Curriculum Vitae

of

Dr. Sheikh Sharif Iqbal

Associate Professor

Electrical Engineering Department
King Fahd University of Petroleum & Minerals (KFUPM)
Dhahran 31261, Saudi Arabia.

September, 2009

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I. Summary of Experience Record

1.1 Statement on Teaching:

Teaching is a magical experience through which I aim to stimulate students who are extraordinary and elevate students who feel average. My primary teaching goal is to inspire a will to succeed. I believe students should be challenged but not frustrated and instructors must cherish their flames of curiosity, enthusiasm and inventiveness. My second objective is to deliver the technical contents of the electrical engineering courses in an animated and interactive manner. My third objective is to fairly assess academic performance. I strongly feel education is about intellectual growth and not competition. So students should cooperate and help each other to enhance the team effort.

My teaching carrier in KFUPM started in 1998, where I have taught **1** graduate course, **10** undergraduate courses and **5** laboratories in the fields of Electromagnetics, Electronics, Electric Circuits and Digital Systems. I have also introduced (*taught for the 1st time in EE dept*) a graduate and an undergraduate course in electromagnetics, coordinated EE courses/labs for **14** semesters and developed/upgraded **5** laboratory facilities for the electrical engineering (EE) department. I have supervised/examined **29** senior design projects (EE-411) involving **103** students, **29** co-operative projects (EE-315) and **105** summer-training (EE-399) students related to undergraduate EE program. I have actively participated in the curriculum development of KFUPM M.Sc., B.Sc. and Diploma programs in electrical engineering. Before joining KFUPM, I have worked for a year in the Electrical Engineering department of 'Islamic University of Technology (IUT)', Dhaka, Bangladesh.

To improve my teaching skills, I have attended an online course offered by Illinois University, USA and participated in **14** workshops/seminars organized by Deanship of Academic Development (DAD), KFUPM. As a course and lab instructor, my average student evaluation in KFUPM is approximately **90%**.

1.2 Statement on Research:

My research work includes rigorous and systematic theoretical investigation, simulated analysis using professional software's and when possible experimental verification. At KFUPM, I continued my graduate research work on modeling gyrotropic material for millimeter-wave devices and theoretically demonstrated its tunable phase-shift properties. A publication related to this novel work was awarded the 'Best Antenna Paper' in "IEE International Conference on Antenna and Propagation (IEE-ICAP)", April 2001. Next phase of my research emphasized on designing integrated planar gyroelectric phase shifters for microwave sensors. The need for conformal antennas in these sensors led to my work in the field of stacked-patch and switchable microstrip antennas. My goal is to extend this research work and design terahertz sensors that can drastically improve existing security scanners.

My research contributions are published in **15** refereed journals and **23** international conferences, of which many are cited by many journal/conference papers. I have supervised/examined **11** post-graduated (PhD and MSc) theses and authored **18** refereed technical reports. I am the Principal-investigator of **2** completed and **1** ongoing and co-investigator of **2** completed and **3** ongoing funded research projects and co-investigator of **5** 'online course' and 'open access' related projects with a total budget of a million Saudi riyal. I have carried out contact research for 'Schlumberger Dhahran Research Center', Saudi Arabia and my international research partners include Microwave Group of University of Manchester, UK', 'Telecommunication Center of Arizona State University, USA', 'ECE Department of Royal Military College, Canada etc.

1.3 Statement on Services:

I have actively participated in organizing **8** international conferences and delivered/offered **34+** public lectures (*short-courses/workshops/seminars*) to Saudi industry and local and international universities. I am a senior-member of IEEE, Fellow of IEE (IET), board-member of IET Saudi-chapter and member of many professional societies (ACES, SSSEE, IEB), where I have volunteered in the peer-reviewing of **50+** international journal and conference papers.

I have published **5** international conference papers in 'Engineering Education' and was a pioneer in developing the online electrical engineering courses in KFUPM. In academic year 2007-08, I have received the "**University distinction award for Excellence in Teaching**" for the college of Engineering Science and was the only recipient of the university '**Distinguished Instructional Technology Award**' in 2005. I was the departmental nominee for "**University Excellence in Advising Award**" in 2008-09, "**University Excellence in Teaching Award**" and "**University Excellence in Research Award**" in 2007-08. I have also received **3 awards** from Deanship of Students Affairs (KFUPM) for assisting student activities. I have served (*elected and selected*) in **11** university standing and ad-hoc committees, chaired and participated in **18+** departmental committees. I have also **coordinated** the "Electromagnetic group (2007-08)" and the "Computer Utilization Committee (2008-09 and 2009-10)" of the EE department, KFUPM.

My active participation in teaching, research and services to KFUPM community is reflected in my official performance evaluation of 'Distinguished (A+)' for academic years; 1998 to 2009.

1.4 Brief General Information

I was born in Dhaka, Bangladesh in 1967 and completed my early education from 'St. Josephs High School (1982)' and 'Notre Dame College (1984)', Dhaka. In 1985, I was awarded an undergraduate scholarship to study Electronics and Communication Engineering (ECE) in 'San Carlos University', Philippines and completed my B.Sc. (March, 1990) degree with 88% of the total mark. A postgraduate scholarship allowed me to complete the M.Sc. (December, 1991) and Ph.D. (September, 1996) degrees in Electrical Engineering from 'University of Manchester Institute of Science and Technology (UMIST)', Manchester, UK. In 1996, I started my married life and eventually blessed with three daughters.

II. General

2.1 Personal Information:

Name:	Sheikh, Sharif Iqbal
Date of birth:	June 18, 1967
Place of birth:	Dhaka, Bangladesh
Marital Status:	Married
Language:	English
Address:	P.O.Box 139, Dhahran 31261, King Fahd University of Petroleum & Minerals, Saudi Arabia
Phones:	Office (966-3) 860 2818 Home (966-3) 860 5139 Mobile 966 500706992
Fax:	(966-3) 860 3535
Email:	sheikhsi@kfupm.edu.sa

2.2 Area of Specialization: (Key word: Electromagnetics, RF/Microwave/Millimeterwave devices)

My research work is based on modeling, simulation and when possible experimental verification of gyrotropic control circuits and antennas for RF/microwave/millimeter-wave devices. My recent research interest involves modeling the front end of microwave sensors, which integrates gyrotropic control devices with compact, switchable, wideband and/or multi-frequency antennas. I am a competent user of professional simulators (HFSS, ADS, COMSOL-Multiphysics), prototype fabrication tools (Protomate microstrip circuit Plotter) and basic experimental equipments (Amplitude, Spectrum and Vector Network Analyzers). Specific topics within the scope of my research include:

2.2.1) Design and implementation of integrated gyrotropic phase shifters for array antennas.

2.2.2) Design and implementation of switchable conformal antennas.

2.2.3) Designing the front-end of micro/millimeter-wave sensors.

2.2.4) Modeling novel gyroelectric planar circuits at micro/millimeter-wave frequencies.

2.3 Educational Background:

2.3.1) 1992 - 1996: **Ph.D**. in Electrical Engineering and Electronics. University of Manchester Institute of Science and Technology (UMIST), Manchester, England. Thesis title: *"Applied-field/Frequency Analysis of Gyrotropic Axisymmetric devices."*

2.3.2) 1990 - 1991: **M.Sc.** in Communication Engineering and Digital Electronics. UMIST, Manchester, England. Dissertation title: *'High Power Microwave Frequency Tunable Filter'*

2.3.3) 1985 - 1990: **B.Sc.** (Hon) in Electronics and Communication Engineering. University of San Carlos, Philippines. Capstone project title: *'Design and Implementation of a FM Transceiver'*

2.4 Employment History:

2.4.1) **Dec 08 – Present :** *'**Associate Professor**'* in **K**ing **F**ahd **U**niversity of **P**etroleum & **M**inerals (KFUPM), Dhahran 31261, Saudi Arabia. *(http://www.kfupm.edu.sa/)*

2.4.2) **Feb 98 – Nov 08 :** *'**Assistant Professor**'* in **KFUPM**, Dhahran 31261, Saudi Arabia.

2.4.3) **June-July, 2003:** *'**Visiting Research Fellow**'* in the **U**niversity of **M**anchester, UK.

2.4.4) **July-Aug, 2001 :** *'**Visiting Post Doctoral Researcher**'* in the **T**elecommunication **R**esearch **C**enter, **A**rizona **S**tate **U**niversity (ASU), PO. Box 877206, Tempe, AZ, USA

2.4.5) **July-Aug, 2000 :** *'**Visiting Post Doctoral Research Associate**"* in the **U**niversity of **M**anchester **I**nstitute of **S**cience and **T**echnology (UMIST), UK.

2.4.6) **Nov 96 – Jan 98 :** *'**Assistant Professor**'* in **I**slamic **U**niversity of **T**echnology (IUT), Dhaka, Bangladesh. *(www.iutoic-dhaka.edu/)*

2.4.7) **May 97 – Nov 97 :** ***'Part time Assistant professor'*** in American International University in Bangladesh (AIUB), Dhaka, Bangladesh. (http://www.aiub.edu/)

2.4.8) **Apr 92 - July 96 :** *'**Teaching Assistant**'* in the **U**niversity of **M**anchester **I**nstitute of **S**cience and **T**echnology, PO Box. 88, Manchester M60 1QD, UK.

2.4.9) **Nov 91 - Mar 92 :** ***'Computer Manager'*** in IBCO limited, 648 Ashton old road, Manchester M11 2WD, England.

2.4.10) **Apr 90 - Jul 90 :** *'**Engineer**'* in Philips International Center, 36/2 Senpara Parbata, Mirpur, Dhaka, Bangladesh.

2.5 Recognition and Awards:

2.5.1) **Evaluation of Overall performance in KFUPM**: Distinguished (A+) since 1998.

2.5.2) **Teaching Awards Received in KFUPM**:

a) Nominated for the '**University Excellence in Academic Advising Award'** from Electrical Engineering Department for academic year 2008-**2009**.

b) Recipient of the **'University distinction award for Excellence in Teaching'** for college of Engineering Science for the academic year of 2007-**2008**.

c) Only recipient of the '**University Distinguished Instructional Technology Award**' for academic year 2004-**2005**.

d) Nominated for the '**University Teaching Excellence Award'** for College of Engineering Sciences for academic year 2006-**2007**.

e) Nominated for the '**University Teaching Excellence Award'** for College of Engineering Sciences for academic year 2005-**2006**.

2.5.3) **Research Awards Received**:

a) Nominate by the Electrical Engineering Department for '**Excellence in Research Award"** of KRUPM for the academic year 2007-**2008**

b) Received '**Best antenna paper award**' in the '11th IEE International Conference on Antenna and Propagation (IEE-ICAP 2001)', Manchester, UK, 17th–20th April, 2001.

c) Principal and co-investigator of funded projects, with a total budget of SAR 500000.

d) Awarded 'Visiting research positions' in 'Arizona State University', USA in 2001, 'UMIST', Manchester, UK in 2000 and 'University of Manchester', UK in 2003.

2.5.4) **Awards for Supporting Student Activities**:

a) Nominated for **"University Excellence in Advising Award"** for College of Engineering Sciences for academic year in 2008-09.

b) Recipient of **3** "**Distinguished performance in student activities award**" from Deanship of Student Affairs, KFUPM, in academic years 1999-2000, 2001-2002, 2004-05

2.5.5) **Awards for Sporting Activities**:

a) Won silver medals (2nd position) for **4** consecutive years (2002 to 2005) in the 'University Rector's Cup' badminton tournament of KFUPM.

b) Won **2** bronze medals in the 'Rector's Cup' badminton tournament (2001 and 2006).

2.5.6) **Scholarship Received**:

a) Undergraduate academic scholarship**:** Hermann-Gmeiner-Fonds, Germany, 1985-1989

b) Postgraduate academic scholarship: SOS International, Innsbruck, Austria, 1990-1995

3. Teaching and Related Experience

Summary:

- **Overall performance evaluation in KFUPM is 'A+', from 1999 to 2009**
- **Taught 1 graduate and 10 undergraduate courses in Electrical Engineering (EE).**
- **Taught laboratory classes of 5 undergraduate Electrical Engineering courses.**
- **Coordinated several EE courses/laboratories for 18 semesters.**
- **Average Student Evaluation is above 90%.**
- **Introduced** (offered for the 1st time in EE dept) **2 EE courses** (1 undergraduate, 1 graduate)**.**
- **Developed curriculum for KFUPM-EET diploma program**
- **Revised electrical engineering curriculum for 5 B.Sc./M.Sc. courses.**
- **Developed Printed Circuit Facilities** (PCB lab) **for EE department.**
- **Developed 1 laboratory for a senior course and revised 3 laboratory manuals.**
- **Supervised/examined 31 EE undergraduate senior-projects involving 111 students**
- **Supervised 29 EE undergraduate co-operative students.**
- **Supervised/examined 105 EE undergraduate summer training students.**
- **Academically advised 400+ EE students** (approximately 20 students per semester)**.**
- **Achieved university level recognition for using innovative teaching tools.**
- **Attended 15+ workshops/seminars and 1 online-course to improve teaching skills.**

3.1 Courses Taught:

3.1.1) **Postgraduate Courses Taught:**

a) 'Microwave Integrated Circuits (graduate)', in *KFUPM*, *Saudi Arabia*

3.1.2) **Undergraduate Courses Taught:**

a) 'Microwave Engineering (senior)', *in KFUPM, Saudi Arabia.*
b) 'Microwave Transmission (senior)', *in KFUPM, Saudi Arabia*.
c) 'Digital Systems Engineering (junior)', *in KFUPM, Saudi Arabia.*
d) 'Electronics II (junior)', *in KFUPM, Saudi Arabia.*
e) 'Electronics I (sophomore)', *in KFUPM, Saudi Arabia.*
f) 'Electric Circuits (sophomore)', *in KFUPM, Saudi Arabia.*
g) 'Electromagnetics'(jun), *in American International University Bangladesh (AIUB)*
h) 'Microprocessor systems' (junior)', *in AIUB*
i) 'Communications I' (junior), *in Islamic University of Technology (IUT), Bangladesh*
j) 'Communication II' (senior)', *in IUT*
k) 'Electronics' (sophomore) and 'Circuit Analysis'(sophomore), *in IUT*

3.1.3) **Undergraduate Laboratory's Taught:** See **Appendix A** for detail information

(a) Microwave Transmission LAB (senior), in the EE department of KFUPM.

(b) Microwave Engineering LAB (senior), in the EE department of KFUPM.

(c) 'Digital- Systems Engineering LAB (junior)', in the EE department of KFUPM.

(d) 'Electromagnetics LAB (junior)', in the EE department of KFUPM.

(e) 'Electronics I LAB (sophomore)', in the EE department of KFUPM.

3.1.4) **Coordinated Courses/Labs:**

Coordinated Course and Laboratories	Terms/Semesters in KFUPM
Digital Systems Engineering (junior)	Term 082 *or* 2nd semester of 2009
Digital Systems Engineering (junior)	Term 072 *or* 2nd semester of 2008
Digital Systems Engineering Lab (junior)	Term 071 *or* 1st semester of 2007
Digital System Engineering (junior)	Term 062 *or* 2nd semester of 2007
Digital System Engineering (junior)	Term 061 *or* 1st semester of 2006
Digital Systems Engineering Lab (junior)	Term 052 *or* 2nd semester of 2005
Digital System Engineering (junior)	Term 042 *or* 2nd semester of 2005
Digital System Engineering (junior)	Term 041 *or* 1st semester of 2004
Digital System Engineering (junior)	Term 032 *or* 2nd semester of 2003
Digital System Engineering (junior)	Term 021 *or* 1st semester of 2002
Electronics II (junior)	Term 011 *or* 1st semester of 2002
Electric Circuits (sophomore)	Term 993 *or* Summer term of 2001
Digital System Engineering (junior)	Term 992 *or* 2nd semester of 2000
Digital System Engineering (junior)	Term 991 *or* 1st semester of 1999

3.1.5) **Field Trips Organized:** Organized **2** industry visits (Electronia, Dammam) for the senior students of KFUPM electrical engineering department.

3.2 **Average Student Evaluation:** 90% (**9.09/10.00**) for academic years of 1998 to 2009.

Detail listing of teaching load per semester and related student-evaluation is tabulated in **Appendix A** *(pg 45)*

3.3 Curriculum Development and Revision in KFUPM:

3.3.1) EE-Courses Introduced:

a) In 2002, I have introduced *(taught for the 1st time in EE department*) a graduate course in 'Microwave Integrated Circuits (EE-533)' and prepared the detail course syllabus. I have also selected the text book for this course.

b) In 2000, I have introduced *(taught for the 1st time in EE department*) a course in 'Microwave Engineering (EE-407)' and prepared the detail course syllabus. I have also selected the text book and organized the laboratory experiments for this course.

3.3.2) Curriculum Revision and Development: (in KFUPM)

a) Updated the course description of **three** undergraduate course (EE-390, EE-407 and EE-470) and **two** graduate courses (EE-605, EE-545) during 2000-01 and 2006-07.

b) As a committee member, I have participated in the curriculum development of KFUPM diploma program in 'Electronic Equipment and Maintenance (EET)' in 2001. A few years later, I was also assigned to compare the curriculum of this diploma program with the curriculum of the related Associate Degree programs.

3.4 Laboratory Facilities Developed and Upgraded: (in KFUPM)

a) In 2009 purchased microwave components for EM Laboratory worth SAR 400000 to improve laboratories of "Microwave Engg" & "Microwave Devices" labs.

b) In 2005 purchased Microwave components (Amplifiers, PCB boards, SAM …) for all microwave labs.

c) In 2004, I have upgraded the EE-340 (Electromagnetics) laboratory manual and introduced several software based laboratories.

d) In 2003, I have recommended the inclusion of the topic "Microcontroller Basics" within the EE-390 (Digital System Engg.) course and laboratory syllabus.

e) In 2001, I have initiated the purchase of "LPKF Protomate C60" PCB plotter and successfully setup the printed circuit board (PCB) laboratory of the EE department. I have also compiled the user manual for this machine.

f) In 2001, I have revised the lab manual of EE 405 (Microwave Transmission) and purchased 'Window version of CAEME software' for this lab.

g) In 2000, revised the lab manual of EE-390 (Digital System Engg.) course

h) In 2000, I have initiated the purchase request for the laboratory equipments of Microwave Engineering (EE-407) LAB and wrote the 1st version of the laboratory manual. A year later, I have updated the LAB manual.

3.5 Senior Design projects (EE-411):

3.5.1. **Supervised 24** senior design projects, involving **89** students (≈ 4 students per project)
Examined 7 senior design projects (capstone), involving **22** students.

Academic Year	Terms	Number of Projects	Number of Students	Responsibility
2007-08	082	2	8	*Examiner*
2007-08	081	1	4	Supervisor
2007-08	071-072	2	7	Supervisor
2007-08	071-072	1	3	*Examiner*
2006-07	061-062	3	11	Supervisor
2005-06	051-052	2	4	*Examiner*
2005-06	051-052	3	12	Supervisor
2004-05	041-042	2	7	*Examiner*
2004-05	041-042	3	10	Supervisor
2003-04	031-032	1	4	Supervisor
2002-03	021-022	2	7	Supervisor
2001-02	011-012	1	4	Supervisor
2000-01	000-001	2	8	Supervisor
1999-00	991-992	4	15	Supervisor
1998-99	981-982	2	7	Supervisor

Titles of the projects supervised include:

- 'Novel Phase Shifter', Supervised in term 081 (*Results published in a conference*)
- 'Controlling Home Appliances using a Wireless Device', Supervised in term 062.
- 'Design of Stacked Patch Antenna for Wireless System', Supervised in term 052.
- 'Microprocessor Based Power Factor Monitoring System', Supervised in term 051.
- 'Design and Implement Novel Microstrip Circulators', Supervised in term 012.
- 'Design & Implementation of an Electronic Voting System', Supervised in term 002.

3.6 **Co-operative training (EE-351) :**

Supervised 17 *and* **Examined 22** undergraduate students, taking their 28-week long applied co-operative (COOP) program in industrial environment. **Sample** project details are:

Student	Title of COOP Report	Company	Responsibility	Completed
F. A. Abu-Shomi,	Oil exploration Techniques	Halliburton, Company, KSA	Supervisor	≈ February, 2008
A. A. Saeed Ali	Logging Techniques	Halliburton, Company, KSA	Supervisor	≈ February, 2008
Al-Sharif Ahmad	Voice Activated Telephone Switches in ARAMCO	Saudi ARAMCO, Dhahran.	Supervisor	May, 2006
E. Al-Mestady	Control Operation of Load Dispatch Center	Saudi Electric Company	Examiner	May, 2006
F. S. Hasan	Power System and Motor Application	Saudi Aramco, Dhahran.	Examiner	January, 2006
Mamdouh Naïf Al-Jameeli	Generator and Exciter Package Maintenance	Kuwait Petroleum	Supervisor	May, 2002

3.7 **Summer Training (EE-399):**

Supervised 55 and **examined 50** undergraduate summer training students (supervised 4 and examined 4 per semester). Examination includes inspecting presentation, report and the knowledge gained during the summer training program. **Sample** projects are;

a) H. Al-Misehal, 'Download system & Video Basics', Naviacom Company, Khobar, KSA, completed in January 2006.

b) A. U. Al-Sutaihi, 'High Voltage Maintenance', Sault Water Conversion Corporation , KSA, January 2006.

3.8 **Academic Advising: Advised 400** EE students (≈20 per semester). Responsibilities include monitoring their registration process, provide assistance in major selection, answer any academic subject or policy related questions, guide through personal problems etc…

3.9 **Innovative methods in teaching:**

a) Innovative methods adopted in my courses includes: animated lecture notes, hardware demos, online review classes, online quizzes etc. In addition, all my lecture notes and course materials are also software based and easy for the students to access through

their WebCT account. In all my courses, WebCT platform is also used to encourage student-instructor and student-student interaction to maximize knowledge transfer.

b) Attended **6** workshops on 'Online Educational Tools and Techniques' in KFUPM. Detail description of these workshops is listed in **section 6.4.2** *(pg 31)*.

c) Only recipient of "University Instructional Technology Award" of KFUPM in 2005.

3.10 Actions Taken to Improve Teaching Skills:

3.10.1) **Attended distance learning (e-learning) course**:

Successfully completed an **online course** on "Tutoring online: Principles and Practices", MVCR, Illinois University, USA during the summer term of 2006. A certificate was awarded at the end of the course. Through this course, I have gained 1st hand experience on the methodology of online education.

3.10.2) **Attended 7 workshops** related to teaching and student learning, offered by the Deanship of Academic Development (DAD), KFUPM. Detail description of these workshops is listed in **section 6.4.2** *(pg 31)*.

3.10.3) Taken part in the voluntary '**Peer Consultation**' process of Deanship of Academic Development (DAD), KFUPM. The suggestions provided by DAD were helpful in improving my teaching techniques.

IV. Post-graduate Theses Supervised and Examined

Summary:

- **Supervised 3 and co-supervised 1 graduate theses leading to MSc degree.**
- **Served as a committee member of 1 PhD and 7 MSc theses.**

4.1 Graduate (M.Sc.) Theses Supervised:

4.1.1) Title: 'Design of Novel Aperture Stacked Microstrip Power Dividers'
Student Name: Mr. Sulaiman L. Taiwo *and* Degree Awarded: M.Sc.
Date Started: October, 2009 *and* Date Completed: - - - -
My Responsibility: Thesis Supervisor

4.1.2) Title: 'Measuring the water level in the oil transmission pipes using EM waves'
Student Name: Mr. Khaled Yahya Al-Qurashi *and* Degree Awarded: M.Sc.
Date Started: October, 2005 *and* Date Completed: Jan., 2007
My Responsibility: Thesis Co-supervisor

4.1.3) Title: 'Cavity enclosed ferrite based aperture coupled stacked patch antenna array'
Student Name: Mr. Mir Riyaz Ali *and* Degree Awarded: M.Sc.
Date Started: June, 2004 *and* Date Completed: July, 2005
My Responsibility: Thesis Supervisor

4.1.4) Title: 'Design of wideband aperture-stacked linear phased array antenn*a*'
Student Name: Mr. Hassan Al-Mudhaffar *and* Degree Awarded: M.Sc.
Date Started: May, 2004 *and* Date Completed: May, 2006
My Responsibility: Thesis Supervisor

4.2 Committee member of M.Sc. Theses:

4.2.1) Title: 'Adaptive Modulation and Multi-user diversity for fading channels'
Student Name: Mr. Masud Abdullahi Abubakar *and* Degree: M.Sc.
Date Started: February, 2008
My Responsibility: Committee Member.

4.2.2) Title: 'Microwave Filter Design by Continuously Varying Transmission Line'
Student Name: Mr. Yousef Fawaz Al-Sharif *and* Degree: M.Sc.
Date Started: June, 2008
My Responsibility: Committee Member.

4.2.3) Title: 'Design and Analysis of EBG-based Low-Profile Microstrip Antennas For Wireless Communications'
Student Name: Mr. Fahd Ahmad Al-Khuraish *and* Degree: M.Sc.
Date Started: May, 2007
My Responsibility: Committee Member.

4.2.4) Title: 'Analysis of Wavelength Selective Directional Coupler with air grooves'
Student Name: Mr. Mohammad Sameer *and* Degree: M.Sc.
Date Started: May, 2007 *and* Date Completed: Jan, 2008
My Responsibility: Committee Member.

4.2.5) Title: 'Solution of Coupled Microstrip Trans. Line using Frequency Domain Analysis'
Student Name: Mr. Salem G. Ali *and* Degree Awarded: M.Sc.
Date Started: June, 2006 *and* Date Completed: May, 2007
My Responsibility: Committee Member.

4.2.6) Title: 'Null Steering in Phased Arrays By Phase Variations Using Genetic Algorithm'
Student Name: Mr. Mohammed N. Mazher *and* Degree Awarded: M.Sc.
Date Started: May, 2004 *and* Date Completed: Jan., 2005
My Responsibility: Committee Member.

4.2.7) Title: 'Analysis of Directional Couplers with Various Embedded Cavity shapes'
Student Name: Mr. Mohammad M. Islam *and* Degree Awarded: M.Sc.
Date Started: January, 2004 *and* Date Completed: January, 2005
My Responsibility: Committee Member.

4.3 Committee member of PhD Theses:

4.3.1) Title: 'Finite Element Analysis and Design of Ferrite Phase shifters'
Student Name: Mr. Junaid Zafar and Degree: PhD
University: University of Manchester, Manchester, England
Date Started: 2006 and Date Completed: September, 2009
My Responsibility: Committee Member.

V. Research and Related Activity

Summary:

- **Research projects: 6 funded, 1 joint (**international**) and 1 contact (**industry**) involving a total budget of SAR 800,000.**
- **Published 15 papers in international Journals, where 2 papers are single authored**
- **Published 23 papers in refereed Conferences, where 3 papers are single authored and 1 paper received an IEE award for 'Best Antenna paper'.**
- **Cited by many international journal/conference papers.**
- **Published 4 and written 14 refereed technical reports.**
- **Visiting researcher for 3 summer terms in UK and USA universities.**

5.1 Funded Research Projects: *(Completed 4 and Ongoing 4)*

5.1.1) **Ongoing funded research projects:**

a) Title: Design of a Superdirective Microstrip Patch Antenna Array for Wireless Communications Applications"
Funded By: King Abdulaziz City for Science and Technology (KACST), KSA
Responsibility: Co-investigator *and* Allocated Budget: SAR 450000
Date Started: October, 2009 *and* Duration: Twenty four months

b) Title: Design of Microwave filters using continuously varying transmission lines"
Funded By: Fast Track Research Grants (FT-080010), KFUPM, Saudi Arabia.
Responsibility: Co-investigator *and* Allocated Budget: SAR 57,000
Date Started: September, 2008 *and* Duration: Twelve month.

c) Title: 'Design of Active 24-GHz Microstrip linear phased array antenna for microwave sensors'
Funded By: Internal Research Fund (IN-070345)), KFUPM, Saudi Arabia.
Responsibility: Principal Investigator *and* Allocated Budget: SAR 74,500
Date Started: March, 2007 *and* Duration: Fourteen month

d) Title: 'Study of the Electromagnetic Radiation and Interference from High speed Digital Systems and Methods to Minimize it from Work Safety and Environment '
Funded By: Saudi Basic Industries Corporation, KSA.
Responsibility: Co-investigator. *(final report yet to be submitted).*

5.1.2) **Completed funded research projects:**

a) Title: 'Circularly Polarized Planar Semi. Phase Shifters for Phased Array Antennas'
Funded By: Fast Track Research Grants (FT-060029), KFUPM, Saudi Arabia.
Responsibility: Principal Investigator *and* Allocated Budget: SAR 70,000
Date Started: September, 2006 *and* Duration: Twelve month.

b) Title: 'Measuring the Water-level in the Oil Transmission Pipes using EM-waves '
Funded By: Schlumberger Dhahran Center for Carbonate Research, Al-Khobar, KSA.
Responsibility: Co-supervisor of MSc student *and* Allocated Budget: SAR 37,000
Date Started: October, 2005 *and* Date Completed: Jan., 2007.

c) Title: 'Novel Millimeter Wave Semiconductor Phase Shifters and Its Application in Phased Array Antennas'.
Funded By: Fast Track Research Grants (FT-2001/02), KFUPM, Saudi Arabia
Responsibility: Principal Investigator *and* Allocated Budget: SAR 70,000
Date Started: October, 2002 *and* Date Completed: May, 2004.

d) Title: 'Development of Gyrotropic Control Device'
Partially Funded By: Telecomm. Researcher Center, Arizona State University, USA.
Responsibility: Post Doctoral Researcher *and* Allocated Budget: SAR 10,000
Date Started: June, 2001 *and* Date Completed: August, 2001.

5.2 **Publications in Refereed Journals:** *(**15** papers)*

5.2.1) **After Joining the Rank (post PhD research):** *(**9** papers)*

[J15] **Sheikh S. I.** and Mir Riyaz Ali "Beam Squint using Integrated Gyrotropic Phase Shifter", *Applied Computational Electromagnetic Society (ACES) Journal*, *ISSN: 1054-4887,* Vol. 23, No.2, June, 2008.

My contribution *to this paper is approximately 70%, mainly for the design, theoretical formulation, guidance during the simulation/experimentation process and interpretation of the results. I have also written the paper and revised it to include reviewer's comments.*

[J14] **Sheikh S. I.,** Al-Quraish K., Ragheb H.A and Babelli I. "Simple Microwave Method for Detecting Water Holdup", *Microwave and Optical Technology Letters (MOTL), ISSN: 0895-2477*, Vol. 50, No. 2, (February 2008), pp. 354-355.

My contribution *to this paper is approximately 40%, mainly due to the writing of the paper and revising it to include reviewer's comments. I was partially involved in the design process and guided the graduate student to carryout related simulation and experimental work.*

[J13] **Sheikh S. I.** and Al-Quraish K. "Theoretical Analysis of Magnetically switchable shorted patch antenna", *ELECTROMAGNETICS, ISSN: 0272-6343*, Vol. 27, No. 8, (November 2007), pp. 545-551.

My contribution *to this paper is approximately 75%, mainly for the design, theoretical formulation and interpretation of the simulated results. I have written the paper, revised it to include reviewer's comments and guided a graduate student to carry out simulation work.*

[J12] **Sheikh S.I.,** Biswas M., Siddique J. Y. and Guha D.**,** "Performance of Cavity Backed Inverted Microstrip Broadband Antenna", *Indian Journal of Radio & Space Physics (IJRSP)*, *ISSN: 0367-8393*,Vol. 35 (2006), pp. 54-58.

My contribution *to this paper is approximately 45%, mainly for the design, optimization and interpretation of the simulated result. I have revised the paper to include reviewer's comments*

[J11] **Sheikh S.I.** and Dawoud M.M.**,** "Predicted Performance of Magnetized Semiconductor Phase Shifters for Millimeter-wave Microstrip Array Antennas", *IEEE Microwave and Wireless Component Letters (MWCL), ISSN 1531-1309*, Vol.15-11 (2005), pp.790-792

My contribution *to this paper is approximately 75%, mainly for the design, theoretical formulation, simulation, experimentation and interpretation of the results. I have also written the paper and significantly revised it to include the reviewer's comments.*

[J10] **Sheikh S.I.**, Guha D. and Siddique J. Y.**,** "Performance of Compact Integratable Broadband Antenna", *ELECTROMAGNETICS, ISSN: 0272-6343*, Vol.25, No. 4

(2005), pp. 317-327.
My contribution *to this paper is approximately 55%, mainly for the optimization and interpretation of the simulated result. I have also helped in the write-up and revision process.*

[J9] Guha D., Siddique J. Y. and **Sheikh S.I.,** "Studies of Field Coupling between Stacked Microstrip Patch Resonators and Design of Broadband Radiators", *Scientific Journal of FACTS UNIVERSITATIS: Series of Mechanics, Aromatic Control and Robotics*, *ISSN: 0354-2009*, Vol. 3, No. 15 (2003), pp. 1121-1125.
My contribution *to this paper is approximately 40%, mainly for the tedious simulation work to optimize the designed structure and interpret the simulated results.*

[J8] **Sheikh S.I.,** "Novel Semiconductor Phase Shifter for Millimeter-Wave Devices", *Microwave and Optical Technology Letters (MOTL), ISSN: 0895-2477,* Vol.39, No.4 (2003), pp 300 303.

[J7] **Sheikh S.I.,** "Millimeter wave semiconductor two-port network at 77K", *International Journal for Applied Electromagnetics…*, *ISSN: 1383-5416,* Vol. 11 (2000), pp.117-126.

5.2.2) **Before Joining the Rank (from PhD):** *(**6** papers)*

[J6] **Sheikh S.I.,** Gibson A.P.P. and Dillon B.M., "Split Frequencies in Planar Axisymmetric Gyroelectric Resonators", *IEEE Trans. on Microwave Theory and Techniques (MTT), ISSN: 0019-9480*, Vol.46, No.1 (1998), pp 62-69.
My contribution *to this paper is approximately 60%, mainly for the design, theoretical formulation, developing program codes and assists in interpreting the results. I have also partially written the paper and revised it to include the reviewer's comments.*

[J5] Gibson A.P.P., **Sheikh S.I.** and Dillon B.M., "Material Independent Design Charts for Circular Ferrite Devices", *International Journal of Electronics (IJE), ISSN: 0020-7217*, Vol.82, No.4 (1997), pp 427-438.
My contribution *to this paper is approximately 55%, mainly for the theoretical formulation, developing solver codes, generating results and assisting in writing/revising the paper.*

[J4] Dillon B.M., Gibson A.P.P. and **Sheikh S.I.**, "An Improved Approximation for Effective Permeability in Microwave Ferrites", *IEE Proceedings Microwaves Antennas and Propagation (H), ISSN: 1350-2417*, Vol.143, No.5 (1996), pp 444-446.
My contribution *to this paper is approximately 20%, mainly for assisting during the theoretical formulation and interpretation of the results.*

[J3] **Sheikh S.I.,** Gibson A.P.P. and Dillon B.M., "Frequency/Bias-field Mode Charts for Gyrotropic Waveguides", *Microwave and Optical Technology Letters (MOTL), ISSN: 0895-2477,* Vol.10, No.4 (1995), pp 201-204.

My contribution *to this paper is approximately 55%, mainly for the theoretical formulation, developing solver codes, generating results and assisting in write-up/revision of the paper.*

[J2] Gibson A.P.P., Davis L.E. and **Sheikh S.I.,** "Duality's in Circular Gyrotropic Disks and Waveguides", *ELECTROMAGNETICS, ISSN: 0272-6343*, Vol.15, No.6 (1995), pp 615-629.

My contribution *to this paper is approximately 55%, mainly for the developing program codes and generating/interpreting the results. I have helped in writing and revising the paper.*

[J1] Gibson A.P.P., Dillon B.M. and **Sheikh S.I.,** "Applied Field/Frequency Response of Planar Gyromagnetic Disks", *International Journal of Electronics (IJE), ISSN: 0020-7217*, Vol. 76, No. 6 (1994), pp 1073-1081.

My contribution *to this paper is approximately 55%, mainly for the theoretical formulation, developing solver codes, assists in interpreting the result, write-up and revision of the paper*

5.3 Publications in International Conferences: *(23 papers)*

5.3.1) After Joining the Rank (Post PhD): *(23 papers)*

[C23] **Sheikh S. I. Mitu**, et al., "Design of Novel Tunable Phase Shifter", Progress in Electromagnetic Research Symposium (PIERS'09), Moscow, 18-21 August (2009)**.**

[C22] **Sheikh Sharif Iqbal Mitu**, Al-Shahrani, S. M. and Johar U, "24 GHz Active Phased Array Antenna for Microwave Sensors", *7th International Conference on Electronics, Hardware, Wireless and Optical Communication (EHAC'09)*, Cambridge UK, 21-23 February (2009).

[C21] **Sheikh S.I.**, "Activities of IET Saudi Arabian Network", IET volunteers conference, Savoy Place, London, 23-26 May, 2009.

[C20] **Sheikh Sharif Iqbal** et al., "Development of 8086 Microprocessor Course for Web" 5th Saudi Technical Conference, Riyadh, 11-14 January, 2009

[C19] **Sheikh S.I.**, "Simulation of Novel Gyrotropic Semiconductor Phase-shifters for Wireless Communication Devices", Comsol Users Conference, Al-Khobar, KSA, 12-13 January, 2009

[C18] **Sheikh S.I.** and Dawoud M.M., "Circularly Polarized Microstrip Ferrite Phase-shifter with Uneven Excitation ", Progress in Electromagnetic Research Symposium (PIERS'08), Cambridge USA, 2-6 July (2008)**.**

[C17] **Sheikh S. I.** and Ali M.R.**,** "'Beam Scanning Using Integrated Microstrip Ferrite Phase shifter", Proceedings of *23rd Progress in Applied Computational Electromagnetics (ACE) conference* in Italy, 19-23 March (2007), pp.1746-1749.
My contribution *to this paper is approximately 75%, mainly for the design, theoretical formulation, guidance during the simulation/experimentation process and interpretation of the results. I have also written and presented the paper in the conference.*

[C16] **Sheikh S.I.** , "Integrated Microstrip Feed Network for Phased Array Antenna", Proceedings of Progress in Electromagnetic Research Symposium (PIERS'06) in Japan, *ISSN: 1559-9450*, 2-5 August (2006), pp. 363-365.
My contribution *to this paper is approximately 90%, mainly for the design and interpretation of the results. I have also written, revised and presented the paper in the conference. .*

[C15] Siddique J., Guha D. and **Sheikh S.I.,** "Input Impedance Behavior of Coax-fed Microstrip Stacked Antenna", *International Conference on Communication, Devices and Intelligent Systems (CODIS 2004) Digest,* January (2004), pp. 220-223.
My contribution *to this paper is approximately 35%, mainly for the tedious simulation process to optimize the designed structure. I have also helped in writing the paper.*

[C14] Guha D., **Sheikh S.I.,** Biswas M., Siddique J., "Effect of Cavity enclosure on the resonance characteristics of an inverted microstrip stacked patch antenna", *Asia Pacific Microwave Conference (APMC)*, India, December (2004), pp. 15-18.
My contribution *to this paper is approximately 30%, mainly for the tedious simulation process to optimize the designed structure. I have also interpreted the results.*

[C13] Guha D.**,** Siddique J. and **Sheikh S.I.,** " Studies of Field Coupling Between Stacked Microstrip Patch Resonators and Design of Broadband Radiators", *The* 6th *International Symposium on Nonlinear Mechanics - Nonlinear Science and Applications (ISNM NSA)*, Yugoslavia, August 24-29, (2003), pp. in abstract 1section
My contribution *to this paper is approximately 35%, mainly for the tedious simulation process to optimize the designed structure. I have also interpreted the results.*

[C12] **Sheikh S.I.,** Siddique J. and Guha D.**,** "Simple Design of a Compact Broadband Microstrip Antenna for Mobile Communication", *IEEE Antenna and Propagation Symposium Digest* (*APS*), *ISBN: 0-7803-7846-6*, USA, Vol. 2 (2003), pp. 288-291.

My contribution *to this paper is approximately 55%, mainly for the optimization and interpretation of the simulated result. I have also presented the paper in the conference.*

[C11] **Sheikh S.I.,** Siddique J. and Guha D.**,** "Stacked Patch Antenna for Dual Band Operation", Paper no.106 in *IEEE GCC Conference Digest,* Bahrain, May (2003).
My contribution *to this paper is approximately 55%, mainly for the optimization and interpretation of the simulated result. I have also presented the paper in the conference.*

[C10] **Sheikh S.I.** and Gibson A.**,** "Characteristics of Millimeter-wave Semiconductor Phase shifters", *11th International Conference on Antennas and Propagation (IEE-ICAP), ISBN: 0-85296-733-0*, UK, April 17-24, (2001), pp. 323-326.
My contribution *to this paper is approximately 80%, mainly for the design, theoretical formulation, developing solver codes and interpretation of the results. I have also partially written the paper and revised it to include the reviewer's comments.*

[C9] **Sheikh S.I.,** "Bias-field frequency characteristics of Millimeter wave semiconductor resonator at 77°K", *International Conference on Microwave and Millimeter Wave Technology (ICMMT 2000)* in China, 14-16 September, pp. 514.

[C8] **Sheikh S.I.** and Dawoud M.**,** "Novel Semiconductor Phase Shifters", 7th *Annual IEEE Technical Exchange Meeting,* King Fahd University of Petroleum and Minerals, Saudi Arabia, April (2000), pp18-19.
My contribution *to this paper is approximately 75%, mainly for the design, theoretical formulation, developing solver codes and interpretation of the results. I have also written and presented the paper in the conference.*

[C7] **Sheikh S.I.,** "Magnetized Ferrite-Semiconductor Composite Resonator in Micro/Millimeter wave Communication", *Progress in Electromagnetic Research Symposium (PIERS 1999)* in Taiwan, 22-26 March, pp.100-101.

5.3.2) **Before Joining the Rank (From PhD):** ***(6 papers)***

[C6] **Sheikh S.I.,** Gibson A.P.P. and Dillon B.M., "Bias-field/Frequency Design Charts for Composite Gyrotropic Resonators", *IEEE Microwave Theory and Technique (IEEE-MTT) Symposium Digest*, Vol.3, pp. 1663-1666, USA, June 1996.
My contribution *to this paper is approximately 65%, mainly for the theoretical formulation, developing solver codes and interpretation of the results. I have also presented the paper.*

[C5] **Sheikh S.I.,** Arnaut L.R., Gibson A.A.P. and Chowdhury D.H., "Modal Behavior of Non-reciprocal Semiconductor Ring Resonators*", Progress in Electromagnetic Research Symposium*, Austria, 8-12 July 1996.

My contribution *to this paper is approximately 20%, mainly for assisting during the theoretical formulation and interpretation of the results*

[C4] Chowdhury D.H., **Sheikh S.I.** and Truscott W.S.**,** "Effect of Fabrication Process Optimization of novel multiquantumwell APD's", *IEE and IOP joint colloquium* on Laboratory-scale Electronic Device Fabrication, England, 23-25 April 1996.
My contribution *to this paper is approximately 20%, mainly for assisting during the theoretical formulation and writing of the paper.*

[C3] Arnaut L.R. and **Sheikh S.I.,** "Effect of Host Medium Losses and Inter-Particle coupling on the Effective Medium Parameters of Helix-Based Chiral Bianisotropic Media", *Progress in Electromagnetic Research Symposium*, Austria, July 1996.
My contribution *to this paper is approximately 20%, mainly for assisting during the theoretical formulation and interpretation of the results*

[C2] Gibson A.P.P., **Sheikh S.I.** and Davis L.E., "Tunable Cavity Resonator W/G Filters", *Information Technology and Applications Conference*, UK, pp 100-104, April 1994.
My contribution *to this paper is approximately 55%, mainly for the theoretical formulation, developing solver codes and generating the results. I have helped in writing the paper.*

[C1] **Sheikh S.I.,** Gibson A.A.P. and Davis L.E., "Cut-off Characteristic of Circular Gyrotropic Waveguides with Electric and Magnetic Walls", Poster Paper in *18th Automated RF and Microwave Measurement Society Conference*, UK, April 1993.
My contribution *to this paper is approximately 55%, mainly for the theoretical formulation, developing solver codes and generating the results. I have prepared the poster paper.*

5.4 **Citations**: ***(13** citations up to 2009)*

5.4.1) **Source publication 1**:
Dehdasht-Heydari R, Naser-Moghadasi M Introduction of a novel technique for the reduction of cross polarization of rectangular microstrip patch antenna with elliptical DGS JOURNAL OF ELECTROMAGNETIC WAVES AND APPLICATIONS 22 8-9 1214-1222 2008 == cited in reference no 13

[J10] **Sheikh S.I. etal,** "Performance of Compact Integratable Broadband Antenna", *ELECTROMAGNETICS, ISSN: 0272-6343,*Vol.25, No. 4 (2005), pp. 317-327 .

Cited by: *Dehdasht-Heydari R, Naser-Moghadasi M Introduction of a novel technique for the reduction of cross polarization of rectangular microstrip patch antenna with*

elliptical DGS JOURNAL OF ELECTROMAGNETIC WAVES AND APPLICATIONS 22 8-9 1214-1222 2008Prati, E., "Microwave propagation in ferromagnetic semiconductors", Journal of Magnetism and Magnetic Materials, 272-276 (III), pp. 1999-2001, 2004.

[J9] **Sheikh S.I. etal,** "Studies of Field Coupling between Stacked Microstrip Patch Resonators and Design of Broadband Radiators", *Scientific Journal of FACTS UNIVERSITATIS: Series of Mechanics, Aromatic Control and Robotics*, *ISSN: 0354-2009*, Vol. 3, No. 15 (2003), pp. 1121-1125.

Cited by: *Guha D, Siddiqui JY, Biswas M, et al., "Microstrip Radiating Structures: Theoretical and Experimental Investigations Executed in Recent Years at the University of Calcutta", IEEE Apllied Electromagnetics Conference Kolkata, INDIA Pages: **234-237**s, DEC 19-20, 2007*

[J7] **Sheikh S.I.,** "Millimeter wave semiconductor two-port network at 77K", *International Journal for Applied Electromagnetics…*, *ISSN: 1383-5416,* Vol. 11 (2000), pp.117-126.

Cited by:

(1) Prati, E., "Microwave propagation in ferromagnetic semiconductors", *Journal of Magnetism and Magnetic Materials*, 272-276 (III), pp. 1999-2001, 2004.

(2) Prati, E., "Propagation in gyroelectromagnetic guiding systems", *Journal of Electromagnetic Waves and Applications* , 17 (8), pp. 1177-1196, 2003.

5.4.2) **Source publication 2**:

[J6] **Sheikh S.I.**, Guha D. and Siddique J. Y.**,** "Performance of Compact Integratable Broadband Antenna", *ELECTROMAGNETICS, ISSN: 0272-6343*, Vol.25, No. 4 (2005), pp. 317-327.

Cited by:

(1) Guha D, et al, 'Microstrip patch antenna with defected ground structure for cross polarization suppression', IEEE *Antennas and Wireless Propagation Letters*, Vol.4, pp.455-458, 2005.

5.4.3) **Source publication 3**:

[C8] **Sheikh S.I.** and Gibson A.**,** "Millimeter-wave Semiconductor Phase shifters at 77K", *11th International Conference on Antennas and Propagation (IEE-ICAP), ISBN: 0-85296-733-0*, UK, April 17-24, (2001), pp. 323-326.

Cited by:

(2) Asmontas S., Nickelson L., et. al.'Įmagnetintų puslaidininkinių ir feritinių bangolaidžių tyrimas', *ISSN 1392–1215 , 2006. No. 2(66)*

5.4.4) **Source publication 4**:

[J13] **Sheikh S.I.,** Gibson A.P.P. and Dillon B.M., "Frequency/Bias-field Mode Charts for Gyrotropic Waveguides", *Microwave and Optical Technology Letters (MOTL), ISSN: 0895-2477,* Vol.10, No.4 (1995), pp 201-204.

Cited by:

(1) Mackerle J, 'Finite element and boundary element analyses of microwave, optical and acoustic waveguides - A bibliography (1994-1996)', *Finite Elements in Analysis and Design*, 28 (2), pp.165-175, Dec. 199

5.4.5) **Source publication 5**:

[J14] Gibson A.P.P., Davis L.E. and **Sheikh S.I.,** "Duality's in Circular Gyrotropic Disks and Waveguides", *ELECTROMAGNETICS*, *ISSN: 0272-6343*, Vol.15, No.6 (1995), pp 615-629.

Cited by:

(1) Tio L.Y., et al, "General gyrotropic finite element formulation with loss", *International Journal Of Numerical Modeling-Electronic Networks Devices And Fields*, 19 (5): pp 453-471, September 2006. ➔ Cited my journal paper *(see 4.1.2)*

(2) Tio L.Y., et al, "Finite element analysis of millimeter and sub-millimeter wave gyroelectric waveguide components", *ELECTROMAGNETICS*, Vol.26, No.6, pp 405-421 August 2006.

(3) Tio L.Y., et al, "Phase shift in GaAs magnetoplasma ridged parallel-plate waveguide", *Microwave and Optical Technology Letters*, Vol. 46, No. 5, pp 419-422, 2005.

(4) Gibson A.P., et al, "Mode conversion in the resonance region of parallel plate magnetoplasma waveguide", *IEEE Microwave and Wireless Components Letters*, 14 (5), pp. 225-227, 2004.

(5) Ng Z.M., et al, "Theoretical design for 120 GHz semiconductor junction circulators: Effects of different numbers of terms in the Green's functio**"**, *International Journal of Electronics*, *90* (3), pp. 211-220, 2003.

(6) Tio L.Y., et al, "Gyroelectric properties of indium antimonide at terahertz frequencies", *IEEE High Frequency Postgraduate Colloquium*, pp. 65-70, 2001.

5.5 Technical Reports: *(**18** refereed reports)*

5.5.1) **After Joining the Rank** (Post PhD):

[T18] **Sheikh S. I.** (PI), Saad Al-Sharani (CI) and Umar Johar (CI)., 'Design of Active 24-GHz Microstrip linear phased array ant. for microwave sensors', **Final report,** KFUPM funded project (IN-07-0345), 2009 ***(Submitted)***

[T17] **Sheikh S. I.** (CI) and Essam Hassan (PI), 'Design Of Microwave Filters Using Continuously Varying Transmission Lines', **Progress report**, SABIC funded project(SB-08-0010), 2009**.**

[T16] **Sheikh S. I.** and Dawoud M.M., 'Circularly Polarized Planar Semi. Phase Shifters for Phased Array Antennas', **Final report,** KFUPM funded project (FT-07-0029), November, 2008. ***(Published)***

[T15] **Sheikh S. I.** and Dawoud M.M., 'Novel Millimeter wave semiconductor phase shifters and its application in phased array antennas', **Final report,** KFUPM funded project (FT-2001/02), January, 2004. ***(Published)***

[T14] Mohandes, M., **Sheikh S. I.,** et al, 'Online Course Development for Digital System Engineering (EE 390) course', **Final report**, KFUPM funded project, October, 2007.

[T13] Kassas, M., **Sheikh S. I.** et al, 'Online Course Development for Electronics I (EE 203) course', **Final report**, KFUPM funded project, April, 2004.

[T12] **Sheikh S. I.** and Dawoud M.M., 'Circularly Polarized Planar Semiconductor Phase Shifters for Phased Array Antennas', **Progress report** of a KFUPM funded project (FT-060029), March, 2007.

[T11] Mohandes, M., **Sheikh S. I.,** et al, 'Online Course Development for Digital System Engineering (EE 390) course', **Progress report** of a KFUPM project, January, 2007.

[T10] Kassas, M., **Sheikh S. I.,** et al, 'Online Course Development for Electronics I (EE 203) course', **Progress report** of a KFUPM funded project, April, 2004.

[T9] **Sheikh S. I.** and Dawoud M.M., 'Novel Millimeter wave semiconductor phase shifters and its application in phased array antennas', **Progress report** of a KFUPM funded project (FT-2001/02), February, 2003.

[T8] Al-Sunaidi M.A. and **Sheikh S. I.** 'Study of the Electromagnetic Radiation and Interference from High speed Digital Systems and Methods to Minimize it from Work Safety and Environment", **Progress report** of a SABIC funded Project, March, 2003.

[T7] **Sheikh S. I.** and Dawoud M.M., 'Circularly Polarized Planar Semiconductor Phase Shifters for Phased Array Antennas', **Proposal** for a KFUPM project, March, 2007.

[T6] **Sheikh S. I.**, Al-Shahrani S.M., et al, 'Design of Active 24-GHz Microstrip linear phased array antenna for microwave sensors', **Proposal** for a KFUPM funded project, November, 2006. (*Accepted for funding*)

[T5] Mohandes, M., **Sheikh S. I.,** et al, 'Online Course Development for Digital System Engineering (EE 390) course', **Proposal** for a KFUPM funded project, May, 2005.

[T4] Kassas, M., **Sheikh S. I.,** et al, 'Online Course Development for Electronics I (EE 203) course', **Proposal** for a KFUPM funded project, May, 2002.

[T3] **Sheikh S. I.** and Dawoud M.M., 'Novel Millimeter wave semiconductor phase shifters and its application in phased array antennas', **Proposal** of a KFUPM funded project, October, 2001.

5.5.2) **Before Joining the Rank** (From PhD):

[T2] **Sheikh S. I., '**Applied-field/Frequency Analysis of Gyrotropic Axisymmetric devices ' Ph.D. Thesis, University of Manchester Institute of Science and Technology (UMIST), September, 1996.

[T1] **Sheikh S. I., '**High Power Microwave Frequency Tunable Waveguide Filter', M.Sc. Dissertation in Communication Engineering & Digital Electronics, **U**niversity of Manchester Institute of Science and Technology (UMIST), December, 1991.

5.6 Visiting Research Activity:

a) During the summer term of 2003 (July-August), I was **invited** by Dr A. Gibson, a professor, EEE department, University of Manchester, UK to work in a joint project on 'Modeling Gyrotropic Millimeter wave Devices'.

b) During the summer term of 2001 (June-August), I was **invited** by Dr Badawy, an associate professor in the EE department of 'Arizona State University (**ASU**), USA', to work on a joint project on 'Development of Gyrotropic Control Device'. Telecommunication Research Center of ASU partially funded the project.

c) During the summer term of 2000 (July-August), I was **invited** to work as a post graduate researcher in 'University of Manchester Institute of Science and Technology, UK', on a joint project on, 'Microwave Semiconductor Gyroelectric phase shifters'.

VI. Professional Activities

Summary:

- **Organized 8 international conferences.**
- **Fellow of IEE (IET), Senior-member of IEEE, Board-member of IET-Saudi chapter and member of 3 professional organizations (SSSEE, ACES and IEB).**
- **Presented 34+ short-courses, workshops and seminars to local and international universities and industry.**
- **Attended 2 training courses, 14+ workshops/seminars and 25+ conferences.**
- **Reviewed 50+ Papers for international journals (IEE and IEEE…) and conferences.**
- **Published 5 international conference papers on 'online engineering education' and**
- **Completed 2 funded projects for developing electrical engineering 'Online courses'**
- **Completed 3 funded projects for developing "Open Access Initiative" of KFUPM.**
- **Consulted to local and international engineering companies and university.**

6.1 Conference Organization *(8)*:

a) Invited to serve in the technical committee of 'The first COMSOL Users Conference in the Arab Countries', Al-Khobar, Saudi Arabia, 12-13 January, 2009.

b) Served as a member of the 'Local Arrangement Committee of '13th Saudi Technical Exchange Meeting (**STEM**), Dhahran, Saudi Arabia, April, 2008.

c) Involved in organizing an International conference on 'Intelligent Systems (**ICIS'08**), sponsored by IET (Saudi and Bahrain chapters) and Bahrain Society of Engineers. The proposed date and location: November 2008, Manama Bahrain.

d) Served as a member of the 'Registration committee' of the 'International Conference on Microelectronics (**IEEE-ICM'06**)', Dhahran, Saudi Arabia, December 2006.

e) Served as a member of the 'Registration committee' of the international meeting on '**11th** IEEE Technical Exchange Meeting (**IEEE-TEM'04**), Dhahran, Saudi Arabia, April 2004.

f) Served in the 'Registration committee' of the 'International Symposium on Wireless Systems and Networks (**ISWSN'03**)', Dhahran, Saudi Arabia, April 2003.

g) Member of the 'Registration committee' of the international meeting on '10th IEEE Technical Exchange Meeting (**IEEE-TEM'03**), Dhahran, Saudi Arabia, April 2003.

h) Member of the 'Registration committee' of the international meeting on '**9th** IEEE Technical Exchange Meeting (**IEEE-TEM'02**), Dhahran, Saudi Arabia, April 2002

6.2 Membership of Professional Organizations:

a) 'Fellow' and 'Honorary Treasurer' of the Saudi-Chapter of Institute of Engineering Technology (**IET or IEE)**. Coordinator of IET student branch, KFUPM.

b) Senior Member of Institute of Electrical and Electronics Engineers (**IEEE**), USA.

c) Member of Saudi Scientific Society for Electrical Engineers (**SSSEE**), KSA.

d) Member of The Institution of Engineering's in Bangladesh (**IEB**), Bangladesh.

e) Member of Applied Computational Electromagnetic Society (**ACES**)**,** USA.

6.3 Presented short-courses, workshops and seminars (Public lectures): *(total **34+** talks)*

6.3.1) Taught Short-courses and Workshops:

a) Title: 'Workshops on Updating EE WebPage contents as part of Open Access Initiative of KFUPM', Electrical Engineering Department, KFUPM, 9th April 2009

b) Title: 'Workshop on Fabricating Multilayer Printed Circuit Boards', organized by Electrical Engineering student club (EE-club), KFUPM, April 2006.

c) Title: 'Short course on Printed Circuit Techniques' organized by IEEE student branch, KFUPM, February 2005.

d) Title: 'Short course on Smart Card Technology and Applications', organized by Continuing Education Department, Deanship of Educational Services, KFUPM, May 2004. My instructor evaluation from the short course was: '4.33/5.00'

6.3.2) Technical Seminars Presented to Saudi Industries:

a) To**:** Title: 'Designing RF/Microwave Passive Circuits using Microwave Simulators', Electronia Company, Dammam, April 2002.

6.3.3) Technical Seminars Presented in KFUPM:

a) Following open courseware related seminars were given to the Electrical Engineering Department (EE) of KFUPM:

i. "OCW and OCF Initiative of KFUPM, Phase-III" on 16th June, 2009.

ii. " Designing Web Pages for EE Graduate Students" on 1st April, 2009.

iii. "Open Access Initiative of KFUPM, Phase-II" on 30th December, 2008.

iv. "Webpage Template of EE" in 25th March, 2008.

v. "Open Access I " in 18th March, 2008

b) "Circularly Polarized Microstrip Phase-Shifters" EE Department, KFUPM, September 2007.

c) 'Design of Microstrip Linear Phased Array Antenna for Microwave Sensors', EE Department, KFUPM, November 2006.

d) 'Developing Course contents for Online courses', 2nd Annual Meeting of EE Online Course Developers, EE Department, KFUPM, July 2006.

e) 'Circularly Polarized Microstrip Phase-Shifters', EE Department, KFUPM, September 2005

f) 'Ferrite Based Integrated Power Division and Tunable Phase Shifter', EE Department, KFUPM, 2005.

g) 'Millimeter-wave Semiconductor Phase shifter's EE Dept., KFUPM, April 2005.

h) 'Microstrip Stacked patch Antennas', EE Department, KFUPM, December 2003

i) 'Virtual Engineering University', EE Department, KFUPM, May 2003.

j) 'Fabricating Printed Circuit Board using Protomate C60 machine' EE Department, KFUPM, November 2001

k) 'Ferrite Resonators and its use in microwave communication', Electrical Engineering (EE) department, KFUPM, October 1998.

6.3.4) **Seminars Presented to Student-organizations in KFUPM**:

a) 'How EET can benefit KFUPM students', IET student branch, KFUPM, Mar, 2007

b) 'Fabricating multilayer printed circuit boards (PCB's)', organized by Electrical Engineering Students Club (EE-Club) and IEEE student branch, KFUPM, 2006

c) 'Inventing Electronic Devices', EE- club, KFUPM, November 2005.

d) 'PCB implementation of Capstone Projects', EE-club, KFUPM, December 2004

e) 'Multilayer printed circuit board Techniques', EE-club, KFUPM, May 2004.

f) 'Designing Multi-layer PCB circuit', EE-Club, KFUPM, November 2001.

g) 'Designing Passive Circuits for RF/Microwave Communication Using the software: High Frequency Structural simulator', EE-Club, KFUPM, October, 2001.

h) 'Implementing multi-layered PCB circuits', EE-student-Club, KFUPM, March 2000.

6.3.5) **Seminars Presented to International Universities Outside KSA:**

a) 'Microwave Inverted Stacked Patch Antennas', EEE Department, UMIST, Manchester, United Kingdom, July 2003.

b) 'Magnetized Gyrotropic Passive Devices' Ferranti-C8, UMIST, UK, August 2000.

c) 'Animated and Interactive Lecture Notes for Engineering Studies', EEE Department, Bangladesh University of Engineering Technology (BUET), Dhaka, Bangladesh, August 2005.

d) 'Fabrication o RF/microwave Device Prototypes for Microwave Communication', Asian University of Bangladesh (AUB), Dhaka, Bangladesh, December, 2002.

e) 'Designing, Fabricating and testing Microwave circuits', Bangladesh University of Engineering Technology (BUET), Dhaka, Bangladesh, December 2001.

f) 'Semiconductor passive MIMIC devices in Satellite Communication' American International University in Bangladesh (AIUB), Dhaka, Bangladesh, January 2000.

6.3.6) **Proposed Short-courses**:

a) Title: 'Design and Analysis of Passive RF circuits and Antennas' proposed to be offered by Deanship of Academic Development, KFUPM, 25 December, 2006

b) Title: 'Microwave Circuit Design for Wireless and Satellite Applications '. Jointly proposed to Continuing Education Dept., KFUPM, February, 2004.

c) Title: 'Design, Implement and Test Microwave/RF passive circuits using HFSS software, Protomate C60, and Network Analyzer', proposed for International Symposium on Wireless Systems and Networks (ISWSN'03) , KFUPM, 2003.

d) Title: 'Microwave/RF circuit-simulator and measurements techniques using network analyzer', proposed to Saudi Telecom, October, 2003.

e) Title: 'Design, Implement and Test Microwave Passive Circuits', offered through Deanship of Academic Development, KFUPM, 25 January, 2003.

f) Title: 'Design, Implement and Text Microwave Communication Circuits', proposed for 6th Saudi Engineering Conference (SEC'06) , KFUPM, October, 2002.

6.4 Training-courses, Workshops and Seminars: *(total 35+ public lectures)*

6.4.1) Attended 2 international training courses:

a) Completed a training course on "COMSOL Multiphysics Modeling (RF-Module)", Offered by COMSOL Ltd. (Middle East), Egypt, 26-28 June, 2007.

b) Completed "Basic and Advance Training Courses on Ansoft HFSS' , Offered by Ansoft Corporation Europe, Twickenham, UK, 22 – 23 July, 2003.

6.4.2) Attended 13 workshops on Educational Tools and Open Access:

a) Seminar on" Open access initiative' and 'ERP' offered by ITC on March, 2008

b) Workshop on "Building Your Academic Portfolio" February 25th and 27th, 2007

c) Workshop on "Experience-Sharing in Developing Online Courses", May 01, 2005

d) Workshop on "Instructional Design for Online Courses", March 06th-13th, 2005.

e) Workshop on "Introduction to Computer Graphics", December 11th-20th, 2004.

f) Workshop on "Designing e-Learning Materials", October 03rd and 05th, 2004.

g) Workshop on "Introduction to WebCT", June 26th-30th, 2004.

h) Workshop on "Content Development for Web-Based Courses Using Macromedia Authorware and Flash" 31 Aug.- 3 Sep., 2003.

g) Workshop on "Teaching and Tutoring Online", September 05, 2005.

h) Workshop on "Using Groups and Student Teams to Promote Learning", Sep. 2004.

i) Workshop on "Active Learning to Foster Critical Thinking", September 6, 2004.

j) Workshop on "Developing the Communication Skills of Students", Sep. 4, 2004.

k) Workshop on "How to be an Effective University Teacher", Sep. 07-08, 2002.

l) Workshops on "Increasing Effectiveness as a University Teacher", Sep. 9, 2002.

6.4.3) Attended 25+ International Conferences:

a) Attended **18** international conferences to present papers. Detail of these conferences are listed in **section 5.3** *(pg 21)*.

b) Attended **6** international conferences as a member of the organizing committee (registration …). The lists of these conferences are available in **section 6.1** *(pg 28)*.

c) Attended the 'IEEE-Antenna & Propagation Symposium', Ohio, USA, June 2003.

d) Attended the '10th International Symposium on Microwave and Optical Technology (ISMOT'05)', Fukuoka, Japan, August 2005.

6.5 Papers Reviewed: *(50+ papers)*

6.5.1) **Journal papers**:

a) Reviewed **5** papers for IEEE Transaction on Antenna & Propagation, USA, (IEEE-AP).

b) Reviewed **22** papers for IEE - Electronics Letters, UK, (IET-EL and IET-AP)

c) Reviewed papers for International Journal of Electronics. (IJE)

d) Reviewed papers for International Journal of Electromagnetics, Japan (IJAEM)

e) Reviewed papers for The Arabian Journal for Science and Engg., (AJSE), KSA.

6.5.2) **Conference papers**:

a) Reviewed paper for International Conference MIC-CNIT, November, 2008

b) Reviewed paper for 'International Conference for Intelligent Systems (ICIS)', 2008

c) Reviewed **2** papers for '18th Int. Con. on Microelectronics (IEEE-ICM)', Dec. 2006

d) Reviewed **3** papers for '3rd IEEE-GCC Conference', Bahrain, January 2006.

e) Reviewed **11+** papers for international conferences of WMSCI'07 (July, USA) and CCSP'05 (KSA), ISWSN'05 (Nov., KSA), SEC'02 (Dec., KSA), IEEE-TEM's (KFUPM)

6.6 Contribution to Engineering Education:

6.6.1) **Published conference papers on** 'Online Engineering Education':

a) **Sheikh Sharif Iqbal** et al.**,** "Development of 8086 Microprocessor Course for Web" 5th Saudi Technical Conference, Riyadh, January 11-14, 2009

b) **Sheikh S.I.** and Siddique J.**,** "Internet/Intranet Based Engineering Education" *3rd Forum on Engineering Education Building Partnership with Government, Industry and Society"*, University of Sharjah, United Arab Emirates, October 14 -15, 2003.

c) **Sheikh S.I.** and Siddique J.**,** "Web Based Engineering Education" *6th Saudi Engineering Conference*, King Fahd University of Petroleum and Minerals (KFUPM), Saudi Arabia, December 14 -17, 2002.

d) **Sheikh S.I.** and Siddique J.**,** "Internet Based Higher Education" *4th IEEE Workshop on Information and Computer Science*, KFUPM, KSA, March 17-28, 2002.

e) **Sheikh S.I.,** "Internet Based Education in Bangladesh" *International conference on Technology Transfer*, Bangladesh, December 23-24, 2000.

6.6.2) **Funded Online Course Projects in KFUPM**:

a) Title: 'Online Course Development Grant for Electronics I (EE 203) course'
Funded By: Deanship of Academic Development, KFUPM, Saudi Arabia.
Responsibility: Co-investigator *and* Allocated Budget: SAR 53,000
Date Started: September, 2002 *and* Duration: Twelve month and One Summer.

b) Title: 'Online Course Development Grant for Digital System Engineering (EE 390)'
Funded By: Deanship of Academic Development, KFUPM, Saudi Arabia
Responsibility: Co-investigator *and* Allocated Budget: SAR 133,000
Date Started: May, 2006 *and* Duration: Twelve month and One Summer.

6.6.3) **Funded "Open Course Ware" and "Open Course File" projects in KFUPM:**

a) Title: 'Phase-III of OCW and OCF for Electrical Engineering Department'
Funded By: Deanship of Academic Development, KFUPM, Saudi Arabia.
Responsibility: Co-investigator *and* Allocated Budget: SAR 15,700
Date Started: 12th May, 2009 *and* Duration: Four Months.

b) Title: 'Phase-II of OCW and OCF for Electrical Engineering Department'
Funded By: Deanship of Academic Development, KFUPM, Saudi Arabia.
Responsibility: Co-investigator *and* Allocated Budget: SAR 15,700
Date Started: 10th November, 2008 *and* Duration: Four Months.

c) Title: 'Open Course Wire (OCW) for Electrical Engineering Department'
Funded By: Deanship of Academic Development, KFUPM, Saudi Arabia.
Responsibility: Co-investigator *and* Allocated Budget: SAR 15,700
Date Started: February, 2007 *and* Duration: Four Months.

6.7 Consultancy:

a) Technical consultation to "Saudi Telecom and Power Est. Dammam, Saudi Arabia", Supplier of Satellite radio and ACC controller to Saudi Industries, June, 2009.

b) Academic consultant of "American International University in Bangladesh", since 2001.

c) Director of a company 'ElectroTech Inc.', registered in Bangladesh, since 1997.

VII. Services to University, College and Department

Summary:

- **Elected to serve in 5 'University Standing Committees' in KFUPM.**
- **Selected to serve in 6 'University Ad-Hoc Committees' in KFUPM.**
- **Reviewed 8+ reports/proposals (**related to funded projects**) for Deanships of 'Scientific Research (DSR)' and 'Academic Development (DAD)' of KFUPM.**
- **Evaluated proposal/report for College of Engineering 'Innovative Grant Scheme'.**
- **For past 7 years, led the college Badminton-team in 'Rector's Cup' tournament.**
- **Participated for the college Table tennis and Volleyball teams in 'Rector's Cup'.**
- **Served in 6 'Standing Committees' of Electrical Engineering department.**
- **Served in 12 departmental 'Ad Hoc Committees' as chairman and member.**
- **Initiated 10 purchase requests for buying equipment/software for EE department.**
- **Evaluated proposals, applications and reports for EE Department.**
- **Nominated by the EE department to attend workshops and seminars.**
- **Participated in the graduate entrance/comprehensive exam and EE Open-day activity.**
- **Coordinator/Member of the Electromagnetics, Electronics and Digital System groups.**
- **Received 3 awards from participating in the student activities of KFUPM.**

7.1 Services to the University (KFUPM):

7.1.1) Elected Member of University Standing Committees *(**5**)*:

a) 'University Conference Committee': Selected member for academic year 2009-2010

b) 'University Conference Committee': Selected member for academic year 2008-2009

c) 'Community Affairs Committee': Elected member for the academic year 2007-2008.

d) 'Library Affairs Committee': Elected member for the academic year 2005-2006.

e) 'Library Affairs Committee': Elected member for the academic year 2001-2002.

7.1.2) Selected Member of University Ad-Hoc Committees *(**6**)*:

f) Member of 'EE lab equipment reception' committee October, 2009.

a) Member 'Promotion Committee for an Assistant Professor ", June-September, 2009.

b) Member of 'University external award recognition' committee, KFUPM, April, 2008

c) Member of 'E-learning' committee, KFUPM, for academic year 2006-2007.

d) Member of the selection committee for 'Univ. Instruction Technology Award', 2007.

e) Chairman of 'ITC Computer Equipment Reception' committee April, 2006.

7.1.3) Reviewed funded projects for 'Deanship of Academic Development (DAD)': *(**6** projects)*

a) Reviewed all the reports of **2** funded online course projects for DAD, KFUPM.

b) Reviewed proposals and progress reports for **4** funded online curse projects for DAD

7.1.4) Reviewed funded projects for 'Deanship of Scientific Research (DSR)': (**2** projects)

a) Reviewed **1** final report of a funded research project for DSR, KFUPM.

b) Reviewed proposals for funded research project for DSR and KACST.

7.2 Services to College of Engineering Science (CES):

7.2.1) Coordinated CES Badminton and Table-tennis teams Rectors cup 2009

7.2.2) Evaluated proposal and final-report for 'CES limited Grant' projects in January, 2005.

7.2.3) Participated in meetings for initiating college wise purchase of 'COMSOL' software.

7.2.4) Lead the college badminton team in yearly 'Rectors Cup' tournament for **7** years

a) Silver medalist (2nd position) for **four** consecutive years (2002, 2003, 2004 and 2005)

b) Bronze medalist (3rd position) for **two** years (2001 and 2006).

7.2.5) Participated in college Volleyball and Table-tennis teams in Rector's cup tournament.

7.2.6) Participated in faculty seminars and programs organized by the college (CES).

7.3 Services to Electrical Engineering (EE) Department:

7.3.1) Departmental Standing committees: *(**6** committees)*

a. 'Coordinator' of 'Computer Utilization of EE Department', KFUPM, 2009-2010.

b. 'Coordinator' of 'Computer Utilization of EE Department', KFUPM, 2008-2009.

c. 'Coordinator' of Electromagnetic Group of EE department, KFUPM, 2007-2008

d. Member of the 'Text-book committee' from 1998 to 2002 and 2007 (12 semesters).

e. Member of the 'Postgraduate-admission committee' from 1998 to 2003 and 2009

f. Member of the 'Lab-supervision and development committee' since 2004 to 2007.

7.3.2) Departmental Ad Hoc committees: *(**12** committees)*

a. Member of committee responsible for nominating "Best Short Course", 2009.

b. Chairman of a committee responsible for updating EE faculty Web information, February, 2008

c. Chairman of a committee responsible for investigating the 'Utilization of IT to improve teaching and learning of EE courses and labs', April 2007

d. Member of the committee responsible for identifying the 'Operational hazards faced by EE faculty, staff and students in the new building (#59)', March 2007.

e. Member of the committee responsible for upgrading the 'EE Handbook', May 2005.

f. Member of the committee responsible for 'Reviewing the credentials of a PhD Applicant in EE department', February 2005.

g. Member of the committee responsible for 'Future Plans for Expansion of Lab and Equipment' for EE department, May 2004.

h. Member of the committee responsible to evaluate the requirements of "Associate Degree in Electronics", December 2003.

i. Member of 'Lab Material reception committee' for EE dept., August, 2001.

j. Member of the 'Curriculum Development Committee' for KFUPM diploma program on 'Electronics Equipment Maintenance (EET)', February, 2001.

k. Member of the committee responsible for nominating 'University Distinguished Teacher/Advisor Award', January 2001.

l. Chairman of a committee responsible for 'Updating the Course and Lab material of Digital System Engineering (EE 390)', April 2000.

7.3.3) Initiated Purchase Requisitions (PR's): *(**9** Purchase Requests)*

a. April, 2008: Initiated PR:8101150 to purchase microwave equipments worth SAR 400,000 to upgrade the laboratories for courses: EE-405, EE407, EE-411.

b. February, 2007: Initiated PR:7402732 to purchase COMSOL Multiphysics software.

c. August, 2005: Initiated PR:01725/425 to purchase required PCB plotter components

d. February, 2005: Initiated purchase order PR:4376, PR:4375 and PR:3918 for Microwave transistors, resistor kit and Substrate material for course/capstone projects students.

e. August, 2004: Initiated PR:360/02323 to buy computer and equipments required to complete an university funded project FT-01002.

f. March, 2004: Initiated PR:00575 to buy 'FEMLAB' software for EE department.

g. April, 2002: Initiated PR:05234 to purchase 'Microstrip Trainer' for 'Microwave Engineering (EE-407)' laboratory.

h. February, 2001: Initiated PR:711/01726 to purchase professional RF/Microwave component simulators: HFSS, ADS and IC-CAP.

i. September, 2000: Initiated PR:03014 to upgrade CAEME software (windows version)

j. October, 2000: Initiated PR:360/01723 to buy 'Microprocessor Trainer' for upgrading the lab of EE 390 (Digital System Engineering).

7.3.4) Evaluated Proposals, Applications and Reports:

a. Evaluated several applications for Electrical Engineering faculty positions.

b. Evaluated final reports for 'Special Summer Assignments' of EE faculty.

c. Evaluated research and conference-attendance applications of EE faculty.

7.3.5) Participated in most of the yearly event organized by the EE department:

a. EE Open-day: Took part in the supervision of EE-open day (for orientation students)

b. Graduation ceremony: Participated in all most all the graduation ceremonies.

c. Participated in most of the weekly and special seminars (presented seminars are listed in section 6.3.3).

7.3.6) Participated in the graduate entrance exam of EE department.

7.3.7) Assigned by the department to compile a report on the existing "Online Evaluation Process". The compiled report was send to university authorities.

7.3.8) Nominated by the EE department for the following workshops:

a. 'Building Academic Portfolios', Deanship of Academic Development, Feb. 2007

b. 'Academic Digital Divide', Instruction Technology Center, KFUPM, January, 2007

7.3.9) Nominated by the EE department to support the coordinator of the university diploma program on 'Electronic Equipment and Maintenance', for academic years of 2001-02 and 2002-03.

7.3.10) Served in the Electromagnetics (coordinator for 2007), Electronics (member) and Digital Systems (member) groups of the electrical engineering department of KFUPM.

7.4 Services to KFUPM Student Clubs (EE, IEEE and IET clubs):

7.4.1) Presented Seminars and Workshops to Student-clubs in KFUPM: (**8** seminars). For detail please refer to section 6.3.4*(pg 30)*.

7.4.2) Recipient of three "Distinguished Performance in the Student activities" award from the 'Deanship of Student Affairs, KFUPM' in academic years, 1999-00, 2001-02 and 2004-05