Muthuraman S holds research interest in the area of Internal Combustion Engine, Bio Fuels, Octane Fuels, Thermodynamics and Heat Transfer. He has recently published a review paper on Exploration of waste cooking oil methyl esters (WCOME) as fuel in compression ignition engines. His research mainly focuses on Bio fuels and has published 21 papers in various Regional and International journals and also has published 5 books in his field of interest.

DEPARTMENT OF APPLIED SCIENCES
APPLIED CHEMISTRY SECTION

Dr. Syed Najmul Hejaz Azmi’s main research activities are in the area of metal speciation analysis which is a branch of inorganic-analytical chemistry that deals with the detection and determination of metals in various samples of air, water and soil. The extensive use of Pd(II) in automotive catalytic converters has led to increasing concentrations of Pd(II) in environmental samples. Hypersensitivity and allergic reactions have been observed in susceptible individuals following chronic occupational exposures. Hence, due to toxicity of palladium compounds to mammals, fish and higher plants, the determination of Pd (II) in environmental matrices is of considerable importance. The requirement of quality, quantity, purity and safety of environmental samples is the idea behind his research work. He developed a new uv-visible spectroscopic method for the quantitation of palladium in synthetic mixture and automobile workshop area samples. The presented method obeyed Beer’s law in the concentration range of 0.75 to 16.50 ppm Pd(II). The results of the presented method were statistically compared with the results of atomic absorption spectrophotometric method and showed no significant difference between two methods. The stoichiometric ratio of the presented method was investigated using mole ratio method. Fourier transformed infrared spectroscopic spectra of the reacting reagents and complex were taken and utilized for reaction mechanism. Linear regression equations were computed and used for assaying Pd(II) in synthetic mixture and automobile workshop area samples.

References

Dr. Mohammed Fawaz Silwadi is engaged in two areas of research activities, the main work is in the Drug Delivery System, he is working in the development of a number of new modes of drug delivery that have entered clinical practice, which would control the rate at which a drug is released and the location in the body where it is released. He succeeded in developing EA-Alg-AgNPs nanocomposite based on ellagic acid (EA) as active compound. Silver nitrate was taken as the metal precursor (AgNPs) and sodium alginate (Alg) as a reducing agent. The release of the drug Ellagic acid from nanocomposite was followed Hixson-Crowell kinetic model. The EA and EA-Alg-AgNPs nanocomposite exhibit MCF-7 cells in a dose-dependent manner with IC50 value 21.4 and 10.5 g mL−1, respectively. His work is in progress to develop more systems for the drug delivery using different models with different carriers. On the other hand, he is working in renewable energy, in studying the biogas production from different mixtures of organic waste, he investigated the biogas production from fruits and vegetable such as rice, potatoes etc., and their aerobic fermentation, as a highly promising technology for converting biomass waste into methane, which then may directly be used as an energy source.

References

Dr. Pankaj Sah’s broad research interests include studies of the anthropogenic impact on biodiversity, ecosystem functioning, and environmental or ecological issues. Specifically, his research interest is to understand the impact of increasing human interference with the environment and biodiversity loss at regional and global scale. In order to study the effects of community indices on ecosystem functioning and stability, experimental microcosms have been very successful. Scientists have reported that many latest and significant developments in community ecology have been derived from experiments conducted in microcosms. Dr. Pankaj is trying to study the effects of species diversity and richness on experimental microcosms. In a recently published research paper his students have shown that species diversity is mainly responsible in ecosystem functioning even at smaller levels of experimental microcosms. Recent studies have shown that much of the Omani soil is badly degraded and research should be done to restore these lands to mitigate desertification problem in Oman. His research activities also address this contemporary problem in restoration ecology where he and his students are trying to understand the salt tolerant efficacy of some multipurpose leguminous trees from Oman. He has recently published a quality research paper showing that *Albizia lebbeck* (L.) Benth from Oman can be used as possible effective ecological cover to mobilize a significant amount of nitrogen in the soil and thus reclaiming salt affected degraded arid lands. Dr. Pankaj and his students recommend that long-term field-based studies up to seedling, sapling, and successful plantation and tree maturation stages should also be performed to collect further data and to quantify the amount of nitrogen sequestration in Omani soils. They also suggested that increased use of this suitable nitrogen fixing ecological cover species will eventually enrich pedological conditions of arid ecosystems, initiate autogenic succession and thus help in reclaiming degraded lands of Oman.

References
Dr. Salla Hemadri Roddy's main research activities are in the area of Plant tissue culture, molecular biology, photochemistry and phytoremediation to study the role of advancements in applied sciences. He is specialized in conservation of medicinal plants through micropropagation which are endangering with their isozyme characterization, medicinal plant extracts as phytomedicines and their antimicrobial study. In addition he is also interested in evaluating medicinal plant extracts as natural remedy for treatment of various human ailments like wound healing, hair growth property, weight loss and hypoglycemic through *invivo* studies on mice. Another major field interest with him is Molecular biology where molecular characterization of several date palm varieties from different locations using SSR markers and genetic fingerprinting of Pomegranate cultivars has been achieved. He is also interested in environmental point of study to clean up the polluted sites through phytoremediation concept, well how the heavy metals at different concentrations affect the cultivars grown in heavy metal polluted sites at different physiological and molecular level like chlorophyll based study and osmolyte regulation etc.

**References**


**DEPARTMENT OF INFORMATION TECHNOLOGY**

Wireless Sensor and Actor Network-Security Analysis (Paper id:100300084)


*This paper refers to the pictures taken for detection of text, company logo, storage of text found in an image, saving contact details from a business card without typing it manually, detection of printed text data, extracting product information from Barcode and QR Code, and translation of languages. The study reveals the performance of its matching logic under real world scenario in 6 major applications, leading to an average of 91.8% successful results.*


Ramkumar Lakshminarayanan, Balaji Dhanasekaran, Ben George Ephrem, “A Study on Features and Limitations of On-line C Compilers", International Journal of Computer Applications (IJCA), Volume 125 , Number 9, September 2015,


http://sites.google.com/site/jcisis/ISSN 1947-5500

**PUBLICATIONS**

*H. Al-Shuail, M. Cruz, K. Altel,*" The Role of Open Educational Resources (OER) in Enhancing Teaching and Learning Quality at the Colleges of Technology, Sultanate of Oman", The third conference on quality management and quality enhancement in higher education. 2015.
Soofi Asra Mubeen holds research interest in the area of Accounting, condition monitoring of mechanical equipment. The research work focus on Human Resource practices in Andhra Pradesh Tourism Development Corporation. The study aims to evaluate customer’s expectation and perception of quality of service provided by Insurance companies in Oman. It also examines how the demographic factors influence on the expectation and perception of insurance services. Descriptive research design was adopted and simple random sampling was chosen for study. Hundred questionnaires were received from the respondents. Data were refined, tabulated and analyzed. The study identified the phenomena related to assessment of service quality in insurance industry in sultanate of Oman based on SERVQUAL model using seven parameters - tangibility, reliability, responsiveness, assurance, empathy, price and technical quality. Demographic factors influence on Service quality were also identified and reported by using descriptive statistics. Results indicated that there is a huge gap between customer’s expectation and perception in price, reliability and it is also revealed that there is a relationship between demographic factors and customer’s expectation and perception of service quality dimensions. The purpose of the study was to evaluate the customer’s expectation and perception towards the current performance of services provided by Insurance Industries in Oman. From the analysis it is found that the customers feel gap in between their expectation and actual services provided by the insurance companies in price and reliability. It is also revealed that there is a relationship between demographic factors and customer’s expectation and perception of service quality dimensions. When customer takes any insurance policy they highly expect their insurance service providers to be reliable and trusted in all matters and thus in turn affect customer’s satisfaction of the insurance service that provided from the companies.

She performed another study to identify the antecedents of Organizational Citizenship Behavior and OCB were studied in the banking sector in sultanate of Oman. The antecedents of OCB include Altruism, Conscientiousness and Civic Virtue in the study. Causal research design was adopted and purposive sampling was used. Unit of analysis was middle level manager in private sector banks. 50 Questionnaires were analyzed from different branches in Bank Muscat from Muscat governorate to identify the relationship between the antecedents of OCB and OCB. Results indicated that Civic Virtue explained more variance towards the construct of OCB compared to Conscientiousness and Altruism. Results explained that the relationship between the antecedents and OCB was highly significant with the value of high $R^2$ (.802). It was found that structural model has significant high global predictive ability.

The study also tries to find out Civic Virtue was the most important antecedents of OCB in Bank Muscat managerial level employees compare to other two antecedents. Result showed that 80 percent of the total variance in OCB was explained by Civic Virtue whereas rest 20 percent of the variance was explained by Conscientiousness and Altruism together. This suggested that most of the managers have constructive and responsible participation in the management matters and they perform and complete their tasks only to preserve the reputation of the organization rather than having a voluntary behavior in assisting people around them in work related tasks. Conscientiousness and Altruism as a dimension of OCB did not explain much variance in the proposed linear relationship. It can be inferred that in banking sector of Oman Altruism and Conscientiousness did not contribute to the construct of Organizational Citizenship Behavior. It means managers working for a significant duration in the organization were also not voluntarily inclined to help and assist the people who are working with or under them. Such lesser Altruism displayed by those employees could be the effect of high competitive environment in the modern organization. The lesser contribution of Conscientiousness towards OCB in the banking sector suggested that middle level managers in such organizations did not overdo with their effort to complete the organizational task. They stick to their normal routine task and follow the normal rules and regulation to perform their duty. They did not voluntarily take initiative to improve on the internal process of the organization pertaining to rules and regulations. This antecedent of OCB did not contribute much towards the construct of OCB because of the increased work pressure in these organizations. The final model suggested that all the antecedents of OCB do contribute towards the construct of OCB in banking sector of Oman because 80.2% of the variance was explained by three antecedents taken in this study. The variance shown in the linear model was significantly higher to validate and accept any model. It can be inferred that all three antecedents did contribute to determine the construct of OCB. Civic Virtue was found as one of the significant antecedents of OCB compare to other two. The reason to this phenomenon was discussed and explained above. The essence of OCB seemed to exist in banking sector in Oman. Future study may be undertaken to explore the phenomenon of OCB to bring more insight and understanding in this sector with increased sample size.
tries to attempt on
banking sector plays a crucial role and it is considered to be one of the fastest growing sectors in India. Due to major structural changes in the international market the banking system is making more and more complex in the modern scenario. The study is based on secondary data by collecting from the official directory, Indian Banking Association, RBI Bulletins, Dion Global Solutions Limited and data base of Centre for Monitoring Indian Economy (CMIE) namely PROWESS. The Published Annual Reports of Bank of Baroda and Punjab National Bank taken from their websites, Magazines and Journals on finance have also been used as sources of data. To evaluate the comparative financial performance of Bank of Baroda and Punjab National Bank, the study adopted the world renowned: Capital Adequacy, Asset Quality, Management, Earning Quality and Liquidity (CAMEL) model (with minor modification) with the statistical tools used are arithmetic mean, t-test using SPSS 19 by covering from the period 2010-2014 for two leading public sector banks- Bank of Baroda and Punjab National Bank- had been taken as a sample. The result of the two banks also suggest that maintaining CRAR at a higher level than the prescribed level, 10%. But the Bank of Baroda has maintained highest across the duration of last five years. It is very good sign for the banks to survive and to expand in future. Out of 14 ratios used in the CAMEL model the average figures of Bank Of Baroda is the best for (6 ratios) followed by Punjab National Bank (5 ratios). Thus it is established that Bank of Baroda is the best bank in the selected public sector banks. In nutshell it can be concluded that transparency and good governance would work as principal guiding force in present scenario. Finally, in the service sector, it is difficult to quantify the output because it is intangible. But, the CAMEL model and t-test which measures the performance of bank from each of the important parameter like capital adequacy, asset quality, management efficiency, earning quality, liquidity and Sensitivity.

M. Krishnamurthy holds research interest in the area of Accounting, Human Resource and Marketing. The research work mainly focuses on Problem and Prospectus of New generation Private Sector Banks. The study focuses on the importance of stress management and identifies their effects on work performance and productivity. In recent past stress has become a debatable topic and so many discussions are going around the world to handle it in right manner to avoid staff turnover. The researcher has considered very important variables and analyzed by factor analysis which is an important branch of multivariate statistics. Stress is key factor which affect the morale of a human being and this study of stress management helps the employees to learn to handle stress in healthy mode, diminish dangerous effects. This study helps the readers to carry out their activities in a relaxed manner which would contribute to their performance, productivity, endurance and job satisfaction. Findings and suggestions of this research study can be considered as common for other organizations and in general society can benefit accordingly. In general stress refers to pressure on individuals that perceived excessive or intolerable psychological and physiological changes in response to those pressures. A bit of these is part of normal life and it is not necessarily always bad, sometimes joyful events such a marriage, a birth, a new job can be successful that makes changes in human life. The most common source of organizational stress will be job itself and these affect the quality of work life, Human organism is constantly being bombarded by stimuli of all sorts from the external environment in the form of changing circumstances. Stress is major threat to employee’s well being and performance which is inescapable aspect of modern working life. This study would help to handle the issues of stress of employees effectively and efficiently in order to have peaceful working culture at the place of work. This study has been undertaken into account to find various issues relating to occupational stress and resolve the problems identified around the employees in the organization.

K. Srinivasan holds research interest in the area of Finance and Accounting. The research work focus on Futures Returns, Trading Volume and Market Depth in Stock Markets. The uncertain nature and the relationship between price movements, trading volume and open interest for select stock future contracts are examine over the period from April 1, 2005 to December 31, 2012. The univariate Box-Jenkins methods are employed to partition trading volume and open interest series into expected and unexpected components based on one-step ahead forecast errors. Along with that, the study also employed Unit Root test, GARCH (Generalized Autoregressive Conditional Heteroskedasticity) and AGARCH (Augmented GARCH) were employed to measure the relationship between these variables by using the method developed by Bessembinder & Seguin (1993). The uncorrelated residuals of conditional mean equation are the unexpected innovations of trading volume and open interest, which are then squared and included in the Augmented GARCH conditional variance specification. The primary findings of the study show significant positive relationship between return volatility, expected trading volume and expected open interest and vice versa. Furthermore, it was found that the return volatility is influencing both expected and unexpected trading volume and open interest respectively. Specifically, the stock futures market in India was more likely to be influenced by lagged volatility, which is consistence with the conclusion of other papers. It was also found that unexpected volume and open interest are more likely to have a greater impact on volatility than the expected trading volume and open interest. Therefore, it can be concluded that market depth does not have any effect on volatility. Our result would be interesting for the researchers, policy makers and market participants. The study suggested that the fluctuations in future return are mainly due to macro-
economic variables and influence in global factors, which will mainly determine the future price movements. But, there is no link between the individual variables like open interest and volatility, whereas trading volume was the variable having meager impact on open interest and volatility. Two of the market participants interested in the results are hedgers and speculators. Hedgers enters the futures market to offset the risk of substantial loss in the future, while speculators take positions based on their expectation of the movements of that contract. Since, open interest does not hold in the Indian futures market, the investors should not base their investment decision according to open interest. Finally, trading volume is an important variable and influencing the futures returns, open interest and volatility in futures markets.

K. Srinivasan holds research interest in the area of Finance and Accounting. The research work focus on Futures Returns, Trading Volume and Market Depth in Stock Markets. Corporate Governance has gained momentum because of changing business environment and various factors such as the GATT (General Agreement on Tariffs and Trade) and WTO (World Trade Organization) have also contributed to raise the awareness towards good governance practices. This main purpose of the study is to examine the relationship between financial performance measures and corporate governance variables, we examined by Correlation Matrix for the period from 2001 to 2013 for value-based financial performance measures like Economic value added (EVA), Market value added (MVA) has been developed. The Empirical studies in corporate governance focus on the link between corporate governance and firm’s performance. Therefore, the current study is based on relationship between corporate governance and value based financial performance measures like EVA and MVA, the study focuses on Information technology sector in India. Independent Variables included in the study were CEO Duality, Size of the Board, Management Equity Ownership, Foreign Ownership, Number of Board Meetings, Leverage ratio and Size of the firm. Overall, the study concluded that corporate governance has significance influence on the financial performance of the Information technology firms in India. In general, the result reveals that corporate governance significantly influences the company growth status and produced value to the investors in creating shareholder’s wealth towards corporate success. But, the differences in laws and effectiveness of enforcing corporate governance law across countries, need to be examined with the possible origins of differences, recapitulate their consequences and assess the growing potential strategies of corporate governance reforms is a major hurdle in the modern environment. Apart from that, the legal provisions pertaining to value based financial measures will have a significant impact in influencing corporate governance in understanding the conventional discrepancy between banking system and financial system in the modern scenario. Therefore, an important implication in controlling banking and financial system will encourage the investors, policy makers and market participants through user friendly regulatory environment, which should be deeply rooted in the legal structure of each country and in the origin of its laws. Despite these difficulties, the reforms of value based financial measures are politically feasible in some circumstances, and bring major changes to global environment. Overall, the result reveals that corporate governance significantly influences the company growth status and produced value for its investors to create shareholder’s value on corporate success. Finally, our study concludes with a suggestion for future potential studies: in addition to value-based performance measures, measures like total shareholder return, cash flow return on investment, and shareholder value added can be taken into consideration as dependent variables.

DEPARTMENT OF BUSINESS STUDIES
HUMAN RESOURCE MANAGEMENT SECTION

Chandra Sekhara Kamir Reddy attempts to identify the life insurance employer priority in between performance and qualification of the employee, the researcher came to know that, the employer of life insurance industry in India is giving more priority to the employee performance rather than his qualification. Some of the facts about why the employer is giving more priority to employee performance rather than his qualification is, Insurance business is purely selling insurance policy business, the primary job of insurance company employee is, he/she should be able to sold as much insurance policies as he/she can, to the customers. The insurance company’s performance is completely depends upon the performance of its employee’s. Qualification is helpful to the employee to enter into the organization, but later the employee cannot survive without proper performance, even though he/she had higher qualification. Employees who are giving good performance, higher qualification will be an added advantage to lead senior positions. Insurance policy selling skills are more required rather than the academic qualification to insurance company employees. The Insurance organizations may survive based on the business what its employees did, it’s not based on how many no of employees are having higher qualification. To gain good market share of insurance company it needs good performance from its employees, if the employees are not performing gaining market share is not at all possible to any of the insurance company. Employee producing more worth of contribution with minimum qualification is always profitable than the employees producing less worth of contribution with higher qualification. To survive in insurance sector business employee’s contribution is highly desirable. As an organization, employer will check the cost to company policy of an employee, every employer expects that, employee contribution should be more worth than his cost in the organization, which means the total amount how much one employee is costing to the
organization should be less than the worth of his contribution i.e. the employee’s cost to company is $1,000 per month, the business profit on behalf of his performance should be more than $1,000, then only it is possible to gain profits to the organization. Qualification without performance will not yield any profit to the organizations. That’s the reason insurance companies strongly implemented statement of “performance is primary qualification is secondary”. The researcher track and what more need to be done to improve the attractiveness of the private sector as employers of young Omani graduates. The primary data has been collected and collated from the distribution of about 120 structured questionnaires to as many respondents in a random manner at different private companies in Muscat region, Oman. The analysis of the data was subjected to factor analysis using Principal Component analysis with Varimax Rotation. The study revealed that the most critical set of factors that determined employee engagement was the personal fulfillment of the employees. Employees felt most engaged when they felt valued by the organization for their contribution and this acted as the most important determinant of employee engagement. This could be an important pointer to the decision makers at the helm of Oman’s private sector. It showed that just an increase in compensation package by the private sector was not the most important determinant of employee engagement as commonly supposed. It was more important to nurture an environment in the private sector which catered to the fulfillment of the inner self of an employee in the form of appreciation and recognition. The second most important set of factors for determining employee engagement among young Omani’s in the private sector included, very significantly, compensation package and the perception of transparency and fairness exhibited by the organization. However, it was important to remember that the incentives must be tailored to the needs of the workers rather than using the “one-size-fits-all” approach, which was impersonal and sometimes ineffective. It was interesting to note that stress level did not play that important a role in employee engagement indicating that the junior Omani employees might not be exposed to a high stress situation in their job. This could point to an oft related sentiment expressed by heads of private sector organizations that Omani employees at the junior level were not yet willing to take up tasks that could be stressful. The least importance accorded to employee promotion and growth could be an indicator of the fact that many of these employees did not consider a long term career in the organization and therefore, such concerns were of no immediate importance. In view of looming uncertainty in Oman.

**RESEARCH PUBLICATIONS**


ENGLISH LANGUAGE CENTRE (ELC)

Awarn Mourssi received his M.A in TESL/TEFL from Birmingham University/ the United Kingdom in 2006, and received his PhD in Applied Linguistics from University of the West of England, Bristol/ the United Kingdom in 2013. His major field of study is Second Language Acquisition SLA. Dr. Mourssi has published and edited a number of research articles and books. He is now on the editorial board of some International Language Journals in Norway, Canada, Iran, Finland, Malaysia, the USA, and the UK.

During this academic year, Dr. Mourssi tried to carry out an empirical study investigating one of the most common issues namely the inter linguistic and the cross-linguistic influence of the L1 in learning L2 grammar in general, and specifically the acquisition of the simple past tense in the context of Arab Learners of English (ALEs) as postgraduate learners. Then in participating with Ms. Taiba Al Hilali, from HCT, they believe that to predict or to analyze the learners’ errors may provide the teachers, researchers and the learners with valuable information in the areas of difficulties that learners may encounter. An empirical study was conducted on 60 Arab Learners of English (ALEs) which lasted about three months. A detailed analysis was made of the errors/mistakes of using the prepositions in 120 written texts produced by ALEs. Quantitative analyses show the impact of error analysis in forms of meta-linguistic feedback and cross linguistic influence on the acquisition of L2 prepositions in the context of ALEs at the Higher College of Technology.

References:


Mourssi, A. (2015). The Inter-linguistic and the Cross-linguistic Influence on the Acquisition of L2 (English) linguistic items: A case study in the context of ALEs as postgraduate learners. Studies in English Language Teaching ISSN 2372-9740 (Print) ISSN 2329-311X (Online) Vol. 3, No. 3, 2015 www.scholink.org/ojs/index.php/selt/article/view/324


Dr. Nasrin Al-Lawati holds a PhD in Applied Linguistics from the University of Reading, UK. She has been involved in ELT, test writing, and teacher training for about two decades. Currently, she is working at the Higher College of Technology, Oman, where she has developed curricula for two of the post-foundation courses offered at the college. She has also published two ELT coursebooks, which are used at the Higher College of Technology, Oman, for the post-foundation program. Her research interests include grammar teaching and applied corpus linguistics.

References:


Mr. Mohammed joined HCT in 2014, and then he was selected to be Head of sections for English language programs. He has co-published with Dr. Anwar Mourssi. He is interested in e-learning and how to use technology in teaching L2. He has participated in some national and international conferences. He got his MA in TESOL from Bath University, UK.

References:

Tayba Al Hilali joined the Higher College of Technology in 2014 as a lecturer at the Post-Foundation Program in the Language Center. She was the former coordinator of Technical Writing 2 course and a member of the Testing Committee. She took part in preparing a substantial number of Technical Writing 1 and Technical Writing 2 exams. Prior to joining HCT, she worked at Modern College of Business and Science and College of Applied Sciences in Nizwa as a lecturer.

Tayba graduated from Sultan Qaboos University in 2008 with BEd. Degree in English and completed her Master’s degree in applied linguistics & TESOL at the University of Queensland in Australia in 2010. She is currently pursuing her PhD degree in education field at the University of Bath in the UK. Her PhD study focuses on ESP and technical writing. Tayba collaborated with her colleague Dr. Anwar Mourssi and published a paper entitled “The Acquisition of L2 Prepositions and the Impact of Cross-linguistic and Meta-linguistic Feedback: An Empirical Study in the Context of ALEs at the Higher College of Technology” in the International Journal of Language Learning and Applied Linguistics World (IJLLALW).

References:

Thomas Kutty P.V is an ELT professional with fourteen years of experience in India, Libya and Oman. I have involved in material development throughout my professional life as part of my career. While in India, I was an editorial board member of a national magazine for civil service aspirants and a columnist in a leading career weekly. I have published a couple of research articles in international and national refereed research journals and presented a few papers in national seminars in India. I have an M.A and MPhil in English Language and Literature and currently pursuing doctoral degree (viva awaited). My research is on the writings of Shashi Deshpande, a renowned Indian author and a social activist and I have focused on “The Image of Modern Indian Women as Projected in the Novels of Shashi Deshpande”. The areas of interest are English language teaching, feminist writing, postcolonial literature, literary criticism, postmodernism and morphology.

References:

1. National Research Award 2015 (NRA-2015) by The Research Council (TRC) Oman

Dr. Syed Najmul Hejaz Azmi and his B. Tech project students won the prestigious National Research Award 2015 (NRA-2015) by The Research Council (TRC) Oman for their significant research work published in the journal *Luminescence* (Impact Factor = 1.5, ISI-JCR, 2014). They were awarded by TRC in the esteemed and gracious presence of His Highness Sayyid Shihab bin Tariq Al Said, Chairman of TRC and Adviser to His Majesty the Sultan. They developed an accurate, selective and sensitive spectrofluorimetric method for the determination of citalopram hydrobromide in commercial dosage forms. The method was based on the formation of a fluorescent ion-pair complex between citalopram hydrobromide and eosin Y in the presence of a disodium hydrogen phosphate/citric acid buffer solution of pH 3.4 that was extractable in dichloromethane.

Reference:

2. Distinguished Research Paper Award at 16th University Day, Sultan Qaboos University

Dr. Mohammed Fawaz Silwadi, Applied Chemistry lecturer was awarded a Certificate of Distinguished Research Paper on the occasion of "16th University Day, Sultan Qaboos University" on May 2, 2016. The presentation was made in a glittering ceremony graced by several dignitaries including His Excellency Dr. Ali bin Mansoud Al Sunaidi, Minister of Commerce and Industry and the His Excellency Dr. Ali Al Bemani, Vice Chancellor of Sultan Qaboos University. The award was received for the publication of a research paper entitled, ‘Variation in Methane Concentration Produced from Anaerobically Digested Vegetables’, co-authored by Dr. H. Mousa published in The Journal of Engineering Research (TJER) Vol. 12, No. 2 (2015) 32-40. The research deals with the formation of bio-fuels from biomass which is of great current relevance. Dr. Mousa and Dr. Silwadi studied to optimize various parameters in order to determine the most favorable recipe for maximum biogas production from fermented vegetable waste. The results revealed that methane concentration goes through maximum value with time.

Reference:
3. Arab Researcher Id Award at University of Malaya, Malaysia (ARID-2016)

Dr. Yousif Al-Sewaidi received an award at the grand opening for the first international platform for Arabic speaking researchers at University Malaya, Kuala Lumpur, Malaysia on 25th April 2016. The mega event was widely covered by international media CNN and Aljazeera network.

DEPARTMENT OF APPLIED SCIENCES
APPLIED BIOLOGY SECTION

DEPARTMENT OF ENGINEERING
ELECTRICAL & ELECTRONICS SECTION

Place: Tamil Nadu, INDIA
Date and Year of Participation: 22-23 March, 2016

Dr. Gunasekaran Thangavel (Oral presentation)


The use of multiple antennas at both the transmitter and the receiver has recently been proposed to substantially increase the attainable data rate, i.e., the channel capacity, of future wireless communications systems. Impressive capacity gains can be achieved using these multiple input multiple output (MIMO) systems. Unfortunately, several practical aspects pose problems for achieving the predicted high data rates. Introducing antenna arrays at both the transmitter and receiver will undoubtedly increase the cost of producing the terminals, since it is expensive to manufacture, calibrate, and maintain antenna arrays with many elements. Practical problems with the feed and size requirements need to be overcome, while still providing an aesthetically pleasing design. An interesting antenna solution, which appears well suited for MIMO systems, is the multimode antenna. In a sense, the multimode antenna offers characteristics similar to those of an antenna array through multiple modes, but using only a single antenna element.
DEPARTMENT OF APPLIED SCIENCES
APPLIED BIOLOGY SECTION

Conference Name: 2nd Biology Forum at College of Science SQU
Organizer: The Biology Group, College of Science at Sultan Qaboos University
Place: Muscat, Oman
Date and Year of Participation: 19-22 October, 2015

Noel Vinay Thomas (Poster Presentation)
Students’ Name:
   Amal Talib Al-Busaidi, Samya Salim AL-Rawahi
Title: Effects of Carbonated Drinks on Living Tissues

Dr. Noel Vinay Thomas and his students studied the effects of carbonated drinks on human tissues were studied and dangerous effects caused by these drinks on teeth, bones, and liver is evaluated. The carbonated drinks contain preservatives, coloring agents and acids. The presence of preservatives, acids and coloring agents in the carbonated drinks might pose a threat to the healthy tissues. In our study, chicken liver pieces were taken into 6 beakers and 30 ml of test carbonated drinks and power drinks were added and left for 4 hours. Similarly, human teeth and chicken bone were also subjected to the treatment with carbonated drinks, power drinks and acids. The teeth and chicken bone were left for observation for 10 days. The effects of carbonated drinks were evident on the liver tissue, teeth and bone. The carbonated drinks have shown a tissue damaging effects like softening and shrinkage in the size of liver, softening, discoloration of teeth enamel, and the discoloration of the bone color along with weakening of the calcium was seen evidently. Based on our observations, we recommend less consumption of carbonated drinks would be a good lifestyle habits to avoid the tissue damages.

DEPARTMENT OF APPLIED SCIENCES
APPLIED CHEMISTRY SECTION

Organizer: The Chemistry Department, Sultan Qaboos University
Place: Muscat, Oman
Date and Year of Participation: 10-12 November, 2015

Lecturers from Applied Chemistry Section of Applied Sciences Department participated in First International SQU Chemistry Conference in Recent Trends in Drug Development (RTDD-2015).

2. Dr. Mohammed Fawaz Silwadi (Oral Presentation)
Title: Development of Novel and New Spectrophotometric Method for Determination Impurities and Degradation of Tricyclic Dibenzazepine Class of Drugs

Dr. Silwadi described a precise, sensitive, and a novel spectrophotometric method for studying the degradation and presence of an impurity (IDB) iminodibenzyl in three dibenzazepine class of drugs in the pre-formulated and the formulated form. The three examined drugs are: imipramine hydrochloride, trimipramine maleate, and carbamazepine. It was possible to determine the chromophore resulting in a reaction between the studied drug and its intermediate, reported to be a major degradation product of drugs, as the product of the drug reaction remained in the aqueous layer, and the impurity (IDB) iminodibenzyl was extracted in the chloroform layer and measured at 630 nm. The formed blue colour was found to be stable for 4 hrs, the instrument response was found to be linear within concentrations ranging from 0.05 to 2.5 μg/mL, with a molar absorptivity (0.68 x 104 l mol-1 cm-1). The reaction conditions were optimized in terms of reagent concentration, time, pH. The developed method was validated as per method validation parameters recommended by International Conference on Harmonization (ICH) for specificity, linearity, precision, accuracy, and determination of LOD, LOQ, solution stability and robustness. The proposed method enabled detection and estimation of the degradation of the drugs under forced conditions of a hydrolytic study under acidic and basic condition,
Photolytic conditions, and Thermal conditions. Forced degradation study was carried out to determine the intrinsic stability of the drug under examination in formulation. The obtained analytical results were confirmed by analyzing the forced degraded drug samples using a reported GC-MS method. The studied method can be successfully used for quantitative determination of potential known impurity and the degradation of certain dibenzazepine class of drugs.

3. Dr. Syed Najmul Hejaz Azmi (Poster Presentation)

**Students’ name:** Aisha Al-Mahroqi, Khoula Al Mamari, Shaima Al-Shukaili

**Title:** Spectrofluorimetric determination of diphenhydramine HCl in pharmaceutical preparations using eosin as a complexing reagent

Dr. Azmi and his students developed a simple and sensitive spectrofluorimetric method and validated it for the determination of diphenhydramine HCl in pharmaceutical preparations. The method was based on the fluorescent ion-pair complex formation between diphenhydramine and eosin Y in the presence of disodium hydrogen phosphate-citric acid buffer solution of pH 5 which was quantitatively extractable in dichloromethane. The proposed method was successfully applied to the determination of diphenhydramine HCl in pharmaceutical preparations with good accuracy and precision. The results were compared with the reference spectrofluorimetric method.

4. Dr. Syed Najmul Hejaz Azmi (Poster Presentation)

**Students’ name:** Khadija Al Ghawii, Asma Al Harrasi

**Title:** Extraction of pectin and its role in pharmaceutical Industry

Dr. Azmi and his students extracted pectin (a biodegradable methylated ester of polygalacturonic acid) from dried powdered Egyptian orange peels at pH 1 and 2 using citric acid and soxhlet extraction. The effect of pectin and starch was investigated on aspirin, diphenhydramine HCl and citalopram HBr showing no change in the peak and absorbance of said pure drug solutions. Starch is taken as binder in pharma industry. Pectin was proved having no interaction with drugs like starch. The pectin can also be taken as natural binder for pharmaceutical preparations such as tablets and capsules in order to increase the profit of orange fruits growers and processors.

5. Dr. Devadoss (Poster Presentation)

**Title:** Environment friendly process for the preparation of aromatic aldehydes using Ce$^{3+}$/Ce$^{4+}$ redox mediator in methanesulphonic acid medium

Aromatic aldehydes are very important chemical intermediate used in the production of fine chemicals and pharmaceutical industry. Electrochemically generated Ce$^{3+}$/Ce$^{4+}$ redox mediator in methanesulphonic acid was used as a synthetic agent for the oxidation of a side chain methyl group to aldehydes in the substituted toluene. Electrolytic conditions for the generation of Ce$^{4+}$ in methanesulphonic acid were studied and the current efficiency was achieved 85%. Chemical oxidation of substituted toluene to aromatic aldehydes were carried out using this electrogenerated Ce$^{3+}$/Ce$^{4+}$ redox mediator in methanesulphonic acid. Reaction conditions were optimized and the yield achieved was 65 to 90%. Electrochemical regeneration of this Ce$^{3+}$/Ce$^{4+}$ redox mediator in methanesulphonic acid was also studied for reuse of this redox mediator.

6. Dr. Dhana Laxmi (Poster Presentation)

**Title:** Anti-inflammatory studies of Nanocomposites of Fluorinated Hydroxyapatite

Currently composite materials have gained momentum in the field of orthopedics. Among the composite materials, ceramic/polymer possesses significant advantages of high mechanical reliability (polymers) and excellent bio compatibility (ceramics) for applications in load bearing areas. Poly(ethylene glycol)PEG/Fluorinated Hydroxyapatite (FHAp) nanocomposites of varying composition for biomaterial applications have been synthesized. The PEG/FHAp nanocomposite materials were characterized by XRD, FTIR, $^{31}$P NMR, TGA, DTA and FESEM. Fluorinated Hydroxyapatite (FHAp) nano rod embedded composite was prepared using poly(ethylene glycol) (PEG) as a matrix with different weight percentages (wt %). The results indicated that the size and crystallinity of FHAp nano particles decreases with increase in PEG concentration in the composite. SEM confirms the presence of FHAp nano rod crystals in PEG matrix PEG/FHAp. The nano composites were screened for antimicrobial and anti-inflammatory activity.
1, 3, 4-oxadiazoles are an important class of heterocyclic compounds that are known to possess important pharmacological and antimicrobial properties. Chromeno oxadiazoles are compounds having both 1, 3, 4-oxadiazoles and 2H-chromenes in their structures. Hence, the synthesis of novel 1, 3, 4-chromeno oxadiazoles, 6-chloro-3-(5-phenyl-1,3,4-oxadiazol-2-yl)-2-(trifluoromethyl)-2H-chromen-2-ol and its derivatives containing chloro, fluoro, methoxy, nitro groups have been carried out, by multi-step organic synthesis, in order to study their interesting antimicrobial properties. The synthesized compounds were characterized by 1H NMR, 13C NMR, 19F NMR, FT-IR, GC-MS and elemental analysis. They were screened for their antibacterial activities against Gram-positive (Staphylococcus aureus, Bacillus subtilis), Gram negative (Escherichia coli, Pseudomonas aeruginosa) bacteria and anti-fungal activities against Aspergillus

Moreover, Homogeneous nano crystalline NiO-Ce0.9Ln0.1O2-δ (Ln = La, Sm and Gd and Pr) composite anode and nano crystalline Ce0.9Gd0.1O2-δ electrolyte material has been successfully synthesized by citrate precursor method. LSCF has been synthesized by conventional solid state method and used as cathode material in our studies. The synthesized powders have been characterized by powder X-ray diffraction, microscopy and surface area studies. The average crystallite size of the anode materials has been found to be in the range of 5-15 nm by transmission electron microscopy. Highly dense electrolyte and porous electrode materials have been observed by field emission scanning electron microscopy and confirmed by BET surface area studies. Three cells have been fabricated successfully. The electrochemical performance of the single cells with configuration NiO-Ce0.9Ln0.1O2-δ (Ln = La, Sm and Gd) (anode) // Ce0.9Gd0.1O2-δ (electrolyte) // La0.8Sr0.2Co0.2Fe0.8O3 (LSCF) (cathode) have been evaluated using humidified hydrogen as the fuel and air as the oxidant. It has been observed that the single cell containing NiO-Ce0.9Gd0.1O2-δ nano composite anode shows better performance with maximum power density of 302 mW cm-2 and open circuit voltage of 1.012 V at 500 °C compared to other two cells. The difference in the performance of the cells containing Ni-LDC and Ni-SDC anode as compared to Ni-GDC anode is due to changes in the micro-structure and crystallite size of the anode which affects the electrochemical performance of the cells. The performance-

7. Ms. Amatur Roquia (Poster Presentation)
Title: Synthesis, characterization and antimicrobial studies of some novel chromeno –oxadiazoles analogous

8. Dr. Wafa Al-Lawati attended the conference on nanotechnology.

9. Dr. Masood Ahmed attended the conference on nanotechnology.

10. Dr. Masood Ahmed (Oral Presentation)
Title: Materials/Nanomaterials for Dielectric, Photocatalytic and Fuel cell Application
Increasing demand for new and advanced nanomaterials/materials has motivated a significant research in wireless communication technology, photocatalysis and solid oxide fuel cell applications. The present investigation discusses the synthesis, photocatalytic and dielectric properties of three series of oxides of the formula La2BaTi2M1xCuxO9, (where M = Mg, Zn and Cd). All the compositions crystallize in the disordered cubic perovskite structure. Suitable substitution at both A and B sites lead to enhancement in the dielectric properties at high frequencies. The relative permittivity and loss tangent have been measured at X-band (8.2-12.4 GHz) and Ku-band (12.4-18 GHz) frequencies. The oxides show a dielectric constant of 20-30 while the dielectric loss is quite low in the order of 10-3-10-4 (at 500 kHz) and 10-2 at X and Ku-band. There is scope for further investigations in these systems to realize useful materials for microwave applications.

Conference Name: 2nd Forum for Enlightenment on Nanotechnology,
Organizer: Ministry of Education, Oman National Commission for Education
Place: Muscat, Oman
Date and Year of Participation: 28-29 December, 2015

Conference Name: Kuwait International Nanotechnology Conference and Exhibition" (KINCE 2016 Kuwait)
Organizer: Department of Chemistry Kuwait University, Kuwait
Place: Kuwait
Date and Year of Participation: 9-11 February, 2016

Date and Year of Participation: 28-29 December, 2015
Conference Name: International Conclave on Innovations in Science, Engineering & Management
Organizer: Department of Chemistry Kuwait University, Kuwait
Place: Muscat
Date and Year of Participation: 24-25 February, 2016

11. Ms. Amatur Roquia (Oral Presentation)
The aim of the study was to design and synthesize the new bioactive heterocyclic compounds. Pyrimidine is an important class of heterocyclic compound that are known to possess important pharmacological and antimicrobial properties. 2H-chromenes are also known to possess antimicrobial properties. Chromeno pyrimidines are compounds having both pyrimidines and 2H-chromenes in their structures. Hence, the synthesis of novel chromeno pyrimidine containing chloro, fluoro, trifluoromethyl groups have been carried out by multi-step organic synthesis, in order to study their interesting antimicrobial properties. The synthesized compounds were characterized by 1H NMR, 13C NMR, 19F NMR, FT-IR, GC-MS and elemental analysis and were screened for their antibacterial activities against some Gram-positive, Gram negative bacteria, and anti-fungal activities by cup plate method. The fluoro and trifluoro methyl derivatives showed the highest anti-microbial activity compared to the others. The trifluoro derivative exhibited excellent results with the highest inhibition zone of 26mm in 100 µg/mL against Bacillus subtilis and 23mm in 100 µg/mL against Pseudomonas

DEPARTMENT OF INFORMATION TECHNOLOGY

Dr. Huda Salim Al Shuaily participated in:
1. The third conference on quality management and quality enhancement in higher education

ENGLISH LANGUAGE CENTRE (ELC)

3.1 Dr. Anwar Mourssi with Dr Osman Hassan Osman from Nizwa University presented their paper at the American University in Cairo from 26th to 27th January, 2016. The title of the paper was Implementing Innovated Writing Process Approach: A path to Independent Learning. The presenters introduce teaching/learning writing skill based on the innovated writing process and learning strategies. Selected errors from students’ work will be given to the audience set in groups. These errors will be discussed and the role of Innovated Writing Process/learning strategies will be shown in enhancing effective writing.

The Innovated Writing Process (IWP) approach was designed as a program for teaching writing, and was implemented in the classroom settings, to investigate the impact of Revising and Redrafting on improving Arab Learners of English writing skill (Mourssi, 2013a). The IWP approach focuses on the role of both the teacher and the learner and gives detailed guidelines for instructors to encourage students to learn writing, based on their own learning strategies, rather than teaching it in order to enhance learning autonomy. IWP is an attempt to apply Sociocultural Theory in the classroom to create a social environment setting (Lantolf & Thorne, 2006), and how the input can be well reprocessed which, in turn, develops the Second language learners’ internalized grammatical system and develop self-confidence.
In other words, based on the shortcomings found in previous methods of teaching writing, such as product writing and following recent works in applied linguistics and second language acquisition on form-focused instruction, ex-implicit teaching and learning (Mourssi, 2013b), and types of feedback, the IWP approach was designed. Finally, implementing the IWP approach indicates that corrective feedback does help L2 learners in the SLA, and also indicates that the meta-linguistic feedback may be one of the most suitable feedback types which help L2 learners acquiring second language linguistic items. These all enhance the independent learning, (Osman, 2013).

3.2 Dr. Anwar Mourssi presented his paper in the conference held at Military Technical College from 19-20 February, 2016. The title of the paper was implementing the Innovated Writing Process Approach (IWPA). The content of the paper can be described as: The IWPA was designed as a method for teaching writing in the classroom settings, and to investigate the impact of Revising and Redrafting on improving Arab Learners of English writing. It focuses on the role of both the teacher and the learner and gives detailed guidelines for instructors to encourage students to learn writing, based on their own learning strategies, rather than teaching it in order to enhance learning autonomy. In this workshop, participants will draw on their own experience of dealing with learners’ errors/mistakes in writing followed by what IWPA actually sets out to do and how. Participants will work in groups on activities analysing errors/mistakes and discuss how best to address them before applying the IWPA model.

3.3 Mr. Mohammed Abdullah Sulaiman Al Kharosi
Mr. Mohammed presented his own paper at the American University in Cairo from 26th to 27th January, 2016. The title of the paper was using moodle in teaching English Language-New era of technology. In this paper he mentioned that technology is playing a massive role in Education these days. Moodle is an online application that can be used to deliver courses for students inside and outside classrooms. The new generation is looking for learning through technology. The paper is mainly focusing on the latest trends of using technology on teaching and it effectiveness on the learning process.
1. Artificial Chemical Ageing Of Ambient Atmospheric Aerosols by Dr. Suad Al-Kindi

Dr. Suad Al-Kindi, a faculty member of Chemistry who is presently officiating as the Head of the Research Committee gave a presentation on the “Artificial Chemical Ageing of Ambient Atmospheric Aerosols” by the initiation of the Head of the Applied Chemistry Section, Dr. Sindhu Menon on the directives of the HoD of the Department of Applied Sciences, Dr. Samiya Al-Jaaidi on 16/09/2015 at the HCT, auditorium. The event was facilitated by the staff development & orientation co-ordinator Dr. C. Rama Chandra Prabhu, who formally introduced the speaker at the beginning and also explained the significance of such activities at the department in establishing a sound teaching base in applied sciences, during the consolidation of the entire talk at the end.

Dr. Suad was enthusiastic while presenting the general overview, objectives and methodology. She was elaborative while presenting her results obtained in the laboratories of University of Birmingham and NERC, UK. She had shown that required maturity while explaining the challenges and the direction in which the future work can be done with the conclusion arrived.

2. Invited Talk at HCT Academic Staff Development Workshop

By Dr. Pankaj Sah

In order to provide high quality teaching and learning to HCT’s students, the office of the Assistant Dean for Academic Affairs headed by Mr. Mohammed Tarawneh in collaboration with the seven (7) Academic Department Heads organized a 2-day Academic Staff Development Workshop which was held last April 20-21, 2016 at Multi-Purpose Hall, Higher College of Technology, Muscat. Dr. Pankaj Sah was invited to deliver a talk on research papers publications by the HCT administration.

Dr. Pankaj Sah delivered a fruitful talk on “How to Turn Students’ Projects into a Research Paper?” He stressed on the importance of transforming students’ research projects into a well reputed published research paper and enumerated the significant benefits of publishing papers. Dr. Pankaj emphasized on the importance of statistical approach in ‘data mining’ by various professional software like SPSS, Sigma Plot etc. and their critical role in data analysis part. He also gave ‘10 golden rules of publishing research papers’ that were very effective in encouraging other researchers to publish their students’ project work into quality journals. He emphasized that the journals listed by Web of Science (Thomson Reuters) and Scopus are considered as quality journals by The Research Council of Oman (TRC).
3. Invited talk at 'National Conference on Impact of Aerosols on Health, Heritage and Environment' (NCIAHHE-2015) Tumkur University, Tumakuru, India by Dr. Rao

Dr. Rao had been invited to give Prof. T. Sreeramulu Oration lecture in the 18th National Conference on Aerobiology on 18th September 2015 at Tumkur University, Tumakuru, India, in view of more than 30 years of research contribution in the field of Aerobiology.

Dr. Rao spoke on the topic “Alliance between nanotechnology and aerobiology-implications and novel approaches”. In his lecture Dr. Rao tried to establish the relationship between these two important branches – nanotechnology and aerobiology. He spoke at length on how advances in Nanotechnology will possibly impact the environment and health of plants, animals and human beings. He believed that increase in the applications of nanotechnology have brought in new concerns in public health and safety. He laid emphasis on the necessity of new instruments which can track the airborne nanoparticles at different altitudes of the atmosphere on a continuous basis. In his concluding remarks he cautioned the people to be vigilant and cited the example of industrial revolution, how it has changed the lively hood of people and at the same time how it impacted the environment and health.

4. Invited Talk at University of Malaya, Malaysia By Dr. Yousif

Dr. Yousif Al-Sewaidi was chosen as a keynote speaker to deliver a speech at the grand opening ceremony of "Arab Resarcher ID" [arid.my] that was launched on 25th April 2016 at University Malaya, Kuala Lumpur, Malaysia. Dr. Yousif delivered the lecture on "Role of Arab Scientists Ancestors." Dr. Yousif stressed on the importance of growing scientific quotient of Arab world and urged the young Arab scientists to explore novel horizons in research and to share the thoughts by collaborating among themselves and with world’s leading universities. He also thanked the organizers to come up with such a revolutionary idea about Arab Research ID that would definitely help to bring Arab researches

5. Invited Talk at Waljat College of Applied Sciences (WCAS) by Dr. Pankaj Sah

Applied Sciences Department Head Dr. Samiya Salim Al-Jaaidi received a request for ‘guest lecture’ from Dr. Sadaf Zahra, Head of the Department of Biotechnology at the Waljat College of Applied Sciences (WCAS). Dr. Pankaj Sah, lecturer of Applied Biology was nominated by Dr. Samiya in consultation with Dr. Ghaitha Suleiman Nasser Al-Abry, Head of Section of Applied Biology to deliver a ‘Guest Lecture’ on the topic entitled “How to turn students’ research projects into research papers?”

Dr. Pankaj Sah had given the Guest Lecture on 27th April, 2016 from 2:00 to 3:00 pm at the Department of Biotechnology, WCAS. The objective of the lecture is to spread the awareness about the research and the quality scientific publications emanating from the research work to the students of that department. The B. Tech students who attended the lecture are motivated to publish the research output from their projects. Dr. Sah was successful in convincing the audience that “the research results do not exist until and unless they are statistically analyzed, well written in the form of a good research paper, reviewed by the peers and are finally published as research papers in the scientific research journals of international repute”. He also highlighted the importance of research publications in the field of biotechnology and science. The students were motivated by the presenter when the ‘10 golden rules’ used in the publication of research papers are presented to them. The importance of ‘Data Mining and Statistics’ in producing quality research publications was presented in detail. The role of good scientific writing skills was also presented. Dr. Pankaj Sah had advised the students to develop the habit of reading quality journals in order to increase their scientific skills and research interests. He had stated that the future of science in Oman is linked with the contributions from the young and budding Omani scientists. In total Dr. Pankaj presentation was successful and it accentuated all the details about the art and science of research publications.
Ms. Bushra Abdul Hussein Al Lawati was invited by Diwan of Royal Court- Directorate General of Medical Services to deliver a ‘guest lecture’ in the conference ”MRSA- Know it Control it and prevent it”. Ms. Bushra delivered a lecture on the topic -“Facts about Methicillin-Resistant Staphylococcus aureus (MRSA)”. The lecture was delivered on 17th May, 2016 at Lecture Hall at Diwan of Royal Court- Directorate General of Medical Services.

Methicillin-Resistant Staphylococcus aureus (MRSA) is a pathogenic strain of bacteria, which was previously found to be globally growing in hospital-associated settings. The present interest in these bacteria is because of the recent findings of its growth in the community. In a workshop on the topic ”MRSA- Know it Control it and Prevent it” organized by Diwan of Royal Court- Directorate General of Medical Services, Ms. Bushra Al Lawati gave an oral presentation entitled as “Facts about Methicillin-resistant Staphylococcus aureus (MRSA)” focused on many points including: the basic biology of Staphylococcus aureus, the history of MRSA, Hospital Acquired-MRSA (HA-MRSA) and Community Associated-MRSA (CA-MRSA), mechanism of resistance to methicillin, virulence factors in MRSA, clinical manifestations of MRSA infections, the epidemiology of the disease and the prevalence of MRSA in the Gulf countries and in Europe. The presentation ended by an emphasis on the importance to the infection control measures that are needed to control the spread of these pathogenic strains of bacteria in the hospital and community settings. Many practicing medical doctors and other related professionals from various hospitals in Muscat and other parts of the Sultanate participated in this workshop. This platform provided a tremendous opportunity to the professionals and academia to interact among themselves and exchange their knowledge and experiences of the latest findings of modern science in the diagnosis and control of these pathogenic bacteria.

DEPARTMENT OF INFORMATION TECHNOLOGY

Dr Huda Salim Al Shuaily was invited to Unleashing Your Research Potential, 2nd National Workshop on Effective Research Practices to participate in the discussion panel.

Conference and Proceedings

Developing a Defensive and Auto Responding Firewall Security System to Secure a Country/Region from Attacks (paper id 1505)
A Model Approach to Broadcast Instant Flight Location Efficiently.
Developing a Defensive and Auto Responding Firewall Security System to Secure a Country/Region from Attacks (paper id 1505)
E. Ben George, Jeba Rosline, Gna Rajesh, “Brain Tumor Segmentation using Cuckoo Search Optimization for Magnetic Resonance Images”, 5. “8th IEEE-GCC conference on Smart Sustainable Solutions”, organized by IEEE and conducted at Sultan Qaboos University, Muscat, Sultanate of Oman

DEPARTMENT OF BUSINESS STUDIES


2. **K. Srinivasan** served as Resource Person for the Workshop Financial Econometrics on Time Series Modeling in Department of Management Studies, Christ University, Bangalore, India on 23rd September 2015.

ENGLISH LANGUAGE CENTRE (ELC)

Dr. Nasrin Al-Lawati

Dr. Nasrin Al-Lawati was invited to give plenary talk at one of the national conferences. The title of her paper was “Striving for Excellence: Innovation and Experience”. It was on 3rd March, 2016 at Scientific College of Design, Oman.

HCT Staff at Military College of technology (Oman) February 2016