Sponsored Research 2009/10
July 2011

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Foreword

Sponsored Research 2009/10 exhibits vital dimensions of faculty research at Kuwait University in an annual cycle of growth, diversity and accomplishments. Presenting an analytical outlook of all ongoing, completed, jointly funded and graduate projects during the academic year, the document consolidates vital information on faculties and postgraduate students research activity during the period, September 1, 2009 to August 31, 2010. An increased diversity is clearly visible in faculties research with the addition of several new themes not researched before, indicating emerging trends in KU research, with faculties increased attention on strategic priorities and concerns. A relative increase in collaborative and multidisciplinary studies was also observed, with as many as 35 collaborative studies actively being pursued in partnership with eight external institutions, during the year. This is a reassuring diversion in KU research, in compliance to RA's current policy that is proactively driven towards building inter-institutional alliances to boost faculties scientific potential and through the pursuit of complex and innovative studies that could yield potentially significant outputs of scientific, social and economic value. RA is equally alert to the wide-spread pursuit of unfunded research activity across KU faculties, which is also leading to the generation of high quality outputs, with several researchers bagging incentive awards for their internationally creditable high impact research. RA has already taken a tangible step towards exploring the dimensions of this unfunded-activity sphere, a preliminary report of which has already been relayed in the June 2011 edition of the OVPR's Research Quarterly Newsletter, and displayed on OVPR website.

RA is also placing significant emphasis on encouraging faculties to pursue high quality research through the availability of generous grants, and is closely monitoring its procedural mechanism to make it more flexible for expediting the grant clearance process. Focus is also on improving and enhancing institutional resources and facilities through the acquisition of state-of-the-art technologies, e-application and online review system to create a conducive climate for researchers to pursue advanced and innovative research in an everlasting mission of promoting research culture across faculties. In this reformational overhaul, RA’s recently introduced rewards and incentives are providing additional motivation to researchers to acquire a competitive edge in their research endeavors for achieving scientific distinction. While, RA is continuing to incorporate new methods and mechanisms for easing the procedural process for researchers benefit, a clear path and direction is being set in faculty research, transpiring faculties to endeavor towards quality and excellence to achieve international recognition and acclaim in their research endeavors. These virtues carry the seeds of transforming the scientific landscape at Kuwait University towards elevated standard of institutional research that is compatible to global status. This
Looking at funding support, Kuwait University remained the top fund-provider for an overwhelming 479 (93.2%) projects, while a relatively smaller funding support was attributable to the collective participation of several external institutions in sponsoring 35 (6.8%) projects during 2009/10. Despite the variance in funding levels, these two funding streams (KU and external sources) have continued to sustain the university's research momentum in pursuing wide-ranging research interests, and in developing the sphere of collaborative research. RA deeply appreciates and acknowledges the involvement of external institutions in supporting some level of faculty research activity at KU, and is increasingly exploring opportunities for inducting new partners for advancing the scope and dimensions of institutional research.

Presently, RA is focused on enhancing faculties participation in research, developing infrastructure and facilities, especially concerning humanities sector, and creating an encouraging environment for research through generous grants, flexible procedures and incentives & rewards. The purpose is to motivate faculties to pursue high quality research that is internationally compatible and benefits society. These aspirations are embedded in RA’s vision for developing institutional research to global standards, a mission that RA is endeavoring to achieve in the foreseeable future.

Vice President for Research
Kuwait University

July 2011
Editors’ Note

Sponsored Research 2009/10 is nineteenth in the series of annual documentation of faculty research, carrying forward the institutional research activity through another cycle of growth and development. Consolidating empirical information on all active and accomplished projects by faculties and graduate students, during the academic year Sept. 1, 2009 through Aug. 31, 2010, the document provides an analytical perspective on the prevailing scientific dynamism at Kuwait University, with faculties increased diversion to address issues of strategic needs and priorities. This is a reassuring development in RA’s endeavors to encourage faculties to pursue high quality research that is relevant in contemporary context, and seeks to resolve persistent national and social concerns. Given this fundamental objective, a measurable growth was observed in faculties increased participation in funded research during 2009/10, with a relatively larger volume of faculty research, reaching 514 projects. These projects were distributed over all faculties, and arranged by departments throughout the document, with Grant No. being the key indicator for classifying projects under various sections, categories and fund providers. A clear demarcation also existed in the arrangement of projects awarded to faculty members, graduate students and jointly funded research.

The entire faculty research was sustained through the RA’s grant support system, placing generous resources and facilities at the disposal of researchers to pursue research in basic and applied sciences, and in humanities. The organized functionality of this system effected a 16% incline in faculty research with 514 projects, as compared to last year’s total of 443 projects. Of the 514 projects, 178 (34.6%) were newly initiated projects, and 336 (65.4%) entered the next more advanced phase in continuity from earlier year(s). In all, 70% (359) projects were ongoing, and 30% (155) completed during the year. As regards faculties and graduate students research, 85% (437) of the projects were being pursued by faculties, and 15% (77) by graduate students. Together, this critical data provided empirical insights into the expanding domain of institutional research, with the 2009/10 edition of Sponsored Research following the standard pattern in listing project-related data, that typically included information on research team, both Principal Investigator and Co-Investigator(s), project title, starting date, duration and the budget. This fundamental scheme of data presentation was aimed at facilitating users access to any project through the identifying Grant No. Any faculty or department, not listed within the document, was suggestive of its non-participation in RA’s funded research. In arranging the projects data, the entire contents of the document were organized into three major sections -- with Section I presenting all projects sponsored by Kuwait University; Section II aggregating data on Jointly Funded projects; and Section III consolidating Graduate Students research projects. These three sections constituted the virtual universe of funded research activity at KU during 2009/10, broadly reflecting faculty-wise variations in research participation and performance. Statistically, Health Sciences faculties (Medicine, Pharmacy, Dentistry & Allied Health) exhibited numerical dominance over other faculties with 36.5% (188) projects.
the Science faculties (Science & Women’s college) were close contenders with 32.7% (168) projects, followed by Engineering & Petroleum faculty with 18.5% (95) projects, and Arts & Humanities (Arts, Business Administration, Education, Law, Sharia & Social Sciences) claiming 12.3% (63) projects. The Graduate Students research activity was confined to Master’s level research, with 77 projects, there being no doctoral level participants during 2009/10. As regards Types of Grants, 61.3% (315) were University Research projects, 15% (77) Graduate Students grants, 11.5% (59) RIG grants, 6.8% (35) External projects, 2.9% (15) General Faculty projects, 2.3% (12) Priority projects, and 0.2% (1) University Service projects. For over two decades, the mainstay of sponsored research activity has consistently remained the KU’s fundamental support, as the virtual fund provider in the sustenance of faculty research. During 2009/10, the level of this support was responsible for sponsoring an overwhelming 93.2% (479) of the projects, alongside 6.8% (35) projects collectively sustained through eight collaborative partners. These included 26 projects supported by Kuwait Foundation for the Advancement of Sciences (KFAS), 1 project by Environmental Public Authority (EPA), 1 project by Teryfox Foundation TFF, 3 projects by Kuwait Petroleum Company (KPC), and one project each by British Council (BC), Novo Nordisk Company (NNC), National Guards (NG) and Unesco. Statistics on faculty-wise research activity have been consolidated in Tables and Graphs, appended to the document. Also, appended is the Researchers Index, providing quick reference to all researchers whose projects are listed in the document, with their names alphabetically organized. In addition, key symbols denote the status of projects, with completed projects carrying the symbol ©, onhold projects (h), and terminated projects (t). All project-related extensions and budgetary supplements, have been highlighted with (*) and (@), and their specifics provided as footnotes.

Overall, 2009/10 edition of Sponsored Research further enriches the existing reservoir of funded research activity at Kuwait University, the documentation of which started in 1987, creating, replenishing, preserving and developing an invaluable historic data on Kuwait research, chartering over two decades, the mainstay of sponsored research activity, and keeping pace with scientific developments at Kuwait University. The document is extensively distributed, and displayed on OVPR and RA Websites (http://www.ovpr.kuniv.edu) for global access and visibility. In releasing 2009/10 edition of Sponsored Research, it is ardently hoped that the document fulfills the needs and aspirations of researchers, and invigorates faculties participation in funded research. A feedback from researchers, readers and users is welcomed for improving the future series of Sponsored Research.

Research Administration
Office of the Vice President for Research
July 2011

vi

Contents

FOREWORD ....................................................................................................................... iii
EDITORS’ NOTE ............................................................................................................... v
SYMBOLS ...................................................................................................................... xiii

CHAPTER 1: SPONSORED PROJECTS .............................................................................. 1

1.1 PROJECTS SPONSORED BY KUWAIT UNIVERSITY (KU) ................................ 3

FACULTY OF ALLIED HEALTH SCIENCES ......................................................... 3
  Department of Medical Laboratory Sciences ....................................................... 3
  Department of Physical therapy ........................................................................... 4

FACULTY OF ARTS ........................................................................................................ 5
  Department of English Language & Literature .................................................. 5
  Department of Mass Communication ................................................................... 5
  Department of Philosophy ..................................................................................... 5

FACULTY OF BUSINESS ADMINISTRATION ...................................................... 6
  Department of Finance & Financial Institutions .................................................. 6
  Department of Management & Marketing ......................................................... 6
  Department of Quantitative Methods & Information Systems ......................... 6

FACULTY OF DENTISTRY ......................................................................................... 7
  Department of Bioclinical Sciences ...................................................................... 7
  Department of Developmental & Preventive Sciences ......................................... 7
  Department of Restorative Sciences .................................................................... 7
  Department of Surgical Sciences ......................................................................... 8

FACULTY OF EDUCATION ...................................................................................... 9
  Department of Management of Education ............................................................ 9
  Department of Psychology of Education ............................................................. 9
  Department of Teaching Methods & Curriculum ................................................ 9

FACULTY OF ENGINEERING & PETROLEUM ................................................... 11
  Department of Chemical Engineering ................................................................. 11
  Department of Civil Engineering ......................................................................... 12
  Department of Computer Engineering ............................................................... 13
  Department of Electrical Engineering ............................................................... 14
  Department of Industrial and Management Systems Engineering .................. 14
  Department of Mechanical Engineering ............................................................ 15
  Department of Petroleum Engineering ............................................................... 16

FACULTY OF MEDICINE ......................................................................................... 17
  Department of Anatomy ....................................................................................... 17
  Department of Biochemistry ................................................................................ 17
  Department of Community Medicine ............................................................... 18
  Department of Medicine ...................................................................................... 18
1.2 PRIORITY RESEARCH PROJECTS

FACULTY OF PHARMACY
Department of Applied Therapeutics .................................................. 23
Department of Pharmaceutical Chemistry ........................................ 23
Department of Pharmaceutics ............................................................. 24
Department of Pharmacy Practice ...................................................... 24

FACULTY OF SCIENCE
Department of Biological Sciences ..................................................... 25
Department of Chemistry ................................................................. 27
Department of Earth & Environmental Sciences .............................. 31
Department of Mathematics & Computer Science ......................... 31
Department of Physics ..................................................................... 32
Department of Statistics & Operations Research ......................... 33

FACULTY OF SHARIA & ISLAMIC STUDIES
Department of Belief & Invocation .................................................... 34
Department of Commentary & Hadith ............................................. 34
Department of Comparative Jurisprudence ..................................... 34
Department of Jurisprudence & Rules ............................................. 35

FACULTY OF SOCIAL SCIENCES
Department of Library & Information Science ................................ 36
Department of Political Science ....................................................... 36
Department of Psychology .............................................................. 36
Department of Sociology & Social Work .......................................... 37

FACULTY FOR WOMEN
Department of Art & Design ............................................................. 38
Department of Communication Science and Languages ................ 38
Department of Environmental Technology Management ............ 38
Department of Family Sciences ....................................................... 39
Department of Information Science .................................................. 39

FACULTY OF ALLIED HEALTH SCIENCES
Department of Physical Therapy ....................................................... 41

FACULTY OF DENTISTRY
Department of Restorative Sciences ............................................... 41
Department of Surgical Sciences ..................................................... 41

FACULTY OF ENGINEERING & PETROLEUM
Department of Chemical Engineering .............................................. 41
FACULTY OF LAW ................................................................. 42
  Department of Private Law ................................................ 42

FACULTY OF SCIENCE ...................................................... 42
  Department of Biological Sciences ..................................... 42

1.3 RESEARCH INITIATION GRANT (RIG) PROJECTS ............... 43

FACULTY OF ALLIED HEALTH SCIENCES ............................ 43
  Department of Health Information Administration ............... 43
  Department of Medical Laboratory Sciences ..................... 43
  Department of Occupational Therapy ............................... 43
  Department of Physical Therapy ...................................... 43
  Department of Radiological Sciences ............................... 44

FACULTY OF BUSINESS ADMINISTRATION .......................... 44
  Department of Accounting & Auditing ............................... 44
  Department of Finance & Financial Institutions .................. 44
  Department of Quantitative Methods & Information Systems ... 44
  Department of Management & Marketing ......................... 44

FACULTY OF DENTISTRY .................................................. 45
  Department of Developmental & Preventive Sciences .......... 45
  Department of Surgical Sciences ..................................... 45

FACULTY OF ENGINEERING & PETROLEUM .......................... 45
  Department of Architecture ............................................. 45
  Department of Civil Engineering ...................................... 45
  Department of Computer ................................................ 46
  Department of Electrical Engineering ............................... 46
  Department of Industrial and Management Systems Engineering 46
  Department of Mechanical Engineering ............................ 46

FACULTY OF LAW ............................................................. 47
  Department of Public Law ............................................... 47

FACULTY OF MEDICINE .................................................... 47
  Department of Anatomy .................................................. 47
  Department of Surgery ................................................... 47

FACULTY OF PHARMACY .................................................... 48
  Department of Applied Therapeutics ................................. 48
  Department of Pharmaceutical Chemistry ......................... 48

FACULTY OF SCIENCE ....................................................... 48
  Department of Biological Sciences ................................... 48
  Department of Mathematics .......................................... 48
  Department of Physics .................................................. 49
CHAPTER 2: JOINTLY SPONSORED PROJECTS

2.1 PROJECTS SPONSORED BY KUWAIT FOUNDATION FOR THE ADVANCEMENT OF SCIENCES (KFAS)

FACULTY OF ARTS
Department of English Language & Literature

FACULTY OF DENTISTRY
Department of Restorative Sciences

FACULTY OF EDUCATION
Department of Psychology of Education

FACULTY OF ENGINEERING & PETROLEUM
Department of Petroleum Engineering

FACULTY OF MEDICINE
Department of Microbiology
Department of Paediatrics
Department of Pathology
Department of Pharmacology & Toxicology
Department of Psychiatry

FACULTY OF SCIENCE
Department of Biological Sciences
Department of Chemistry
Department of Earth & Environmental Sciences
Department of Physics
2.2 PROJECTS SPONSORED BY ENVIRONMENTAL PUBLIC AUTHORITY (EPA) .................. 61
   Department of Biological Sciences ........................................... 61

2.3 PROJECTS SPONSORED BY KUWAIT PETROLEUM CORPORATION (KPC) ...... 62
   Department of Chemical Engineering ........................................ 62

2.4 PROJECTS SPONSORED BY TERRYFOX FOUNDATION (TFF) ......................... 63
   Department of Medicine ............................................................ 63

2.5 PROJECTS SPONSORED BY BRITISH COUNCIL (BC) .................................. 64
   Department of Physics ............................................................... 64

2.6 PROJECTS SPONSORED BY NATIONAL GUARDS (NG) ............................... 65
   Department of Civil Engineering .............................................. 65

2.7 PROJECTS SPONSORED BY NOVO NORDISK COMPANY (NNC) ................ 66
   Department of Pharmacology & Toxicology ............................. 66

2.8 PROJECTS SPONSORED BY UNESCO .................................................. 67
   Department of Information Science ......................................... 67

CHAPTER 3: GRADUATE STUDENTS RESEARCH PROJECTS ......................... 69

3.1 GRADUATE RESEARCH PROJECTS SPONSORED FOR MASTER’S STUDENTS .... 71
   Department of Biochemistry ................................................... 71
   Department of Microbiology ................................................... 71
   Department of Pathology ....................................................... 75
   Department of Pharmacology & Toxicology ............................ 75
   Department of Physiology ..................................................... 76
FACULTY OF SCIENCE .................................................................76
  Department of Biological Sciences ...........................................76
  Department of Chemistry .........................................................77
  Department of Earth & Environmental Sciences .......................77

• INDEX ..........................................................................................79
  Researchers Index .....................................................................81

• TABLES & GRAPHS .................................................................91
  1. Total Research Awards 2009/10 ..............................................93
  2. Ongoing and New Awards 2009/10 .......................................94
  3. Total Research Awards by Funding Source, 2009/10 ..........95
  4. Total Research Awards for Arts & Humanities, 2009/10 ....96
  5. New Awards by Funding Source, 2009/10 .........................97
  6. Projects Completed during 2009/10 ......................................98
  7. Total Research Activity by Ongoing Vs Completed Projects, 2009/10 .......................................................99
  8. Total Research Projects by Types of Grants, 2009/10 ..........100
C. .................................................................................................................. Completed
H ................................................................................................................. On Hold
T................................................................................................................. Terminated
I.................................................................................................................. RIG (Incentive)
N................................................................................................................. National/Priority Projects
Y................................................................................................................. Graduate Research Awards