



6th ANNUAL RESEARCH REPORT

(Academic Year 2013/2014)

Department of Research

Dhofar University

June 2014

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1. Explanatory Notes:

The Sixth Annual Research Report presents the research output of Dhofar University (DU) faculty members from August 2013 to July 2014. It also shows the research record and potential of recently appointed faculty. 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 URB biannual 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, **Acting Director for Research, Chairperson URB**
2. Professor Rustom Mamlook, **College of Engineering**
3. Dr. Aref Wazwaz, **College of Engineering**
4. Dr. Muhammad Asif Gondal, **College of Arts and Applied Sciences**
5. Dr. Khedr Abo Hassan, **College of Arts and Applied Sciences**
6. Dr. Shanker Menon, **College of Commerce and Business Administration**
7. Dr. Mohammed Aref, **College of Commerce and Business Administration**
8. Mr. Abdul Latheef Vennakkadan, **Foundation Program**

3. URB Activities for the Academic Year 2013-2014:

3.1 Applications for Funds

The URB has received a total of 13 applications for Short Term Faculty Development Grant (STFDG), One for Seed Grant (SG) and two for Regular Research Grant (RRG). 12 STFDG applications were successful and one was rejected. No SG and one RRG applications were rejected. The URB in coordination with DVC also suggested incentives for research to encourage faculty members at DU to engage in research activities (For details refer to Appendix A). Total allocated budget for grants for this academic year was 20,000 R.O out of which 17,461 R.O was utilized (See Table 1). Next year the budget of 30,000 R.O is expected to be provided. Figure 1 summarizes the URB budget and expenditures for the past five years.

Table 1: Cost Breakdown of Grants Approved

S. NO	Type of Grant	Amount (OMR)
1	Short Term Faculty Development Grant	10911
2	Seed Grant	1000
3	Regular Research Grant	2400
4	Incentive Claims	3150
Total		17461

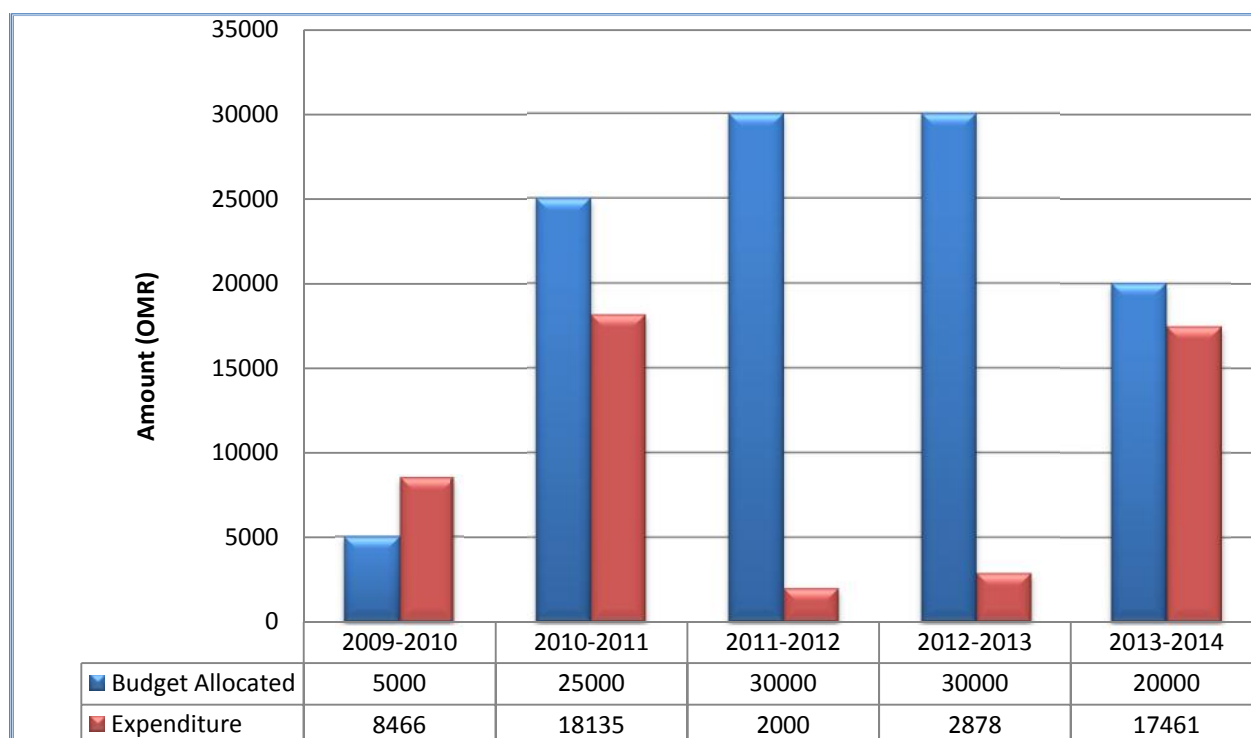


Figure: 1 URB Budget Allocated and Expenditure from 2009 to 2014

3.2 TRC Projects

During this academic year, URB received eight applications to be submitted to The Research Council (TRC). The submitted projects are of worth 800800 R.O. The ongoing and completed projects for academic year 2013/14 are of worth 2,91,750 R.O as tabulated in Table 2. The projects submitted to TRC for approval are shown in Table 3.

Table 2: Ongoing TRC Projects

Type of Grant	Title	Date of Completion	Principal Investigator	Budget (OMR)
Open Research Grant (ORG)	Sensor Networks for an Enhanced and Personalized Management and Use of Resources	19 th Dec, 2013	Dr. Shafique Chaudhry	39700
	Medical Sterilization System Using Solar Concentrated Parabolic Dish Collector	12th Jun, 2014	Dr. Aref Wazwaz	38800
	Improved Design Parabolic Trough Collector for Electric Power Generation	29th Nov, 2014	Dr. Said Grami	78250
Eco House	Eco House Competition (Phase I)	8th Nov, 2014	Ms. Liudmila	15000
	Eco House Competition (Phase II)		Ms. Liudmila	120000
Total				291750

Table 3: TRC projects Submitted to TRC in Academic Year 2013/2014

Type of Grant	Title	Principal Investigator	Budget (OMR)
ORG	Fixed Bed Column Study for the Removal of Multi-Heavy Metal Component from Simulated Wastewater using Shell of coconut as adsorbent	Dr. Ahmmed Saadi Ibrehem	40900
	Natural Fractures Reactivation and its impact on Enhanced Oil Recovery	Dr. Fethi Abbasi	149600
	Knowledge Management Systems to Diminish Turnover of Professionals	Dr. Biju Mohd	181300
	Towards the Future Dhofar Smart Power Grid	Dr. Abdulkader Dekdouk	172000
	Secure Collaborative Proactive Shield against DDoS Attacks	Dr. Shafique Chaudhry	155000
FURAP	Academic and non academic predictors of success in college	Dr. Lakshmi Nayaranan	2100
SRG	Youth Values: An Examination of Youth in Oman	Dr. Lakshmi Nayaranan	29900
CONCEPT NOTE	Socio-economic Sustainable Development Monitoring of Dhofar Mountain	Dr. Muawya Ahmed Hussein	70000
		Total	800800

3.3 URB Policy

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

- Duties of URB
- Tidying up the whole policy
- Application forms for different type of grants

3.4 Biodiversity Research Chair

DU submitted the proposal for the Biodiversity Research Chair to the TRC. This will develop new research projects and programs and will increase research capacity in the field of biodiversity. Total proposed Budget for the Research Chair is 6,790,000 R.O

3.5 Turnitin Software

The URB, through DU, renewed its annual subscription to the Turnitin software.

3.6 Research Ethics Board

During this academic year, hard work was put on setting up and initiating the "**Research Ethics Board**" which was due to be set up as part of the recommendations of the Self Study by OAAA.

3.7 First Meeting of Medicinal Plants Focal Points of IORA RCSTT cum Exhibition:

The first meeting cum Exhibition of "Medicinal Plants Focal Points of Indian Ocean Rim Association Regional Centre for Science and Technology Transfer (IORA RCSTT)" organized by Oman Animal and Plant Genetic Resource Centre (OAPGRC), TRC, IORA and DU will be held between 23rd to 25th June, 2014 at DU. Each Focal point from 20 member states; includes Asia Pacific, Africa and Middle East and 6 dialogue partners including China, Japan, Egypt, France, UK and USA will be attending this event covering 34 topics. The key topics are:

- Policy making for producing, processing and commercializing medicinal plants
- Setting standards and standardization process for medicinal plants and herbal medicine
- Technology transfer and market forecasting
- Discussing role and activities of focal points in IORAMPNet
- Discussing establishment of special funds for medicinal plants and herbal medicines

3.8 Visits

During the academic year 2013/2014, number of visits have been organized under supervision of Acting Director of Research as mentioned below:

- First TRC visit was on 19th December, 2013. Presentation was delivered to faculty and staff on research opportunities like ORG, FURAP and Incentives

- Second TRC visit was on 30th April, 2014 to work on Concept Note in relation to sustainable development
- The Acting Director for Research attended a TRC meeting on Graduate Research Support Program on 26th May, 2014 at TRC head office in Azaiba, Muscat

3.9 Annual report

The URB prepared the annual report for the academic year 2013-2014.

4. Publications:

4.1 College of Arts & Applied Sciences

Department of Education

Book:

E. **Abdelkader**, "Special Education Programs and Curricula between Thought and Application and Development", 2nd edition, Alam alkotop, Cairo, 2014

Refereed Journal Papers:

E. **Abdelkader**, "Study of the Interaction between the Instruction Scaffolding and Achievement Levels on Mathematical Skills and the Fifth graders' Attitudes Towards the Subject", Journal of Arabic Studies in Education and Psychology, Vol. 03, Issue 43, pp: 77-120, 2013.

E. **Abdelkader**, "Effectiveness of a Strategy Based on Brain Compatible Learning Theory in the Development of Numerical Sense Skills at the Primary School Students", Journal of Mathematics Education, Vol. 17, Issue 2, pp: 1-37, 2014.

Department of Languages and Translation

Book:

S. **Jayaraman**, "An Acoustic Analysis of Railway Announcements in English", Lambert academic publishers, Germany, 2013.

Book Chapters:

K. **Khan, U. Bontha**, "General Foundation Program at Dhofar University: A Case Study", General Foundation Programs in Higher Education in the Sultanate of Oman: Experiences, Challenges and Considerations for the Future, Mazoon Press & Publishing, 2013.

M. **Risse**, "Throwing Children in the Street: Explaining Western Culture to Omanis", Emanations: Third Eye, International Authors, 2013.

M. Risse, "Selecting the Right Literary Texts for Middle Eastern Students: Challenges and Reactions", Focusing on EFL Reading: Theory and Practice, Sultan Qaboos University Press, 2014.

V. Thakur, "Engaging Learners in Productive Learning: Some Pedagogical Gateways", Aspects of ELLT: Essays on Theory, Practice and Experimentation in English Language and Literature Teaching in India and elsewhere, The English and Foreign Languages University, 2013.

V. Thakur, R. Al Mahrooqi, "Beyond Mere Textual Understanding: A skeptical Approach to Reading", Focusing on EFL Reading: From Theory to Practice, Cambridge Scholars Publishing, 2013.

Refereed Journal Papers:

M. Risse, "Verstehen/ Einfühlen in Arabian Sands (1959): Wilfred Thesiger as Traveler and Anthropologist", Journeys: The international Journal of Travel & Travel Writing, Vol. 14.1, pp: 23-29, 2013.

S. Jayaraman, "Challenges in the Learn Ability of English Personal Pronouns and Possessives: A Case of Arabic-Speaking Undergraduates", The Journal of ESL for Teachers and Learners, Vol. 02, pp: 18-23, 2013.

V. Thakur, "Teaching Grammar in an Integrated-Interactive Framework: Some Pedagogical Applications", Yashashri: An International Journal of Language and Literature, Vol. 06, pp: 56-64, 2013.

Conference Papers:

K. Khan, F. Khan, "What Ails our Students? An Investigation into the Factors Affecting EFL Learners at Dhofar University", First DU National English Language Conference, Salalah, February 22 – 24, 2014.

K. Khan, "Factors Affecting Rural Students' Learning English in Dhofar Region of Oman", 21st Century Learners: Learning Styles and Strategies, Chennai, India, July 18-20, 2013.

M. Risse, "Analyzing Arabic Teaching to Improve English Teaching" , TESOL Arabia Annual Conference, Dubai, United Arab Emirates, March 13-15, 2014.

M. Risse, "Using Literature Texts in Beginner and Intermediate Language Classrooms", Dhofar University National English Language Conference, Salalah, Oman, February 22-24, 2014.

M. Risse, “‘I do not Need the Night’: The Gibali Conception of Self-respect in Southern Oman”, Middle Eastern Studies Association Conference, New Orleans, United States, October 10-13, 2013.

M. Risse, “‘Ya Mabel’ and the Duchess: A Victorian but Modern, Female Traveler and a Modern but Victorian, Female Traveler in Southern Oman”, Navigating Networks: Women, Travel, and Female Communities - An Interdisciplinary Conference hosted by the Travel Cultures Seminar Series, Oxford, United Kingdom, October 4, 2013.

S. Jayaraman, “Teaching Sound-Spelling Coordination as a Part of Spoken Skill – A Case of Arabic-Speaking Undergraduate Students”, First DU National English Language Conference, Salalah, Oman, February 22-24, 2014.

V. Thakur, R. Al Mahrooqi, “Teaching Grammar Beyond the Borders of Sentence: An Integrated Approach to Grammar in Context”, English Beyond Borders International ELT Conference, Izmir, Turkey, March 20-22, 2014.

V. Thakur, “Addressing the Centrality of Interaction in an EFL/ESL Writing Class: A Pedagogical Perspective of the Natural and Normal Learning”, First DU National English Language Conference, Salalah, Sultanate of Oman, February 22-24, 2014.

V. Thakur, “Teaching Writing in an Integrated Framework: Some Pedagogical Applications”, Nadar Saraswathi College of Arts and Science International Conference on Teaching English Language and Literature, Theni, India, August 6-7, 2013.

Department of Mathematics & Science:

Book Chapter:

A. Elhissi, **I. Ul Hassan**, A. Papapanou, N. Zeb, K. M.G. Taylor, "Cationic Liposomes as Model Nonviral Vectors for Pulmonary Delivery of DNA", Advances in Planar Lipid Bilayers and Liposomes, Elsevier Inc., 2014

Refereed Journal Papers:

I. Hussain, **M. A. Gondal**, "An Extended Image Encryption using Chaotic Coupled Map and S-box Transformation", Nonlinear Dynamics, Vol. 76, pp: 1355-1363, 2014.

I. Hussain, **M. A. Gondal**, "Stego Optical Encryption Based on Chaotic Baker’s Map Transformation", Zeitschrift für Naturforschung (ZNA), Vol. 69a, pp: 249-253, 2014.

4.2 College of Commerce & Business Administration

Department of Accounting and Finance

Book Chapters:

M. A. Hussein, R. Debie, "Environmental Policies and Issues in Some Arab Countries", Comparative Perspectives on Environmental Policies and Issues, Routledge Taylor and Francis Group, 2014.

S. Mohammed, "Analytical issues in trade, development and finance", Essays in honor of Biswajit Chatterjee, Springer, 2014.

Refereed Journal Papers:

F. ALshubir, "Analysis the Relationship between Liquidity, Credit Risk and Market Value in Commercial Jordanian Banking", International Journal of Academic Research, Vol. 05, Issue 5, pp: 109-113, 2013.

F. ALshubir, A. Nassem, "The Relationship between Cash Conversion Cycle and Financial Characteristics of Industrial Sectors: An Empirical Study", International Research Journal Investment Management and Financial Innovations, Vol. 10, Issue 4, pp: 87-94, 2013.

F. ALshubir, Z. AL-saidat, " The Impact of Investment in Creative Activities on Turnover Stock Ratio: An Empirical Evidence of Jordanian Banking", International Journal of Business Administration, Vol. 04, Issue 6, pp: 134-139, 2013.

K. Chavali, "Accounting Aberrations: A Managers Dilemma", Journal of International Business Education, Vol. 08, pp: 35-48, 2013.

K. Chavali, "Vulnerability of Banking Institutions in India to frauds – Academic, Regulatory & Customer Perspectives", AIMS International Journal of Management, Vol. 07, Issue 13, pp: 131-151, 2013.

K. M. AlAni, "Application of Rodrigo Model to Prepare the Income Statement in Banks", Mousl, Iraq, Vol. 36, Issue 117, pp: 109-127, 2013.

K. M. AlAni, "Effects of Assets Structure on the Financial Performance: Evidence from Sultanate of Oman", Journal of US-China Public Administration, Vol. 11, Issue 3, pp: 81-92, 2014.

M. A. Hussein, "Foreign Direct Investment and its Impact on Economic Growth and Integration in GCC Countries", Journal of Business and Economics, Vol. 28, Issue 2, pp: 52-70, 2014.

M. A. I. Khan, "Post Financial Crisis Performance of Commercial Banks in Oman", International Journal of Management and Economics, Vol. 01, Issue 12, pp: 29-34, 2014.

M. A. I. Khan, "Trade Between India and UAE: A Fact, Conundrum or Fiction", International Journal of Developments in Trade, Commerce and Business, Vol. 01, pp: 21-27, 2014.

M. A. I. Khan, "Online Attendance Register System: A Correlation between Students Performance and Student Attendance", International Journal of Advances in Management, Technology & Engineering Sciences, Vol. 02, Issue 12 (II), pp: 63-68, 2013.

S. Mohammed, "Factors affecting internet banking usage in India: an Empirical Analysis", Economica, Vol. 09, Issue 5, pp: 5-15, 2013.

Conference Papers:

K. M. AlAni, M. S. AlAmri "Determinants of Capital Structure in Omani Services Sector", 12th EBES Conference, Singapore, January 09-11, 2014.

K. M. AlAni, "A Strategic Framework to Use Payback Period in Evaluating the Capital Budgeting: Managers' and Investors' Perspective", International Conference on Multinational Finance Insurance Investment, Shuker, Kingdom of Bahrain, November 25-27, 2013

M. A. Hussein, M. H. S. Ahmed, "Challenges and Opportunities of Microfinance in Oman -Case of Dhofar Region", The APUGSM Conferences - 2014 International Winter Conference on Business and Economics Research, Beppu, Oita, Japan, January 17-18, 2014.

M. A. I. Khan, "Trade Between India and UAE: A Fact, Conundrum or Fiction", International Conference on Paradigm Shift in Commerce and Management, Aurangabad (MS), India, March 21-22, 2014.

M. A. I. Khan, "Post Financial Crisis performance of Commercial Banks in Oman", National Conference on Emerging Trends in Commerce, Aurangabad, India, January 17-18, 2014.

M. A. I. Khan, "Online Attendance Register System: A Correlation between Students Performance and Student Attendance" 4th International Research Symposium on Management, Technology and Engineering Sciences, PUNE(MS), India, September 21, 2013.

Z. B. Mohamed, "Challenges and Constrains Faced by Small and medium Enterprises (SMEs) in Al Batniah Governorate of Oman", World Business Research Conference, Dubai, UAE, April 21 - 23, 2014.

الشبيري ، فارس " (2013) تحليل العوامل المؤثرة على ربحية ومخاطرة الشركات الصناعية الأردنية: دراسة تطبيقية" مجلة الزرقاء للبحوث والدراسات الإنسانية ، جامعة الزرقاء ، الأردن.

الشبيري ، فارس " (2013) العلاقة بين الإيرادات والتدفقات النقدية من العمليات التشغيلية والتوزيعات النقدية للسهم الواحد : دراسة تطبيقية مقارنة - مجلة دراسات ، جامعة عمار تليجي الأغواط ، الجزائر.

Department of Management of Information System

Refereed Journal Papers:

H. Nakkouri, **M. Limam**, "Discovering Features Contexts from Images Using Random Indexing, Combinatorial Image Analysis", Lecture Notes in Computer Science, Springer, Vol. 8466, pp: 134-145, 2014.

H. Nakkouri, **M. Limam**, "A New Bilinear Approach for Incremental Visual Learning and Recognition", International Journal of Pattern Recognition and Artificial Intelligence, Vol. 05, Issue 4, pp: 1-15, 2013.

I. Khanchouch, K. Boujenfa, **M. Limam**, "A New Multi SOM Algorithm", International Journal of Network Security and Applications, Vol. 05, Issue 4, pp: 181-186, 2013.

I. Kooli, **M. Limam**, "Economic design of attribute np control charts using a variable sampling policy", Applied Stochastic Models in Business and Industry, Article published online, 5 June 2014.

M. B. Mzoughia, **M. Limam**, "An Improved BG/NBD Approach for Modelling Purchasing Behaviour using CPM-Poisson Distribution", International Journal of Modelling and Optimization, Vol. 04, Issue 2, pp: 141-145, 2014.

M. Mirusmonov, C.S. Kim, "Understanding User's Motives Influencing Usage Behavior of Social Networking Sites," International Journal of Science and Advanced Technology, Vol. 04, Issue 3, pp: 4-14, 2014.

M. Y. Ismail, M. S. Baba, "Measuring Cognitive Load for Visualizations In Learning Computer Programming -Physiological Measures", UBICC Journal, Vol. 9, Issue 1, pp: 1410-1426, 2014.

W. Bouaguel, G. Belmufti, **M. Limam**, "A Three-stage Feature Selection Using Quadratic Programming for Credit Scoring", Applied Artificial Intelligence, Vol. 27, Issue 8, pp: 721-742, 2013.

W. Bouaguel, G. Belmufti, **M. Limam**, "Rank Aggregation for Filter Feature Selection in Credit Scoring", Mining Intelligence and Knowledge Exploration, Lecture Notes in Computer Science, Vol. 8284, pp: 7-15, 2013.

W. Bouaguel, G. Belmufti, **M. Limam**, "Similarity Aggregation a New Version of Rank Aggregation Applied to Credit Scoring Case, Mining Intelligence and Knowledge Exploration, Lecture Notes in Computer Science, Vol. 8284, pp: 618-628, 2013.

W. Gani, **M. Limam**, "On the Use of the K Chart for Phase II Monitoring of Simple Linear Profiles", Journal of Quality and Reliability Engineering, Article ID 705450, 8 pages, 2013.

W. Gani, **M. Limam**, "Performance Evaluation of One Class Classification-based Control Charts through an Industrial Application", Quality and Reliability Engineering International, Vol. 29, Issue 6, pp: 841-854, 2013.

Conference Papers:

M. Aref, "Adoption of Data Mining Technique to Find the Condition of an Automobile Machine", International Conference on Emerging Technologies and Trends in Information Systems and Business Management, Kuala Lumpur Malaysia, April 23-24, 2014.

M. Y. Ismail, M. S. Baba "Cognitive Load Measurement in Learning Programming Using NASA TLX Rating Scale (Non Physiological Measures)", 13th International Conference on Applied Computer And Applied Computational Science (ACACOS '14), Kuala Lumpur, Malaysia, April 23-25, 2014.

Department of Management & Marketing

Refereed Journal Papers:

A. AlArabi, "The Impact of Organizational Social Responsibility on Boosting Up Effectiveness of Health Care Institutions in Quafari", Aledari, Vol. 133, pp: 11-66, 2013.

A. AlArabi, "Jordanian University Leadership Opinion about Organizational and Environmental Effects on TQM in Jordanian Universities", Aledairi, Vol. 133, pp: 115-160, 2013.

Conference Papers:

S. Sanyal, **M. W. Hisam**, "Developing Entrepreneurial Competencies of Omani Entrepreneurs : A Study of the Dhofar Region of Sultanate of Oman", Global Conference on Service Management, Surat, India, January 4-5, 2014.

T. Alhadi, "Impact of Corporate Sustainability on Organizational Image", International Conference on Technology Management, Business and Entrepreneurship 2013 (ICTMBE2013), Melaka, Malaysia, December 4-5, 2013.

4.3 College of Engineering

Department of Chemical Engineering

Book:

A. Saadi, A. Wazwaz, "Hysys Software for Chemical and Petroleum Engineering 2014", LAP LAMBERT Academic Publishing , France, 2014.

Refereed Journal Papers:

A. Saadi, "Mathematical Model for Gas Phase in Fluidized Bed Catalytic Reactor for Oxidation of Ethylene to Propanol", Wulfina Journal, Vol. 21, Issue 3, pp: 15-26, 2014.

A. Saadi, "Catalyst Flow Rate Effects on Gas Phase in Fluidized Bed Catalytic Reactor for Production Polybutene", Wulfina Journal, Vol. 21, Issue 4, pp: 215-234, 2014.

A. Saadi, M. A. S. Rafit, A. M. Al Hakmnai, S. S. AL-reem, "Mathematical Model and Convention Controller System for Heater Transfer of Sun Cells to Produce Energy", Journal of Purity, Utility Reaction and Environment, Vol. 03, Issue 2, pp: 177-189, 2014.

Conference Papers:

A. Wazwaz, A. Al-Salaymeh, "Theoretical and Measured Optical Properties of Ni-Al₂O₃ over Al Substrate Selective Absorber ", Global Conference on Renewables and Energy Efficiency for Desert Regions 2013 (GCREEDER 2013), Amman, Jordan, September 10 – 12, 2013.

A. Wazwaz, H. AlHabshi, Y. Gharbia "Investigations of the Measured Solar Radiation, Relative Humidity and Atmospheric Temperature and their Relations at Dhofar University" , The 2013 World Congress on Advances in Nano, Biomechanics, Robotics, and Energy Research (ANBRE13), Seoul, Korea, August 25-28, 2013.

A. Saadi, R. Mamlook, "Advance Mathematical Model of Acrylamide Analysis in Different Food Types using Fuzzy Logic", EDS Conference on Desalination for the Environment: Clean Water and Energy, Limassol, Cyprus, May 11-15, 2014.

A. Saadi, R. R. Al Battashi , Y. N. Al-Yaarubi, "Study For the Removal of Multi-Heavy Metal Component from Simulated Wastewater Using Coconut" ,CCE TECH FEST, Muscat, Oman, May 5-6, 2014.

A. Saadi , A. Al Jabri , H. Al Breiki, "Study For the Removal of Multi-Heavy Metal Component from Simulated Wastewater Using Palm fronds", CCE TECH FEST, Muscat, Oman, May 5-6, 2014.

A. Saadi , A. A. Al Balushi , I. S. Al Hadhrami , M. B. Al Rahbi, "Simulation of biomass product using gasification reactor", CCE TECH FEST, Muscat, Oman, May 5-6, 2014.

A. Saadi, R. R. Al Battashi , Y. N. Al Yaarubi, "Study and Analysis For the Removal of Multi-Heavy Metal Component from Simulated Wastewater Using Coconut" , SOMChE & RSCE, Kualalumpur, Malaysia, October 29-30, 2014.

A. Saadi, A. Al Jabri , H. Al Breiki, "Study and Analysis For the Removal of Multi-Heavy Metal Component from Simulated Wastewater Using Palm fronds", SOMChE & RSCE, Kualalumpur, Malaysia, October 29-30, 2014.

A. Saadi, "Mathematical Model for Gas Phase in Fluidized Bed Catalytic Reactor for Oxidation of Ethylene to Propanol", SOMChE & RSCE, Kualalumpur, Malaysia, October 29-30, 2014.

A. Saadi, "Catalyst Flow Rate Effects on Gas Phase in Fluidized Bed Catalytic Reactor for Production of Polybutene", ICII International Conference on Information Management and Industrial Engineering (ICII 2014) Dubai, UAE, August 22-23, 2014.

Exhibitions:

A. Wazwaz, H. AlHabshi, "Design of Solar Sterilizer in the Focus of Solar Parabolic Dish Collector", CCE TECH FEST, Muscat, Oman, May 5-6, 2014.

A. Saadi, R. R. Al Battashi , Y. N. Al Yaarubi, "Study For the Removal of Multi-Heavy Metal Component from Simulated Wastewater Using Coconut" , CCE TECH FEST, Muscat, Oman, May 5-6, 2014.

Externally Funded Research:

A. Saadi, "Novel Study and System Analysis Identification Relations between Food Qualities Effects on Nervous System and Diabetes Diseases", funded by SEED GRANT.

This study embarks on the following objectives:

1. To study the relationship between food quality and nervous system
2. To study the relationship between food quality and diabetes
3. To study brain performance with food quality
4. To study the effect of brain performance on pancreas gland
5. To produce new theory to show the relationship between diabetes, food and nervous system
6. Design a new mathematical model to describe all these factors.

Department of Civil and Environmental Engineering

Refereed Journal Papers:

A. Abu Abdo, F. Eckwright, S.J. Jung, F. Bayomy, R. Nielsen “Semi-Circular Notched Beam Testing Procedure for Hot Mixture Asphalt” Proceedings of the Institution of Civil Engineers: Transport, Vol. 167, Issue 1, PP: 48-58, 2014.

A. Abu Abdo, S.J. Jung “Evaluation of Prediction Models of Fatigue for Asphalt Mixes” International Journal of Pavement Research and Technology (IJPRT), Vol. 6, Issue 6, PP: 696-703, 2013.

F. Eckwright, S.J. Jung, **A. Abu Abdo** “Utilizing A Particle Flow Code in 2 Dimensional Discrete Element Analyses of Fracture Resistance Evaluation of HMA and Brittle Rock” Asian Journal of Civil Engineering (BHRC), Vol. 15, Issue 1, PP: 9-21, 2014.

Externally Funded Research:

S. J. Jung, **A. Abu Abdo**, “Evaluation and Prediction of Fatigue and Fracture Distresses in Asphalt Mixes ”, funded by the University of Idaho, USA.

To improve asphalt mixes fracture and fatigue resistance evaluation and to overcome the difficulty of preparation of HMA beam samples for testing, a two stage study has been initiated. The first stage was to investigate and compare the stress intensity factor (KIC) determined by two test setups; the semi-circular notched bending fracture (SCNBF) and the single edge notched beam (SENB) tests. In stage two, the potential of correlating a simple monotonic (static) to a cyclic (dynamic) SCNBF tests was investigated.

A. Rauf, T. Maki, “Performance Based Design of Concrete Bridge Structures, funded by Ministry of Education, Culture, Sports, Science and Technology, Japan.

The current research consists of two major tasks; damage assessment and reparability evaluation of RC bridge structures, which has significant importance in the damage based design and in the assessment of vulnerability of existing structures. For damage assessment a damage index for RC structures is proposed based on the integration of the material strain obtained from finite element analysis. The specimens were modeled using finite element analysis program WCOMD which computes the response based on constitutive equations in terms of average stress-strain relationships for reinforced concrete. The specimens with range of behavior covering shear and flexure dominant response were tested in the laboratory for reversed cyclic lateral loadings till the specimens were severely damaged. The damage in terms of crack volume was measured during the test and is presented with the proposed damage index. The relationship between the proposed damage index and well known Park & Ang damage index is shown. The proposed damage index is then applied to the bridge system to assess the damage when subjected to an earthquake history.

Department of Electrical and Computer Engineering

Refereed Journal Paper:

H. Hassan, Z. Osman and A. Lasheen, "Sizing of STATCOM to Enhance Voltage Stability of Power Systems for Normal and Contingency Cases", Smart Grid and Renewable Energy, Vol. 05, Issue 1, pp: 8-18, 2014.

Conference Papers:

M. Zellagui, **H. Hassan**, and A. Chaghi, "The Impact of Conduction Angle on Short Circuit Calculations in Case of Three Phase Fault for a FACTS Controlled Transmission Line in the Algerian Network", The International Conference on Automatic Control Theory and Application (ACTA 2014), Bangkok, Thailand, June 17-19, 2014.

M. Zellagui, A. Chaghi, **H. Hassan**, A. Ghodbane and A. Ghorbani, "Impact of Fault Resistance on Transmission Line Compensated by Series FACTS Devices", International Conference on Electrical Engineering and Automatic Control (ICEEAC'2013), Setif, Algeria, November 24-26, 2013.

S. Sheik Mohammed , D. Devaraj, "Simulation and Analysis of Stand-alone Photovoltaic System with Boost Converter using MATLAB/Simulink" 2014 International Conference on Circuit, Power and Computing Technologies (ICCPCT 2014), Tamilnadu, India, March 20-21, 2014.

S. Sheik Mohammed , D. Devaraj, " Design, Simulation and Analysis of Microcontroller based DC-DC Boost Converter Using Proteus Design Suite", Proc. of Int. Conf. on Advances in Electrical & Electronics, AETAEE 2013, NCR, India, December 13-14, 2013.

T. Mohammed, W. Al-Alzzo, M. Akaak, M. Suroor, "Microprocessor-Based Prototype of a Driverless Train", 4th National Symposium Engineering Final Year Projects, Nizwa, Oman, May 5, 2014.

T. Mohammed, S. Haddad, H. Sammar, F. Al-Shanfari, "Computer-Supported Learning: A Teaching Aid for ECE Students", International Conference On Future Trends In Learning, Education and Teaching Methodologies - FTLETM 2014, Bangkok, Thailand, May 3-4, 2014.

W. Al-Alzzo, T. Mohammed, M. Al Rawas, S. Al Mashani, A. Qata, S. Al Sulaimani, "Automation of Greenhouses with In-house and Remote Monitoring/Control System", 4th National Symposium Engineering Final Year Projects, Nizwa, Oman, May 5, 2014.

Department of Graphic Design

Conference Paper:

L. Cazacova, M. Hidalgo, M. Farhan, F. Al-Masikhi, F. Al-Hafidh, H. Qatan, J. Hubais, L. Ghafoor, M. Al-Marhoon, M. Darwish, M. Al-Amri, S. Al-Baraami, S. Al-Shanfari & S. Al-Rawas, "Recognition of Mirbat town's old area as historical environment", REHAB 2014, Tomar, Portugal, March, 19-21 2014.

Externally Funded Research:

L. Cazacova, K. Adam, S. Mohammad, F. Abbassi, S. Mana, "Eco-House Project Competition", funded by TRC.

The Oman EFHC is a national competition open to all colleges and universities in Oman. Teams consisting of students and faculty in addition to engineering consultant and construction firm compete to design, build, and operate highly energy-efficient houses. The entire Oman EFHC project encompasses not only the competition, but also the project's design development, construction, and commissioning phases necessary to participate in the competition. The Oman EFHC is also a public event designed to increase awareness about energy for residential use. The competition demonstrates that a beautifully and well-designed house can generate enough thermal and electrical energy to meet the needs of a household, including electricity for lighting, cooking, washing clothes and dishes, powering home and home-office electronics, and maintaining a comfortable indoor temperature and air quality.

Department of Mechanical and Mechatronics Engineering

Conference Paper:

S. Grami, **G. Yousef**, "GMS Friction Compensation in Robot Manipulator", IECON 2013, Vienna, Austria, November 10-13, 2013.

Externally Funded Research:

S. Grami, "Experimental Investigation of Parabolic Trough Solar Collector ", funded by TRC.

This study aims to compare between two troughs designed and build in Dhofar University: open and closed trough. The comparison shows that the closed trough is more efficient in terms of temperature and heat losses.

4.4 Foundation Program

English Language Unit

Conference Papers:

F. Hamadi, "Towards 'Hybridizing' the Translation of Foreign Literature: Some Theoretical Reflections", The First Dhofar University National English Language Conference, Salalah, Oman, February, 22-24, 2014.

J. Irudayasamy, "The Impacts of Omani EFL Learners' English Reading Habits on other Macro-skills", The First Dhofar University National English Language Conference, Salalah, Oman, February, 22-24, 2014.

J. Irudayasamy, "Inculcating Self Access Learning in ELT through Blogging", ELTAI 8th International Conference on 21st Century Learners, Chennai, India, July 18-20, 2013.

L. Vennakkadan, "The Impacts of Omani EFL Learners' English Reading Habits on other Macro-skills", The First Dhofar University National English Language Conference, Salalah, Oman, February, 22-24, 2014.

L. Vennakkadan, "Effecting Positive Washback through Alternative Assessment", ELTAI 8th International Conference on 21st Century Learners, Chennai, India, July 18-20, 2013.

R. Bontha, "Outcome Based English Language Programmes at Foundation Programme in Dhofar University – A case Study", The First Dhofar University National English Language Conference, Salalah, Oman, February 22-24, 2014.

R. Bontha, "Alternative Assessments in ESL/EFL at Foundation Program in Dhofar University", National Conference on Quality Initiatives in Higher Education – Exploring frontiers, Hyderabad, India, August 3-5, 2013.

R. Bontha, "Writing Journals and Portfolios – Tools of ESL/EFL Learning and Assessment", International Conference on 21st Century Learners: Styles and Strategies, Chennai, India, July 18-20, 2013.

Refereed Journal Papers:

L. Vennakkadan, "Shifting from an Aural Tradition to a Visual Paradigm in Teaching Poetry", Research Journal of English Language and Literature, Vol. 02, Issue 2, pp: 67-70, 2014.

L. Vennakkadan, "Incorporating Mobile Learning and Testing Possibilities to ELT Classrooms", New Man International Journal of Multidisciplinary Studies, Vol. 01, Issue 5, pp: 28-33, 2014.

R. Bontha, "Writing Journals and Portfolios – Tools of ESL/EFL Learning and Assessment", International Journal of the Frontiers of English Literature & Patterns of English Literature & the Patterns of ELT, MGIT, Vol. 02, Issue 1, pp:1-10, 2014.

Book Chapter

R. Bontha, "Alternative Assessments in ESL/EFL at Foundation Program in Dhofar University", Christadoss Joseph (edt). Quality Initiatives in Higher Education Exploring New Frontiers, Semmoodhai Pathippagam, Chennai, 2013.

Math and IT Unit

Refereed Journal Paper:

D. Manzoor, A. Ali, A. Ahmad, "Cloud and Web Technologies: Technical Improvements and their Implications on E-Governance", International Journal of Advanced Computer Science and Applications, Vol. 05, Issue 5, pp: 196-201, 2014.

Appendix-A

The details of STFDG, RRG, SG and Incentive claim granted in the academic year Fall 2013- Spring 2014 are shown below in Tables A, B and C respectively:

Table A: STFDG Granted in Academic Year 2013/ 2014

S.No	Author	Presented at:
1	Dr. Marielle Risse	Writing Conference in Oxford University, USA
2	Dr. Muawya Ahmed Hussein	International Seminar on Policies of Economic Openness and Growth, in South Mediterranean Countries, Algeria
3	Dr. Said Grami	3 rd Annual Conference of IEEE Industrial Electronics Society, Austria
4	Dr. Tariq Al Hadi	ICTMBE 2013, International Conference, India
5	Dr. Vijay Singh Thakur	International ELT Conference, Izmir, Turkey
6	Dr. Sheikh Mohammed Sulthan	International Conference on Circuit, Power & Computing Technologies 2014, India
7	Dr. Mohammad Yousoof Ismail	13 th International Conference on Applied Computer and Applied Computational Science, Malaysia
8	Dr. Zaroug Osman Mohammad Bilal	World Research Conference, Dubai, UAE
9	Dr. Thabit Sultan Mohammed	International Conference on Future Trends n Learning, Education & Teaching Methodologies 2014, Thailand
10	Dr. Ahmar Uddin Mohammed	2 nd International Conference on Social Sciences Research, Malaysia
11	Dr. Mirsobit Mirusmonov	The Finance, MIS, Economics & Global Business Research Conference, Turkey
12	Dr. Tarig Mohammed Salih Atiya	10th Global Business and Social Science Research Conference, China

Table B: RRG and SG Granted in Academic Year 2013/ 2014

Type of Grant	No	Author	Title
Regular Research Grant (RRG)	1	Dr. Mirsobit Mirusmonov	Impact of Social Networking on Knowledge Transfer and Community Cohesiveness in Oman
Seed Grant (SG)	1	Dr. Ahmmed Ibrehem	Identifying Relation between Effects of Food Qualities on Nervous System and Diabetes Disease: A Novel Study and System Analysis

Table C: Incentive Claims Granted in Academic Year 2013/ 2014

Sr. No	Author	Title of Paper	Journal
1	Dr. Ra'ed Mohammad	Determining the Attitude of Undergraduate Students Towards Physics Through Concept Mapping	Mediterranean Journal of Social Science
2	Dr. Mohammad Asif Gondal	An Extended Image Encryption Using Chaotic Coupled Map and S-box Transformation	Nonlinear Dynamics
3	Dr. Ahmmed Saadi Ibrahim	Catalyst Flow Rate Effects on gas Phase in Fluidized Bed Catalytic Reactor for production of Polybutene	Wulfina Journal
4	Dr. Ahmmed Saadi Ibrahim	Mathematical Model for Gas Phase in Fluidized Bed Catalytic Reactor for Oxidation of Ethylene to Propanol	Wulfina Journal
5	Dr. Ahmed Abu Abdo	Evaluation of SCNB Testing Procedure for Hot Mixture Asphalt	Proceedings of the Journal of Civil Engineers: Transport
6	Dr. Ahmed Abu Abdo	Utilizing a Particle Flow Code in 2 Dimensional Discrete Element Method of Fracture Resistance Evaluation of HMA and Brittle Rock	Asian Journal of Civil Engineers
7	Dr. Ahmed Abu Abdo	Evaluation of Prediction Models of Fatigue for Asphalt Mixes in Fatigue	International Journal of Pavement, Research & Technology
8	Dr. Wisam Fahmi Al-Azzo	IDRG-PTS Scheme with Low Complexity for Peak-to-Average Power Ratio reduction in OFDM System	Journal of Chinese Institute of Engineering
9	Dr. Mohammad Asif Gondal	Stego Optical Encryption Based on Chaotic Baker's Map Transformation	Zeitschrift für Naturforschung

