



**9<sup>th</sup> ANNUAL RESEARCH REPORT**  
**Academic Year**  
**2016 - 2017**





**H. M. SULTAN QABOOS BIN SAËED**

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**Legend:**

<b>AY</b>	Academic Year
<b>CAAS</b>	College of Arts and Applied Sciences
<b>CCBA</b>	College of Commerce and Business Administration
<b>CE</b>	College of Engineering
<b>DR</b>	Department of Research
<b>DU</b>	Dhofar University
<b>DVC</b>	Deputy Vice Chancellor
<b>FURAP</b>	Faculty mentored Undergraduate Research Award Program
<b>IC</b>	Incentive Claim
<b>IT</b>	Information Technology
<b>OAAA</b>	Oman Academic Accreditation Authority
<b>ORG</b>	Open Research Grant
<b>QA</b>	Quality Assurance
<b>Ques.</b>	Questionnaire
<b>RCOL</b>	Research Collaboration
<b>RL</b>	Research leave
<b>R.O</b>	Rial Omani
<b>SG</b>	Seed Grant
<b>STFDG</b>	Short Term Faculty Development Grant
<b>TRC</b>	The Research Council
<b>URB</b>	University Research Board
<b>VC</b>	Vice Chancellor



## *A Foreword by the Vice Chancellor*

I am pleased to present to you the 9th Annual Research Report for AY 2016–17. Dhofar University (DU) continues to play a steady role towards His Majesty's vision to excel in Education, Research and Development. DU has always been devoted to excel by delivering specialized courses with exceptional job prospects for our graduates and performing futuristic applied research that unswervingly improves peoples' lives. A mark of our success is that based on its RG score, ResearchGate ranked DU as second best in Research among all private Universities in Oman. Moreover, during AY 2016-17, our faculty and students have successfully bagged prestigious awards in research nationally and internationally. Also as per OAAA report, DU has successfully met all the requirements in research set for institutional accreditation. A major milestone for DU was the establishment of research centre with fully operational cluster on Frankincense and Medicinal plants that has showed promising results.

This report highlights the significant increase in Research activity over past few years and we are committed to support our students and staff in future. I would like to praise the tremendous achievements of our University, and the immense efforts and commitment of our committed and passionate staff, students and faculty members who worked hard to make DU's vision a reality. We thank you for your wonderful contributions for raising the University's Research profile by doing quality Research work and look forward with confidence to the year ahead.

Last but not the least I would like to express my gratitude to Board of Trustees (BoT) for their continuous encouragement and support in promoting Research. I would also like to thank The Research Council (TRC) for their substantial contribution and assisting DU to fulfil our mission to attain a position as an internationally renowned Research Intensive University. I wish and pray may DU succeed in its endeavour to foster sustainable development in this beloved country guided by the great wisdom of His Majesty Sultan Qaboos; May he be blessed by Allah and prosper in health and live a long life to serve his beloved people and country.

**Best Regards,**

**Prof. Hassan Said Kashoob**

Vice Chancellor  
Dhofar University



## *A Foreword by the Deputy Vice Chancellor*

I have an immense pleasure in presenting the Dhofar University's 9<sup>th</sup> Annual Research Report as an evidence of DU seeking to achieve the highest levels of distinction in the discovery and transmission of knowledge and understanding.

Ever since its humble beginnings, the University Research Board and the Department of Research, have played an important role in the development of Research at DU. DU's Research strategy is based on two major objectives or pillars: **First**: capacity building for national competencies and **Second** the need to focus on research with clear benefits to the region and to Oman. These two objectives are the main drive for all our research strategy and related policies. Appropriate policies and activities have been implemented to promote research through many incentives and awards.

Our main focus now, as we are growing, is to have our faculty publish in Web of Science and to give you an indication that over the last academic year 16 of our faculty published in Web of Science journals with Impact factors, and I am sure that number will keep increasing. During the AY 2016-17, the number of applications received through URB has also shown a significant increase. Considering the increase of the number of applications the budget for research activities has been increased accordingly. Moreover, our Research Gate score is 982 and we are ranked second after the University of Nizwa. We need to gear up our efforts to improve that score to be the best private university in the Sultanate of Oman. During Last Academic Year, 17 FURAP applications have been submitted to TRC i.e. nearly double the number of the previous year. I believe this trend will undoubtedly accelerate as many new Research projects move from the development phase to full Research activity and we expect that our faculty and students will do more in this regard through funded projects along with our graduate student's research in their Masters theses.

DU has established a Research Center in 2015 that focuses on few niches with interest to Oman, each niche is managed within a Research Unit. The first research unit focuses on 'Biodiversity, Frankincense and Medicinal Plants' with a fully operational state of the art laboratory and 4 researchers headed by the Principal Investigator Prof Luay Rashan. The Unit is currently working in collaboration with prominent researchers from Germany, Australia, United Kingdom and Jordan and promising results have been achieved related to the "healing power" of Frankincense.

Finally, I would like to express my utmost appreciation to the support from the VC, Prof. Hassan Kashoob, to the TRC for their continuous funding despite the budget cuts, the Department of Research, previous and current URB members, and everyone in DU involved or not with Research. I believe that over this period we collectively achieved our planned objectives and I am confident that we will continuously strive towards achieving our long term aspiration, which is to be recognized as a hub of quality Research.

**Best Regards,**

**Prof. Mohamed Limam**  
Deputy Vice Chancellor  
Dhofar University



## *A Foreword by the Director, Department of Research*

Dhofar University continues to grow and excel in all areas of research and one of our main goals for this academic year was to encourage faculty led student driven projects focusing on the Faculty Mentored Undergraduate Award Program (FURAP) supported by The Research Council (TRC). Dhofar University was successful in meeting all the criteria as per the Oman Academic Accreditation Authority (OAAA) framework and we will, together strive to further meet our target and goals for the future.

With the newly established Research Center particularly focusing on biodiversity and medicinal plants and state of the art facilities, Dhofar University is continuously striving towards excellence by working with internationally renowned institutions and more importantly building local human capacity. The main goal for the next academic year is to meet the demands of local industry and provide effective Consultancy to all stakeholders.

This continued success is all due to the support, hard work, enthusiasm and commitment of our management, faculty and students. I encourage everyone to continue this journey and together we can continue on this path to success.

**Best Regards,**

**Dr. Israr Ul Hassan**  
Director, Department of Research  
Dhofar University



## **1. Explanatory Notes**

The **Ninth Annual Research Report** presents the ‘**Research output**’ of faculty members of Dhofar University (DU) for the AY 2016-17. Please note that:

- In the Publications' list, DU faculty members are indicated with bold letters.
- Only published or presented papers are listed. Manuscripts accepted but not yet published shall appear in the next annual Research report.
- All listings are listed in alphabetical order by College's name, department's name and faculty's first name.
- For each author, most recent publications are listed first.

## **2. Members of the University Research Board (URB)**

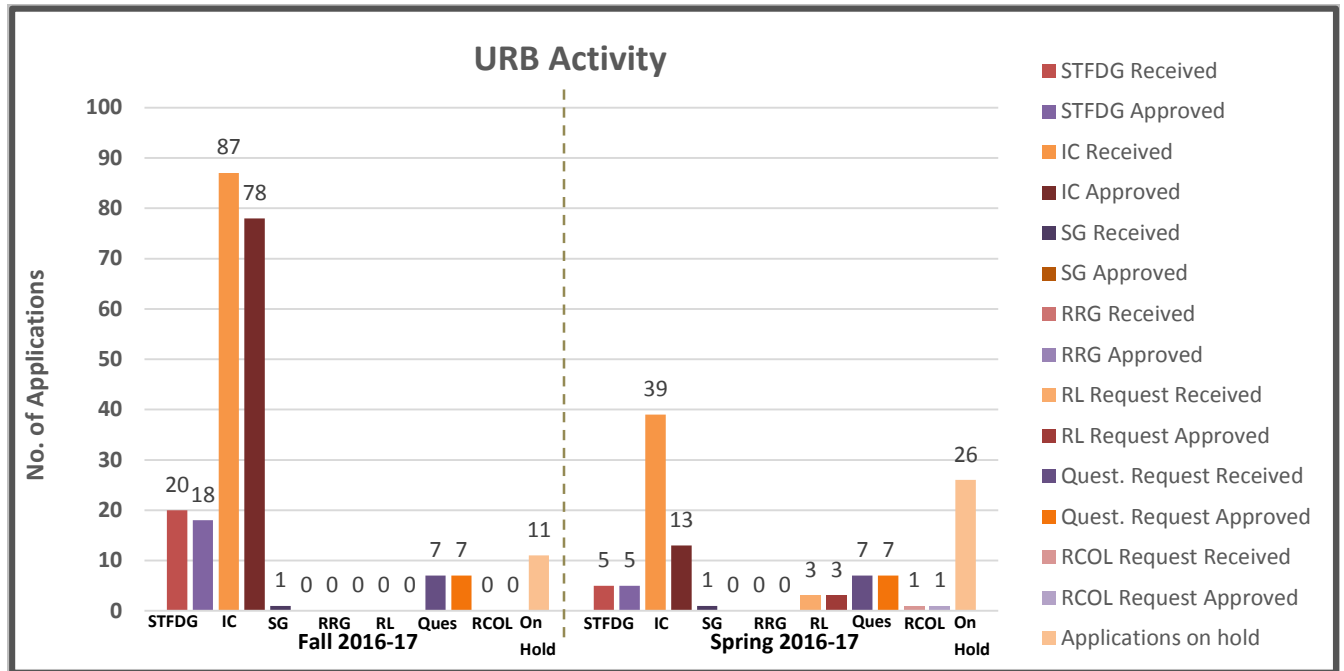
1. Dr. Israr Ul Hassan, **Director, Department of Research, Chairperson URB**
2. Dr. Shafique Chaudhry, **College of Arts and Applied Sciences**
3. Dr. Francesco Bigagli, **College of Arts and Applied Sciences**
4. Dr. Dimitrios Xanthidis, **College of Commerce and Business Administration**
5. Dr. Mohammed Imran Khan, **College of Commerce and Business Administration**
6. Dr. Said Grami, **College of Engineering**
7. Dr. Ghada Rehan, **College of Engineering**
8. Dr. Umamaheswara Rao, **Foundation Program**

## **3. URB Activities during the Academic Year 2016-17**

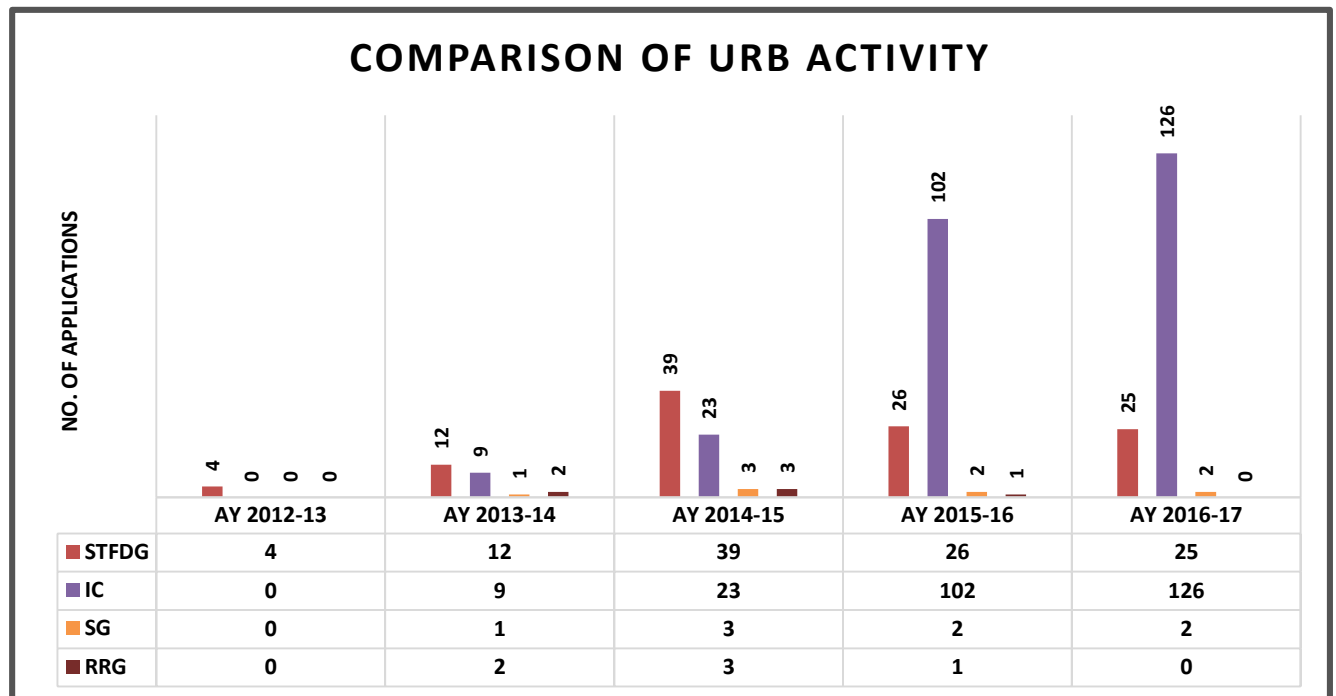
During the Academic Year (AY) 2016-17, URB received a total of **168 applications** categorized as:

- **25** applications for Short Term Faculty Development Grant (STFDG),
- **2** for Seed Grant (SG),
- **126** applications for the Incentive Claims (IC) including 13 applications from AY 2015-16 that were put on hold due to budget shortage,
- **14** for the distribution of questionnaires, and,
- **1** requests for Research collaboration

**129** applications were unanimously approved by the URB, Deputy Vice Chancellor (DVC) and the Vice Chancellor (VC), whereas, **2** applications were rejected while **37** were put on hold due to budget shortages that will be discussed during the next academic year. Figure 1 summarizes the URB activity during AY 2016-17 while figure 2 shows the comparison of URB activity over last five years i.e. from AY 2012-13 to AY 2016-17.



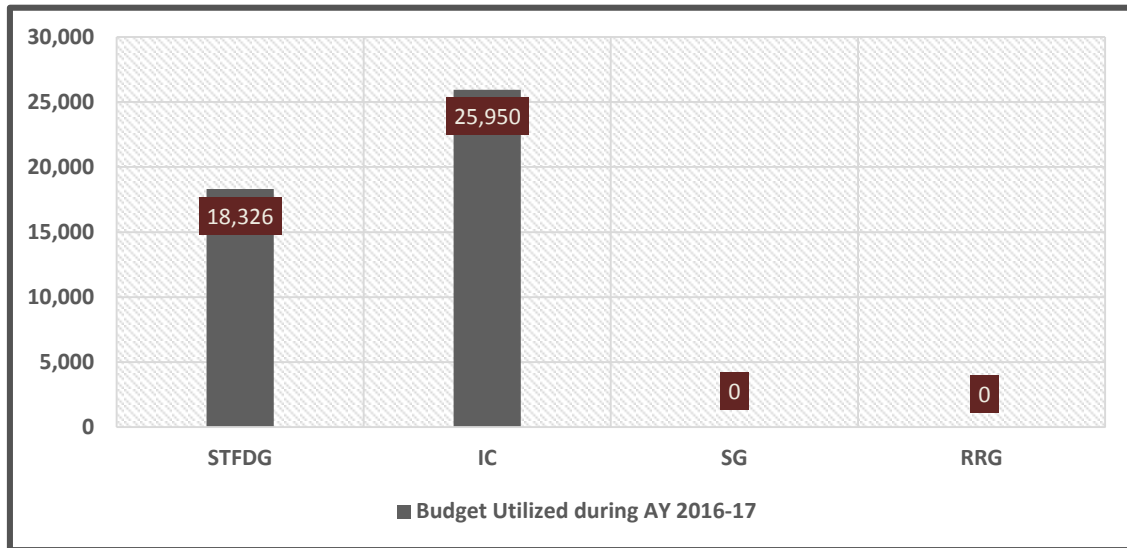
**Figure 1: URB Activity during AY 2016-17**



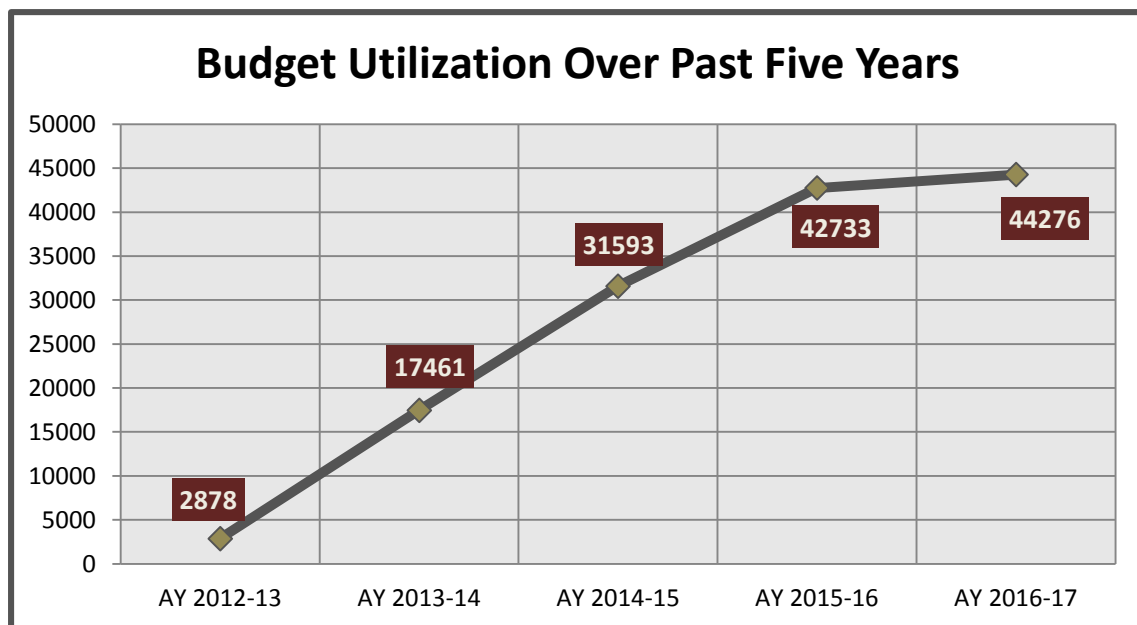
**Figure 2: Comparison of URB Activity over last Five Years**

### 3.1. Budget Utilization

Total allocated budget for the grants for the AY 2016-17 was 41,000 R.O. Due to overwhelming number of application received; URB exceeded the allocated budget and utilized an amount of 44,276 R.O. for the approval of internal grants. For the AY 2017-18, the total budget allocated for the Department of Research is 55,000 R.O. out of which 47,000 R.O. is allocated for Research activities. Figure 3 shows the budget utilization for the AY 2016-17 while figure 4 shows the comparison of budget utilization over the past 5 years.



**Figure 3: Breakdown of Budget Utilization for AY 2016-17**



**Figure 4: Budget Utilization over Past Five Years**

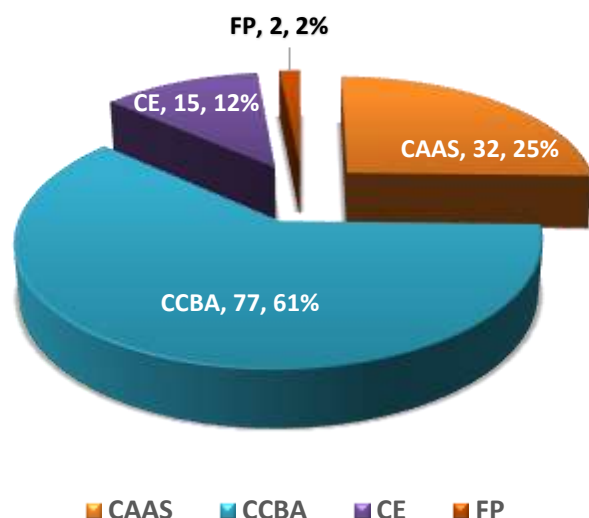
## 3.2. Comparison of Research Activity across Colleges and Foundation Program (FP)

Following charts below shows the comparison of Research activity across all Colleges and the FP.

### 3.2.1 Incentive Claims – Scopus or Web of Science

Beginning from the AY 2013-14, the URB in coordination with the DVC suggested incentives for Research to encourage faculty members at DU to engage in quality Research activities. As per the policy, the faculty members who have published a paper in a journal indexed in Scopus or Web of Science will be eligible to claim a monetary incentive of 300, 200 or 100 R.O. as the first author, second author or the third author.

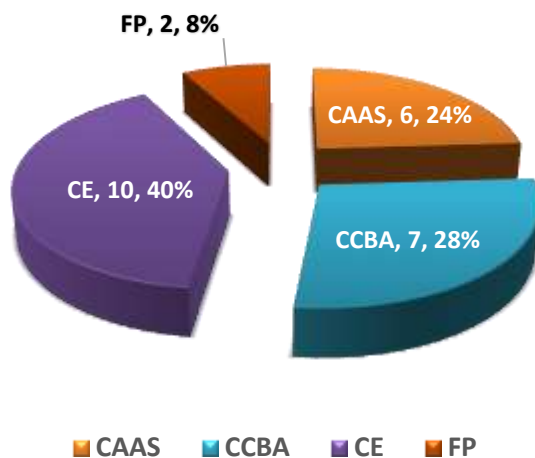
During the AY 2016-17, 126 applications were received for incentive claims compared to 102 applications during AY 2015-16. Among these, 77 applications were from the College of Commerce and Business Administration (CCBA), 15 from College of Engineering (CE), 32 from the College of Arts and Applied Sciences (CAAS) while 2 applications for incentives were received from FP. Figure 5 shows the distribution of incentive claim applications received from all Colleges and FP.



**Figure 5: Distribution of Incentive Claims across all Colleges/FP**

### 3.2.2 Short Term Faculty Development Grant

Faculty members presenting their Research papers in prestigious conferences are eligible to receive a grant to cover their travel and accommodation along with the registration fee. The number of applications received for STFDG declined since last academic year due to the stringent review process both at CRC and URB levels. 39 STFDG applications were received during the AY 2014-15, while only 23 during the AY 2015-16 and 25 during the AY 2016-17. Among these, 7 applications were from CCBA, 10 from CE, 6 from CAAS while 2 applications for STFDG were received from FP. Figure 6 shows the distribution of STFDG applications across all Colleges and FP during the AY 2016-17.



**Figure 6: Distribution of STFDDG applications across Colleges/FP**

### 3.3. URB Policy

The URB reviewed and modified the URB policy. The revision includes:

- Addition of clauses in IC and STFDDG guidelines
- Tidying up the whole policy
- Updating forms

## 4. DR Activities during the Academic Year 2016-17

### 4.1. Turnitin Renewal

The annual subscription of the Turnitin software was renewed during Fall semester by the DR.

### 4.2. Seminars and lectures for Professional Development of Research

As a part of its efforts to promote fruitful Research and to create a healthy Research environment in DU, the DR conducted a series of seminars on Research skills as tabulated in Table 1 below:

**Table 1: Seminars on Professional Development of Research during AY 2016-17**

No.	Details of Event	Presenter/ Speaker	Target Audience	Affiliation	Date
1	Socio-ecological dynamics of overgrazing in the Dhofar Mountains of Oman	Mr. Lawrence Ball	DU Academic Staff	University of Kent having joint collaborative research with Dhofar University	13/12/2016
2	Exploring Natural Compound As Potential Therapeutic Agents, How Can We Unravel their Pharmacology	Prof. Dr. Thomas Simmet	DU Academic Staff	Ulm University, Ulm-Germany	21/12/2016

3	IoT* Role in smart cities	Prof Abdul-Rahman Al-Ali	DU Academic Staff	American University of Sharjah	03/01/2017
4	Writing and Submitting your FURAP Proposal	Dr. Israr Ul Hassan/ Ms. Sarah Iqbal	DU Academic Staff	Dhofar University	30/03/2017



**Figure 7: Seminars by Prof. Dr. med. Simmet**

### **4.3. Strategic and Operational Plan for Research**

As specified in the operational and strategic plan of DU, the DR with the support of URB, DQA and the DVC, worked tirelessly to achieve following objectives to promote quality Research across the University:

#### **1. Strengthen Environment for Research Activities:**

- 50% increase in the Research budget as compared to AY 2015-16.
- Promoting the faculty members to publish their Research work in quality journals that resulted in increased number of publications in Scopus and Web of Science indexed journals by 2 folds.
- Increase in incentives given to faculty members for their quality Research papers.
- Organized seminars and events for improving Research skills.
- Conducted and organized seminars to create awareness regarding policies related to Research.

#### **2. Provide an Environment Conducive to Consultancy Services:**

- Presentations to motivate faculty members to take part in Consultancy activities.
- Approval and signing of one consultancy agreements with local agencies.

### 3. Develop DU into a Hub for Research Activities that are Important to the Region

- Worked in coordination with DVC and the Research Centre at DU in setting up of Frankincense and Biodiversity lab and promoting DU as the Hub for Frankincense Research in the region.
- Increased number of institutional and private Research activities in Dhofar region channelized through DU.
- Signed MoUs with national and international private and government entities (for details, refer to table 12).

### 4. Ensure Ethics and Bio-Safety in Research:

- Ensured the Implementation of the ethics policy while reviewing and evaluating external and internal Research requests.

### 5. Establish Research Teaching Nexus:

- Developed plans to focus on 'Research teaching nexus' during AY 2017-18 by promoting faculty members to incorporate their Research into curricula.

## 5. Research Centre and Deanship of Research and Graduate Studies

DU with the approval of the Ministry of Higher Education (MoHE) established a Research center in AY 2015-16. The Centre aims to promote quality Research across the University. The Centre focuses on few niche areas of Research of regional and strategic importance dealt with in different Research clusters. One of the cluster is the 'Frankincense and Medicinal plants' for which a fully operational Research lab has been established in AY 2016-17. Currently, following projects have been carried out at the Research centre with the coordination of experts in Germany, UK and Australia:

**1. Frankincense Lab Project 1:** The anti-inflammatory, analgesic and healing properties of Frankincense and Myrrh Resins both invitro & invivo. **(DU/AY-2015-16/FLAB-P001)**

**2. Frankincense Lab Project 2:** Pharmacological and Biological Activities of *Boswellia sacra* Gum Extract. **(DU/AY-2015-16/FLAB-P002)**



**Figure 8: Frankincense and Biodiversity Lab at Research centre**

The second unit developed focuses on Omani Cultural Studies. However, other units on pre-selected areas of Research will follow. All potential Research focus areas as listed in Table 2, 3 and 4 respectively.

**Table 2: Research Focus Areas in CCBA**

S.No	Research Focus Area	Research Focus Topic
1.	Entrepreneurship	Entrepreneurship and innovation
2.	Accounting, Finance & Economics	Omani Economy and Globalization, Efficacy of Microfinance and Cooperative Movement (Qabila system) for sustainable development
3.	Management & Marketing	Human capital development, Development of tourism industry in Oman
4.	Management Information System	Cloud Computing, Social Media

**Table 3: Research Focus Areas in CAAS**

S.No	Research Focus Area	Research Focus Topic
1.	Autonomous Monitoring Systems	Large scale Wireless Sensor Networks, Wireless communications for distributed and intelligent networks, Intelligent Monitoring, Autonomic Network Management, Geo-simulations
2.	Big Data Analytics	This Research area addresses Research challenges in Big Data domain. The big data group at DU is working both in the applications of Big Data and in underpinning technologies and concepts.
3.	Health Care (Cancer)	The aim of this group is develop strategies to establish cancer Research at DU. In the long run, main focus areas shall be diagnosis, prognosis, treatment selection, and treatment aims.
4.	Youth Leadership	Youth Leadership
5.	Family Cohesion	Family Structure, Divorce, Elderly Care and Interaction between family members
6.	Use of Technologies for Education and Learning	Use of Technologies for Education and Learning
7.	Material Science and Nanotechnology	Material Science and Nanotechnology
8.	Applied Mathematics	Numerical Analysis, Cryptography, Inverse Problems, Analysis of PDEs, Financial Mathematics and Fuzzy Algebra and Applications



**Table 4: Research Focus Areas in CE**

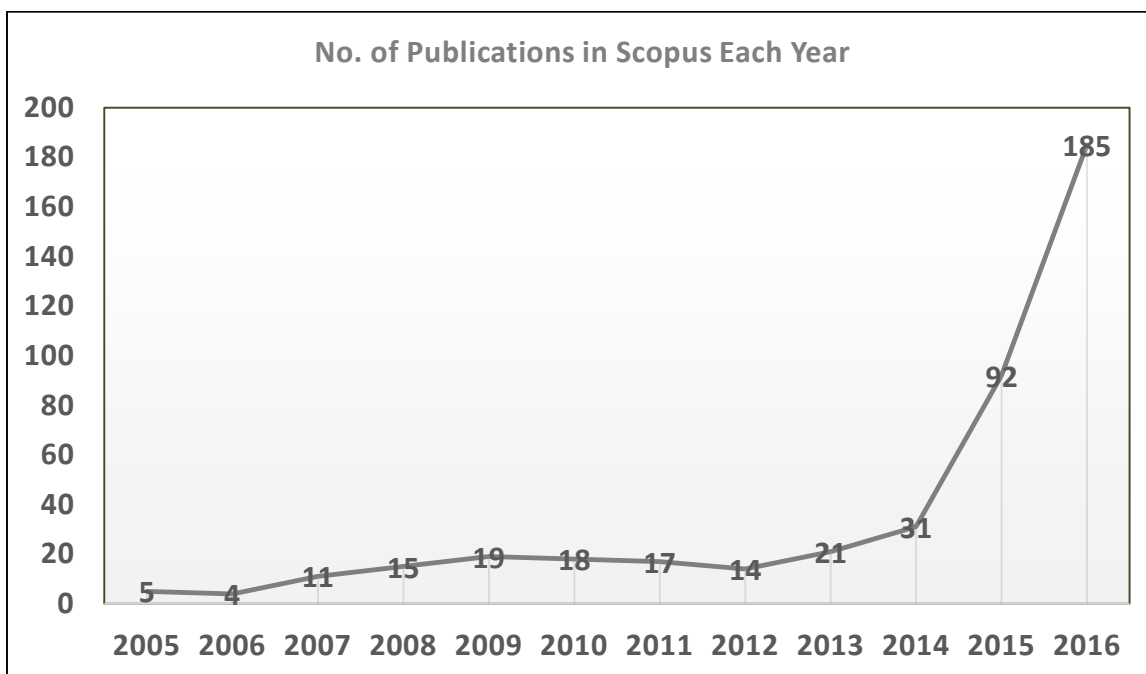
S.No	Research Focus Area	Research Focus Topic
1.	Electrical and Computer Engineering	Artificial Intelligence group (Neural Networks, Fuzzy Logic, Control), Energy, and Environment group, Communication and Networking group
2.	Civil Engineering	Earth retaining structures, Soil-structure interaction, Reparability of structures
3.	Mechanical and Mechatronics Engineering	Renewable Energy, Energy Manufacturing, Mechanical damage
4.	Chemical and Environmental Engineering	Waste water treatment, Renewable energy, Modeling and diabetes, Biopolymers and Composite materials
5.	Graphic Design and Interior Architecture	Architectural heritage and Ecological Architecture, Eco- Architecture Management

## **6. Scopus Indexed Publications**

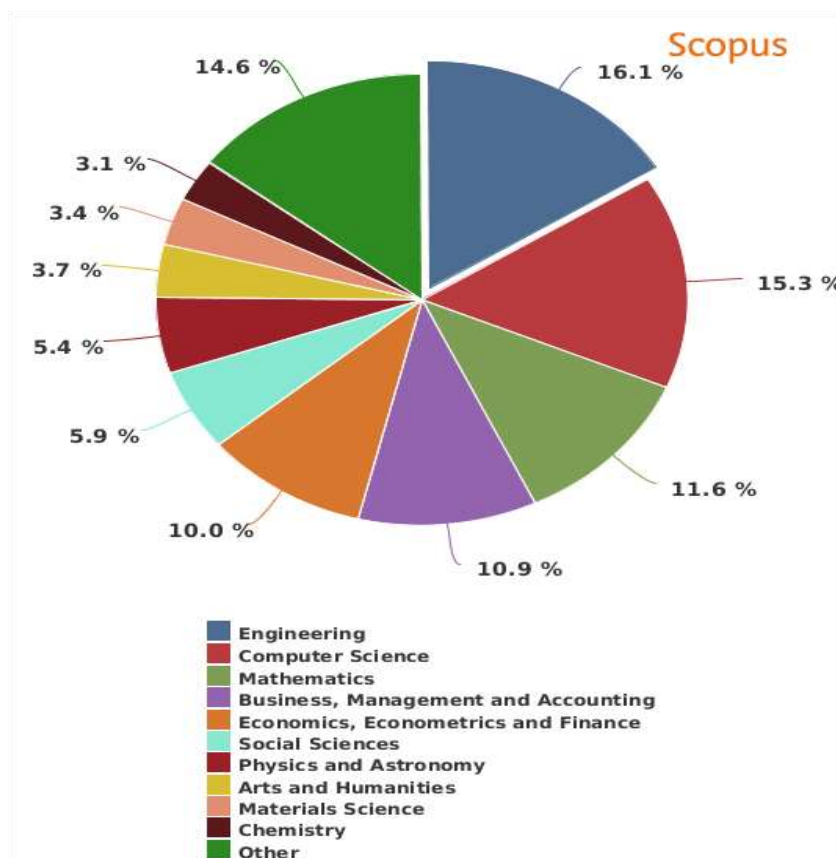
Beginning from the academic year 2013-14, the URB in coordination with DVC suggested incentives for research to encourage faculty members at DU to engage in quality research activities. Faculty members who publish their research work in Scopus or Web of science were awarded with a cash reward. Following this, faculty members have been actively involved in publishing their research work in Scopus indexed journals. From 5 publications in 2005 to 185 publications in 2016, the trend has undoubtedly accelerated. Table 5 summarizes the publications in Scopus indexed journals since 2005 while figure 9 displays the increasing trend each year, whereas, figure 10 displays the distribution of papers published as per their discipline.

**Table 5: No. of publications in Scopus**

Year	No. of Publications
2005	5
2006	4
2007	11
2008	15
2009	19
2010	18
2011	17
2012	14
2013	21
2014	31
2015	92
2016	185



**Figure 9: Increasing Trend showing Scopus Indexed Publications each year by DU**



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**Figure 10: Distribution of Publications in Scopus by DU as per Discipline**

## **7. TRC Related Activities**

### **7.1 Projects Submitted to The Research Council (TRC) during the Academic Year 2016-17**

During the AY 2016-17, due to the economic conditions of the country and budget constraints, TRC stopped accepting new applications for the Open Research Grant (ORG). So no new submissions were recorded. However, 8 new applications were submitted to TRC for Faculty mentored Undergraduate Research Award Program (FURAP). 6 out of 8 applications worth 9050 OMR were approved by TRC. For FURAP Call 5, 17 new applications were submitted to TRC in April, 2017. The details of newly approved projects is tabulated via Table 6, whereas, all ongoing projects are shown in Table 7. The submitted projects are tabulated *via* Table 8.

**Table 6: TRC Projects Approved during AY 2016-17**

No.	Type of Application	Title	Faculty Mentor	Amount Requested (R.O)
1.	FURAP	Students' attitude towards voluntary services: A study of Dhofar University	Dr. Reem Abuiyada	1200
2.		Ad-hoc remotely controlled rover system	Dr. Manaf Zghaibeh	2400
3.		Surface modified Gd <sub>2</sub> O <sub>3</sub> nanoparticles for Magnetic Resonance Imaging(MRI) contrast agents	Dr. Md. Wasi Ahmad	1850
4.		Synthesis of bacterial cellulose facial masks for industrial and medical applications	Dr. Mazhar Ul Islam	1700
5.		Designing a high performance work system: A key step towards building employee engagement in the health sector	Dr. Rabia Imran	1000
6.		The prevalence of internet addiction among youth in Oman	Dr. Shanker Menon	1250

**Table 7: Ongoing TRC Projects**

No.	Type of Application	Title	Principal Investigator	Total Amount Approved (R.O)
1.	ORG	Improved Design Parabolic Trough Collector for Electric Power Generation	Dr. Said Grami	78,250
		Natural Fractures Reactivation and its impact on Enhanced Oil Recovery	Dr. Fethi Abbassi	145,700
2		Towards the Future Dhofar Smart Power Grid	Dr. Abdulkader Dekdouk	118,200

3.		Intelligent Monitoring Systems for Cooperating Objects Using 6LowPAN(6-IMS)	Dr. Shafique Chaudhary	103,700
4.	<b>EcoHouse</b>	Eco House Competition (Phase II)	Dr. Liudmila Cazacova	30,000
5.	<b>FURAP</b>	Students' attitude towards voluntary services: A study of Dhofar University	Dr. Reem Abuiyada	1200
6.		Ad-hoc remotely controlled rover system	Dr. Manaf Zghaibeh	2400
7.		Surface modified Gd <sub>2</sub> O <sub>3</sub> nanoparticles for Magnetic Resonance Imaging(MRI) contrast agents	Dr. Md. Wasi Ahmad	1850
8.		Synthesis of bacterial cellulose facial masks for industrial and medical applications	Dr. Mazhar Ul Islam	1700
9.		Designing a high performance work system: A key step towards building employee engagement in the health sector	Dr. Rabia Imran	1000
10.		The prevalence of internet addiction among youth in Oman	Dr. Shanker Menon	1250

**Table 8: Submitted TRC Projects during AY 2016-17**

No.	Type of Application	Title	Faculty Mentor	Amount Requested (R.O)
1.	<b>FURAP</b>	Consumer readiness to adopt social commerce: a field study	Dr. Mansour Al Raja	1300
2.		Culture as a driver of sustainable tourism development	Dr. Kamal Allil	1150
3.		Smart Vehicle over Speeding Detector	Dr. Sarfaraz Khan	1800
4.		Salalah Robocop	Dr. Manaf Zghaibeh	1400
5.		Investigating the development of tourism in Oman through shared economy: a study with specific reference to AIRBNB	Dr. Sarfaraz Khan	1600
6.		Computer control for Vehicle wireless data transponder and driver alert system	Prof. Rustom Mamlook	2400
7.		From traffic data collection to traffic state detection in Salalah	Dr. Zied Bouyahia	1890

8.	<b>FURAP</b>	Towards a smart and collaborative private buses transportation system for Dhofar University students	Dr. Hedi Haddad	920
9.		Synthesis and characterization of bacterial celluloses from coconut water; an economically feasible bio-medical product	Dr. Mazhar Ul Islam	1200
10.		Agribot: the automatic planting system in Oman'	Dr. Najam Ul Hasan	2200
11.		Manufacturing of Drop Tower Impact Testing Machine for Industrial and Aerospace Applications'	Dr. Furqan Ahmad	1600
12.		Desalination of the spring water in Dhofar region using Renewable energy	Dr. Said Grami	2400
13.		Fabrication of Nanostructured Porous CuO Composite Materials for Energy Storage Devices Super capacitors	Dr. Gowhar Naikoo	2400
14.		The process of leadership emergence: an empirical Investigation in the private service sector of Oman	Dr. Rabia Imran	1000
15.		Study behaviors: comparing peer mentoring and study	Dr. Mohammed Hamdoun	1800
16.		Corporate social responsibility of Omani university students: predictors, priorities, and importance for job decisions	Prof. Ramzi Nasser	1000
17.		Synthesis and characterization of Iron Oxide Nano-particles for the magnetic resonance imaging (MRI) contrast agents	Dr. Wasi Ahmad	912
			<b>Total</b>	<b>26, 972</b>

## 7.2. Annual National Research Forum by TRC

As a part of its vision to promote research culture within the sultanate, TRC organized the '3<sup>rd</sup> Annual National Research Forum' on 5<sup>th</sup> October, 2016. More than 400 scientists, researchers and innovators participated in the event. The faculty members having ORG projects were invited from all HEIs to participate in the event. The details of participation from DU are tabulated visa Table 9.

**Table 9: Details of participation at ANRE, Muscat by DU**

Research Field	Researcher	Type of participation
Energy and Industry Sector	Dr. Aref Wazwaz (CE)	Presentation
	Dr. Abdulkader Dekdouk (CAAS) Dr. Fethi Abbassi	Poster Presentation
Environment and Biological Resources	Prof. Luay Rshan	Attendance only
Energy and Industry	Dr. Israr Ul Hassan	Attendance only

## **8. Consultancy Activities**

As a part of DU's efforts to facilitate activities to smoothen the progress of knowledge and technology transfer between University and the local community, contributing to economic and social impact of the society, the faculty members were encouraged to take part in consultancy activities. Such activities will also act as an extra source of additional income to the University and/or financial benefit to the faculty. Table 10 enlists the consultancy activities carried out during current academic year while Table 11 shows the list of professional development workshops or lectures delivered to local schools, Colleges and industry during AY 2016-17.

**Table 10: Consultancy Activities carried out during AY 2016-17**

No	Code	Consultant	College/FP	Client	Duration
1.	DU/AY/2016-17/CONS-001	Dr. Nasser Abdelrasheed	CCBA	Alfakr Training Services	2 <sup>nd</sup> April, 2017 - 6 <sup>th</sup> April, 2017

**Table 11: Professional Development Workshops/Guest Lecture given by Faculty Members during AY 2016-17**

No.	Name of Faculty Member	Title of Lecture	Place	Duration
<b>FP</b>				
1.	Mr. Waqas KHAN	Smart Cities	Adelaide, Australia	8 <sup>th</sup> August 2016
2.	Mr. Waqas KHAN	Using social media to improve business	Salalah, Oman	14 <sup>th</sup> Jan 2017
3.	Mr. Nathaniel Lotze	The Art of Structured Review	DU, Salalah, Oman	17 <sup>th</sup> February, 2017
4.	Mr. Paul Pearce	As above	DU, Salalah, Oman	9 <sup>th</sup> March, 2017
5.	Mr. Ashraf Ali	Workshop on Advanced Microsoft Office Excel	DU, Salalah, Oman	30 <sup>th</sup> April 2017
<b>College of Applied Sciences</b>				
<b>Computer Science</b>				

6.	Dr. Shafique Ahmad Chaudhry	Conducting Online Survey	DU, Salalah, Oman	8 <sup>th</sup> November, 2016
7.	Dr. Biju Theruvil Sayed	Soft Skills Training in Spreadsheets	DU Computer Lab	8 <sup>th</sup> December, 2016
8.	Dr. Biju Theruvil Sayed	Soft Skills Training in Spreadsheets	DU Computer Lab	20 <sup>th</sup> December 2016
<b>Education</b>				
9.	Dr. Abdelkader Elsayed	Preparing trainers in the field of community service	Ministry of Sports, Oman	18 <sup>th</sup> -19 <sup>th</sup> June, 2016
10.	Dr. Abdelkader Elsayed	School Accreditation for Private Schools	SQU, Oman	14 <sup>th</sup> -17 <sup>th</sup> November, 2016
11.	Dr. Abdelkader Elsayed	Diversity in schools	SQU, Oman	14 <sup>th</sup> -17 <sup>th</sup> November, 2016
12.	Dr. Abdelkader Elsayed	تصميم مخرجات التعلم	DU, Salalah, Oman	2 <sup>nd</sup> -3 <sup>rd</sup> March, 2017
13.	Dr. Khalid Al Mashikhi	تصميم سلم درجات	DU, Salalah, Oman	
<b>Mathematics and Sciences</b>				
14.	Dr. Khedr Abu Hassan	Exams Guidelines and Ethics	DU, Salalah, Oman	January 3, 2017
<b>Social Science</b>				
15.	Dr. Reem Abuiyada	The Effect of Technology on Community	College of Applied Sciences, Salalah, Oman	18 <sup>th</sup> November, 2016
16.	Dr. Reem Abuiyada	Child Abuse	Khawla School, Salalah, Oman	5 <sup>th</sup> April, 2017
<b>Languages &amp; Translation</b>				
17.	Dr. Shafeeq al-Nobany	Arabic as a national capital	Directorate of culture and heritage in Salalah	26 <sup>th</sup> November, 2017
<b>Law</b>				
18.	Dr. Ahmed Elzien	تقرير الأنشطة والتقييم السنوي	DU, Salalah, Oman	15 <sup>th</sup> May, 2017
19.	Dr. Youssef Chebat	محاضرة بعنوان قانون الخدمة المدنية العماني	DU, Salalah, Oman	

<b>College of Commerce and Business Administration</b>				
<b>Department of Management &amp; Marketing</b>				
20.	Dr. Omar Durrah	Developing leadership skills	DU, Salalah, Oman	20 <sup>th</sup> - 22 <sup>nd</sup> November, 2016
21.	Dr. Omar Durrah	SPSS and Research Methodology, CRC Activities	DU, Salalah, Oman	29 <sup>th</sup> November, 2016
22.	Dr. Omar Durrah	Business Excellence Framework for SMES	DU, Salalah, Oman	5 <sup>th</sup> December, 2016
23.	Dr. Omar Durrah	Efficient Use of MS-Excel/SPSS in Data Analysis	DU, Salalah, Oman	28th February, 2017
24.	Dr. Mohamed Hamdoun	Principles of Project Management	DU, Salalah, Oman	1 <sup>st</sup> - 2 <sup>nd</sup> March, 2017
25.	Dr. Alexandrina Maria Pauceanu	Entrepreneurial culture in GCC	Academy of Economic Studies, Romania	April 14 <sup>th</sup> , 2017
<b>Department of Management Information System</b>				
26.	Dr. Mansour AlRaja	Improving the leadership skills	General Directorate of Fisheries Wealth in Dhofar Governorate	5 <sup>th</sup> December, 2016
27.	Dr. Muhammed Yousoof	Effective use of Moodle in teaching and learning	DU, Salalah, Oman	22 <sup>nd</sup> February, 2017
28.	Dr. Samir Hammami	Digital Entrepreneurship	Ministry of Education	17 <sup>th</sup> May 2017
29.	Dr. Samir Hammami	Small Project from the Idea to Operation and Development” in collaboration with Arab Planning Institute (www.arab-api.org) and Omani Chamber of Commerce & Industry in Dhofar	DU, Salalah, Oman	3 <sup>rd</sup> -4 <sup>th</sup> May, 2016
30.	Dr. Samir Hammami	Workshop about Business Model Canvas in Collaboration with Riyada “Public Authority for SMEs in Oman” and Shell Company	DU, Salalah, Oman	22 <sup>nd</sup> -23 <sup>rd</sup> April 2017
31.	Dr. Samir Hammami	National Workshop “Bright Ideas” in Collaboration with Riyada “Public Authority for	DU, Salalah, Oman	October 2016



		SMEs in Oman” and Shell Company		
32.	Dr. Samir Hammami	“Feasibility Studies for Small Projects” workshop in collaboration with Riyadah (Public Authority of Small and Medium Enterprises in Oman)	DU, Salalah, Oman	12 <sup>th</sup> May, 2016
33.	Dr. Samir Hammami	Symposium of “Business Horizons in Dhofar Region: Opportunities and Challenges” organized	Salalah Technical College	25 <sup>th</sup> May, 2016
<b>College of Engineering</b>				
<b>Department of Electrical &amp; Computer Engineering</b>				
34.	Dr. Thabit Sultan Mohammed	National Workshop on ABET Accreditation for Engineering Programs (AEP 2017)	Sohar, Oman	1 <sup>st</sup> March, 2017
<b>Department of Mechatronics &amp; Mechanical Engineering</b>				
35.	Dr. Fethi Abbassi	Use of Digital Image Correlation (DIC) technique for the validation of numerical simulation results	Advanced Applied Mechanics Lab, KAIST, Republic of Korea	21 <sup>st</sup> March, 2017
36.	Dr. Fethi Abbassi	Use of Digital Image Correlation (DIC) technique for the validation of numerical simulation results	School of Mechanical Engineering, at Chung-Ang University, Korea	24 <sup>th</sup> March, 2017

## **9. Liaison/Agreement with External Agencies/HEIs**

DU has signed mutual agreements with world renowned HEIs for collaboration in ‘Teaching & Learning’ and Research during AY 2016-17. Also, it has worked on implementing the objectives of MoUs signed with HEIs during previous academic years. Table 12 highlights the details of all MoUs and MoAs signed, in process or implemented.

**Table 12: Events Organized by DU Faculty and Staff AY 2016-17**

S.No	External Agency/HEI	National/International	Status
1.	The University of Western Australia, Australia	International	Signed MoU in 2014 and throughout the AY 2016-2017 has been in the process

			of implementing objectives of the MOUs
2.	Indian Agricultural Research Institute, India	International	Signed MoU in 2014 and throughout the AY 2016-2017 has been in the process of implementing objectives of the MOUs
3.	Nitte University	International	MoA signed during AY 2016-17 and working towards implementation of the MoA
4.	The University of St. Andrews, Scotland, UK	International	Signed MoU in 2015 and throughout the AY 2016-2017 has been in the process of implementing objectives of the MOUs
5.	University of Nebraska Omaha, USA	International	Signed MoU in 2015 and throughout the AY 2016-2017 has been in the process of implementing objectives of the MOUs
6.	Tata Institute of Social Sciences, India	International	MoU signed during AY 2016-17 and working towards implementation of the MoU
7.	4HF Biotech GmbH, Germany	International	MoU signed during AY 2016-17 and working towards implementation of the MoU
8.	Vivacell Biotechnology, Germany	International	MoU signed during AY 2016-17 and working towards implementation of the MoU
9.	Universiti of Nasional, Germany	International	MoU signed during AY 2016-17 and working towards implementation of the MoU
10.	A' Sharqiyah University, Oman	National	MoU signed during AY 2015-16 and working towards implementation of the MoU
11.	Sohar University, Oman	National	MoU signed during AY 2015-16 and working towards implementation of the MoU
12.	Waljat College of Applied Sciences, Oman	National	MoU signed during AY 2015-16 and working towards implementation of the MoU
13.	Dhofar Power Company, Oman	National	Research Collaboration
14.	The Port of Salalah, Oman	National	Research Collaboration

15.	Petroleum Development Oman	National	Research Collaboration
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## **10. Annual Research Day**

As a part of its vision to foster, promote and establish conducive environment for the Research, the department of Research organizes the Research day in the month of June every year to celebrate achievements of students and faculty members in Research at DU. This year, due to Ramadan, exam schedule and Eid holidays, the research day was decided to be postponed till the start of AY 2017-18.

## **11. Awards won by Faculty and Students**

### **11.1 DU Research Recognized by Optics (CAAS)**

Optics is the branch of physics which involves the behavior and properties of light, including its interactions with matter and the construction of instruments that use or detect it. The understanding of light optics requires a variety of mathematical techniques. Consequently, there are attempts to understand light optics using different mathematical machineries. Dr. Sameen Ahmed Khan has been single handedly working on a new formalism of beam optics using matrices and quantum technics. He is an assistant professor in the College of Arts and Applied Sciences, Dhofar University, Salalah. This year alone he published five papers describing different facets of his formalism. Amidst strong international competition, two of Dr. Sameen’s papers have been chosen as one of the best this year by the influential magazine, Optics & Photonics News (OPN) published by The Optical Society (OSA was founded in 1916 as the Optical Society of America and renamed as Optical Society in 2008). Each year OSA highlights world-wide breakthrough innovations in optics and photonics in its year end December issue of its OPN Magazine. The research is thereby featured in the special edition, Optics in 2016, which carries the summaries of the thirty selected breakthroughs.



**Figure 11: Optics in 2016: This special issue of Optics & Photonics News highlights the most exciting peer-reviewed optics research to have emerged over the past twelve months.**

## 11.2 Best Paper Award in ISAMR, Korea (CE)

Dr. Fethi, the Chair of Department of Mechanical and Mechatronics at the College of Engineering at Dhofar University, has won “The Best Paper Award” for his research paper titled “Numerical and experimental damage analysis of carbon/PPS composite under uniaxial and biaxial loading”. He presented his paper in an “International Symposium on Advanced Material Research (ISAMR-2017)” during March 17-19, 2017 in Seoul, South Korea. ISAMR was sponsored by prestigious organizations and top ranking universities in South Korea. Dr. Abbasi’s visit was sponsored via Short Term Faculty Development Grant i.e. granted to faculty members to present their research papers in national and international conferences by University Research Board at Dhofar University. Moreover, during his visit, Dr. Abbasi, conducted seminars in Korea Advanced Institute of Science and Technology (KAIST) and Chung-Ang University (CAU) where he shared his Research with the faculty and students.



**Figure 12: Award won by Dr. Fethi in ISAMR, 2017**

## 11.3 Awards won by CCBA Faculty

Three faculty members from CCBA have brought laurels to the University. The following staff members have been rewarded for their remarkable contribution in their areas of expertise. The details are shown in the table 13 below:

**Table 13: Awards won by CCBA Faculty**

SN.	Name of the Academic Staff	AWARD
1.	<b>Dr. Faris al Shubairi</b>	Award as outstanding scientist in finance and accounting by center for advanced research and design, India (Venus international Foundation).
2.	<b>Dr. Kavita Chavali</b>	Best paper award for the paper titled “Capital Structure of non-banking finance companies and their profitability in Indian scenario”, presented at International Conference at Skyline University, Sharjah.
3.	<b>Dr. Mohammed Aref</b>	Best “Practice Research Award” in International Conference & Exhibition on Best Practices in Sustainable Water, Waste

		Water & Energy Management, 17-19, August 2016, Bengaluru, INDIA.
4.	<b>Dr. Muhammed Yousoof</b>	Awarded the 'Outstanding scientist award' by Venus International Foundation for his research on Artificial intelligence in December, 2016.

### 11.4 Awards won by Students

DU students actively indulged in research activities during the AY 2016-17 and won several awards for their research presented in conferences, workshops and poster competitions nationwide. The details are tabulated Table 14 below:

**Table 14: Awards won by Students**

No	Name of Students	College	Title of Research	Title of Award	Awarding Body
1.	Noor Salim Mohammed Mahad Al Maashani, Tufool Amor Said Al Mashikhi, Latifa Said Mohammed Al Kathiri, Nada Mohammed Salim Bait Faraj Allah	CE	A study of gasoline flow through sand by changing the diameter of the cylindrical reservoir with respect to vertical	3 <sup>rd</sup> Joint Prize for Poster Presentation	ICTEA: 10 <sup>th</sup> International Conference on Thermal Engineering: Theory and Applications
2.	Zainab Ahmed Ba Anqood, Lamia Ali Al Shanfari, Lamees Mohammed Ba Qweer, Muna Aqeel Ba Omar	CE	Modified Diesel Fuel of Omani Engine Oils Using Bio waste	2 <sup>nd</sup> Prize for Research paper	12 <sup>th</sup> International Chemical Engineering Gathering
3.	Abdullah Khamis Ali Al Saidi	CE	Study and Analysis the chemical, physical and nutrient properties of Oman's date compare to date of Al-Madinah	1 <sup>st</sup> Prize for Research paper	12 <sup>th</sup> International Chemical Engineering Gathering
4.	Shihab Ahmed Al Safiyani, Mohammed Saeed Masoud Al- Amri, Hamed Issa Al- Awaid, Saeed Ali Rafeet	CE	A study of gasoline flow through sand by changing the diameter of the cylindrical reservoir	3 <sup>rd</sup> Joint Prize for Poster Presentation	ICTEA: 10 <sup>th</sup> International Conference on Thermal Engineering: Theory and Applications

5.	Yousuf Safrar	CE	Analysis and comparison of protein and Glutein of Wheat from Oman, Canada and Iran	1 <sup>st</sup> Prize for Poster Presentation	7 <sup>th</sup> National Symposium on Engineering Final Year Project
6.	Anood Al Mezeni, Naema Khamis, Shaima Al Falahi, Fakrah Salim	CE	Surface modified Gd2O3 Nanoparticles for Magnetic Resonance Imaging (MRI)	2 <sup>nd</sup> Prize for Oral Presentation for their Research Project	7 <sup>th</sup> National Symposium on Engineering Final Year Project

## **12. Solar Decathlon Middle East**

Solar Decathlon is an international competition created by the U.S. Department of Energy in which universities from all across the world meet to design, build and operate a grid-connected, energetically self-sufficient house.

The Solar Decathlon Middle East (SDME) was created by Dubai Electricity and Water Authority (DEWA) and the Department of Energy of the United States of America. Twenty-two (22) teams from sixteen (16) different countries represented by renowned international Universities from around the globe participated in the event. The teams were selected by an International Jury after a rigorous technical review process which lasted more than three months.

SoLLite Salalah team from Dhofar University is the only team nominated from the Sultanate of Oman to participate in the competition. An official announcement of the selected teams was made on October 5, 2016 during the opening ceremony of the World Green Economy Summit 2016. It is an annual event held in Dubai in order to take stock of environmental sustainability and economy.

SoLLite Salalah attempts to contribute to the dissemination of sustainable housing and solar energy in an open learning environment conducive to creativity and innovations and to the attainment of cutting-edge technologies and knowledge. The team has successfully delivered First three deliverables of the competition and is working currently to deliver the next deliverable in October, 2017.

### **12.1 Project objectives**

SoLLite Salalah aims to build an easy to assemble house, which provides mobility if needed under stressed circumstances, i.e. for example cases of natural disasters, refugees and can also be a resting home for tourists during the Khareef season in Salalah, when population of the city drastically increases and the accommodations are limited.

### **12.2 Goals**

The goals are to:

- ✓ Design a house that's eco-friendly.

- ✓ conserves natural resources and use clean energy.
- ✓ Build a house adaptable to the Middle East climate and culture.
- ✓ smart and easy to operate.
- ✓ flexible for adaptation to a different environments and different seasons.
- ✓ A flexible house layout and structure that can be redesigned and adjusted by the resident.

### 12.3 Details of Omani Students' participation

Since October 2016, forty-one (41) students from different disciplines of Dhofar University have been working on building a sustainable and energy-sufficient house. The work is done under the guidance and supervision of faculty members from the College of Engineering. The students are divided into different teams depending on their majors and assigned tasks accordingly. Table 15 shows the details of Omani students' participation in the project:

**Table 15: Omani Students Participation in SoLLite**

No.	Name	Major	Team
1.	Ibrahim Salim Jadad	Interior Architecture	Team leader
2.	Afaf Abdullmanan Al Jabli	Interior Architecture	Sponsorship leader
3.	Ibtisam salim Aljahwri	Civil engineering	Engineering leader
4.	Asrar Seddiq Ba Seddiq	Graphic Design	Communication leader
5.	Abeer Musallam Al Amri	Interior Architecture	Management Team
6.	Esra Hafedh Al Sarnaj	Interior Architecture	Engineering & construction Team
7.	Maisa Sameer Rajab Bait Sameer	Interior Architecture	Engineering & construction Team
8.	Tariq Ali Ba Omar	Interior Architecture	Engineering & construction Team
9.	Omaimah Said Bait Bakhit	Interior Architecture	Engineering & construction Team
10.	Tafool Mahfoodh Alawadi	Engineering Architecture	Engineering & construction Team
11.	Shaima Awadh Said	Graphic Design	Sponsorship Team
12.	Fatima Abdullah Al Gharaibi	Graphic Design	Communication team
13.	Samah Saed Al Hajri	Interior Architecture	Engineering & construction Team
14.	Hamza Abdulmtlab Farah bit Ali Jbraheel	Computer Science	Sponsorship Team
15.	Maryam Talib Al-Haddadi	Graphic Design	Communication team
16.	Hafidh Mohammed Ba Omar	Finance	Sponsorship Team
17.	Laila Said Al Maashani	English literature	Sponsorship Team
18.	Ali Badar Ali Al Rawas	Interior Architecture	Engineering & construction Team
19.	Aqeel Ahmed Al Ibrahim	Computer sciences	Communication team
20.	Farah Salim Rajab Ojaili	English department	Communication team

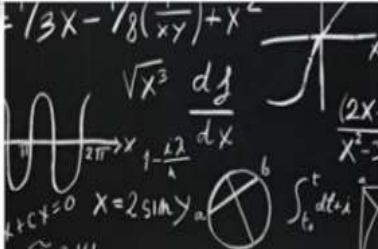
21.	Fatima Alawi Al- Hafidh	Interior Architecture	Management Team
22.	Musallam Mohammed Musallam Jadad Alkathairi	Architecture Engineering	Engineering & construction Team
23.	Marwa Salim Barami	Social work	Engineering & construction Team
24.	Khalid Abdul Hadhi Mohammed	Civil engineering	Engineering & construction Team
25.	Basma Subait Khalfan Al Kindi	Finance	Sponsor team
26.	Bahiya Mohammed Muqaibal	Interior Architecture	Engineering & construction Team
27.	Kholoud Salim Al Amri	Education in English Language	Communication team
28.	Osama Bashir Bait Abaidoun	Computer Science	Sponsor team
29.	Ibrahim Salim Jadad	Interior Architecture	Team leader

### **13. Annual Research Report**

The DR along with the URB prepared the 9<sup>th</sup> annual Research report for AY 2016-17.



# College of Arts & Applied Sciences



**AY 2016-17**

## **14. Publications by College of Arts and Applied Sciences**

### **14.1 Department of Computer Sciences**

#### **Refereed Journal Papers:**

A. Mirzal, **S. A. Chaudhry**, "Call for a computer-aided cancer detection and classification research initiative in Oman", Asian Pacific Journal of Cancer Prevention, Vol. 17, No. 5, pp: 2375-2382, 2016. DOI: 10.7314/APJCP.2016.17.5.237

**B. T. Sayed, A. Dekdouk**, Y. Ashraf, "A prototype to detect and efficiently rectify faults in a smart power grid using an intelligent knowledge based information system", Journal of Theoretical and Applied Information Technology, Vol. 95, No. 1, pp:125-138, 2017.

**S. A. Chaudhry**, J. Zhang, "Network-State-Aware quality of service provisioning for the internet of things", International Journal of Advanced Computer Science and Applications, Vol. 7. No. 6, 2016. pp 369-376. DOI: 10.14569/IJACSA.2016.070648

S. Mustapha, **B. T. Sayed**, "Measuring process innovation on double-flanked conceptual model for knowledge sharing on online learning environment", Journal of Theoretical and Applied Information Technology, Vol. 95, No. 7, pp:1499-1509, 2017.

S. Zafar, **S. A. Chaudhry**, S. Kiran, "Adaptive Trimtree: green data center networks through resource consolidation, selective connectedness and energy proportional computing", Energies, Vol. 9, No 10, 2016.

S. Zafar, **S. A. Chaudhry**, A. Bashir, "On implementation of DCTCP on three-tier and fat-tree data center network topologies", Springer Plus, Vol. 5 No. 1, 2016.

#### **Conference Papers:**

H. Yahyaoui, **A. Dekdouk**, S. Krichen, "A hybrid VNS based framework for biomass transportation", 17th IEEE/ACIS International Conference on Software Engineering, Artificial Intelligence, Networking and Parallel/Distributed Computing, May 30- June 1, 2016.

**A. Dekdouk**, H. Yahyaoui, S. Krichen, A. Touzene, "Multi-objective reconfiguration of power distribution system using an iterated local search approach", 7<sup>th</sup> International Conference on Swarm Intelligence, June 25-30, 2016.

H. Yahyaoui, **A. Dekdouk**, S. Krichen, "Graphic-based optimal network reconfiguration in CPU/GPU architectures using AGA-LS metaheuristics", IEEE International Conference on Power System Technology, September 28- October 01, 2016.

R. D. Balaji, R. Malathi, **B.T. Sayed**, "A study on impact of information and communication technology and students centered learning in Oman economy", International Conference on Economic Development and Diversification: Contemporary Issues, Strategies and Opportunities for Sustainable Development in Oman, Salalah, Oman, April 26-27, 2017.

**Member Editorial Board:**

**S. A. Chaudhry**, Member editorial board, Ubiquitous Computing and Communication Journal.

**Externally Funded Research:**

**A. Dekdouk, B. T. Sayed, S. Chaudhry**, T. Abderezak, "Toward a Future Smart Dhofar Power Grid: Advanced Distribution Management and Meter Data Analytics", Funded by TRC, Status: Project in Progress.

**Executive Summary**

The smart grid is the name of the future intelligent electricity network. This type of network uses intelligent techniques and information technology in order to optimize production and distribution and better link supply and demand between producers and consumers of electricity. In fact, the smart grid delivers electricity from suppliers to consumers using the technique of two-way communication to control electrical appliances in order to save energy, reduce cost and increase reliability and transparency. The smart grid also provides opportunities to automate the process of maintenance, recovery and operation. The information on consumption and energy control is provided by digital sensors and smart meters and it is conveyed through fixed and wireless communication networks. The automation part of a smart grid is mainly composed of four systems namely, the power generation automation system, the smart substation defined by an advanced SCADA, the distribution automation system and the advanced metering infrastructure. These four infrastructures are supervising and controlling the power generation plants, the transmission substations, the distribution networks and the customer-end systems respectively. Efficient supervision and controlling of these different automatic systems is based on intelligent information systems like the meter data management system (MDMS), the distributed management system (DMS), the mobile workforce management system (MWMS), the outage management system (OMS), the work and asset management system (WAMS), the energy management system (EMS) and the customer care and billing system (CIS).

**S. A. Chaudhry, H. Haddad, A. Dekdouk**, "Intelligent Monitoring Systems for Cooperating Objects using 6LowPAN (6-IMS)", Funded by TRC, Status: in Progress

**Executive Summary**

In this project, we aim at the design of large-scale and interoperable architecture of heterogeneous networks and applications for intelligent monitoring systems using 6LowPAN as the core sensing and communication protocol. As an illustrative example of 6-IMS, we propose to a real-life application, which will tackle the intelligent monitoring scenarios for Salalah Port. The proposed application shall focus on monitoring of various restricted areas and traffic within the port area.

**14.2 Department of Education****Books:**

**A. Elsayed**, "Contemporary approaches to teaching and active learning in the twenty-first century", University Book House, Alain, 2016.

### **Refereed Journal Papers:**

**A. Elsayed**, M. Balhaf, Y. Sabtan, "Job Performance Assessment for School Activity Teachers from the Viewpoints of School Principals in Dhofar Governorate", *International Journal of Humanities and Cultural Studies*, Vol. 2, pp: 563-585, 2016.

**S. Bakhiet, Y. Essa, A. Elsayed, A. Sulman**, H. Cheng, R. Lynn, "Correlations between Intelligence, Head Circumference and Height: Evidence from two Samples in Saudi Arabia", *Journal of Biosocial Science*, Vol. 49, pp: 276-280, 2017.

S. F. Bakhiet, Y. A. Essa, **N. S. Abdelrasheed**, H. Cheng, R. Lynn, "Sex Differences in the intelligence of university students in Thailand", *Mankind Quarterly*, Vol. 57, No. 1, pp: 72-74, 2016.

S. F. Bakhiet, M. F. Al-Qudah, Y. A. Essa, **N. S. Abdelrasheed**, H. Cheng, R. Lynn, "Sex differences in the intelligence of university engineering students in Sudan", *Journal of Mankind Quarterly*, Vol. 57, No. 3, pp: 95-98, 2017.

S. F. Bakhiet, Y. A. Essa, I. S. Albursan, **N. S. Abdelrasheed**, R. Lynn, "Sex differences in high school students on advanced progressive matrices in Yemen", *Mankind Quarterly*, Vol. 57, No. 3, pp: 99-103, 2017.

### **Conference Papers:**

**A. El Sayed, A. Moosa**, "The role of educational institutions in development human capital in Oman, The International Conference of Human Capital Perspective, Istanbul, Turkey, April 4-6, 2017.

**A. Elsayed, M. Al-Awed**, "Imagine a proposal to activate the practice of student activities in the colleges of applied sciences in the light of the quality standards and accreditation", *The International Conference of Academic Accreditation: The Road to Sustainable Quality Education*, Muscat, Oman, November 14-17, 2016.

**A. Elsayed, M. Soliman**, "The role of policies and educational institutions in the Sultanate of Oman in the development of human capital", *The International Conference of Human Capital Perspective*, Istanbul, Turkey, April 4-6, 2017.

### **Member Editorial Board:**

**A. Elsayed**, Arab Society of English Language Studies.

**A. Elsayed**, International Conference on Global Environment, India

**A. Elsayed**, Universal Journal of Educational Research, USA.

**N. Abdelrasheed**, Journal of Educational & Psychological Studies (JEPS)

### **14.3 Department of Languages and Translation**

#### **Books:**

R. Al. Mahrooqi, C. Coombe, F. Al-Maamari, **V. Thakur**, "Revisiting EFL assessment: Critical perspectives", Springer, Switzerland, 2017.

#### **Book Chapters:**

**A. Alhassan**, H. Ali, "An evaluation of the challenges of the Sudanese linguistics and English language-related studies' PhD candidates: An exploratory qualitative study", Evaluation in Foreign Language Education in the Middle East and North Africa, Springer International Publishing, 2017.

#### **Refereed Journal Papers:**

**V. Thakur**, "Cooperative principle and inferential chains of interpretation: Socio-pragmatic approach to language and literature teaching", Arab World English Journal for Translation and Literary Studies, Vol. 1, pp: 171-186, 2017.

**S. S. Sultan**, "Fiction of Imprisonment and Individual Peace: Abdul Rahman M. al Rubayi's Al Washm as an example", Journal of Humanities and Cultural Studies, Vol. 2, No. 2, pp:1-22, 2017.

#### **Conference Papers:**

**A. Alhassan**, "EAP and subject specialists in EFL contexts: can we establish a professional dialogue?", The 3<sup>rd</sup> TESOL Arabia SIG Conference: Learners & Teachers: Partnering for Excellence in ELT Education, Abu Dhabi, UAE, April 19, 2017.

**A. Alhassan**, H. Ali, "Plagiarism technology and ghostwriting: can we make the undetectable detectable?", 17<sup>th</sup> International English Language Teaching Conference: ELT: Innovate Integrate, Motivate, Muscat, Oman, April, 20-21, 2017.

**A. Alhassan**, "A Corpora-based approach for training EFL student translators and interpreters: moving beyond bilingual dictionaries and intuition", The 8<sup>th</sup> Annual International Translation Conference: 21<sup>st</sup> Century Demands: Translators and Interpreters Towards Human and Social Responsibilities, Doha, Qatar, March 27-28, 2017.

**A. Alhassan**, "Mainstream vs. International English: Voices from Classrooms", The 23<sup>rd</sup> TESOL Arabia Conference: advancing the ELT profession, Dubai, UAE, March 9-11, 2017.

**A.H. Al-Saqqaf**, "Will Nizwa Arabic witness a change of palatal stops to coronal affricates?" Symposium of Omani Arabic Dialects, Nizwa University, Nizwa, Oman, 20 April, 2017.

**V. Thakur**, "Promoting critical thinking as a social practice: Shaping students' voice, agency and inter-subjectivity in a cohesive framework", The English Scholars Beyond Borders Group and Providence University, Taichung, Taiwan, May 19-22, 2016.

**V. Thakur**, "Tapping students' critical thinking through poetry in ELT classrooms." 17<sup>th</sup> International ELT Conference on ELT: Innovate, Integrate, Motivate, Muscat, Sultanate of Oman, April 20-21 2017.

**M. A. Saeed**, S. Ali, "Learner Autonomy – towards a new collaborative approach", 17<sup>th</sup> International ELT Conference 2017, Muscat, Oman, April 20 -21, 2017.

**S. Al-Nobany**, "Literature from a Cultural point of view: Ghassan Abd al-Khaliq as an example", Cultural critique, Amman, Jordan, April, 11-13, 2017.

**S. S. Sultan**, "Creative writers and their invocation of divine inspiration, with particular reference to Aldous Huxley", The Aldous Huxley Symposium, Almeria, Spain, April 19-22,2017.

#### **Member Editorial Board:**

**V. Thakur**, "Journal of English as an International Language".

**V. Thakur**, "The Asia TEFL Journal"

**V. Thakur**, "International Journal for the Scholarship of Teaching and Learning"

#### **14.4 Department of Law**

##### **Books:**

د. أحمد الزين ، قواعد قانون الإثبات العماني ، دار الكتاب الجامعي ،الإمارات، 2017 م.

د. يوسف شباط، القانون الاداري وتطبيقاته، دار الكتاب الجامعي، الامارات، ابو ظبي، 2017 م.

د. يوسف شباط، المالية العامة وتشريعات الضرائب، دار الكتاب الجامعي ، الامارات، ابو ظبي، 2017

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##### **Refereed Journal Papers:**

د. أحمد الزين ، المسؤولية المدنية للشيك، المجلة العلمية لجامعة الإمام المهدي ، العدد الثامن الصفحات 1-35، ديسمبر 2016 م .

د. أحمد الزين ، الإحتيال ، مجلة العدل ، العدد السادس والأربعون ، الصفحات 5 - 33، أبريل 2016 م.

د. أحمد الزين، أحمد الصرايرة ، المسؤولية المدنية للأضرار الناتجة عن الإستخدام السلمي للطاقة النووية، مجلة الدراسات والبحوث الإسلامية، كلية دار العلوم جامعة القاهرة ، العدد السابع والسبعون.

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## **14.5 Department of Mathematics and Sciences**

### **Book Chapters:**

G. B. V. S. Lakshmi, Shumaila, **S. A. Khan** and A. M. Siddiqui, "Thin films: polyaniline and poly (3-methylthiophene)", Encyclopedia of Plasma Technology, pp. 1442-1451, First Edition, Taylor & Francis Encyclopedia Program, 2016. ISBN-10: 146650059X.

**M. Idrees, I. U. Hassan**, M. Naeem, A. Ali, T. Aftab, M. Masroor, A. Khan, "The accumulation and degradation of alkaloids in catharanthus roseus supported by various external agents under different environmental conditions, Catharanthus roseus Eds., Springer, 2017. DOI 10.1007/978-3-319-51620-2\_13.

M. Naeem, T. Aftab, **M. Idrees**, M. M. Alam, M. M. A. Khan, and M. Uddin, "Plant efficacy and alkaloids production in sadabahar (Catharanthus roseus L.): Role of Potent PGRs and Mineral Nutrients, Catharanthus roseus Eds., Springer, 2017. DOI: 10.1007/978-3-319-51620-2\_3.

A. Jaradat, **F. Awawdeh**, M. Noorani, "Identification of time-dependent source terms and control parameters in parabolic equations from over specified boundary data", Journal of Computational and Applied Mathematics, Vol. 313, pp: 397-409, 2017.

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A. R. Bhat, **G. A. Naikoo, I. U. Hassan**, R. S. Dongra, T. Ara, "Ultrasound assisted one Pot expeditious synthesis of new pyrido [2, 3-d] pyrimidine analogues using mild and inexpensive 4-dimethylaminopyridine (DMAP) catalyst", Beni-Suef University Journal of Basic and Applied Sciences, Vol. 6, No. 3, pp: 238-246, 2017.

B. S. Kusmariya, A. Tiwari, **G. A. Naikoo**, A. P. Mishra, "Spectroscopic, thermal, non-isothermal decomposition kinetics and quantum chemical computational studies of Ni (II)-and Cu (II)-Schiff base complexes", Research on Chemical Intermediates, pp: 1-17, 2016.

**F. Awawdeh**, A. K. Alomari, "A Numerical Scheme for the One-Dimensional Wave Equation Subject to an Integral Conservation Condition", AIP, Vol. 1739, No. 1, pp: 1-8, 2016.

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**H. M. Jaradat**, I. Jaradat, M. Alquran, M. M. M. Jaradat, Z. Mustafa, **K. M. Abohassan**, **R. Abdelkarim**, "Approximate solutions to the generalized time-fractional ITO system", Italian Journal of Pure and Applied Mathematics, Vol. 37, Issue 1, pp: 699-710, 2017.

M. A. Ganaie, H. Soni, **G. A. Naikoo**, L. T. S. Oliveira, H. K. Rawat, P. K. Mehta, N. Narain, "Screening of low cost agricultural wastes to maximize the fructosyltransferase production and its applicability in generation of fructooligosaccharides by solid state fermentation", International Biodeterioration & Biodegradation, Vol. 118, pp: 19-26, 2017.

M. Alquran, K. Al-khaled, S. Sivasundaram, **H. M. Jaradat**, "Mathematical and numerical study of existence of bifurcations of the generalized fractional Burgers-Huxley equation", Nonlinear studies, Vol. 24, No. 1, pp: 235-244, 2017.

M. Imsatfia, **R. Horchani**, "Invariant formulation of a variational problem: physical applications", Universal Journal of mathematics and mathematical sciences, Vol. 8, No. 1-2, pp: 21-40, 2016.

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M. Naeem, T. Aftab, **M. Idrees**, M. Singh, A. Ali, M. Masroor, A. Khan, M. Uddin, L. Varshney, "Modulation of physiological activities, active constituents and essential oil production of



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- O. Alsayyed, **H. M. Jaradat**, M. M. M. Jaradat, Z. Mustafa, F. Shatat, “Multi-soliton solutions of the BBM equation arisen in shallow water”, *Journal of Nonlinear Sciences and Applications*. Vol. 9, No. 4, pp: 1807-1814, 2016.
- R. Horchani**, "Asymmetric transport of light in linearly arrayed metallic nano-particles", *European Physical Journal Plus*, Vol. 131, No. 2, 2016.
- R. Horchani**, "Laser cooling of internal degrees of freedom of molecules", *Frontiers of Physics Journal*, Vol. 11, No. 4, 2016.
- R. Horchani**, “Cold molecules: Formation, ro-vibrational cooling and electronic conversion”, *International Journal of Modern Physics B*, Vol. 30, No. 14, 2016.
- S. A. Khan**, “Beginning to count the Number of Equivalent Resistances”, *Indian Journal of Science and Technology*, Vol. 9, No. 44, pp: 1-7, 2016.
- S. A. Khan**, “Doing numerical calculus using Microsoft EXCEL”, *Indian Journal of Science and Technology*, Vol. 9, No. 44, pp: 1-5, 2016.
- S. A. Khan**, “Ahmed Hassan Zewail (1946–2016)”, *Current Science*, Vol. 111, No. 5, pp: 936-937, 2016.
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- S. A. Khan**, “Quantum Methods in Light-Beam Optics”, *Optics & Photonics News (OPN)*, Vol. 27, No. 12, pp: 47, 2016.
- S. A. Khan**, “Reflecting on the international year of light and light-based technologies”, *Current Science*, Vol. 111, No. 04, pp: 627-631, 2016.

**S. A. Khan**, "Coordinate geometric generalization of the spherometer", Far East Journal of Mathematical Sciences, Vol. 101, No. 3, pp: 619-642, 2017.

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**S. A. Khan**, "Polarization in maxwell optics", Optik - International Journal for Light and Electron Optics, Vol. 131, pp: 733-748, 2017.

S. Al-Shara, **F. Awawdeh**, S. Abbasbandy, "An automatic scheme on the homotopy analysis method for solving nonlinear algebraic equations", Italian Journal of Pure and Applied Mathematics, Vol. 37, pp: 5-14, 2017.

T. Aftab, M. Naeem, **M. Idrees**, M.S.A Khan, L. Varshney, "Simultaneous use of irradiated sodium alginate and nitrogen and phosphorus fertilizers enhance growth, biomass and artemisinin biosynthesis in Artemisia annua L", Journal of Applied Research on Medicinal and Aromatic Plants Vol. 3, pp 186-194, 2016.

U. J. Pandit, **G. A. Naikoo**, G. A. Khan, S. Wankar, I. Khan, K. K. Raj, S. N. Limaye, "Electrochemical and Spectroscopic Evaluation on Interaction of Anticancer Drug Bicalutamide with DNA". Der Pharma Chemica, Vol. 9, pp: 82-88, 2017.

Z. Mustafa, M. M. M. Jaradat, , A. S. Ansari, Z. B. Popović, **H. M. Jaradat**, "C-class functions with new approach on coincidence point results for generalized  $\phi$ -weakly contractions in ordered b-metric spaces", SpringerPlus, Vol. 5, pp: 802-819, 2016.

Z. Mustafa, M. M. M. Jaradat, **H. M. Jaradat**, "Some common fixed point results of graphs on b-metric space", A Journal of Nonlinear Sciences and Applications, Vol. No. 6, pp: 4838-4851, 2016.

Z. Mustafa, M. M. M. Jaradat, **H. M. Jaradat**, "Some fixed point theorems for generalized contractive mappings in complete metric spaces", Journal of Mathematical Analysis, Vol. 8, No. 2, pp: 17-22, 2017.

### **Conference Papers:**

**F. Awawdeh**, A. K. Alomari, "A numerical scheme for the one-dimensional wave equation subject to an integral conservation condition", 2<sup>nd</sup> International Conference on Mathematical Sciences and Statistics, Kuala Lumpur, Malaysia, January 26-28, 2016.

**F. Awawdeh**, "High-precision quadrature schemes for fredholm integral equations of the second kind", International Conference on Mathematics and Engineering, Istanbul, Turkey, May 10-12, 2017.

**R. Horchani**, "Few-body physics with ultracold potassium rubidium mixtures", European Winter Conference On Plasma Spectrochemistry, Sankt Anton, Austria, February 19-24, 2017.

R. Sethi, P. Kumar, **S. A. Khan**, A. Aziz, A. M. Siddiqui, "Effect of nitrogen ion implantation on the structural and optical properties of indium oxide thin films", Fifth Saudi International Meeting on Frontiers of Physics, Gizan, Saudi Arabia, February 16-18 2016.

**S. A. Khan**, "Quantum aspects of charged-particle beam optics", Fifth Saudi International Meeting on Frontiers of Physics, Gizan, Saudi Arabia, February 16-18 2016.

**S. A. Khan**, "Relativistic quantum mechanics of charged particle beam optics", Frontiers in Theoretical and Applied Physics Conference 2017, Sharjah, United Arab Emirates, February 22-25, 2017.

#### **Member Editorial Board:**

**G. A. Naikoo**, "Current Research on Chemical Sciences".

### **14.6 Department of Social Sciences**

#### **Refereed Journal Papers:**

**R. Abuiyada**, A. Eteiw, "Planning of health non-governmental organizations in Palestine", Journal of Sociology and Social Work, Vol. 4, No. 2, pp: 1-9, 2016.

**R. Abuiyada**, R. Abdelkarim, "Non-governmental health organizations in Palestine from Israeli occupation to Palestinian authority", Asian Social Science, Vol. 12, No. 12, 2016.

**R. Abuiyada**, "Gender, poverty elimination and environmental protection: three key paths to sustainable rural development", International Journal of Social Science Studies. Vol. 5, No. 1, pp: 1-6, 2017.

#### **Conference Papers:**

**R. Abuiyada**, "The success of cross cultural teaching and learning at a predominantly Arab speaking institution for higher education", International Symposium on Education and Social Sciences, Singapore, September 13-15, 2016.

**R. Abuiyada**, "Students' attitudes towards voluntary services: a study of higher institutions in Dhofar region", Asia-Pacific Conference on Social Sciences and Management, Cebu, Philippines, January 04-06, 2017.

**S. Menon**, J. Wang, "Balancing cross-cultural borders: the role of emotional labor and cultural intelligence", The 3<sup>rd</sup> ESBB Conference, Taichung, Taiwan, May 18-22, 2016.

#### **Externally Funded Research:**

**R. Abuiyada**, A. Albathari, A. Kindi, R. Amri, "Students' attitudes towards voluntary services: A study of Dhofar University", FURAP Call 4, Funded by TRC.

The aim of this study was to explore university students' attitude towards voluntary services in Sultanate of Oman and also to identify the obstacles that prevent them from participating in voluntary services. A questionnaire with close-ended questions was distributed to 500 students

from Dhofar University. The findings revealed low rates of students volunteering and the popularity of occasional volunteering. It also revealed that sport and cultural organizations were the main beneficiaries of students' voluntary activities as well as local agencies. The study found that altruistic motivations are most commonly cited as reasons to volunteer is religious believes. Promote national affiliation, wanting to fill spare time, and gaining work experience are also important motivating factors. Students were clear that they wanted their volunteering to make a difference and some preferred to select activities that allowed them to see more impacts. Student volunteers report many positive impacts on their own personal development, skills and employability. The major barrier to volunteering reported by students is lack of time owing to study pressures. The study revealed no significant statistical differences regarding university students' attitude towards any kind of voluntary services and the obstacles that hinder their participation in those activities. The study also included a number of recommendations and suggestions with the aim of further strengthening university students' participation in voluntary services.

**S. Menon, T. Al Mashani, L. Al Mashani, "Prevalence of Internet Addiction among young people in Oman", FURAP Call 4, Funded by TRC.**

There is increasing evidence today from research world-wide that internet addiction is an ongoing problem and it is rapidly increasing. Just like compulsive gambling, overeating and taking alcohol or drugs some individuals who continuously and excessively use the internet have become addicted to this in much the same way as other addictions. This study examined the prevalence of Internet addiction among young people in Oman. The perverseness of technology everywhere today has created some conditions and problems in the form of addiction to the internet or Internet Addiction. In this study students from two universities in Oman, Dhofar University and Nizwa University were surveyed for internet usage using the Young's Internet Addiction scale. Many demographic variables and their relationship to these addiction behaviors were also examined. The study was analyzed using several descriptive and inferential statistical methods with the SPSS software. Some interesting findings emerged and the implications of these findings are discussed. It is suggested that proactive interventions and awareness and recognition of this addiction be done as both students and employees, could potentially become addicted to a technology that is being provided directly by the college or institution. Many recommendations for future research on this important topic are suggested.

# College of Commerce & Business Administration



AY 2016-17

## **15. Publications by College of Commerce and Business Administration**

### **15.1 Department of Accounting and Finance**

#### **Refereed Journal Papers:**

**F. N. Al Shubairi, M. Hussein**, “Investigating the impact of sustainable development supply chain on economic performance: An empirical study of Sultanate of Oman”, *International Journal of Supply Chain Management*, Vol. 5, No. 3, pp: 69-81, 2016.

**K. Khan, S. A. Jamil, M. A. Uddin**, “Performance evaluation of mutual funds in Oman: An investors' perspective”, *Journal of Business & Retail Management Research*, Vol. 10, No. 2, 2016.

**M. A. Khan**, “Working capital management and its impact on Indian SMU’s performance”; *International Journal of Economic Research*, Vol. 13, No. 5, pp: 2059-2088, 2016.

**M. A. Uddin, M. A. Khan, M. Shariq**, “An empirical study of automated teller machine users in Oman”, *International Review of Marketing and Management*, Vol. 6, No. 4, pp: 904-908, 2016.

**M. Hussein, H. M. S. Ahmed**, “Socio- environmental impacts of urban expansion: case of Arab Countries” *International Journal of Applied Business and Economic Research*, Vol. 14, No. 11, pp:7689-7706, 2016.

**M. Hussein, H. Ahmed, Mansour Alraja**, “The adoption of information and communication technology by small and medium enterprises in Oman: Case of Dhofar region”, *Journal of Business and Retail Management Research*, Vol. 11, No. 3, pp: 64–71, 2017.

**M. S. Alam, N. Alam, M. A. Khan**, “The performance analysis of Saud Bahwan group, Oman: An empirical study”, *International Journal of Economic Research*, Vol. 13, No. 5, pp: 2059-2088, 2016.

**O. I. Tawfik, E. Y. Al-Sheikh**, “The bases of application the system of time- driven activities- based costing: a field study in the Iraqi industrial companies”, *International Journal of Economic Research*, Vol. 13, No. 3, 2016.

**O. I. Tawfik, A. F. Hayek, A. Al-Smadi**, “The extend of applying the extensible business reporting language at Jordanian industrial companies, *International Review of Management and Marketing*, Vol. 7, No. 1, pp: 1-10, 2017.

**S. Mohammed, N. Sha, M. A. Uddin**, “Determinants of Islamic banks acceptance in Oman”. *International Review of Management and Marketing*, Vol. 7, No. 1, 2017.

**T. M. Al Houssary, M. A. Hussein, K. Al Mashani**, “The relationship between ownership, management and performance in family-run business in Oman: Case of Dhofar Province”, *Corporate Ownership & Control*, Vol. 14, No. 1, pp: 532-542, 2016.

**Z. O. Bilal, S. Hammami, S. A. Jamil**, “The influence of entrepreneurship education and previous entrepreneurial experience on students’ desirability to self-employment: A case study of HEIs in

Dhofar Region in Oman”, International Journal of Economic Research, Vol. 13, No. 4, pp: 1737-1749, 2016.

### **Conference Papers:**

**M. A. Khan**, “Factors affecting choice of Islamic banks in Oman”, 6<sup>th</sup> International Conference on Management Practice and Research, Delhi, India, July 22, 2016.

**M. Hussein, F. N. Al Shubairi**, “The impact of infrastructural on growth of GDP and foreign direct investment: an empirical comparative study between governorates of Sultanate of Oman”., **Regional Symposium** ‘Business in Dhofar Region: Trends, Opportunities and Challenges’, Salalah, Oman, May 26 2016.

**M. Hussein, M. H S. Ahmed**, “Impact of direct foreign investment on gross domestic product: case of Oman 1990-2014”, International Conference on Economic Development and Diversification in Sultanate of Oman, Salalah, Oman, April 26-27, 2017.

### **Member Editorial Board:**

**M. A. Khan**, “Amity Journal of Finance”.

**M. A. Uddin**, “Amity Journal of Finance”.

## **15.2 Department of Management & Marketing**

### **Books:**

**A. M. Pauceanu**, “Entrepreneurship in Gulf Cooperation Council – guidelines for starting and managing businesses”, Elsevier, Atlanta, 2016.

### **Book Chapters:**

**A. Rehman**, “Micro Takaful in India: A path towards financial inclusion and sustainable development”, Takaful and Islamic Cooperative Finance: Challenges and Opportunities, Chapter 15, Edward Elgar Publishing, UK & USA, 2016.

**S. Jamil, M. Al Ani**, “Corporate Social Responsibility (CSR) and enhancing the corporate governance in Omani banking system”, Banking Sector in Oman: Strategic Issues, Challenges and Future Scenarios”, College of Banking and Financial Studies, Sultanate of Oman, 2017.

### **Refereed Journal Papers:**

**A. A. Syed, G. S. Brain, K. Khan, D. M. Hepburn, S. A. Siddiqui**, “Stochastic behavior of propagation of partial discharge acoustic signals in transformer oil”, International Journal of Applied Engineering Research, Vol. 11, No. 12, pp: 7702-7707, 2016.

**A. M. Pauceanu**, “Business performance management - an innovative approach”, LUMEN NASHS 2015 Proceedings, Medimond – Monduzzi Editore, Italy, ISBN 978-88-7587-728-6, 2016.

**A. M. Pauceanu**, “Innovation and entrepreneurship in Sultanate of Oman - an empirical study”, The International Journal of Entrepreneurship and Sustainability Issues, Vol. 4, No. 1, pp: 83- 99, 2016.

**A. M. Pauceanu, M. Ahmad, A. A. A. Abumraen**, “A 21st century touristic perspective on United Arab Emirates, Qatar and Sultanate of Oman”, *International Journal of Applied Business and Economic Research*, Vol. 14, NO. 11, pp: 7737-7749, 2016.

**A. M. Pauceanu, S. Sahli**, “Sustainable economic development policies in Romania within the EU and Brexit context”, *Journal of Security and sustainability issues*, Vol. 6, No. 1, pp: 167 - 178, 2016.

**A. M. Pauceanu, S. Sahli**, “Success factors for entrepreneurs in Sultanate of Oman-an empirical study”, *Ponte International Scientific Researches Journal*, Vol. 72, No. 11, pp: 349-371, 2016

Fatima, **R. Imran**, U. Noreen, “Antecedents and outcomes of employee wellbeing: a path model approach”, *Journal of Innovative Research in Education & Management*, Vol. 1, No. 1, pp: 1-50, 2016.

**K. Khan**, “Bayesian analysis for lower bounds of reliability function for log normal distribution”, *International Journal of Agricultural and Statistical Sciences*, Vol. 12, No. 1, pp: 193-197, 2016.

**K. Khan**, “Reliability analysis of Mukherjee Islam distribution under three different prior distributions”, *Global Journal of Pure and Applied Mathematics*, Vol. 12, No. 3, pp: 2513-2522, 2016.

**M. Ahmed, A. Kahwaji, O. Durrah, K. Allil**, “The impact of strategic flexibility on the performance of private banks during the crisis in Syria”, *International Journal of Economic Research*, Vol. 13, No. 5, pp: 2089-2097, 2016.

**M. Hamdoun**, M. Zouaoui, “Impact of environmental management on competitive advantage of Tunisian companies: the mediator role of organizational culture”, *International Review of Management and Marketing*, Vol. 7, pp: 76-82, 2017.

M. Yasir, **R. Imran**, M. K. Irshad, N. A. Mohamad, M. M. Khan, “Leadership styles in relation to employees’ trust and organizational change capacity: evidence from non-profit organizations”, *SAGE Open*, Vol. 6, No. 4, pp: 1-12, 2016.

N. Khmour, **O. Durrah**, A. Abu A’aqoulah, “The role of applying total quality management in improving incentives: a comparative study between Jordanian and United Arab Emirate hospitals”, *International Journal of Business and Management*, Vol. 11, No. 11, pp: 126-138, 2016.

**O. Durrah**, A. Alhamoud, **K. Khan**, “Positive psychological capital and job performance: the mediating role of job satisfaction”, *Ponte, International Scientific Researches Journal*, Vol. 72, No. 7, pp: 214-225, 2016.

**O. Durrah, A. Alhamoud, K. Khan**, “Positive psychological capital and job performance: the mediating role of job satisfaction”, *Ponte*, Vol. 72, No. 7, pp: 214-225, 2016.



S. Rabbani, **R. Imran**, S. Shamoan, N. Kamal, "Directive leadership and satisfaction: a unique relationship", *Advanced Science Letters*, Vol. 23, No. 1, pp: 337-340, 2017.

**S. A. Jamil, K. Khan**, "A study of customer satisfaction on select service dimensions with reference to ATMs and CDMs services in Oman", *The Journal of Business and Retail Management Research*, Vol. 10, No. 3, pp: 106-113, 2016.

**Z. O. Bilal, O. Durrah, T. S. Attiya**, "Comparative study on performance of Islamic banks and conventional banks: evidence from Oman", *International Journal of Economics and Financial Issues*, Vol. 6, No. 4, pp: 1835-1841, 2016.

### **Conference Papers:**

**A. Rehman**, J. Jaboob, "Exploring consumer attitudes towards halal tourism in Oman", *International Conference on Economic Development and Diversification: Contemporary Issues, Strategies and Opportunities for Sustainable Development in Oman*, Salalah, Oman, April 26-27 2017.

A. Fatima, **R. Imran & U. Noreen** "Antecedents and outcomes of employee wellbeing: a path model approach", *IAARHIES International Conference*, London, UK, October 05-06, 2016.

**A. M. Pauceanu**, "Entrepreneurial ethics - Evidence from GCC", 2<sup>nd</sup> CEE LUMEN Multidimensional Education and Professional Development, Ethical Values Conference, Targoviste, Romania, November, 2016.

M. A. Achabou, S. Dekhili, **M. Hamdoun**, "'I would like a European eco-product!': A study on the preference of Algerian and Tunisian consumers for local ecological products", *Academy Marketing of Science Annual Conference*, Coronado, USA, May 24-26, 2017.

**O. Durrah**, A. Baomar, **M. Gharib**, "The role of organizational culture in improving the process of knowledge sharing among faculty members in Dhofar University", *International Conference of Assessment, Quality and Academic Accreditation in Higher Education*, Amman, Jordan, April 18 – 20, 2017.

**R. Imran, K. Al-Ansi**, A. Fatima, "Mediating effect of psychological capital between transformational leadership and innovative work behaviour; an investigation within Omani Context", *28th International Business Information Management Association Conference*, Seville, Spain, November 9-10, 2016.

**S. Ghouse**, "Barriers to export performance in SMEs: Insights from an emerging economy", *6th Henley Business School Conference*, Reading, United Kingdom, April 6-8 2017.

**S. Sanyal, M. W. Hisam**, "A Study of tourism using demographic and travel characteristics – the case of Salalah, Sultanate of Oman", *3<sup>rd</sup> International Conference on Applied Business and Economic Research*, New Delhi, India, July 30-31, 2016.

**S. Sanyal, M. W. Hisam**, “Opportunities and challenges for e-commerce in the MENA Region”, 1<sup>st</sup> Symposium on Business in Dhofar Region: Trends, Opportunities and Challenges, Salalah, Oman, May 26, 2016.

**Exhibition:**

**O. Durrah**, “Omani Products Exhibition”, Ministry of Commerce and Industry, Sultanate of Oman, February 12-14 and March 1-2 2017.

**Member Editorial Board:**

**A. M. Pauceanu**, “Economics and Sociology Journal”.

**K. Khan**; “Vikas Vimarsh- An International Multidisciplinary Refereed Research Journal”.

**O. Durrah**, “International Journal of Public Leadership”.

**O. Durrah**, “Ponte International Scientific Researches Journal”.

**O. Durrah**, “Journal of Public Administration”.

**R. Imran**, “International Journal of Management and Administrative Sciences”.

**Externally Funded Research:**

**R. Imran**, M. Qatan, A. Bait Rajab, “Designing a high performance work system; A key step towards building employee engagement in the health sector”, FURAP Call 4, Funded by TRC.

This research aimed at identifying appropriate bundle of human resource practices (such as selective recruitment, training and development, empowerment, competitive pay and job rotation) that would help the health sector organizations to develop High Performance Work Systems that are needed to have engaged employees for quality health services. A convenient sample of 422 employees from health sector of Dhofar region of Oman was selected for the study. This research examined the currently followed Human resource practices in health organizations in Dhofar region. Interviews were conducted with the administrative staff, doctors and paramedical staff to identify the gap between current practices and desired practices. The indigenous high performance work system practices were identified for the health sector. Moreover, the impact of these identified high performance work system on employee engagement was empirically tested. The results revealed that all the practices except job rotation had positive and significant effect on employee engagement. Limitations and implications were also discussed and suggestions have been made for future research.

U. Noreen, **R. Imran**, “Talent management: an issue of strategic importance for banking sector in gulf region”, Funded by Prince Sultan University, Riyadh, Saudi Arabia.

The research aimed at providing a road map for Gulf region focusing on sample of Saudi and Omani banking sector for playing their part in country’s economic growth. The proposed research is also an attempt to help these organizations develop such systems that lead to the attraction, retention and growth of local human talent needed to cope with current turbulent situation. It

aims at identifying the indigenous talent management practices necessary for increased organizations performance.

### **15.3 Department of Management Information Systems**

#### **Refereed Journal Papers:**

A. Rashed, **S. Hammami**, “An efficient revocation scheme for stateless receiver with less encryption and less key storage”, *Journal of Engineering and Applied Sciences*, Vol. 12, No. 2, pp: 556-559, 2017.

A. B. Brahim, **M. Limam**, “Ensemble feature selection for high dimensional data: a new method and a comparative study”, *Advances in Data Analysis and Classification*, pp: 1-16, doi:10.1007/s11634-017-0285-y, 2017.

D. Mejri, **M. Limam**, C. Weihs, “A new dynamic weighted control Chart for data streams”, *Soft Computing*, pp:1-12, 2016. DOI 10.1007/s00500-016-2351-3

D. Mejri, **M. Limam**, C. Weihs “Monitoring a dynamic weighted majority method based on real datasets with concept drift”, *Analysis of Large and Complex Data*, pp: 241-250, 2016.

F. Alkhaldi, **S. Hammami**, S. Kassem, A. Rashed, **M. Alraja**, “Enterprise system as business intelligence and knowledge capabilities for enhancing applications and practices of IT governance”, *International Journal of Organizational and Collective Intelligence*, Vol. 7, No. 2, pp: 63-77, 2017.

F. M. Alkhaldi, **S. Hammami**, A.Mohammed, “Understating value characteristics toward a robust IT governance application in private organizations using COBIT framework”, *International Journal of Engineering Business Management*, Vol. 9, No. 1, 2017.

**M. Alraja**, “The effect of social influence and facilitating conditions on E-Government acceptance from the individual employees’ perspective”, *Polish Journal of Management Studies*, Vol. 14, No. 2, pp: 18-27, 2016.

**M. Alraja, S. Hammami**, B. Chikhi, S. Fekir, “The influence of effort and performance expectancy on employees to adopt E-government: Evidence from Oman”, *International Review of Management and Marketing*, Vol.6, No. 4, pp: 930-934, 2016.

**M. Alraja, S. Hammami, H. AlSamman**, “Investment in Information and communication technology in developing countries: The effect of foreign direct investment-evidences from Sultanate of Oman”, *International Journal of Economics and Financial Issues*, Vol. 6, No. 4, pp: 1632-1636, 2016.

**M. Alraja**, B. Salim, **M. A. Uddin, M. Yousoof**, “The Adoption of internet banking: clients’ perspective in Oman”, *International Review of Management and Marketing*, Vol. 6, No. 4, pp: 926-929, 2016.

**S. Khan, M. Yousoof**, “Al-Shifa: A case study on Sultanate of Oman's national health care

information systems”, Indian Journal of Science and Technology, Vol. 10, Issue 17, 2017.

**S. Hammami**, F. M. Alkhalidi, “Individual, managerial and collaborative capabilities of organizational knowledge”, International Business Management, Vol. 11, No. 1, pp: 156-164, 2017.

#### **Conference Papers:**

B. Chikhi, S. Fekir, **M. Alraja**, “The role of foreign direct investment in supporting the economic growth and achieving the sustainable development in the developing countries”, The fifth International Seminary about: Foreign Direct Investments and the future of Free Industrial Zones for Export, Boumerdes, Algeria, May 25-26, 2016.

H. Nakouri, **M. Limam**, “Robust generalized low rank approximation of matrices for image recognition”, IEEE International Symposium on Signal Processing and Information Technology, Limassol, Cyprus, Dec, 12-14, 2016.

H. Nakouri, **M. Limam**, “An incremental Two-Dimensional principal component analysis for image compression and recognition”, 12<sup>th</sup> International Conference on Signal-Image Technology and Internet-Based System, Naples, Italy, Nov 28 - Dec 1, 2016.

**M. Alraja**, **S. Hammami**, **H. Al Samman**, “The effect of foreign direct investment in information and communication technology in developing countries-the case of sultanate of Oman”, The fifth International Seminary about: Foreign Direct Investments and the future of Free Industrial Zones for Export, Boumerdes, Algeria, May 25-26, 2016.

**M. Alraja**, B. Salim, **M. A. Uddin**, **M. Yousoof**, “Clients' readiness to adopt internet banking: field study in Dhofar Region”, The first Symposium on 'Business in Dhofar Region: Trend's, Opportunities and Challenges, Salalah, Oman, 26<sup>th</sup> May, 2016.

**M. Alraja**, **M. Hussein**, H. Ahmed, “The influence of organizational and technological factors in SMEs readiness to adopt IT”, International Conference on Economic Development and Diversification: contemporary Issues, Strategies and Opportunities for Sustainable development in Oman, Salalah, Oman, April 26-27 2017.

**S. Hammami**, **Z. O. Bilal**, **S. A. Jamil**, **A. Mohammed**, “Influence of the entrepreneurs capabilities, desirability and government support on self-employment intention: A case of HEIs in Oman”, International Conference On Economic Development and Diversification, Salalah, Oman, April 26-27, 2017.

#### **Exhibition:**

**S. Hammami**, “The second national exhibition of Omani products and entrepreneurs”, Dhofar University and Rysut Industrial Zone, 1<sup>st</sup> & 2<sup>nd</sup> March, 2017.

**S. Hammami**, “Linking Oman's Higher Education Institutions with the Public and Private Sectors”, Muscat, Oman, May 7-9, 2017.

# College of Engineering



AY 2016-17

## **16. Publications by College of Engineering:**

### **16.1 Department of Architecture Engineering**

#### **Refereed Journal Papers:**

B. Yapiçioğlu, L. Cazacova, "The building as a statement of an artefact: The Mijmara", International Journal of Ecology & Development, Vol. 31, No.3, pp: 99-116, 2016.

L. Cazacova, "Sustainable built cultural heritage conservation with cradle to cradle", International Journal of Energy and Environment, Vol. 10, pp: 61-69, 2016.

L. Cazacova, "Green courses and heritage conservation for sustainable development", International Journal of Environmental Science, Vol. 2, pp: 200-209, 2017.

#### **Conference Papers:**

L. Cazacova, F. Abbassi, "Dhofari Eco-House Project", poster presentation, TRC Annual Day, Muscat, Oman, October 5, 2016.

#### **Externally Funded Research:**

L. Cazacova, F. Abbassi, M. Ul Islam, K. Adam, S. Mana, W. Osman, M. Farhan, L. Mohammed, F. Al Housni, O. Fraz Khan, "SoLLite - Salalah", Solar Decathlon Middle East 2018 Competition by DEWA Dubai and US Department of Energy.

The Solar Decathlon is an international competition in which universities from all over the world meet to design, build and operate a grid-connected, solar powered house. The houses use solar energy as the only energy source and are equipped with all the technologies that permit maximum energy efficiency. During the final phase of the competition teams assemble their houses in a main expo area, open to the general public, while undergoing the 10 contests of the competition. There are 22 teams from 16 different countries and SoLLite – Salalah is the single team representing Sultanate of Oman.

L. Cazacova, K. Adam, S. Mana, F. Abbassi, S. Grami, M. Farhan, L. Mohammed, F. Al Housni, O. Fraz Khan, "EHDC2 (Eco-House Second phase)", Funded by The Research Council of Oman.

Through research and innovation in architecture, environment and renewable energy the competition raises awareness of the possibilities and importance of green building and eco-design. Higher Education Institutions will compete in designing houses that are innovative in architecture, engineering and inspiration. The designs will incorporate smart technology and may either use new ideas or reinterpret traditional styles.

### **16.2 Department of Chemical Engineering**

#### **Book Chapter:**

M. Ul Islam, S. Khan, M. W. Ullah, J. K. Park, "Recent advances in biopolymer composites for environmental issue, Handbook of Composites from Renewable Materials Scrivener Publishing LLC, 2017.

### **Refereed Journal Papers:**

A. Hameed, R. Ullah, M. Ul Islam, "Facile synthesis of hair extract capped gold and silver nanoparticles and their biological applications", RSC Advances, Vol. 6, 113452-113456, 2016.

A. Khalid, R. Khan, **M. Ul-Islam**, T. Khan, F. Wahid, "Bacterial cellulose-zinc oxide nanocomposites as a novel dressing system for burn wounds", Carbohydrate Polymers, Vol. 164, pp: 214–22, 2017.

**A. S. Ibrahim** and **T. S. Mohammed**, "Mathematical model for gas phase in fluidized bed catalytic reactor for ammoxidation of propene to acrylonitrile", Journal of Engineering and Applied Sciences, Vol. 11, No. 1, pp:78-84, 2016.

**A. S. Ibrahim**, "Mathematical model of a highselectivity technique to describe and treat cancer diseases using healthy food", Wulfenia Journal, Vol. 23, No. 6, 2016.

**A.S. Ibrahim**, A. S. Al Buloshi, S. S. Al Zaabi and L. A. Al Yafai, "Mathematical model describes treatment of waste water using modified activated carbon", The Journal of Engineering Research, Vol. 14, No. 1, 94-104, 2017.

**M. Ul Islam**, Mu. W. Ullah, S.Khan, T. Kamal, S. Ul-Islam, N. Shah, J. K. Park, "recent advancement in cellulose based nanocomposite for addressing environmental challenges", Recent Patents on Nanotechnology, Vol. 10, pp: 169-180, 2016.

**M. Ul Islam**, M. W. Ullah, S. Khan, J. K. Park, "Strategies for cost effective production of bacterial cellulose", International Journal of Biological Macromolecules, Vol. 102, pp: 1166-1173, 2017.

**M. Ul Islam**, Na. Shah, S. Khan, W. Ullah, "Current advancements of magnetic nanoparticles in adsorption and degradation of organic pollutants", Environmental Science and Pollution Research, Vol. 24, pp: 12713-12722, 2017.

M. W. Ullah, **M. Ul Islam**, S. Khan, N. Shah, J. K. Park, "Recent advancements in bio reactions and cellular systems: the example of bacterial cellulose", Korean Journal of Chemical Engineering, Vol. 34, No. 6, pp: 1591-1599, 2017.

**M. Z. Othman**, **T. S. Mohammed**, A. B. Ali, "Neural network classification of white blood cell using microscopic images", International Journal of Advanced Computer Science and Applications, Vol. 8, No. 5, 2017.

N. Shah , F. Claessyns , S. Rimmer , M. B. Arain , T. Rehan, **A. Wazwaz** , **M. W. Ahmad**, **M. Ul-Islam**, "Effective role of magnetic core-shell nanocomposites in removing organic wastes from water", Recent Pat Nanotechnology, Vol. 10, No. 1, pp: 202-212, 2016.

S. Khan, **M. Ul Islam**, M. Ikram, M. W. Ullah, F. Subhan, Y. Kima, J. H. Janga, S. Yoon, and J. K. Park, "Three-dimensional microporous and highly biocompatible bacterial cellulose-gelatin composite scaffolds for tissue engineering applications", RSC Advances, Vol. 6, No. 112, pp: 110840-110849, 2016.

T. Kavitha, T. Kamal, **M. Ul Islam**, "Thermal decomposition of metal complex precursor as route to the synthesis of  $\text{Co}_3\text{O}_4$  nanoparticles: Antibacterial activity and mechanism", Journal of Alloys and Compounds, Vol. 704, pp: 296-304, 2017.

### **Conference Papers:**

**A. Wazwaz**, S. Grami, "Medical sterilization using concentrated parabolic dish collector", Annual Research Forum", Muscat, Oman, October 4-5, 2016.

**A. Wazwaz**, A. Al-Hkmani, M. Tabook, K. AL-Mashikhi, "Kinetic study of the corrosion of some household alloys by seawater at different temperatures", 7th National Symposium on Engineering Final Year Projects, Nizwa, Oman, May 3, 2017.

**A. Saadi**, H. Issa, S. Ahmed, S. Ali, M. Said, "A Studying of Gasoline Flow through Sand by Changing the Diameter of Cylindrical Reservoir", 10<sup>th</sup> International Conference on Thermal Engineering: Theory and Application, February 24-26, 2017 Muscat, Oman.

**A. Saadi**, A. Musallam, N. Ali, "A study of gasoline flow through sand by changing the angle of cylindrical reservoir with respect to vertical", 10<sup>th</sup> International Conference on Thermal Engineering: Theory and Application, Muscat, Oman, February 24-26, 2017.

**A. Saadi**, N. Salim, T. Amor, L. Said, N. Mohammed, "A study of gasoline flow through sand by changing the height of cylindrical reservoir with respect to vertical", 10<sup>th</sup> International Conference on Thermal Engineering: Theory and Application, Muscat, Oman, February 24-26, 2017.

**A. Saadi**, Z. Ahmed, L. Mohammed, L. Ali, M. Aqeel, "Modified diesel fuel of Omani engine oils using bio waste", 10<sup>th</sup> International Conference on Thermal Engineering: Theory and Application, Muscat, Oman, February 24-26, 2017.

**A. Saadi**, A. Khamis, "Study and analysis the physical properties of Oman's date palms compare to date palm of Al-Madinah", 10<sup>th</sup> International Conference on Thermal Engineering: Theory and Application, Muscat, Oman, February 24-26, 2017.

**A. Saadi**, A. Khamis, "Study and analysis the chemical, physical and nutrient properties of Oman's date compare to date of al-Madinah", 12<sup>th</sup> International Chemical Engineering Gathering, Muscat, Oman, February 12, 2017.

**A. Saadi**, Z. Ahmed, L. Mohammed, L. Ali, M. Aqeel "Modified diesel fuel of Omani engine oils using bio waste", 12<sup>th</sup> International Chemical Engineering Gathering, Muscat, Oman, February 12, 2017.

**M. W. Ahmad**, A. A. Almezeni, Y. M. Safrar, "Detection of cancer cell inside the animal body", Muscat, Oman, November 28-30, 2016.



**M. Ul Islam, M. W. Ahmad, M. W. Arshad**, “Bacterial cellulose nanocomposites; impressive biomaterial for practical applications in medical fields”, 11<sup>th</sup> International Conference On Composite Science and Technology, Sharjah, UAE, April 4-6, 2017.

**M. Ul Islam**, “Bio-ethanol, “A renewable energy source from waste of beer industry”, International Conference on Oil, Gas and Petrochemistry, Dubai, UAE, April 3-5, 2017.

R. Munir, E. Hamdan, F. Muhammed, A. Al shahri, M. Madian, M. W. Arshad, **M. Ul Islam**, “Synthesis of bio-cellulose facial masks for biomedical applications”, 7<sup>th</sup> National Symposium on Engineering Final Year Projects, Nizwa, Oman, May 3, 2017.

E. Ali, E. Hamed, W. Khasib, M. W. Arshad, **M. Ul Islam**, “Synthesis of cellulose of zinc oxide nanocomposite for medical application”, 7<sup>th</sup> National Symposium on Engineering Final Year Projects, Nizwa, Oman, May 3, 2017.

R. Munir, **M. Ul Islam**, “Bio-cellulose facial masks from cheap raw materials for biomedical applications”, Oman Talent Expo, Muscat, Oman, December, 2016.

**M. W. Ahmad, M. Ul Islam**, “Iodine compound coated nanomaterials for the measurement of MR Relaxivities and in vitro cytotoxicity”, 11<sup>th</sup> International Conference on Composite Science and Technology, Sharjah, United Arab Emirates, April 4-6, 2017.

#### **Exhibition:**

**A. Wazwaz**, “Oman Energy and Water”, Muscat, Oman, May 1-3, 2017.

R. Munir, **M. Ul Islam**, “Oman Talent Expo”, Muscat, Oman, December, 2016.

A. Ahmad, **M. W. Ahmad**, “Oman Talent Expo”, Muscat, Oman, December, 2016.

#### **Member Editorial Board:**

**A. Wazwaz**, “Renewable Energy Research”.

**A. Wazwaz**, “International Journal of Application or Innovation in Engineering & Management”.

**A. Wazwaz**, “International Journal of Application or Innovation in Engineering & Management”.

**A. Wazwaz**, “World Journal of Advanced Engineering and Technology”.

**A. S. Ibrehem**, “Advanced Science and Engineering Research”.

**A. S. Ibrehem**, “Journal of Purity, Utility Reaction & Environmental”.

#### **Externally Funded Research:**

**M. Ul Islam**, E. Hatmi, R. Munir, “Synthesis of Bacterial Cellulose facial masks for Industrial applications”, FURAP Call 4, Funded by TRC.

Bio-cellulose, a microbially produced biopolymer has received immense interest in diverse fields including bio-medical. The objective of the current study was to synthesize the bio-cellulose facial masks for skin care and related bio-medical applications. The bio-cellulose was synthesized through static cultivation strategy using *acetobacter xylinum* strain. Microbial cells were inoculated to synthetic culture media at optimized conditions and sheets of bio-cellulose were produced. Physical characterization indicated that bio-cellulose can absorb and hold around 68 times water of their weight. The high water holding capabilities of bio-cellulose argue that they can absorb medicine, pharmaceutical and cosmetic products. The bio-cellulose facial mask was further treated with various bio-safe fragrant materials to enhance its properties for the skin care and to give it a pleasant aroma which made the facial mask suitable for practical use. We hope that this finding of current project will open new gateways for promoting research related to synthesis and medical applications of bio-products in Oman.

**Dr. Wasi Ahmad**, " Surface modified Gd<sub>2</sub>O<sub>3</sub> nanoparticles for magnetic resonance imaging (MRI) contrast agents ", FURAP Call 4, Funded by TRC.

Magnetic resonance imaging (MRI) is widely used in modern clinical medicine as a diagnostic tool, and provides noninvasive and three-dimensional visualization of biological phenomena in living organisms with high spatial and temporal resolution. Therefore, considerable attention has been paid to magnetic nanoparticles as MRI contrast agents with efficient targeting ability and cellular internalization ability, which make it possible to offer higher contrast and information-rich images for detection of disease. In this report, we synthesized oxalic acid coated Gd<sub>2</sub>O<sub>3</sub> and ZnO nanoparticles. The surface modification of the Gd<sub>2</sub>O<sub>3</sub> nanoparticles were confirmed by FT-IR spectroscopy. From the FI-IR, it was confirmed that the nanoparticles are well coated with oxalic acid. The synthesized materials will be used for the in vitro test. Furthermore, the materials will be used for the in vivo test if the nanoparticles will be biocompatible.

### **16.3 Department of Civil Engineering**

#### **Refereed Journal Papers:**

A. Fahmy, M. H. El Nagggar, "Cyclic lateral performance of helical tapered piles in silty sand", The Journal of the Deep Foundations Institute, Vol. 10, No. 3, pp: 111-124, 2017.

### **16.4 Department of Electrical and Computer Engineering**

#### **Refereed Journal Papers:**

**A. Abu-Elanien**, A. Abdel-Khalik, A. Massoud, S. Ahmed "A non-communication based protection algorithm for multi-terminal HVDC grids", Electric Power Systems Research Journal, Vol. 144, pp: 41-51, 2017.

A. Sajid, **I. Baig**, K. Manzoor, S. Zulfiqar, "Performance evolution of reactive, proactive and hybrid routing protocols in MANET", International Journal of Computer Science and Information Security, Vol. 14, No. 12, pp: 144-149, 2016.

A. Sajid, K. Hussain, **I. Baig**, "A model to overcome node level congestion in opportunistic networks", International Journal of Computer Science and Information Security, Vol. 14, No. 12, pp: 95-102, 2016.

A. Sajid, K. Hussain, **I. Baig**, "A survey on congestion handling techniques in opportunistic networks" *International Journal of Computer Science and Information Security*, Vol. 14, No. 7, pp. 490-502, 2016.

A. Sajid, K. Hussain, **Imran Baig**, "Reactive Buffer management model to handle congestion at node level in opportunistic network" *International Journal of Computer Science and Information Security*, Vol. 14, No. 8, pp. 78-87, 2016.

A. U. Ghafoor, M. Sher, M. Imran, **I. Baig**, "Disjoint key establishment protocol for wireless sensor and actor networks," *Journal of Sensors*, Vol. 2016, pp: 1-15, 2016.

**I. Baig**, "PAPR reduction in 5G cellular networks: A new DCMT precoding based downlink NOMA system" *International Journal of Computer Science and Information Security*, Vol. 14, No. 11, pp. 1020-1024, 2016.

**I. Baig**, "A precoding based multicarrier non-orthogonal multiple access scheme for 5g cellular networks," *IEEE Access*, Vol. 5, pp: 19233-19238, 2017.

M. Ayaz, M. Ahammadin, **I. Baig**, E. M. Aggoune, "Wireless sensor's civil applications, prototypes and future integration possibilities: A review," *Journal of Sensors*, DOI: 10.1109/JSEN.2017.2766364, 2017.

M. Khan, I. U. Khan, **I. Baig**, "A new hybrid pre-coding based Interleaved Orthogonal Frequency Division Multiple Access (IOFDMA) system for vehicular ad-hoc network", *Science International*, Vol. 28, No. 2, pp: 913-918, 2016.

**P. Valsalan**, O. Shibi, P. Manimegalai, "Full adder topologies for improved plethysmograph performance", *Journal of Advanced Research in Dynamical & Control Systems*, Special Issue on Recent Trends in Engineering and Managerial Excellence, 2017.

**Prajoona Valsalan**, P. Manimegalai, "Analysis of area delay optimization of improved sparse channel adder", *Pakistan Journal of Biotechnology*, Vol. 14, Special Issue II, pp: 209-213, 2017.

**R. Mamlook et. al**, "A fuzzy simulated annealing algorithm for minimizing consumer electricity bill under demand response" *International Journal of Computer Science and Information Security*, Vol. 14, No. 11, pp: 659-670, 2016.

**R. Mamlook et. al**, "Advanced fuzzy control innovative solar tracking system for solar distillation system" *International Journal of Computer Science and Information Security*, Vol. 14, No. 11, pp: 144-160, 2016.

**R. Mamlook et. al**, "Controlling future intelligent smart homes using wireless integrated network systems", *International Journal of Computer Science and Information Security*, Vol. 15, No. 2, pp: 86-112, 2017.

**R. Mamlook, A. S. Ibrahim**, “Advance mathematical model of acrylamide analysis using Fuzzy logic” International Journal of Computer Science and Information Security, Vol. 15, No. 1, pp: 348-354, 2017.

S. Aslam, **N. U. Hasan**, A. Shahid, J. W. Jang, K. G. Lee, “Device centric throughput and QoS optimization for IoTs in a smart building using CRN-Techniques”, Sensors, Vol. 16, pp: 1647, 2016.

S. Aslam, **N. U. Hasan**, J. W. Jang, K. G. Lee, “Optimized energy harvesting and channel allocation for IoTs in smart cities”, Sensors, Vol.16, No. 12, pp: 2046, 2016.

S. Saand, F. Memon, M. M. Rind, V. Jeoti, **I. Baig**, N. K. Tanwani, “Receive and transmit beamforming in dual-hop relay network using fukunaga koontz transform based SINR and SLNR maximization”, The Sindh University Research Journal, Vol.48, No. 4D, pp: 61-66, 2016.

#### **Conference Papers:**

**M. Zghaibeh, N. Ul Hasan**, “SAM: Scalable Addressing Mechanism for structured P2P networks”, Third International Afro-European Conference for Industrial Advancement, Marrakesh, Morocco, November 21-23, 2016

**I. Baig, N. Ul Hasan, M. Zghaibeh**, I. Ullah Khan, A. S. Saand “, A DST precoding based uplink NOMA scheme for PAPR reduction in 5G wireless network”, 7<sup>th</sup> International Conference on Modeling, Simulation and Applied Optimization, Sharjah, UAE, April 4-6, 2017.

**T. S. Mohammed**, S. M. Al Blushi, M. F. Al Musalhi, Z. S. Al Ismaili, M. R. Al Khayairi, “Adaptive traffic control system”, 7<sup>th</sup> National Symposium Engineering Final Year Project., Nizwa University, Oman, May 3, 2017.

**P. Valsalan**, O. Shibi, P. Manimegalai, “Analysis of submicron adder circuits ”, 6th IEEE International Conference on Communication and Signal Processing, Tamilnadu, India, April 06-08 ,2017.

S. Qureshi, S. Ahmad, A. A. Ikram, **N. Ul Hasan**, “Joint energy and throughput based multichannel assignment in cognitive radio sensor networks”, IEEE 3<sup>rd</sup> International Symposium on Telecommunication Technologies, Kuala Lumpur, Malaysia, Nov 28-30, 2016.

#### **Exhibition:**

**T. S. Mohammed**, S. M. Al Blushi, M. F. Al Musalhi, Z. S. Al Ismaili, M. R. Al Khayairi, “Adaptive traffic control system”, The 3<sup>rd</sup> Information and Technology Exhibition 2016, Muscat, Oman, December 19-20, 2016.

#### **Member Editorial Board:**

**N. Ul Hasan**, “Annals of Telecommunication”.

**N. Ul Hasan**, “IEEE Access”.

**N. Ul Hasan**, “International Journal of Information Technology and Electrical Engineering”.

**T. S. Mohammed**, “Computer Science and Information Technology”.

**T. S. Mohammed**, “International Journal of Research in Computer Science and Electronics Technology”.

#### **Externally Funded Research:**

**M. Zghaibeh**, M. Kashoob, N. Alamri, N. Amri, T. Qatan, M. Tabuk "Ad-hoc Remotely Controlled Rover System", FURAP Call 4, Funded by TRC.

Our project is an Ad-hoc Robot Vehicle system that is able to be controlled remotely by the user. The system is consisting of two vehicles and a control unit. The vehicles are a mother vehicle and a daughter vehicle which follows the mother or can be controlled also independently. The MOTHER vehicle will have a vision system that captures its surroundings. The communication link between the vehicles and the control unit will be achieved by implementing XBEE modules. Finally, the included sensors in MOTHER vehicle are GPS, smoke, and distance sensor, we can include different type of sensors based on the Vehicle goals.

### **16.5 Department of Mechanical and Mechatronics Engineering**

#### **Refereed Journal Papers:**

A. Karrech, **F. Abbassi**, H. Basarir, M. A. Khorassani, “Self-consistent fractal damage of natural geo-materials in finite strain”, *Mechanics of Materials*, Vol. 104, pp: 107–120, 2017.

**S. Grami**, Y. Gharbia, “Identification of GMS friction model using a new switching function: Experimental investigation”, *International Journal of Modelling, Identification and Control*, Vol. 27, No. 1, 2017.

R. Amin, **H. Bhowmik**, M. uddin, S. M. K. Hossain, “Development of a PLC controlled drilling machine”, *International Journal of Electronics & Date Communication*, Vol. 3, No. 5, pp: 148-153, 2016.

**F. Abbassi**, **M. Srinivasan**, C. Loganathan, R. Narayanasamy, M. Gupta, “Experimental and numerical analyses of magnesium alloy hot workability”, *Journal of Magnesium and Alloys*, Vol. 4, No. 4, pp: 295-301, 2016.

A. Ullah, **F. Ahmad**, H. W. Jang, S. W. Kim and J. W. Hong, “Review of Analytical and Empirical Estimations for Incident Blast Pressure”, *KSCE Journal of Civil Engineering*, 2017.

**F. Ahmad**, **F. Abbassi**, J.W. Hong, S. H. Chang, M. K. Park, “Hygroscopic effects on the penetration-resistance behavior of a specially-orthotropic CFRP composite plates, *Composite Structures*, Vol. 176, pp: 1073-1080, 2017.

#### **Conference Papers:**

**S. Grami**, R. Fareh, “Friction compensation in a 2DOF Robot Manipulator”, The 7<sup>th</sup> Edition of the International Congress on Design and Modelling of Mechanical Systems, Hammemet, Tunisia, March 27-29, 2017.

**H. Bhowmik, A. Faisal**, “Experimental analyses of natural convection and radiation heat transfer from a horizontal cylinder”, 10<sup>th</sup> International Conference on Thermal Engineering: Theory and Applications, Muscat, Oman, February 26-28, 2017.

**F. Ahmad, F. Abbassi**, J. W. Hong, “Numerical simulation of impact resistance of CFRP plates with different fiber angles”, 11<sup>th</sup> International Conference on Composite Science and Technology, Sharjah, United Arab Emirates, April 4-6, 2017.

**F. Abbassi, F. Ahmad**, C. Garnier, “Numerical and experimental damage analysis of carbon/PPS composite under uniaxial and biaxial loading”, International Symposium on Advanced Material Research, Seoul, South Korea, March 17-19, 2017.

**F. Abbassi and F. Ahmad**, “Experimental, numerical and theoretical forming limit diagrams development for sheet metal”, International Conference on Applied Mechanics and Industrial System, Muscat, Oman, December 6-8, 2016.

#### **Externally Funded Research:**

**F. Abbassi, S. Grami**, “Natural Fractures Reactivation and its impact on Enhanced Oil Recovery, funded by TRC, in process.

The ever-increasing energy demand and decline in number and size of new oil discoveries have set the stage for advanced research on new technologies including Enhanced Oil Recovery (EOR). This technology, which involves the injection of fluids into hydrocarbon reservoirs to increase its pressure, proved to be economically viable and environmentally friendly to a large extent. In Oman, this technology allowed to increase oil production by 17% in 2009 after a decrease of 27% between 2001 and 2007. EOR is particularly mature in conventional reservoirs, as it has been used extensively for decades. However, it still needs an extensive research work to adapt it to naturally fractured reservoirs. The purpose of this project is to investigate fractures’ reactivation due to fluids injection at different levels of temperature and pressure and identify the impact of such operations on the performance of fractured reservoirs. This research work will use advanced coupled multi-physics for reservoir modelling to optimize production from fractured reservoirs. It will also include novel continuum damage mechanics approaches to describe the initiation, evolution and coalescence of fractures within geological materials. Mathematically, such problem is governed by a fully coupled thermal-hydraulic-mechanical processes. Therefore, a high resolution is needed, which takes into account the intrinsic length and time scales of the involved processes. We intend to solve this problem using High Performance Computing. The solution method relies on massively parallel numerical models based on the finite element method.

**S. Grami, A. Wazwaz**, “Improved Design Parabolic Trough Collector for Electrical Power Generation”, funded by TRC.

All parabolic trough collectors in use today are of open configuration type. This meant that the trough is open and therefore is subjected to the ambient conditions. Consequently, the trough remains exposed to wind effects which exacerbate heat loss problem by convection and

radiation. In addition, the issue of dust accumulation in the open trough configuration deteriorates the trough performance over time and therefore requires continuous cleaning. The cleaning process is extremely complex owing to the profile of the trough and the presence of the receiving tube. This project investigates the performance of a novel trough design called Vacuum Parabolic Trough Collector (VPTC). The top side of the trough is covered by borosilicate sheets, the same material used for the outer tube of vacuum solar tubes. The trough is then sealed. This design is eliminating the drawbacks of the conventional trough collectors mentioned above in addition to minimizing the heat loss as a result of the wind gusting inside the trough. The cleaning issue is much easier since the VPTC will be covered by flat borosilicate sheets for which a simple autonomous cleaning machine could be devised. The accumulated dust inside the trough can dramatically reduce the performance of the system especially in the Middle East region with the high occurrence of dusty days throughout the year. Work in this project will include building a few VPTC troughs as well as conventional troughs with vacuum focal tubes, which were compared in terms of their performances. In the first phase, water was used as a heat transfer fluid, the new design parabolic trough collector showed a better performance than the conventional trough. In the second phase, a mineral oil was used as a heat transfer fluid. Again, the new design parabolic trough showed a better performance than the conventional trough in terms of the outlet temperature. During the third phase, a heat loss analysis was carried out to compare both troughs. The new design parabolic trough showed a less heat loss than the conventional trough because the new trough represents a greenhouse effect since it is closed and sealed.

# Foundation Program



AY 2016-17



## **17. Publications by Foundation Program**

### **17.1 English Language Unit**

#### **Books:**

**U. Bontha, K. Khan**, "Outcomes-Based Assessment in English Language Program", Revisiting EFL Assessment, Springer, 2017.

#### **Refereed Journal Papers:**

M. Nazir, **S. Bashir**, "motivation towards language learning: a study of Pakistani ESL learners at certificate level", International Journal of English and Education, Vol.6, pp:284-297, 2017.

#### **Conference Papers:**

**S. Shah, U. Bontha**, "English language assessments at Dhofar University's foundation program", 17<sup>th</sup> International ELT Conference, Muscat, Oman, April 20-21, 2017.

**N. Lotze**, "A pinch of turmeric: Color vocabulary in the Omani dialect of Mahri", 3<sup>rd</sup> International Conference on Language, Linguistics, Literature, and Translation, Muscat, Oman, November 3-5, 2016.

**P. Pearce**, "A social semiotic analysis of the use of English in Arabic print media advertising", connecting the dots in a globalized world, 3<sup>rd</sup> International Conference on Language, Linguistics, Literature and Translation, Muscat, Oman, November 3-5, 2016.

#### **Exhibition**

**S. Bashir**, "Time management and its application in academic life: a study of Omani students at Dhofar University", 4<sup>th</sup> Annual Research Day, Salalah, Oman, June 14, 2016.

### **17.2 Mathematics & IT Unit**

#### **Refereed Journal Papers:**

**Z. Shareef**, S. Hussain, S. Sokol, M. Darus, "On p-valent functions under certain linear operator", Information, Vol. 19, No.6A, pp: 1651-1656, 2016.

S. Hussain, **Z. Shareef**, M. Darus, "On a class of functions associated with Sălăgean operator", Revista De La Real Academia De Ciencias Exactas, Físicas Y Naturales. Serie A. Matemáticas, Vol. 111, No. 1, pp: 213-222, 2017.

#### **Exhibition**

**A. Ali**, "New Approach for IR on the Web", Fourth Annual Research Day, Dhofar University, Salalah, Oman, June 14, 2016.



# APPENDICES

## Appendix A

**Table 1: Approved Applications for STFDG (Fall 2016-17)**

No.	Name of Faculty	College/FP	Title of Paper	Title of Conference	Location	Date
1.	Mr. Nathaniel Lotze	FP	A pinch of turmeric: Color vocabulary in the Omani dialect of Mahri	Connecting the Dots in the Globalized World	Muscat, Oman	Nov 3-5, 2016
2.	Mr. Paul Pearce	FP	A social semiotic analysis of the use of English in Arabic print media advertising	Connecting the Dots in the Globalized World	Muscat, Oman	Nov 3-5, 2016
3.	Dr. Alexandria Maria	CCBA	Entrepreneurial ethics-evidence from GCC	MEPDEV 2nd Central & eastern European LUMEN International Conference	Targoviste, Romania	November 16-20, 2016
4.	Dr. Rabia Imran	CCBA	Mediating effect of psychological capital between transformational leadership and innovative work behavior; an investigation within Omani context	28th International Business Information Management Conference	Seville, Spain	November 9-10, 2016
5.	Dr. Faris Al Shubairi	CCBA	Determinants of financial banking stability: An empirical study of commercial banks listed in MSM	The requirements to achieve an economic-Take off in the oil countries under the collapse of Oil prices	Bouira, Algeria	November 28-December 1, 2016
6.	Dr. Manaf Zghaibeh	CE	SAM: Scalable addressing mechanism for structured P2P networks	3rd International Afro-European Conference for Industrial Advancement	Marrakesh, Morocco	November 21-23, 2016
7.	Dr. Fadi Awawdeh	CAAS	High-precision quadrature schemes for fredholm integral equations of the second kind	International conference on mathematics and engineering (ICOME 2017)	Istanbul, Turkey	May 10-12, 2017
8.	Dr. Husein Jaradat	CAAS	Multiple-kink solutions and singular kink solutions of (2+1) dimensional coupled burgers system	International conference on mathematics and engineering (ICOME 2017)	Istanbul, Turkey	May 10-12, 2017

9.	Dr. Ridha Horchani	CAAS	Few-body physics with ultracold potassium rubidium mixtures	European winter conference on plasma spectrochemistry 2017	Sank Anton, Austria	February 19-24, 2017
10.	Dr. Fethi Abbassi	CE	Numerical and experimental damage analysis of carbon/PPS composite under uniaxial and biaxial loading	ISAMR 2017	Seoul, Korea	March 17-19, 2017
11.	Dr. Himangshu Bhowmik	CE	Experimental analyses of natural convection and radiation heat transfer from a horizontal cylinder	10th International Conference on Thermal Engineering: Theory and Applications	Muscat, Oman	February 26-28, 2017
12.	Dr. Sarfaraz Fayaz Khan	CCBA	Health care monitoring system in Internet of Things by using RFIP	6th International conference on industrial technology and management ICITM 2017	Cambridge, UK	March 7- 10, 2017
13.	Dr. Kavita Chavali	CCBA	Capital Structure of non-banking finance companies and their profitability in Indian scenario	International conference of Business and Management-2017	Sharjah, UAE	March 26-27 2017
14.	Ms. Shireen Rosario	CCBA	Study of capital structure and its impact on profitability in the cement industry in India	International conference of Business and Management-2017	Sharjah, UAE	March 26-27 2017
15.	Dr. Furqan Ahmad	CE	Numerical simulation of impact resistance of CFRP plates with different fiber angles	11TH International conference on composite science and technology	Sharjah, UAE	April 4-6, 2017
16.	Dr. Mazhar Ul Islam	CE	Bacterial cellulose nanocomposites; impressive biomaterial for practical applications in medical fields	11th International conference on composite science and technology	Sharjah, UAE	April 4-6, 2017
17.	Dr. Wasi Ahmed	CE	Iodine compound coated nanomaterials for the measurement of MR relaxivities and invitro cytotoxicity	11th International conference on composite science and technology	Sharjah, UAE	April 4-6, 2017
18.	Dr. Dimitrios Xanthidis	CCBA	Actors and roles in electronic health record: a review	8th European conference on applied mathematics and informatics	Cambridge, UK	February 24-26, 2017

**Table 2: Approved Applications for Distribution of Questionnaire (Fall 2016-17)**

No.	Name of Faculty	Research Title	Affiliation
1.	Dr. Abdelkader Elsyed, Dr. Khalid Al Mashaikhi, Dr. Moosa Sulieman	Study to identify the learning style of DU students and know their relationship with some variables, such as average and specialization.	College of Arts and Applied Sciences, Dhofar University
2.	Dr. Abdelkader Elsyed, Dr. Nasser Abdelrasheed, Dr. Yasser Sabtan	Know your Personality Type with the Holland Code	College of Arts and Applied Sciences, Dhofar University
3.	Mr. Shahid Bashir	How students perceive their transition from home and high school to life as a Foundation Program student	Foundation Program, Dhofar University
4.	Ms. Muna Shaaban Bait Ajzoon	An exploration of alcohol and substance use knowledge, attitudes, subjective norms, perceived behavioral control and behavioral intentions among Omani higher education students	Old Dominion University, USA
5.	SS Al Hadi	The Level of Satisfaction among Omani Academics Working in Private Colleges and Universities in Oman	
6.	Mr. Mohammed bin Nasir Al Hajari	explore the current limitations and potential and propose a model for cloud-based collaborative VLE for the higher education institutions in Oman	University of Bournemouth, UK
7.	Ms. Maryam Ali Al Hinai	Social Sustainability and Software: Case of Equality	University of Leicester, UK

**Table 3: Approved Applications for IC (Pending applications from AY 2015-16)**

No.	Name of Faculty	College/FP	Title of Paper	Title of Journal
1.	Dr. Suhail M. Ghouse	CCBA	Influence of demographics on consumer perception towards email marketing in Oman: an empirical approach	International Journal of Economic Research
2.	Dr. Mohammad Ahmar Uddin	CCBA	Influence of demographic factors on the entrepreneurial intentions of University students in Oman	Investment management and Financial Innovations

3.	Dr. Shouvik Sanyal	CCBA	An analysis of the impact of service quality and passenger satisfaction on passenger preferences for airlines: a study of the Indian aviation sector	International review of Management and Marketing
4.	Dr. Zaroug Osman Bilal	CCBA	Does dividend policy impact stock market prices? Evidence from Oman	International Journal of Applied Business and Economic Research
5.	Dr. Alexandria Maria	CCBA	Leadership through spiritual wisdom: the case of Romania	Purushartha Journal
6.	Dr. Omar Durrah	CCBA	Impact of service quality dimensions on hospital image: the mediating role of patients satisfactions	International Journal of Applied Business and Economic Research
7.	Dr. Alexandria Maria	CCBA	Strategic energy management in Sultanate of Oman	Montenegrin Journal of Economics
8.	Dr. Dimitrios Xanthidis	CCBA	ICT and the people with dementia	Journal of Theoretical and Applied Information Technology
9.	Dr. Kavita Chavali	CCBA	Liquidity analysis of select firms listed in MSM-Sultanate of Oman	Journal of Applied Economic Sciences
10.	Dr. Faris Nasif AL-Shubairi	CCBA	The impact of entrepreneurial financial activities on financial indicators: evidence from all companies listed in MSM	Journal of Applied Economic Sciences
11.	Dr. Gowhar Ahmed Naikoo	CAAS	Theoretical and experimental studies of Cu(II) and Zn(II) coordination compounds with N2O donor bidentate Schiff base ligand containing amino phenol moiety	Journal of Molecular Structure
12.	Dr. Gowhar Ahmed Naikoo	CAAS	Synthesis, spectral characterization, grain size effect, antimicrobial, DNA cleavage and anticancer activities of cobalt(II), nickel(II), copper(II) and zinc(II) complexes of Schiff base	Asian Journal of Chemistry
13.	Dr. Gowhar Ahmed Naikoo	CAAS	Hierarchically macroporous silver monoliths using Pluronic F127: facile synthesis, characterization and its application as an efficient biomaterial for pathogens	Journal of Saudi Chemical Society

**Table 4: Approved Applications for IC (Fall 2016-17)**

No.	Name of Faculty	College/FP	Title of Paper	Title of Journal
1.	Dr. Liudmila Cazacova	CE	The building as a statement of artefact: The mijmara	International Journal of Energy and Development
2.	Dr. Fethi Abbassi	CE	Numerical and experimental investigations on deep drawing of G1151 Carbon Fiber Woven Composites	Application of Composite Materials
3.	Dr. Ahmmed Saadi	CE	Mathematical model for a gas phase in fluidized bed catalytic reactor for ammoxidation of propene to acrylonitrile	Journal of Engineering and Applied Sciences
4.	Dr. Ahmmed Saadi	CE	Mathematical model of a high selectivity technique to describe and treat cancer diseases using healthy food	Wulfenia Journal
5.	Dr. Yasser Muhammad Naguib Sabtan	CAAS	Bilingual lexicon extraction from Arabic-English parallel corpora with a view to machine translation	Arab World English Journal
6.	Dr. Ridha Horchani	CAAS	Cold molecules: Formation, rovibrational cooling and electronic conversion	International Journal of Modern Physics B
7.	Dr. Shafique Ahmed Chaudhry	CAAS	Call for a computer aided cancer detection and classification research initiative in Oman	Asian pacific Journal of Cancer Prevention
8.	Dr. Shafique Ahmed Chaudhry	CAAS	Network-state-aware quality of service provisioning for the internet of things	International Journal of Advanced Computer Science and Applications
9.	Dr. Fadi Awawdeh	CAAS	Analysis of steady three dimensional hydromagnetic stagnation point flow towards a stretching sheet with heat generation	Italian Journal of Pure and Applied Mathematics
10.	Dr. Sabir Ali Siddiqui	CAAS	Beta exponentiated mukherjii-Islam distribution: Mathematical study of different properties	Global Journal of Pure and Applied Mathematics
11.	Dr. Sabir Ali Siddiqui	CAAS	Development of Size-based Mukherjii-Islam distribution	International Journal of Pure and Applied Mathematics
12.	Dr. Sameen Ahmed Khan	CAAS	Quantum methodologies in Helmholtz optics	Optik-International Journal for Light and Electric Optics

13.	Dr. Sameen Ahmed Khan	CAAS	Reflecting on the international year of light and light-based technologies	Current Science
14.	Dr. Alexandria Maria	CCBA	ABC Method contribution to business performance	International Journal of Applied Business and Economic Research
15.	Dr. Moaz Nagib Gharib	CCBA	The impact of job stress on job performance: a case study on academic staff at Dhofar university	International Journal of Economic Research
16.	Dr. Kamal Allil	CCBA	Factors affecting adoption of mobile services	International review of Management and Marketing
17.	Dr. Shouvik Sanyal	CCBA	A study on the impact of Islamic thought on global trade and commerce	Purushartha Journal
18.	Dr. Shouvik Sanyal	CCBA	A study of tourism using demographic and travel characteristics: The case of Salalah, Sultanate of Oman	International Journal of Applied Business and Economic Research
19.	Dr. Suhail Mohammad Ghouse	CCBA	Role of demographics on consumers' perception towards email marketing in Oman: An empirical approach	International Journal of Economic Research
20.	Dr. Omar Durrah	CCBA	Positive psychological capital and job performance the mediating role of job satisfaction	Ponte
21.	Dr. Dimitrios Xanthidis	CCBA	A brief on big data: lessons from 10 years of experience	Journal of Theoretical and Applied Information Technology
22.	Dr. Dimitrios Xanthidis	CCBA	Security, privacy, accessibility and availability issues addressed when developing websites in the GCC	Journal of Theoretical and Applied Information Technology
23.	Dr. Muhammed Yousoof	CCBA	Employee perceptions on factors affecting organizational climate- An emp study	International Journal of Business and Economic Research



24.	Dr. Sarfraz Fayaz Khan	CCBA	Influence of gender and nationality of consumers perception towards email marketing: an exploratory study in Oman	International Journal of Applied Business and Economic Research
25.	Dr. Faris Nasif AL-Shubairi	CCBA	Determinants of foreign direct investment: evidence of Sultanate of Oman	Polish Journal of Management Studies
26.	Dr. Faris Nasif AL-Shubairi	CCBA	Analysis of economic development based on KIBS interaction: evidence from Sultanate of Oman	Actual problems of Economics
27.	Dr. Zaroug Osman Bilal	CCBA	Does Basel III implementation impact on financial performance? Evidence from Oman's commercial banks	International Journal of Economics and Financial Issues
28.	Dr. Zaroug Osman Bilal	CCBA	Influence of entrepreneurship education and previous entrepreneurial experience on student's desirability to self-employment: A case of HEIs in Dhofar region in Oman	International Journal of Economic Research
29.	Dr. Mohammed Ahmar Uddin	CCBA	E-examinations for management students in Oman	International Journal of Applied Business and Economic Research
30.	Dr. Kavita Chavali	CCBA	Predicting bankruptcy using Multi discriminant analysis in sugar industry	Journal of Applied Economic Sciences
31.	Dr. Abu baker Elsadiq Abbas Ismail	CCBA	Poverty measures in Islamic economy with application in Sultanate of Oman	International Journal of Applied Business and Economic Research
32.	Prof. Ibrahim Fattouh	CCBA	The role of replacing fair value accounting with principle historical cost in enhancing the quality of accounting information	International Journal of Applied Business and Economic Research
33.	Prof. Ibrahim Fattouh	CCBA	The effect of CAMELS model on bank efficiency ratio: an evidence of banking on MSM	Ponte
34.	Dr. Mohammed Abdul Imran Khan	CCBA	E-commerce for entrepreneurs: Boon or Bane	International Journal of Applied Business and Economic Research

35.	Dr. Murtaza Farooqui	CCBA	Data mining application in classification scheme of human subjects according to ayurvedic prakruti-Temperament	Indian Journal of Science & Technology
36.	Dr. Mohammad Ahmar Khan	CCBA	E-marketing a boon for SMEs of Oman	International Journal of Applied Business and Economic Research
37.	Dr. Mohammad Ahmar Khan	CCBA	Cluster & rough set theory based approach to find the reason for customer churn	International Journal of Applied Business and Economic Research
38.	Dr. Khaliqzaman Khan	CCBA	Performance evaluation of mutual funds in Oman: an investors' perspective	Journal of Business and Retail Management Research
39.	Dr. Khaliqzaman Khan	CCBA	Bayesian analysis for lower bounds of reliability function for log normal distribution	International Journal of Agricultural and Statistical Sciences
40.	Dr. Md Shabbir Alam	CCBA	Climate sensitivity of Indian Agriculture	International Journal of Applied Business and Economic Research
41.	Dr. Zahid Shareef	FP	On p-valent functions under certain linear operator	Information
42.	Dr. Alexandria Maria	CCBA	Innovation and entrepreneurship in Sultanate of Oman	Entrepreneurship and sustainability issues
43.	Dr. Hazem Al Samman	CCBA	The effect of financial liberalization through the general agreement on trade and services on economic growth in developing countries	International Journal of Economics and Financial Issues
44.	Dr. Fadi Awawdeh	CAAS	Identification of time-dependent source terms and control parameters in parabolic equations from over specified boundary data	Journal of computational and applied mathematics

45.	Dr. Hussein Jaradat	CAAS	Dynamic behavior of traveling wave solutions for a class for the time-space coupled fractional kdv system with time dependent coefficients	Italian Journal of Pure and Applied Mathematics
46.	Dr. Hussein Jaradat	CAAS	New solitary wave and multiple soliton solutions for the time-space fractional Boussinesq equation	Italian Journal of Pure and Applied Mathematics
47.	Dr. Mohammad Ahmar Uddin	CCBA	An empirical study of automated teller machines in Oman	International Review of Management and Marketing
48.	Dr. Mansour Alraja	CCBA	Investment in information and communication technology in developing countries: the effect of foreign direct investment: evidences from Sultanate of Oman	International Journal of Economics and Financial Issues
49.	Dr. Mansour Alraja	CCBA	The influence of effort and performance expectancy on employees to adopt e-government: evidence from Oman	International Review of Management and Marketing
50.	Dr. Md. Shabbir Alam	CCBA	The performance analysis of Saud Bahwan group, Oman: An empirical study	International Journal of Economics and Financial Issues
51.	Dr. Moinuddin Ahmad	CCBA	The impact of strategic flexibility on the performance of private banks during the crisis in Syria	International journal of economic research
52.	Dr. Omar Ikbal Tawfik	CCBA	The bases of application the system of time-driven activities based costing: A field study in the Iraqi industrial companies	International Journal of Economic Research
53.	Mr. Muawya Hussein	CCBA	Investigating the impact of sustainable development supply chain on economic performance: An empirical study of sultanate of Oman	International Journal of Supply Chain Management
54.	Dr. Mohammed Abdul Imran Khan	CCBA	Working capital management and its impact on SMU's performance	International Journal of Economic Research
55.	Dr. Mohammad Idrees	CAAS	Simultaneous use of irradiated sodium alginate and nitrogen and phosphorus fertilizers enhance growth, biomass and artemisinnin biosynthesis in Artemisia annua L.	Journal of Applied Research on Medicinal and Aromatic Plants

56.	Dr. Mohammed Aref	CCBA	Fault reporting processing of business information systems	International Journal of Economic Research
57.	Dr. Mohammed Aref	CCBA	Oman e-readiness: A paradigm shift for business	International Journal of Economic Research
58.	Dr. Samir Hammami	CCBA	Applying SECI Model to encourage knowledge creation in eLearning environment	International Journal of Economic Research
59.	Dr. Nasser Said Abdelrasheed	CAAS	Sex differences in the intelligence of University students in Thailand	Mankind Quarterly
60.	Dr. Moh'd Abdelqader Faris Obeidat	CCBA	Human Resources performance measurement approaches compared to measures used in Master's theses in applied science university	International review of Management and Marketing
61.	Dr. Moh'd Abdelqader Faris Obeidat	CCBA	The role of project management information systems towards the project performance: The case of construction projects in UAE	International review of Management and Marketing
62.	Dr. Rabia Imran	CCBA	Leadership styles in relation to employees' trust and organizational change capacity-evidence from non-profit organizations	Sage Open
63.	Dr. Mazhar Ul Islam	CE	Recent Advancement in cellulose based nanocomposite for addressing environmental challenges	Recent Patents on Nanotechnology
64.	Dr. Mazhar Ul Islam	CE	Three dimensionally microporous and highly biocompatible bacterial cellulose-gelatin composite scaffolds for tissue engineering applications	RSC Advances
65.	Dr. Srinivasan Murugan	CE	Experimental and numerical analyses of magnesium alloy hot workability	Journal of Magnesium and Alloys

## Appendix B

**Table 1: Approved Applications for STFDG (Spring 2016-17)**

No.	Name of Faculty	College/FP	Title of Paper	Title of Conference	Location	Date
1.	Dr. Imran Baig	CE	A DST precoding based uplink NOMA scheme for PAPR reduction in 5G wireless networks	7th International conference on modeling, simulation and applied optimization	Sharjah, UAE	April 4-6, 2017
2.	Dr. Said Grami	CE	Friction compensation in a 2 DOF rRobot manipulator	7th Edition of the International Congress "Design and Modeling of Mechanical System"	Hammemet, Tunisia	March 27-29, 2017
3.	Dr. Shafiq Taha AlNobany	CAAS	Literature from a cultural point of view: a critical study of Ghassan Abd Al-Khaliq's works	21st International conference on culture criticism in the Arab world	Amman, Jordan	April 11-13, 2017
4.	Dr. Inayatur Rehman	CAAS	Generalized projective and injective modules	International Conference ICMSAO 2017	Sharjah, UAE	April 4-6, 2017
5.	Dr. Abdelkader El Syed	CAAS	The role of policies and educational institutions in the Sultanate of Oman in the development of human capital	International Conference: Human Capital Perspectiver	Istanbul, Turkey	April 4-6, 2017

**Table 2: Approved Applications for Research Collaboration (Spring 2016-17)**

No.	Name of Faculty	Research Title	Affiliation
1.	Mr. Amir Hajaji	BYOD solution for secure access to applications and data of HEIs of Oman anywhere by any device at any time.	University of Liverpool/Salalah College of Technology

**Table 3: Approved Applications for Distribution of Questionnaire (Spring 2016-17)**

No.	Applicant	Research Title	Affiliation
1.	Ms. Samantha Burns	Skills for 21st century training in HEIs in Oman: Helping students realize their highest potential in relation to the job market	Sultan Qaboos University, Muscat

**Table 4: Approved Applications for IC (Spring 2016-17)**

No.	Applicant Name	College/FP	Paper title	Journal Title
1.	Dr. Ahmed Taha Kahwaji	CCBA	A study of customer satisfaction dimensions and their impact on customer loyalty to online shopping sites-an analytical study of online shopping sites in Arab market	International Journal of Economic Research
2.	Dr. Shariq Mohammad	CCBA	Bankruptcy prediction by using the Altman Z-score model in Oman: A case study of Raysut cement company SAOG and its subsidiaries	Australasian Accounting, business and Finance Journal
3.	Dr. Zahid Shareef	FP	On a class of functions associated with Salagean operator	Revista de la Real Academia de Ciencias Exactas, Físicas y Naturales. Serie A. Matemáticas
4.	Mr. Muawya Hussein	CCBA	Socio-environmental impacts of urban expansion: case of Arab countries	International Journal of Applied Business and Economic Research
5.	Dr. Dimitrios Xanthidis	CCBA	An exploratory study of the effects of social media in everyday life and consumer behavior in Saudi Arabia	Indian Journal of Science and Technology
6.	Dr. Dimitrios Xanthidis	CCBA	Web development in the GCC from an HCI and a globalization/customization perspective	Indian Journal of Science and Technology
7.	Dr. Dimitrios Xanthidis	CCBA	E-learning penetration, challenges and opportunities in Saudi Arabia	Indian journal of science and technology
8.	Dr. Hussein Jaradat	CAAS	New Solitary wave and multiple soliton solutions for the time-space coupled fractional mKdV system with time dependent coefficients	Journal of Computational and Theoretical Nanoscience

9.	Dr. Hussein Jaradat	CAAS	Mathematical analysis and physical interpretation on new multiple solitonic solutions of n-coupled modified KdV system	Journal of Mathematical Analysis
10.	Dr. Hussein Jaradat	CAAS	A new numerical method for heat equation subject to integral specifications	Journal of Nonlinear Science ad Applications
11.	Dr. Alexandria Maria	CCBA	Variables affecting employee satisfaction-evidence from Sultanate of Oman	International Journal of Applied Business and Economic Research
12.	Dr. Alexandria Maria	CCBA	Sustainable economic development policies in Romania within the EU and Brexit context	Journal of Security and Sustainability Issues
13.	Dr. Alexandria Maria	CCBA	A 21 <sup>st</sup> century touristic perspective on united Arab emirates, Qatar and sultanate of Oman	International journal of applied business and economic research



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