials science, semiconductors, photovoltaics, petroleum research and related areas. He also said that the fundamental objective of these core facilities was to pursue high quality research, and elevate Kuwait University to become a leading academic institution in the field of applied sciences.

offered him two options, firstly, to gather all equipments available in the faculty at one place, with the promise that technicians to manage this equipment resource would be provided by RA. Secondly, I suggested to him to apply for general facilities projects. Since then, RA

continued pushing the committees, working closely with them by putting in great effort and determination to accomplish this

research. Continuing further, Prof. Al-Thakeb said that "looking at overall statistics for KU research



projects for the academic year 2008/09, it showed Faculty of Science had 30% projects, Health Sciences 22%, and Engineering 15%. Approximately 50% of Engineering projects belonged to the first category of awards (i.e. less than KD 2,500/-). With the availability of such advanced equipment, RA hopes for a significant decline in this percentage. "He also mentioned that in the sphere of scientific publications too, the Faculty of Engineering had 15% of total published research in Kuwait University”.

Sharing his thoughts on this important event, Prof. Al-Thakeb said that the opening of ESF facility at faculty of Engineering marks an honest and genuine step towards developing research capacity building endeavor for providing researchers latest technology and specialized scientific equipment, in pursuing high quality research. He recounted that "thinking on this project began in the first month of my taking office, when on looking at statistics of faculties, I observed that the College of Engineering needed General facilities equipment. Consequently, I had a meeting with Prof. Mohammad Al-Ansari, the former Dean, and

vital project. ***This took us three years, and an endeavor that costed KD 3 million,*** leading to the accomplishment of a mission that has successfully matured today for the benefit of researchers, faculty and KU’s scientific development." It is now up to the faculty and researchers to enhance the scientific research culture, making the best use of the equipment at their disposal, and deliver. The college must now assume a critical role in enhancing the faculty's research and development activity. Referring to the faculty’s significant role in community service through its training and consultation program, he said that RA hoped to see a similar role in the field of scientific

However, there were some promising developments too, where Faculty of Engineering & Petroleum has made some headway, with a group of its researchers bagging the first incentive reward for distinguished research from RA, for publishing in the best top 25% scientific journals. In addition, RA’s efforts have led to the funding of two projects by KPC, at the total budget of over KD 400,000/-. These are reassuring accomplishments, which are setting the grounds for developing research abilities, and building partnerships and cooperation with external institutions for advancing KU research. What RA is aiming at is to create

(Contd. on ... P. 21)

RA begins implementing the new research rewards from April 1, 2010

Incentives aimed at elevating KU research to internationally compatible quality standards

Having achieved the University Council's approval for the stimulus package to be awarded as incentives to researchers for publishing their research outputs in top 25% of the highly rated journals, as already announced in the July 2009 issue of the OVPR's Research Newsletter, RA is now gearing up for overseeing the rewards implementation starting from the fiscal year 2009/10.

The new incentives for researchers are primarily aimed at encouraging faculties to bring about qualitative improvements in their research performance by targeting distinguished journals of world standing, and be active participants in elevating in-

stitutional research to internationally compatible quality standards. To achieve this purpose, RA has explicitly defined the mechanism and moto researchers for achieving distinguished research outputs, re-

**Research Rewards
earmarked
for both
funded and
unfunded research**

gardless of whether the results were generated from funded or unfunded research. Grounds have thus been laid by RA for the first time where unfunded research has been brought

within the frame of being an equal competitor alongside funded research for research rewards, with quality being the determining factor for the incentive. For the information of faculty research community, the recipients of the research rewards are entitled to following financial incentives earmarked for both funded and unfunded research (see below).

The actual implementation of the research rewards incentive has started from April 1, 2010, and since then three research rewards had been approved by RA from unfunded research (see below).

Research Rewards Approved for Faculty of Engineering & Petroleum

- 1- Ghannam, M; Abouelsaood, A; Alomar, A; Poortmans, J; "Analysis of thin film silicon solar cells with plasma textured front surface and multi-layer porous silicon back reflector", Solar Energy Materials & Solar Cells Vol. 94 (2010) 850-856 (Solar Energy Materials & Solar Cells Journal is ranked 7th out of 67 in Energy & Fuels subject category).
- 2- Nashawi, I S; Malallah, A; Al-Bisharah, M; "Forecasting world crude oil production using multicyclic Hubbert model", Energy & Fuels Vol. 24 (2010) No.3, 1788-1800 (Energy & Fuels Journal is ranked 15th out of 67 in Energy & Fuels subject category).

Research Rewards Approved for Faculty of Science

- 1- Manaa, H; Al-Mulla, A; Al-Jamal, N; Al-Dallal S; Al-Alawi, S; "Optical limiting in hydrogenated amorphous silicon-selenium thin films", Thin Solid Films, Vol. 518 (2010) 3933-3937 (Thin Solid Films Journal is ranked 2nd out of 16 international Journals in the category: Materials Science, Coatings and Films).

I. Rewards for Funded Research

- i. A KD 1000/- reward for the PI for each research paper, considered as productivity of any research grant, published in top 25% of the international journals with impact factors evaluated according to the Journal Citation index in the concerned scientific field of the candidate. The reward is restricted to a maximum of two papers in one calendar year.
- ii. A KD 500/- reward to the PI for each final report of any research grant that merits "excellent" scoring from an external referee. The reward is given for only one project per calendar year.

II. Rewards for Unfunded Research

- i. A KD 1000/- is rewarded to the researcher; or researchers in case there are many, for each scientific paper published in top 25% of the international journals with impact factors evaluated in accordance to the Journal Citation index in the discipline of the candidate. The reward is restricted to a maximum of two papers per calendar year.
- ii. In case of multiple authorship, the corresponding author submits each researcher's share of the award specifying his/her participation, otherwise, the reward is distributed evenly.

OVPR releases several major publications during the First few months of current academic year 2009/10

OVPR publications strategic reservoirs of authentic information on research sector's policy & programs

The sphere of OVPR publications remained in the sway of intense activity, encapsulating critical reformations and substance for the rapid release of several documents during a short span of three months, from January through March 2010. Documenting important information on institutional research developments, new initiatives, incentives, programs, procedures, and proposed action plan by external experts, OVPR accomplishments provided research substance for source documents to be generated, distributed and critical information disseminated to reach wider community.

The fundamental objective in generating publications remained the creation of a dependable channel of authentic and reliable information on research sector's policy, goals and strategy to cater to multi-dimensional needs of researchers, institutions, experts and decision-makers keen on keeping pace with Kuwait University's scientific advancements, R & D potential, major accomplishments, and policy directions. Dependency on OVPR publications has, therefore, remained a perpetual need of diverse community of users, keen on gathering first-hand information on the prevailing scientific environment at KU, facilities for advanced research, grant support mechanism, and propensity for collaborations or new alliances.



Publications fulfilling the vital objective of keeping KU accomplishments

Invariably, OVPR's new initiatives and developmental activities inadvertently necessitate generation of strategic documents, which alongside the standard and serial publications, continue to broaden the publications domain, building additional pool of vital information for dissemination, display, access, reference and preservation.

While accelerated production activity during the academic cycle 2009/10, is continuously gaining momentum, OVPR's constituent offices – Research Administration (RA), Academic Publication Council (APC), Center for Gulf & Peninsula Studies (CGPS), and Center for Strategic & Futuristic Studies (CSFS), have been effectively generating an array of major documents, with several key reports, issues and editions printed and delivered during the last three months (*January to March 2010*), with many more under-production documents rapidly progressing to completion, and an additional line-up of new documents currently in

information aggregation, preparatory and formatting stages. Here, our focus is on most recent publications released from various OVPR offices since January 2010, and were widely distributed. Descriptive details of these newly released publications are summarized below under respective OVPR Offices:

I. Research Administration (RA) publications

- OVPR Research Newsletter, Volume 1, Nov/Dec., 2009



Issue -- Released in December 2009, this third issue of the OVPR's Research Newsletter marks the culmination of Volume I of the year 2009 series, with the first issue released in March 2009, and the last in December 2009, as RA heads for Volume II, marking the beginning of year 2010 series. The Nov./Dec. 2009 issue of the Research Newsletter encompassed strategic news on major accomplishments of OVPR in the first 3 months of the academic year 2009/10, especially the signing of MOUs with KU-KPC and Amphion. Equally important was the news on formation of external experts panel to review the

(Contd. on ... P. 15)

► performance committee report, determining of new priority areas based on survey report, by-laws on Research Services Unit, KU-Unesco first project, preliminary meet on Center for Sustainable Development in Buildings, and approval of the proposal on elevating KU research quality. The issue also provided the statistical outlook on faculty research activity, in addition to the summary view of RA's publications released until Dec. 2009, and specific features on Centers' news. For readers benefit, the Nov./Dec. issue of the OVPR Research Newsletter was widely circulated, hard copies are available on request and electronic copy could be accessed through the OVPR website (<http://www.ovpr.kuniv.edu>). Published (*English and Arabic*).

• **Research Initiation Grant (RIG), 2010**

– Released in January 2010, RIG Guide to Information provides essential information on RIG incentive grants, specifically earmarked for new Kuwaiti faculty members, joining various faculties/departments at the Assistant Professor's level. The Guide presents explicit details on access to RIG grants, outlining the eligibility requirements, budgetary limitations, project duration and research implementation procedures, together with expectations of report at the project's culmination. The Guide also clarifies the entitlement of such grants only once to the eligible faculty members, as a start off incentive for more comprehensive research. The processing framework for submission of RIG Application



is also presented, including the intervening stages through which the project eventually matures to completion within a span of 12 months, a stage which opens the door for researchers to participate in mainstream research, through a larger, more comprehensive research proposal. In fact, a comprehensive new proposal is expected at the completion of RIG incentive project, so that new faculty members could be effective contributors in advancing institutional research through original, high quality proposals. Published (*English and Arabic*).

• **External Experts Panel Report, 2009**

– Released in February 2010, this report consolidates experts panel's recommendations on RA's Performance Evaluation Committee Report of July 2008. The panel was tasked with the responsibility of suggesting a feasible action plan that could be implemented as a strategy to achieve the twin goals of improving research sector's performance and elevating KU's international standing. While applauding the scale of research operations at KU, the panel expressed the dire need for scaling-up budgetary allocations for high quality research to uplift KU's international standing. Promoting the culture of research across faculties and departments was emphasized, and a revenue sharing formula for patentable research suggested. Initiation and funding of large collaborative projects for KU's placement among first rank of global scholarship was emphasized, and RA's efforts towards encouraging publishing of research



outcomes in top 25% of the high ranking journals was endorsed. Emphasis was also on addressing bureaucratic dimensions in grant processing procedures, an area where RA has already introduced transparency and accountability. The Panel recommended continuity of current programs, with due emphasis on augmenting basic and applied research, and undertaking large-scale research in collaboration with the private sector, overseas universities and foundations in the Gulf region, Europe and Americas. The panel report is available on OVPR's website (<http://www.ovpr.kuniv.edu>), and readers are invited to have first hand view of the panel's recommendations and suggested action plan. Published (*English and Arabic*).

• **RA's Annual Report, 2008/09** --

Released in March 2010, RA's Annual Report 2008/09 profiles a dynamic view of RA's accomplishments during the academic year September 1, 2008 to August 31, 2009, unfolding key elements of RA's developmental strategy for the next four years (2010/11 – 2013/14), laying a clear road map to steer faculty research towards two distinct policy domains of enhancing allocation for applied research, and establishing national policy and programs for scientific research through



(Contd. on ... P. 16)

partnerships and collaboration with external institutions. The basis for these developmental goals evolved during 2008/09 for strengthening the institutional research process, explicit details of which are included in the report, in the form of new initiatives, developmental activities, and the sustainable momentum of ongoing programs during 2008/09. RA also expanded the sphere of its external alliances, while exploring new possibilities of undertaking joint research and investing scientific outputs through effective collaborations and partnerships, a consolidated view of which is presented under RA's developmental programs.

Throughout the year, matters of research growth, quality, infrastructural facilities, procedural flexibility and transparency in research processes remained in RA's focus, explicit details of which are presented as RA's ongoing activities, while sphere of external alliances continued to expand in advancing institutional R & D capabilities. RA also encouraged redressal of national, regional and global concerns through basic, applied and humanities research, while involving faculties in incorporating the culture of quality in their research endeavors, an issue which is bound to gather further momentum in the coming years. Overall, the report summarizes RA's major achievements during 2008/09 under four major sections -- *New Initiatives* envisioned and launched during the year, a view of *Developmental* and *Ongoing programs*, rounding up with the vision of *future priorities and goals*. Packed with critical information, RA's Annual Report 2008/09 presents an analytical

profile on research sector's major accomplishments and mission ahead, details of which could be accessed on OVPR's website. Published (*English and Arabic*).

• Faculty Visits Report, 2009 --

A summarized report on



Faculty Visits, undertaken by RA's Executive delegation to various KU faculties during the academic year 2008/09, was also generated during January 2010. The report consolidates information on major research-related issues that surfaced during the course of discussions held at various faculties, including various aspects of the research support procedures, R & D activity, research cooperation and productivity. The report aggregates faculties suggestions, as well as requisite actions taken by RA towards implementing some of the suggestions, and studying others for procedural implications. While, the Faculty Visits Report has been duly appended to the recently released RA's Annual Report, 2008/09, the document is also prepared in-house for internal record and reference needs. Documented (*English and Arabic*).

II Academic Publication Council (APC) publications

The Academic Publications Council (APC) has been equally prolific in the production and generation of several scientific journals, the latest editions of which are as follows:

Journals released (Latest Issues 2009/10)

- **Kuwait Journal of Science & Engineering**, Vol. 36, Dec. 2009
- **Journal of Social Sciences**, Volume 37, No. 4, 2009
- **Journal of Gulf & Arabian**

Peninsula Studies, Issue No. 135, Oct. 2009

- **Annals of Arts & Social Sciences**, Volume 30, Dec. 2009
- **Arab Journal for the Humanities**, Volume 28, No. 109, 2010.
- **Journal of Sharia & Islamic Studies**, Volume 24, Issue 79, Dec. 2009
- **Journal of Education**, Volume 24, Issue No. 93, Dec. 2009.
- **Journal of Law**, Volume 33, Issue No. 4, Dec. 2009
- **Arab Journal of Administrative Sciences**, Issue No. 43, Sept. 2009

III. Center for Gulf & Arabian Peninsula Studies (CGAPS) publications

The Center for Gulf & Arabian Peninsula Studies (CGAPS) is dynamically involved in the preparation of scientific, periodical and publications series, including Master's and Ph.D Thesis, as part of its production activity. The latest releases and under-production documents during the last five months, up to February 2009/10 are listed below:

- **Center's periodical "Ongoing Events Record"** in the Gulf & Arabian Peninsula Region and its Geographic Vicinity," Issues 50 & 51 (underproduction).
- **Special publications:** Scientific refereed Series concerning Gulf & Peninsula Region (*to be issued soon*).
- **"Identity Crisis of University Kuwaiti youth in view of contemporary**

(Contd. on... P.17)

► **changes and challenges,”** by Dr. Abdulaziz Al-Ahmad, Dept. of Origins and Educational Administration, College of Basic Education, PAAET, Issue No. 28 (underproduction).

- **Thesis Series** (Master's & Ph.D) (to be released soon), "Economic and Social Situations in Al-Ehsaa Region, 1288 – 1331 (Hijri)/1871 – 1913,” by Hamad Mohammed Al-Qahtani (Summary of Ph.D. thesis) -- Thesis No. 8 (underproduction).

- **Documents of Gulf & Peninsula Region and its Geographic Vicinity:** Collecting and publishing annually important documents issued by official sectors of Gulf & Peninsula Region, documenting political, economic, social and cultural events. First issue was released in 1975, latest Issues Nos. 15 & 16 to be released soon (underproduction).

- **Publications Series** based on research papers presented at the lectures organized by the Center. First Issue of the Lectures series was published in 1993, and until 2006, 15

issues have been released so far. The latest Issue No. 16 documents four lectures held by the center as part of its First Cultural Season, 2007/08, to be followed by Issue No. 17, documenting five lectures held during the Center's Second Cultural Season, 2008/09 (underproduction).

IV. Center for Strategic & Futuristic Studies (CSFS)

The Center's latest activities involved participation in international book fairs, description of which is presented elsewhere in this Newsletter (see Page 20).

The above publications reflect the broad spectrum of production activity, both ongoing and accomplished since Dec./Jan. 2010 at OVPR, resulting in the rapid generation of a large number of publications released, distributed, displayed, preserved and sustained by OVPR. While a significant line-up of underproduction documents are keeping the production momentum in full swing, new publications are simultaneously being conceptualized, planned, and formatted to document the research sector's newer

needs, policy outlook, procedural developments, accomplishments and expansions. More importantly, the dispersal of latest documents are further consolidating the OVPR's developmental agenda, facilitating the fulfillment of its prime objective of keeping the institutional research accomplishments, R & D activities, scientific strengths, and distinguished research in public eye.

The OVPR's rapidly expanding reservoir of publications, is undoubtedly fulfilling this vital goal, while serving as a dependable channel for transmitting critical information, spreading awareness, enhancing visibility and boosting KU's standing worldwide. This indeed is the critical driving force that is effectively keeping the OVPR's publications domain thriving and under intense production heat for global outreach. For readers information, OVPR publications are widely distributed, additional copies are available on request, and also could be accessed electronically through OVPR's Website (<http://www.ovpr.kuniv.edu>). □

RA Invites Faculty-wide Nominations for *Researchers Awards*

...(From.... P.5)

the two categories. For all practical purposes, the *researchers awards* symbolize a befitting honor, annually bestowed on faculty members for achieving outstanding research accomplishments in *basic and applied sciences*, and *in arts & humanities*. Since awards criteria is the determining factor for the qualifying entries, the newly evolved and approved criteria would henceforth serve as the legitimate yardstick for objective evaluation of nominees under the two Researchers Awards

categories, and would effectively be used in *determining, shortlisting, selecting* and *declaring* the annual winners of researchers awards in the applied sciences and humanities streams.

RA's current strategy is to motivate faculties in developing their R & D potential and work towards uplifting the quality of scientific research to achieve distinguished outputs. It is this recognition that demonstrates research excellence, and is the critical qualifying factor for winning entries

for the researchers awards. RA is, therefore, driven towards encouraging faculties to target excellence and be competitors through meritorious research for the annual Distinguished Researchers and Young Best Researchers Awards, so that faculties creative efforts could strengthen institutional scientific capabilities towards high quality research that leads to new discoveries and scientific breakthroughs. □

RA's mission of joint research grounded in building effective partnerships with external institutions

RA holds executive meetings with *Diabetes Center, KPC, EPA & KFAS* for enhancing the sphere of collaboration

RA's mission of joint research is grounded in building partnerships with external institutions to advance the sphere of collaborative research, and pursue complex, high quality research that spearheads institutional R & D potential. This mission is successfully leading to several strategic agreements with external institutions for scientific collaboration, as for instance the four recently signed pacts with *KPC, Amphion, Ecophile*, and *UNESCO* within a short span of three months, in the current academic year 2010/11, paving the way for joint research, technology transfer and research cooperation. These are indeed positive developments in widening the institutional collaborative horizons, at a time when RA is driven towards achieving high quality outputs of scientific impact and compatibility to world class standards.

Presently, RA's current challenges are twofold, *firstly*, its gross reliance on indigenous virtues of developing conducive environment, enhanced services, facilities and incentives for high quality research, and *secondly*, strengthening existing external alliances while exploring new avenues for potential partnerships through communication, contacts, interaction and visits. It is precisely in this context that

Agreements with KPC, Amphion, Ecophile & UNESCO signed in a short span of 3 months during the current academic year 2010/11



RA's recent executive meetings with the Diabetes Center, Kuwait Petroleum Corporation, Environmental Public Authority, and Kuwait Foundation for the Advancement of Sciences are targeted at, in enlisting additional collaborative support through cultivating new partnerships, and re-strengthening the existing, long-standing bonds that RA shares with KFAS and EPA.

RA's recent alliances with Terryfox Foundation, as well as newly started projects in collaboration with KPC, Unesco, British Council, MIT, and Novo Nordisk are increasingly providing a promising outlook to RA's expanding sphere of partnerships, which also include the Intel Company for high performing computing cluster, and a partnership emerging between KU and IMEC in the sphere of *alternative energy* and *Photovoltaics*, as well as an effective partnership with National Offset Company (NOC) for steam-rolling the KU Research Park project

at the new Sabah Al-Salem campus site at Shadadiya.

These links are indicative of RA's fast-expanding sphere of alliances and partnerships, distinctly laying a strong foundation of joint research with local and international institutions, a network which is slated to grow in the foreseeable future as new partnerships develop.

Already, RA is receiving encouraging response from the public/private sectors, exhibiting interest in bonding with KU, and several institutions and delegations are continuously visiting OVPR in a bid to explore collaborative possibilities for the exchange of expertise, joint research, knowledge-sharing and faculty-exchange.

A legitimate basis is thus being laid for enduring alliances to emerge with external institutions for the pursuit of joint research that is strategic to advancement of scientific research. □

Proposed center viewed as a national level project of potential benefit to Kuwait and the region

Concept proposal on "Center for Energy and sustainability in Buildings in Kuwait," prepared and circulated among collaborative partners for review and feedback

With the onset of academic year 2009/10, the Research Administration (RA) floated the idea of establishing the Center for Sustainable Development of Buildings (CSDB) in Kuwait, to oversee sustainability of buildings, conserve energy and utilize renewable/non-renewable natural resources. The idea, to be accomplished through joint collaboration with external institutions, led RA to invite several national and international institutions that include Kuwait Foundation for the Advancement of Sciences (KFAS), Kuwait institute for Scientific Research (KISR), Environmental Public Authority (EPA), United Nations Environment Program (UNEP), Ministry of Electricity & Water (MEW), and American Society of Heating, Refrigeration and Air-Conditioning Engineers (ASHRAE), for the first brain storming session on Nov. 5, 2009, at the Office of the Vice President for Research. The purpose was to solicit support of like-minded experts/institutions for developing a national level project on sustainability of buildings in Kuwait, especially eco-friendly structures for enhancing energy conservation, and its benefits for the State of Kuwait, and the region.

A consensus emerged during the meeting for developing a national level Center for Energy and Sustainability in Buildings. The participating institutions unanimously agreed on generating requisite proposal in time for the second meeting, held on Dec. 21, 2009, with each institution specifying its support for CSDB. UNEP offered support in establishing the Center through sustainable building planning and

sharing experiences from other parts of the world about legislative mechanisms. KISR shared support towards the establishment of Energy



Board, Kuwait Center on Energy and sustainability in Buildings, and national energy conservation program.

Project aims at eco-friendly structures that promote green buildings concept, advocates energy conservation & healthy environment

Center in Kuwait, highlighting its efforts in energy conservation at global level. EPA's regulatory process concerned compliance and enforcement for any permit given to project consultants. MEW fully supported the establishment of CSDB, in view of significant increase in energy consumption, and its impact on Kuwait's environment and economy.

A 4-member Steering Committee was tasked to outline the Center's scope, activities, and follow-up mechanism. Presently, the concept proposal on "**Center for Energy and sustainability in Buildings in Kuwait**," has been prepared, professing Energy conservation Technical Advisory

The Center is justified on grounds of prevalent energy wastage, limited application of green buildings concept, fragmented efforts, weak implementation and limited impact on ground. The project is viewed as economically beneficial in lowering consumer bills, saving money, and transfer of technology to Kuwait, with its environmental benefits viewed in terms of lowering pollution, reducing green house gas emissions, and enhancing healthy environment and lifestyles.

The proposal, encompassing the Center's rationale, objectives, timeline, roles and responsibilities of collaborative partners, has been circulated to all participating institutions for requisite review and feedback, to be followed by a collective meeting for the proposal's finalization, and the steps ahead.

CSFS organizes a lecture on "Positive and negative changes in the Kuwaiti political scenario"

Center for Strategic & Futuristic Studies participates in international book fairs

The Center for Strategic and Futuristic Studies (CSFS) actively participated in two international book fairs held during the months of December 2009 through February 2010. The Center participated in the 53rd session of the Beirut International Book fair, held in Lebanese capital during the period Dec. 11-24, 2009, where center's publications were displayed, and attracted significant attention.

The Center also actively participated in the 42nd International Book Fair, held at the Cairo city of Nasr from January 28 to February 10, 2010. In both these international events, the center's participation was in response to the Ministry of Information initiative.

In addition the center organized a lecture on "*Positive and negative changes in the Kuwaiti political scenario*," held on March 15, 2010.

The key speakers were Mr. Saleh Al-Fidhala, former Member of National Assembly; Mr. Abdulla Al-Naibari, former Member of National Assembly; and Dr. Mohammad Al-Sayyid Saleem, Professor of Political Sciences, Faculty of Social Sciences at Kuwait University. The lecture was chaired by Dr. Haila Al-Mukaimi, Professor of Political Science, Faculty of Social Sciences at Kuwait University. The venue was Kuwait University Club at Shuwaikh. □

Gulf Center actively participates in several national/international book fairs

CGAPS launches a new series on specially invited write-ups by distinguished researchers/professors on issues of contemporary significance

The Center for Gulf and Arabian Peninsula Studies (CGAPS) made steady progress on several fronts during the last three months, ranging from preparation and release of center's publications; initiating specially invited features series on specific issues; organizing lectures; participating in international book exhibitions; and holding seminars/conferences, etc. The Center's publications include serial documents, such as periodicals, Master's/Ph.D thesis, books and brochures, details of which are listed elsewhere under the OVPR publications feature. A project has recently been initiated by the Center, launching a new series based on specially invited write-ups on issues of

contemporary significance from distinguished researchers, professors and academicians. The first issue of this series is under advanced preparation, and focuses on "*GCCC Policies concerning expatriate manpower: A study on a diagnostic view of reality and futuristic directions*," which would be released soon.

A well attended symposium was also organized by the Center on "*Present Status and Future of Gulf Cooperation Council Countries after 30 years*," as part of the Third Cultural Season, providing analytical outlook from the speakers viewpoint. In addition, CGAPS actively participated in several local and international book exhibitions held in Beirut,

Qatar, Egypt and Kuwait during the period December 2009 through February 2010, specifics of which are provided below:

1. **53rd Beirut International Book Fair**, organized by the Ministry of Information, Lebanon, Dec. 11-24, 2009.
2. Mini Book Fair on the sidelines of the **8th International Conference** of the Gulf Employment Development Forum, Kuwait, Dec. 15-17, 2009.
3. **Doha International 20th Book Fair**, organized by the Ministry of Information, Qatar, Dec. 30, 2009 to Jan 9, 2010.
4. **Cairo 42nd International Book Fair**, organized by the Ministry of Information, Egypt, Jan. 28–Feb. 10, 2010. □

KU scientific publications generate immense interest among the Arab readership

APC actively participates in the 42nd International Cairo Book Fair

The Academic Publications Council Director, Sami Al-Wuhaibi, affirmed that Kuwait University publications were a source of significant interest among researchers, academicians and visitors at the 42nd International Book Fair held at Cairo, widely displaying KU scientific journals, periodicals and books.

The participation in such international events is primarily aimed at highlighting the range and quality of scientific publications generated from Kuwait University, and the increasing demand observed for scientific productions is largely the result of APC's regular and successful participation in such events in the past. Each year, KU periodicals displayed at such fairs include new titles and books in different specializations, in addition to KU scientific journals, such as the

Journal of Social Sciences, Journal of Law, Journal of Gulf & Peninsula Studies, Arab Journal for Humanities, Educational Journal, Arab Journal for Administrative Sciences, Annals of Arts & Social Sciences, Kuwait Journal of Science & Engineering, and Journal of Sharia & Islamic Studies.

According to Al-Wuhaibi, an event of such magnitude is the result of prevailing cooperation among all the concerned sectors, considering that KU publications are part of the scientific and cultural services offered by Kuwait in diverse scientific fields. The purpose being to benefit readers for accessing serious scientific research. In the views of Abdulaziz Al-Khatib, researcher at the Center of Kuwait Research Studies, there

appeared a keen interest among Egyptian and Arab researchers in the history of Kuwait, as apparent in the increasing demand for KU publications displayed at the fair. Being APC's 15th participation in the Cairo book fair, the council has observed a growing demand for KU scientific publications, considering that these offer an opportunity to experts, academicians and graduate researchers to acquire vital information on diverse aspects of history of the State of Kuwait. Given the wide exposure that KU publications get at such events, Cairo International Book Fair has become a regular feature that links the Center for Research & Studies with a diverse community of Arab readership. ■

“Engineering Scientific Facilities” inaugurated ... (From.... P.12)

good infrastructure for scientific research, strengthen faculty research, build effective partnerships with international and local institutions for collaborative research, and develop institutional R & D capabilities. The Research Administration, through its office of External Research Collaboration, has recently signed a number of agreements for cooperation with several external institutions, and "we hope that the General facilities project we are opening today will play a key role in this field." Thanking everyone who participated in accomplishing this project, he hoped that this project would contribute towards enhancing the high standing of the faculty of Engineering & Petroleum. Also, it is RA's ardent hope to see Kuwait University acquiring research eminence on the strength

of its distinguished outputs that are achieved through the pursuit of advanced high quality research.

A briefing was then given by Dr. Abdulwahab Almusallam, KUNRF Director, who introduced the General Facilities at the College of Engineering & Petroleum, outlining the efforts that went into developing the core facilities labs. The faculty's acquisitions were currently well endowed to support cutting edge research in semiconductors, nano-electronics and photovoltaics, providing the basis for establishing high-tech industries in Kuwait, and the Gulf region. He also said that Nanotechnology was a fast emerging field that is expected to have high scale impact on science, engineering, society and economy, as well as research at the interface of disciplines and sciences.

The establishment of such advanced lab facilities at KU are bound to provide researchers with a conducive environment in the fields of advanced materials science and engineering, nanotechnology and nanoelectronics. The inauguration was followed by laboratory tours, viewing of the sophisticated and ultra-sensitive instruments, equipment and facilities reservoir that would now be available for researchers. For readers information, Dr. Yaser M. Abdulraheem would be responsible for the Semiconductor Research Facility (KUSRF), and Dr. Osamah AlOmar for the Petroleum Fluids Research Center (PFRC). The inaugural event was held at the faculty's Farouq Barghash Hall. ■

Sphere of external alliances shows visible signs of expansion in collaborative research with the entry of new partners

Faculty research activity maintains a progressive outlook with 552 ongoing, completed and under-process projects during first six months of academic year 2009/10

Six months through the current academic year 2009/10, the faculty research activity maintained its progressive outlook, attracting a far greater participation of faculty research community in the RA's sponsored program. More significantly, the program showed visible signs of an enhancing sphere of external participation, enlarging the existing collaborative process, with the entry of new partners joining the system of support during this period. The new entrants included Unesco, KPC, Novo Nordisk and British Council, providing grants to new projects that started this year, alongside the existing spectrum of joint research that RA shares with KFAS, EPA and TFF.

These new partnerships signal how the research sector's current strategy, in attracting external institutions to join RA's sponsored program, is effectively gaining momentum, laying the framework for joint research through inter-institutional alliances. RA's spirited move in this direction is aimed at boosting KU's R & D potential, broaden the sphere of applied research, and create a conducive environment for high quality research. Building world class infrastructure, involving faculties in presenting research outputs through scientific poster events, inducing transparency and visibility in faculty research, and encouraging researchers to publish their research outputs in international refereed journals of high impact, are some of the strategic initiatives taken

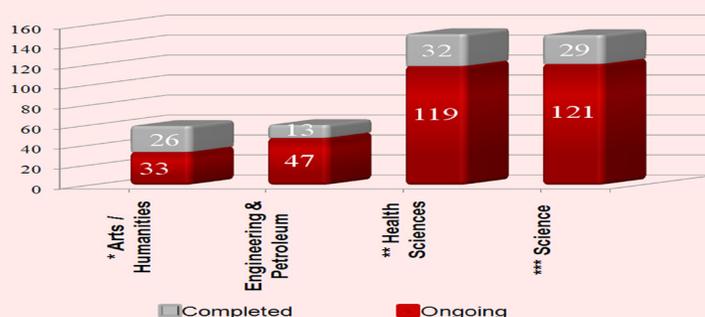
RA endeavoring towards developing an environment of research culture throughout KU faculties

Table 1. TOTAL RESEARCH ACTIVITY, ACADEMIC YEAR 2009/10 (Sept 1, 2009 to Feb., 2010)*

Project Status	Funding ** Levels			Total
	less than 2501	2501 - 8500	more than 8500	
Ongoing	100	83	137	320 (58%)
Completed	51	29	20	100 (18.1%)
Under-process	43	29	60	132 (23.9%)
TOTAL	194 (35.1%)	141 (25.6%)	217 (39.3%)	552

* Source KURA, Data upto February 19, 2010.

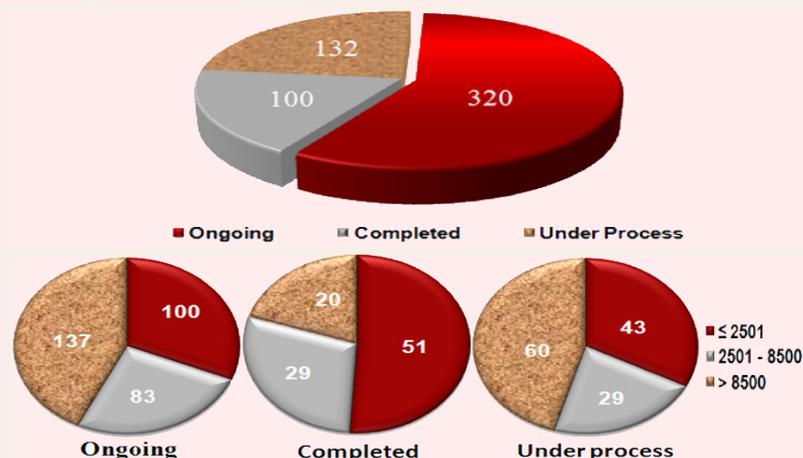
** Values in KD.



* Includes the Faculties of Arts, Business Admn., Education, Law, Sharia and Social Sciences.

** Includes Allied Health Sciences, Dentistry, Medicine and Pharmacy.

*** Includes Science and Women.



by RA in energizing faculty research, and in raising the spectrum of institutional R & D activity towards global dimensions. How these moves are being translated into faculty research initiatives that make a difference to institutional world standing, would only be determinable in the foreseeable future, but RA's stimulus is there for the faculties to reach out and capitalize on strengthening their research performance and quality of outputs.

Given this supportive environment, faculty research recorded accelerated growth in the first six months of 2009/10, with an overall total of 552 projects across faculties, spanning the period September 2009 to February 2010. These included 320 (58%) ongoing, 100 (18.1%) completed and

(Contd. on ... P.23)

Table 2. TOTAL ONGOING, COMPLETED & UNDER-PROCESS PROJECTS BY FACULTY & FUNDING SOURCE, ACADEMIC YEAR 2009/10

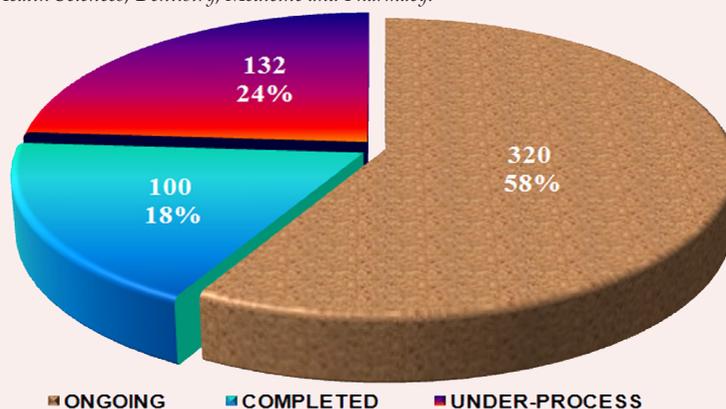
(Sept 1, 2009 to Feb., 2010)*

FACULTY	ONGOING		COMPLETED		UNDER-PROCESS		TOTAL		GRAND TOTAL
	KU	EXT	KU	EXT	KU	EXT	KU	EXT	
Allied Health Sciences	12	-	4	-	7	-	23	-	23
Arts	2	-	5	-	5	-	12	-	12
Business Admn.	6	-	4	-	2	-	12	-	12
Dentistry	12	1	2	-	3	-	17	1	18
Education	6	2	6	-	1	-	12	3	15
Engineering & Petroleum	44	3	12	1	20	2	76	6	82
Law	1	-	-	-	-	-	1	-	1
Medicine	70	11	20	3	31	4	121	18	139
Pharmacy	11	-	3	-	7	-	21	-	21
Science	91	11	26	1	28	5	145	17	162
Sharia	3	-	5	-	-	-	8	-	8
Social Sciences	12	1	6	-	5	-	23	1	24
Women	18	1	2	-	9	1	29	2	31
Health Sciences Center (GF)**	2	-	-	-	-	2	2	2	4
TOTAL	290	30	95	5	118	14	502	50	552

┌ 320 ┐
┌ 100 ┐
┌ 132 ┐
┌ 552 ┐
└ 420 ┘

* Source KURA, Data upto February 19, 2010.

** Includes Allied Health Sciences, Dentistry, Medicine and Pharmacy.



► 132 (23.9%) under-process projects, granted to faculty members as well as graduate students. Cumulatively, the sphere of active grants is inclusive of all ongoing and completed projects, which taken together totaled 420 (76.1%) projects, providing a measure of awarded and accomplished research by faculties in the current academic year 2009/10. However, with rapid progress in an additional 132 under-review projects, the sphere of active grants is bound to further enhance in the coming semester, with the clearance and approval of under-process projects, deemed original, scientifically sound and meritorious.

A further analysis of the total project-activity, in terms of funding levels, showed the largest concentration of 217 (39.3%) projects in the highest grant category of more than KD 8500/- & above, followed by 194 (35.1%) projects in the lowest grant category of less than KD 2501/-. The intervening budgetary category of KD 2501–8500/- enlisted as many as 141 (25.6%) projects. (Table I).

The faculty-wise distribution of 420 ongoing and completed projects showed biggest grant recipients to be the Science faculties (*Science & Women*) claiming a total of 150 (35.7%) projects, closely followed by the Health Sciences faculties (*Medicine, Dentistry, Pharmacy & Allied Health Sciences*) with 151 (36%) projects, Engineering & Petroleum with 60 (14.3%) projects, and Arts & Humanities faculties (*Arts, Business Administration, Education, Law, Sharia & Social Sciences*) with 59 (14%) projects (Table 2). Table 2 also provides additional insight into the domain of under-process faculty research activity, with largest number of projects 54 (40.9%) from the Health Sciences, 43 (32.6%) projects from Science Colleges, 22 (16.7%) projects from Engineering & Petroleum and 13 (9.8%) from

(Contd. on ... P.24)

**Table 3. TOTAL ONGOING RESEARCH PROJECTS BY FUNDING SOURCE, 2009/10
(Sept 1, 2009 To Feb., 2010)***

FACULTY	KU	KFAS	EPA	TFF	UNS	NNC	BC	KPC	TOTAL
Allied Health Sciences	12	-	-	-	-	-	-	-	12
Arts	2	-	-	-	-	-	-	-	2
Business Admn.	6	-	-	-	-	-	-	-	6
Dentistry	12	1	-	-	-	-	-	-	13
Education	6	2	-	-	-	-	-	-	8
Engineering & Petroleum	44	1	-	-	-	-	-	2	47
Law	1	-	-	-	-	-	-	-	1
Medicine	70	9	-	1	-	1	-	-	81
Pharmacy	11	-	-	-	-	-	-	-	11
Science	91	7	1	-	-	-	1	2	102
Sharia	3	-	-	-	-	-	-	-	3
Social Sciences	12	1	-	-	-	-	-	-	13
Women	18	-	-	-	1	-	-	-	19
Health Sciences Center (GF)**	2	-	-	-	-	-	-	-	2
TOTAL	290	21	1	1	1	1	1	4	320

* Source KURA, Data upto February 19, 2010.

** Includes Allied Health Sciences, Dentistry, Medicine and Pharmacy.

KU Kuwait University

TFF Terryfox Foundation

NNC Novo Nordisk Company

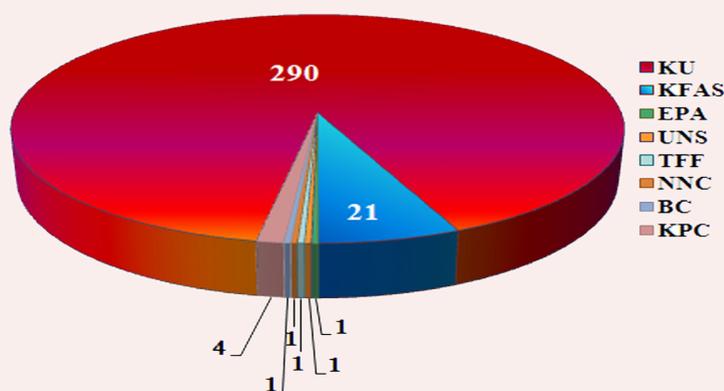
KFAS Kuwait Foundation for the Advancement of Sciences

EPA Environmental Public Authority

UNS UNESCO

BC British Council

KPC Kuwait Petroleum Company



Arts & Humanities Colleges, currently under various stages of review, and awaiting clearance.

In terms of funding commitments, Kuwait University and external sponsors were collectively responsible for the funding of a total of 420 ongoing and completed projects during the six months of 2009/10. In the sponsorship process, Kuwait University (KU) remained the top grant provider, responsible for rendering support to an overwhelming 91.7% (385) projects, while remaining 8.3% (35) projects received external funding support.

A view of total ongoing research projects (320), supported by KU and external institutions, showed 290 (90.6%) ongoing projects granted by KU, and remaining 30 (9.4%) projects sustained through external support. Of the external institutions, maximum 21 (70%) projects were supported by Kuwait Foundation for the Advancement of Sciences (KFAS), 4 (13.3%) projects granted by Kuwait Petroleum Corporation (KPC), 1 (3.3%) project granted by Environmental Public Authority (EPA), 1 (3.3%) project supported by Terryfox Foundation (TFF), 1 (3.3%) project sponsored by Unesco, 1 (3.3%) project by Novo Nordisk Company, and 1 (3.3%) project granted by the British Council (Table 3). During 2009/10, the inclusion of 4 external institutions (*Unseco, Novo Nordisk, Kuwait Petroleum Corporation, and the British Council*) in KU's awards activity, is a promising development

(Contd. on ... P.25)

Table 4. PROJECT STATUS by FACULTY & FUNDING LEVELS, ACADEMIC YEAR 2009/10**
(Sept 1, 2009 to Feb., 2010)*

FACULTY	ONGOING			COMPLETED			UNDER-PROCESS			TOTAL
	less than 2501	2501 - 8500	more than 8500	less than 2501	2501 - 8500	more than 8500	less than 2501	2501 - 8500	more than 8500	
Allied Health Sciences	6	1	5	4	-	-	5	1	1	23
Arts	2	-	-	4	1	-	1	3	1	12
Business Admn.	5	1	-	3	1	-	1	1	-	12
Dentistry	6	1	6	2	-	-	3	-	-	18
Education	4	1	3	6	-	-	-	1	-	15
Engineering & Petroleum	13	13	21	6	6	1	10	3	9	82
Law	-	1	-	-	-	-	-	-	-	1
Medicine	16	36	29	3	11	9	7	11	17	139
Pharmacy	3	5	3	2	-	1	2	-	5	21
Science	22	15	65	12	6	9	6	4	23	162
Sharia	3	-	-	5	-	-	-	-	-	8
Social Sciences	10	2	1	3	3	-	1	3	1	24
Women	10	7	2	1	1	-	7	2	1	31
Health Sciences Center (GF)***	-	-	2	-	-	-	-	-	2	4
TOTAL	100	83	137	51	29	20	43	29	60	552

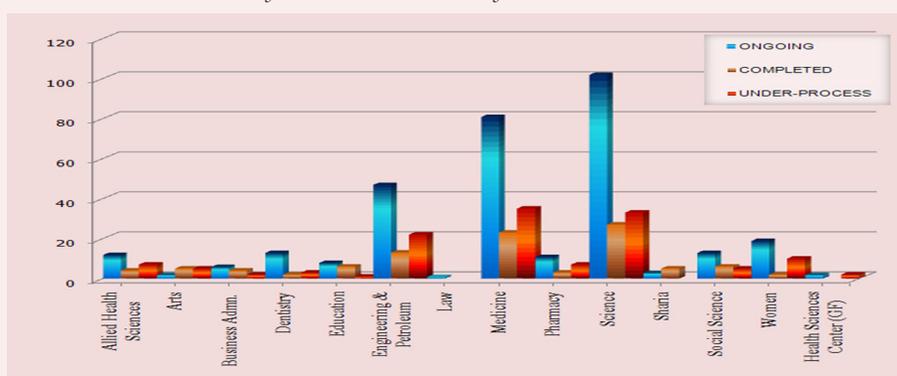
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320
100
132

* Source KURA, Data upto February 19, 2010.

** Values in KD.

*** Includes Allied Health Sciences, Dentistry, Medicine and Pharmacy.



► in enhancing the sphere of collaborative research, and in spearheading RA's current policy of developing new alliances and building an extensive network of external resource support for advanced research and studies.

Further analysis of 320 ongoing projects by funding levels, showed maximum number of 137 (42.8%) projects in the highest budgetary category of KD 8500/- & above, followed by 100 (31.3%) projects in the lowest budgetary level of less than KD 2501/-, and least number of 83 (25.9%) projects in the medium range budgetary category of KD 2501-8500/- (Table 4). Considering the distribution of completed projects (100) by funding levels, we find maximum completed projects 51% (51) in the less than KD 2501/- category, 29%(29) projects in the budgetary category ranging between KD 2501 – 8500/- and the lowest project completion rate 20% (20) associated with the highest budgetary category of more than KD 8500/-. Faculty-wise distribution of completed projects further showed maximum projects 32 (32%) completed by Health Sciences faculties, followed by 29 (29%) projects by Science faculties (*science & women*), 26 (26%) projects by Arts & Humanities faculties, and 13 (13%) projects by Engineering & Petroleum faculty (See Tables 2 & 4).

Since RA's grant support system provides research awards under nine distinct categories, Table 5 presents distribution of ongoing projects (320) by Types of Grants. During 2009/10, the distribution of projects by various grant categories showed maximum number of ongoing projects 196 (61.3%) awarded under the

(Contd. on ... P.32)

Intel cluster installed at Kuwait University IT Center...(From.... P.2)

RA endeavoring to facilitate researchers in accomplishing research-related processes at high speed

and consists of Dr. Amar Al-Sayegh, Faculty of Engineering & Petroleum, Dr. Ozgur Sinanoglu, Faculty of Science, and Dr. Issam Francis, Faculty of Medicine. Three meetings have been held by the Committee so far, of which the second meeting was with the Intel expert, Dr. Mohamad Mikias, responsible for configuring the cluster. The main objective of the committee is to explore potential applications, and motivate researchers to utilize the existing computing power.



feasibility of establishing Center for high performance computing, based on the computer cluster received from Intel, was also raised, an issue which is in an initial exploratory phase.

The long-term objective of the committee is aimed at upgrading the existing machines and working towards establishing the HPC Center. High performance computing being the core of the Intel cluster, the Research Administration is all set in exploring possibilities that could uplift computing power and enhance the research implementation process.

For all practical purposes, the acquisition of the Intel cluster is the result of RA's sustained efforts towards developing alliances with external organizations through coordinated partnerships in advancing the goals of scientific research at Kuwait University.



Given this objective, this technology would necessarily strengthen the existing collaboration between KU and Intel in the sphere of IT technology, and facilitate researchers in accessing high performance computing resources within the institutional premises, for effective utilization by faculty and graduate students in accomplishing their project-related applications with precision, accuracy and speed. In extending the benefit of this advanced

technology to meet faculties diverse scientific needs, RA foresees continuity of collaboration with Intel as a viable step towards creating an effective environment that nurtures scientific advancement and facilitates pursuit of high quality research.

Presently, RA's focus and efforts are directed at placing the facility at the use of faculty members to expedite accomplishment of research-related processes at high speed. With the installation of this facility, preparations

are currently underway for the Intel's demonstration, for which requisite workshop is being arranged for the benefit of faculty members, specifics of which would soon be announced along with the program details. It is anticipated that the facility would empower the institutional resource potential by creating an effective environment of larger, more powerful systems for diverse computational needs of the faculty and students, and facilitate advanced high quality research.

External Experts Panel outlines a feasible strategy for RA ...(From.... P.1)

RA endeavoring towards achieving the twin goals of improving research sector's performance, and elevating KU's international standing

body of external consultants, to look at the recommendations, and suggest a feasible action plan for implementing the recommendations.

Consequently, RA invited a three-member external panel of consultants, to examine the recommendations in a five day meeting schedule from Nov. 1-5, 2009, and lay the framework for RA to move ahead. The panel included Prof. Ahmed K. Elmagarmid, Purdue University (U.S.A.), Prof. Frank Hegarty, University College Dublin (Ireland), and Prof. John Comaroff, University of Chicago (U.S.A.), who developed a coordinated plan of action for RA's needs, based on consultations, interactions and discussions, resulting in a duly endorsed External Panel's Report, submitted to the Vice President for Research.

The report dwelt on KU's research objectives, policies and priorities, and developed a feasible action plan on recommendations. This report has since been printed, released and widely circulated by RA, along with the Performance Evaluation Committee Report of July 2008. For the readers benefit, both reports are vital, one providing the performance outcome, and the other prioritizing the suggested action plan, that could be implemented and adopted as a strategy for RA to achieve the twin goals of

improving research sector's performance, and elevating KU's international standing. The panel report was based on vital information gathered on KU's research support system, priority research, quality assurance mechanism, joint research endeavors, developing external collaboration and building areas of research strengths.

This information provided the substance for the panel's review outcome, emphasizing the need for reformulating RA's mission, developing interdisciplinary and graduate research, and inclusion of publications in top-ranking scholarly journals. The scale of research operations at KU was applauded, and the need for scaling-up of budgetary allocations was emphasized for sustaining high quality research, and uplifting KU's international standing. The report emphasized a strong need for promoting the culture of research at KU and in incorporating a vision of global dimensions in institutional research. Suggestions on a revenue sharing formula for patentable research, and cultivating the norms of ethics and integrity in research, were also made.

Additional suggestions concerned initiating and funding of large collaborative projects to place KU among first rank of global scholarship, encouraging international networking, visibility and scientific distinction. The panel agreed with RA's efforts



towards encouraging publishing of research outcomes in top 25% of the high ranking journals, and suggested the holding of regular seminars, inviting editors of prestigious international journals for conducting seminars on preparation and publications of articles in sciences, humanities and social sciences. Emphasis was also on addressing bureaucratic dimensions in grant processing procedures, an area where RA has already introduced transparency and accountability.

The panel recommended continuity of current programs, emphasized augmenting of basic and applied research, and undertaking of large-scale research in collaboration with the private sector, overseas universities and foundations in the Gulf region, Europe and Americas. Overall, the suggested action plan invariably reflected on all aspects of research at KU, providing the basis for RA to move ahead in drawing benefits from the recommendations, and transpiring faculties in pursuing high quality endeavors that bring scientific visibility, distinction and laurels to KU. □

Scientific Poster Day Events ...*(From.... P.9)*

Health Sciences faculties observe their 15th Annual Poster Conference, inaugurated on April 20, 2010

The Health Sciences Center faculties dynamically carried forward their long standing tradition of jointly observing their 15th Annual Poster Conference this year, with the collective participation of the faculties of Medicine, Dentistry, Pharmacy and Allied Health Sciences, displaying over 283 posters in the diverse disciplinary streams. Organized as a three-day event, the HSC poster conference was inaugurated by the Vice President for Research, Prof. Fahed Al-Thakeb, in the distinguished presence of the Deans of various HSC faculties, Prof. Fuad Hasan, Prof. Ladislav Novotny, Dr. Jawad Behbehani, and Dr. Saud Al-Obaidi, in addition to a huge turnout of faculty members, researchers, graduate and undergraduate students. Also present were the Assts. Vice Presidents for Research Prof. Haitham Lababidi and Prof. Nejb Smaou.

On the occasion, Prof. Fuad Hasan, said that the annual poster conference was a landmark activity that provided stimulus to researchers to work together in addressing strategic concerns in the basic, applied and clinical sciences, that are vital to Kuwait and the world. Over 283 posters were on display at the posters conference, abstracts of which were aggregated together in the **Posters Conference Abstracts Book**, released on the occasion, providing insights into voluminous research activity in the form of **233 research studies, and 50 case reports**. The event culminated in the distribution



▲ *Inauguration of 15th Health Sciences Poster Conference Event*

of awards for best undergraduate research, best graduate research, and top basic and clinical sciences research by faculty members, in addition to the best case report.

The prevailing scientific dynamism also permeated across the Humanities sector, which having organized an inspiring and highly successful first poster event last year, is all geared up for organizing its second scientific poster day for the academic year 2009/10, involving close participation of the six Humanities faculties -- Arts, Law, Sharia & Islamic Studies, Social Sciences, Administrative Sciences and Education. The general coordinator for this year's Humanities poster event

is the Faculty of Education, who would be hosting the Poster Day at its faculty premises, as a three-day event. Essential mechanism and procedures for the Humanities Second Poster Day have been finalized, and the event, will take place in the College of Education from May 24-26.

For all practical purposes, the underlying objective in observing scientific posters events remains encouraging faculties in providing a platform to researchers for displaying their scientific accomplishments in a spirit of scientific openness, with the occasion simulating an environment of scientific innovation and interaction among researchers.

RA would, therefore, continue its endeavors in promoting the holding of such scientific events in joint coordination by faculties, by being key facilitator in the successful organization of a theme-based poster activity, through multi-faculty input and participation. □

Faculty of Medicine Posters Winners

1. Aboqrais NA1, Abahussain EA2, Qaddoumi MG1* Role of pharmacists as Health Educators in Early Detection and Prevention of Breast Cancer in Kuwait.
2. Nashawi H , Oriowo MA, Kombian SB The potential of TH-9, a Theophylline Derivative, as a Memory Enhancer in Dementia.
3. Safar FH1, Mojiminiyi OA1, Al Rumaith H2, Al Rammah T.1, Diejomaoh FME1 Associations of Leptin, Leptin Receptor and Free Leptin Index With Metabolic Phenotypes of PCOS
4. Renno WM, Al-Maghrebi M, George P, Mathur A (-)-Epigallocatechin-3-Gallate (EGCG) Promotes Functional and Sensory Recovery in Crushed Rat Sciatic Nerve
5. Mustafa AS, Shaban F Propred Analysis for Prediction of HLA-DR-Promiscuous Regions and Epitopes of Mycobacterium tuberculosis Protein Rv1980c, and their Recognition by Human T Cell Lines
6. Zahid MA1, Ohaeri JU2 Schizophrenia Psychopathology in a Kuwaiti Arab Sample
7. Mokaddas E, Ahmad S Large Scale Evaluation of Multiplex PCR and DNA Sequencing of Internal Transcribed Spacer Region for Rapid Differentiation and Identification of Mycobacterium Species Isolates in Kuwait
8. Akanji AO1, Thalib L2, Al-Isa AN2 Folate, Vitamin B12 and Homocysteine Levels in Kuwait Adolescent Subjects: Potential Implications for Cardiovascular Disease Risk in Later Life.
9. Al-Harbi O, AlOsaimi S, AlKandari I Scoliosis as a Rare Risk Factor for Colon Perforation During Colonoscopy: a Case Report

Two steering committees formed to oversee implementation of three projects -- one from KOC and two from PIC
KU-KPC participate in a series of *kickoff meetings*

Carrying forward the partnership process with KPC, following the signing of agreement for cooperation in the field of scientific research, and in the formalization of three research projects, further progress was recorded concerning this matter, with the holding of a series of kickoff meetings, that brought together Kuwait University (KU), Kuwait Petroleum Corporation (KPC), Kuwait Oil Company (KOC) and Petrochemicals Industries Ltd. (PIC). The purpose was to discuss the mechanism of implementing the joint research projects, entitled below:

- *“Design of a dedicated flaring system for the ammonia storage tanks.” (PIC)*
- *“Environmentally friendly natural gas combustion catalysts.” (PIC)*
- *“Evaluation of miscible flood performance in Kuwait.” (KOC)*

for which the contracts had been signed on Nov. 2, 2009. As agreed, the first two of the above projects are to be conducted in collaboration with PIC, and the third project with KOC. The framework for implementing these projects emerged during the course of three meetings, which involved the collaborative partners – KU, KPC, KOC and PIC. These meetings were attended by RA representatives, Prof. Haitham Lababidi and Mrs. Mariam Shemali, and respective Research & Development representatives from KPC, KOC and PIC. The kickoff meetings provided appropriate occasions for the projects' research teams to demonstrate electronically the phases and mechanisms of implementing the projects through requisite presentations.

The role of participating sectors in the implementation of each contracted project was also highlighted, along with the project duration, and the

type of equipment to be used in implementing specific projects. For overseeing the implementation of projects, two steering committees were also formed with members drawn from KU, KPC and the concerned subsidiary company, of which one committee was delegated with the responsibility of KOC project, and the other committee was entrusted with the two PIC projects. In all such contracts, the project teams included Principal Investigator (PI) from Kuwait University, and Co-Investigator (CoI) from the concerned subsidiary company. With the formation of projects teams, involvement of researchers, and delegation of responsibilities, current efforts are directed at seeing the projects progress through the necessary procedural processes in preparation for their phased implementation. □

RA holds special orientation on *Research Initiation... (From.... P.4)*

such as Kuwait Foundation for the Advancement of Sciences (KFAS), Environmental Public Authority (EPA), KPC, KOC, PIC, UNESCO, Amphion and Korean Ecophile. Besides, the Patents office facilitates researchers in registering their inventions, and for protection of their Intellectual Property Rights. RA is also in the process of establishing the Research Services Unit, a new entity responsible for accomplishing the goal of marketing research outputs, and overseeing their investment commercially and industrially. In addition, the Unit would facilitate transfer of technology for the benefit of Kuwait, disseminate research awareness, and encourage researchers for scientific innovation and creative excellence.

The session's participants were provided information on research programs, priorities and procedures, including research review, refereeing, and reporting requirements, and carrying forward the RIG outputs, as a step towards developing comprehensive proposals that could effectively lead to scientific advancement. The financial and administrative regulations were also explained, as well as procedures for submission of grant application, and utilization of RA facilities, services, and procedural forms, which could be accessed on the OVPR/RA websites (<http://www.ovpr.kuniv.edu>) and (<http://www.ovpr.kuniv.edu/research>).

Specific information on RIG grants is available in RA's recently released *RIG Guide to Information 2010*, presenting current regulations governing these grants, including requirements concern-



ing the submission of RIG Application, and intervening stages through which the project eventually matures to completion within a span of 12 months, opening the door for researchers to participate in mainstream research, through a larger, more comprehensive research proposal, thus laying the grounds for their active involvement in addressing critical concerns that need scientific probe and solutions, and for researchers to be effective contributors in advancing the institutional research process. □

RA's strategy of enhancing KU infrastructure aims at bolstering high quality research
RA's Funding Committee approves two new General Facilities projects granted to Engineering & Petroleum, and Science faculties

The Research Administration's mission of developing a technology-intensive environment at Kuwait University (KU) through the establishment of world-class infrastructure, received a significant boost with the approval granted to two new General Facilities (GF) projects by RA's Funding Committee, in its recent meeting held on January 13, 2010. The projects, (GE03/08) and (GS01/08), submitted by the faculties of Engineering & Petroleum and Science, respectively, aim at enhancing faculties indigenous capabilities for advanced experimentation and complex analytical studies, apart from transpiring researchers to explore hitherto uncharted new areas of research. In this regard, the acquisition of new equipment resources under the GF umbrella, would further complement the faculties existing core facilities in the form of ESF at the Engineering & Petroleum faculty, and SAF at the Science faculty, with the former (ESF) formally launched, and the latter (SAF) headed for existing resource expansion.

It is precisely in this context that the grant of General Facility project GE03/08 to the Faculty of Engineering & Petroleum, would enable the faculty to establish a *Petroleum Refining and Petrochemicals Research Center*, at the total budget of KD 636,300/-, apart from amplifying the faculty's existing resource muscle. The new equipment would also provide the critical mass for a general facility laboratory that would further enhance the faculty's existing research activity in the spheres of *petroleum refining* and *petrochemical processing*, the



Developing Petroleum Refining & Petrochemicals Research Center, and acquiring Femto-second Laser System on the anvil

areas which have critical significance for Kuwait. Intended as a world-class facility, the acquisition of this state-of-the-art resource will accelerate the development of new areas of research in chemical engineering, which primarily involves the acquisition of an itemized cluster of 17 equipments, each for a specific function.

Likewise, the GF project GS01/08 granted to the Faculty of Science aims at adding a significant dimension to the faculty's advanced equipment resource with the acquisition of *Femto-second Laser System*, at the total budget of KD 250,000/-. The facility would enable study of ultra-fast dynamics of highly excited Rydberg atoms and controlling coherence of multi-level transitions among high lying energy states of Rydberg atoms. It will also be used to study the response of Rydberg atoms to intense electromagnetic pulses as short as tens of femto-second. For the faculty, the acquisition of this new facility would be crucial

in investigating phenomenon that is not possible through the conventional lasers. The system would, therefore, significantly boost the faculty's R & D potential, in addition to supporting and sustaining advanced research in such areas as *Tera-hertz Spectroscopy* and *Nonlinear Optics*, apart from facilitating inter-departmental collaboration, especially in the study of chemicals exhibiting nonlinear behavior.

The acquisition of these latest facilities, signify the faculties growing interest in investigating new and ultra-sensitive areas of research, for which the RA's general facility program is seemingly laying the framework for the needed infrastructure to facilitate researchers in implementing high quality research that yields distinguished outputs. Already, RA's vision of developing model labs and enhancing institutional capabilities for advanced research, is shaping up into an achievable reality, with the establishment of three model labs -- SAF at the Faculty of Science, RCF at the Health Sciences Center, and ESF at the Faculty of Engineering & Petroleum, all equipped with sophisticated instruments, latest equipment, and state-of-the-art technology for precision-testing, micro-analysis, petrochemical studies, nanotechnology, electron microscopy, etc. These labs harbor the institutional technology nucleus for boosting KU's R & D activity towards

(Contd. on ... P. 31)

A national level project on alternative energy in proposal stage

KPC holds Seminar on *Renewable Energy* in coordination with the Research Administration on March 21, 2010

RA's vision to invest institutional scientific potentialities in addressing strategic national concerns has been surely and significantly gaining momentum driven by the need to find scientific solutions to problems facing society. The idea of forming task force groups or consortia is suggestive of RA's efforts in bringing together researchers to tackle national concerns and community problems through specialized groupings of elite scientists, clinicians, engineers, and experts in addressing specific national problems, in a bid to offer plausible solutions.

These efforts started last year (2008/09), when RA envisaged the formation of three consortia in the critical fields of *alternative energy, environment and cancer*, being areas of major national concern, that require scientific attention and coordinated plan of action for practical solutions.

While, RA's efforts in identifying requisite expertise are ongoing for

the formation of the task force groups, a national level project on alternative energy is already in proposal stage. Additional team leads are also being identified for environmental issues and cancer concerns.

Alongside, issues of energy conservation, efficient use of *renewable energy*, green building concept are increasingly being recognized as strategic to eco-friendly, energy efficient structures for improving the quality of indoor/outdoor environment, and promoting healthy lifestyles.

In response to this need, RA's efforts are already leading towards the formation of a dependable national/international collaborative team of experts for evolving a national level project on the establishment of the "*Center for Energy and sustainability in buildings in Kuwait*," aimed at green building concept, advocating energy efficiency in buildings and

promoting effective utilization of *renewable energy* resources, such as solar, geothermal, biomass, hydro and wind, for sustainable structures that conserve energy.

Since *renewable energy* is increasingly being recognized as a dependable source for achieving energy efficiency, a seminar on *renewable energy* has recently been organized by KPC in coordination with the Electrical Engineering department of the Faculty of Engineering & Petroleum, Kuwait University.

The seminar held on March 21, 2010, with a presentation on "*Thin film PhotoVoltaics, leading the future of renewable technologies*," by Dr. Abdul-Azeez Al-Omar, which unfolded new and interesting insights into this potentially significant methodology for the future in the sphere of energy efficiency. ■

Funding Committee approves GF Projects ...*(From.... P.30)*

for advanced research, is shaping up into an achievable reality, with the establishment of three model labs -- SAF at the Faculty of Science, RCF at the Health Sciences Center, and ESF at the Faculty of Engineering & Petroleum, all equipped with sophisticated instruments, latest equipment, and state-of-the-art technology for precision-testing, micro-analysis, petrochemical studies, nanotechnology,

electronmicroscopy, etc. These labs harbor the institutional technology nucleus for boosting KU's R & D activity towards international standards of sophistication in addressing scientific complexities. This purpose is central to RA's strategy of enhancing the institutional infrastructure through general facilities grants, which is receiving encouraging response from the faculties keen on building their technology resources for the

sustenance of multi-researchers/departments/faculties needs. For RA, such advanced facilities would hopefully create a congenial environment that transpires scientific innovation, invigorating faculties to pursue high quality research that leads to excellence, and in the process opens dynamic channels for the emergence of effective alliances for applied and collaborative research. ■

RA presents statistical outlook (From.... P.25)

University Research Projects (URP) category, 45 (14.1%) grants were Graduate Research Projects (GRP), 30 (9.4%) were External Research Projects (ERP), 25 (7.8%) were Research Initiation Grants (RIG), 14 (4.3%) were General Facilities Projects (GFP), 9 (2.8%) projects were granted as Priority Research Projects (PRP), and 1(0.3%) project under the University Service Projects (USP) category. There were no National Research Projects (NRP) and GCC Joint Research

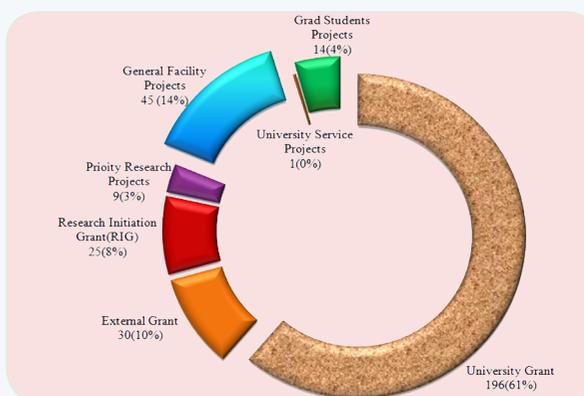


Table 5. ONGOING RESEARCH PROJECTS BY TYPES OF GRANTS, ACADEMIC YEAR 2009/10 (Sept 1, 2009 to Feb., 2010)*

Faculty	Types of Grants							Grand Total
	URP	RIG	PRP	GRP	USP	GFP	ERP	
Allied Health Sciences	7	5	-	-	-	-	-	12
Arts	2	-	-	-	-	-	-	2
Business Admn.	4	2	-	-	-	-	-	6
Dentistry	6	3	3	-	-	-	1	13
Education	6	-	-	-	-	-	2	8
Engineering & Petroleum	33	5	3	-	-	3	3	47
Law	-	-	1	-	-	-	-	1
Medicine	31	4	-	35	-	-	11	81
Pharmacy	10	1	-	-	-	-	-	11
Science	65	4	2	10	1	9	11	102
Sharia	3	-	-	-	-	-	-	3
Social Sciences	11	1	-	-	-	-	1	13
Women	18	-	-	-	-	-	1	19
Health Sciences (GF)**	-	-	-	-	-	2	-	2
TOTAL	196	25	9	45	1	14	30	320

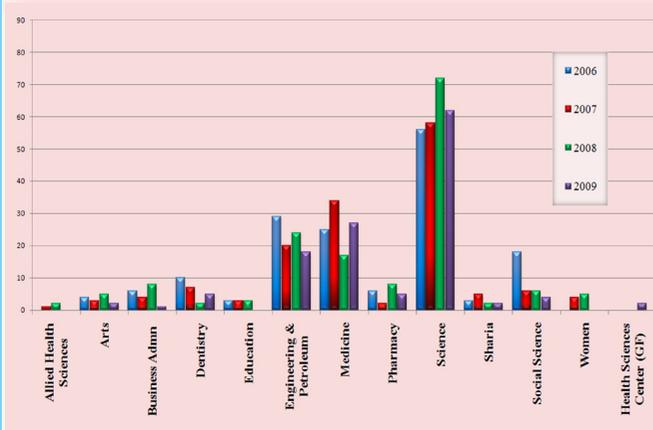
* Source KURA, Data upto February 19, 2010.
 ** Includes Allied Health Sciences, Dentistry, Medicine and Pharmacy.

URP = University Research Projects
 RIG = Research Initiation Grants
 PRP = Priority Research Projects
 GRP = Graduate Research Projects
 USP = University Services Projects
 GFP = General Facilities Projects
 ERP = External Research Projects

Table 6. PUBLISHED PAPERS, COMPARATIVE FOUR CALENDAR YEARS*, 2006, 2007, 2008 & 2009

FACULTY	2006	2007	2008	2009
Allied Health Sciences	-	1	2	-
Arts	4	3	5	2
Business Admn.	6	4	8	1
Dentistry	10	7	2	5
Education	3	2	3	-
Engineering & Petroleum	29	20	24	18
Medicine	25	34	17	27
Pharmacy	6	2	8	5
Science	56	58	72	62
Sharia	3	5	2	2
Social Sciences	18	6	6	4
Women	-	4	5	-
Health Sciences Center (GF)**	-	-	-	2
TOTAL	160	146	154	128

* Figures for Published papers coordinate with calendar year (Jan. 1 to Dec.31).
 ** Includes Allied Health Sciences, Dentistry, Medicine and Pharmacy.



Projects (JRP) during the first six months of the academic year 2009/10. Since, faculties research performance is measurable in terms of published outputs from completed projects, research publications generated from funded research by faculties is presented in Table 6, providing a comparative outlook of research productivity over the last four calendar years 2006, 2007, 2008, and 2009. Considering 2006 to be the base year, with 160 published/accepted papers, this productivity stood at 146 papers during 2007 exhibiting a decline of nearly 8.7%. Some improvements were noted during 2008, with the generation of 154 publications, however, the listing of 128 published papers during 2009, are suggestive of the scope for upward growth in the sphere of faculty publications, considering the general time-gap between submitted paper's acceptance and release of a journal issue. These figures could thus be a tentative view of 2009 productivity, with actual anticipated data update around mid-2010.

Nonetheless, RA's emphasis on inclusion of high quality research in top ranking journals of international repute, portray the vision of world-class standards in KU research outputs in the times ahead. The need for energizing research sector's overall performance to attain this ultimate goal is steadily driving RA towards adherence to quality assurance measures in research review & awards, sensitizing faculties to the significance of research performance & impact, while focusing on uplifting institutional R & D potentialities, at a time,

when RA's is critically nurturing the aspirations of accomplishing its most challenging mission of developing an environment of research culture throughout KU faculties.

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