

**King Fahd University of Petroleum & Minerals**

**Deanship of Graduate Studies**

in collaboration with

**Deanship of Student Affairs**



**7<sup>th</sup> GRADUATE RESEARCH DAY**  
**FINAL PROGRAM**

**Feb 03 – 04, 2013**

# Introduction

This Graduate Research Day is a continuation of the annual seminar series initiated by the Deanship of Graduate Studies at King Fahd University of Petroleum & Minerals in 2007. The idea behind initiation of this Seminar Series is to bring Graduate Students of the University and the Kingdom to a forum where they can present and discuss their research with each other. The event it is inaugurated by H.E. the Rector.

The 7<sup>th</sup> Graduate Research Day has the following features:

- Presentations by graduate students of KFUPM as a preparation for the 4<sup>th</sup> Saudi Student Conference to be held in April 2013. This is done in cooperation with the Deanship of Student Affairs.
- Presentations cover wide range of topics from Mathematics, Physics, Chemistry, Earth Sciences, Environmental Design, Computer Sciences and Engineering; Aerospace, Industrial, Civil, Chemical, Electrical, Mechanical and Petroleum Engineering; Management Information Systems and Accounting, Finance, Economics, and Architecture.

This year, out of 273 submitted contributions, a total of 242 papers are selected for presentation. The overall acceptance ratio is 89%. The evaluation of the submitted papers was based on technical review by specialized faculty members. Every presentation will be evaluated by two faculty members. Students whose work is accepted shall receive the University incentive and their paper's abstract appears in the 7<sup>th</sup> Graduate Research Book of Abstracts.

The final program and the Book of Abstracts of the 7<sup>th</sup> Graduate Research Day 2013 are posted on the website of the Deanship of Graduate Studies on the link: <http://www1.kfupm.edu.sa/gs/events/grd7/>

Your active participation encourages graduate students and help in promoting exchanging of research ideas and interdisciplinary research.

**Prof. Salam A. Zummo**  
Dean of Graduate Studies

## 7<sup>th</sup> Graduate Research Day Organizing Committee:

- |                                |                           |
|--------------------------------|---------------------------|
| • Basim A. Abussaud (Chairman) | • Marwan Hassan Abu-Amara |
| • Watheq Al-Basheer            | • Khalid Al-Ramadan       |
| • Hesham Merdad                | • Khondokar Nahiduzzaman  |

## Final Program

Activity	Time	Location
Dr. Salam A. Zummo <b>Dean of Graduate Studies - Introductory remarks</b>	8:15-8:20am	<b>B20-103</b>
H.E. Dr. Khalid Al-Sultan <b>University Rector – Inaugural Speech</b>	8:20-8:30am	

## Parallel Sessions

### Summary of Contributions & Departments Coordinators

College	Session	Chair	Numbering format	Dept.	Department Coordinator	Contributions			
						Submitted	Accepted	% Acce	Total Acce
<b>Science</b>	<b>1</b>	Dr. Watheq Al-Basheer	1Axx	CHEM	Dr. Hasan Al-Muallem	14	13	93	38
			1Bxx	PHYS	Dr. Watheq Al-Basheer	11	7	63	
			1Cxx	MATH /ES	Dr. Mohammad Z. Abu-sbeih	15	10	67	
<b>CCSE</b>	<b>2</b>	Dr. Marwan Hassan Abu-Amara	2Axx	ICS	Dr. Mahmoud Omar Elish	27	26	96	68
			2Bxx, 2Cxx	SE	Dr. Mujahed Al-dhaifallah	20	16	80	
			2Dxx, 2Exx	COE	Dr. Marwan Hassan Abu-Amara	31	26	84	
<b>CIM</b>	<b>3</b>	Dr.Hesham Merdad	3Axx	MBA	Dr.Hesham Merdad	1	1	100	1
<b>CED</b>	<b>4</b>	Dr. Khondokar Nahiduzzaman	4Axx	ARE/C EM	Dr. Mohammad A. Hassanain	14	9	64	12
			4Bxx	CRP	Dr. Khondokar Nahiduzzaman	3	3	100	
<b>College of Engineering Sciences and Applied Engineering</b>	<b>5</b>	Dr. Basim Abussaud	5Axx	CHE	Dr. Basim Ahmed Abussaud	26	25	96	132
			5Bxx	CE	Dr. Talat Bader	17	17	100	
			5Cxx	PETE	Dr. Enamul Hossain	32	10	31	
			5Dxx	AE	Dr. Khalil Ibrahim	3	1	33.3	
	<b>6</b>	Dr. Ali Muqaibel	6Axx, 6Bxx	EE	Dr. Ali Hussein Muqaibel	66	56	85	
	<b>7</b>	Dr. Samir Nadir Mekid	7(A to G)xx	ME	Dr. Samir Nadir Mekid	24	23	96	
					<b>TOTAL</b>	<b>271</b>	<b>242</b>	<b>89</b>	<b>242</b>

## Parallel Session 1A: Chemistry, Location:4-100

Session Chair: **Dr. Jafar. Mazumder**

#	Title	Authors	Advisor	Dept	Judge	Time
<b>1A1</b>	Carbon nanostructures deposited on Silicon Carbide foams	Saheed Adewale Ganiyu	Dr. Khalid Al-Hooshani	CHEM	Dr. Jafar. Mazumder Dr. Anvarhusein A. Isab Dr. Mazen Khaled	09:00-09:15
<b>1A2</b>	Novel cross-linked polysulfonate-carboxylate resin for the removal of Cu <sup>2+</sup> and Cd <sup>2+</sup> from aqueous solutions	Shamsuddeen A. Haladu	Dr. Shaikh Asrof Ali	CHEM		09:15-09:30
<b>1A3</b>	Synthesis and Characterization af Mononuclear Platinum(II) Complexes With Some Thione Ligands. X-Ray Crystal Structures of Tetrakis(Tetrahydropyrimidine	Ahmed Zainelabdeen Abdalla	Dr. Anvarhusein A. Isab	CHEM		09:30-09:45
<b>1A4</b>	New [(thione) <sub>2</sub> Au(diamine)]Cl <sub>3</sub> complexes: Synthesis, Spectroscopic characterization and <i>in vitro</i> Cytotoxicity	M. Monim-ul-Mehboob	Dr. Anvarhusein A. Isab	CHEM		09:45-10:00
<b>1A5</b>	Comparison of anti-cancer activity of various gold (III) diamine complexes against SGC-7901 and PC-3 cancer cell lines	M. Monim-ul-Mehboob	Dr. Anvarhusein A. Isab	CHEM	Dr. Musa Musa Dr. Tawfik Saaleh Dr. Basheer Chanbasha	10:00-10:15
<b>1A6</b>	Determination of Haloacetic acids in swimming pool waters by Membrane-protected micro-solid phase extraction	HAKIMU NSUBUGA	Dr. Basheer Chanbasha	CHEM		10:15-10:30
<b>1A7</b>	Simultaneous Extraction of Sulfur and Mercury from Fossil Fuels Combined with Fluorescence Spectroscopy	Zahrani, Ibrahim Mohammed	Dr. Basheer Chanbasha	CHEM		10:30-10:45
<b>1A8</b>	DETOXIFICATION OF CHLORINATED COMPOUNDS USING FLUIDIC MICROREACTOR WITH GAS CHROMATOGRAPHY/MASS SPECTROMETRY	Abdulelah Ahmed Ali Thabet	Dr. Basheer Chanbasha	CHEM		10:45-11:00
<b>Dohor Prayer &amp; Lunch Break 12:00 – 1:00</b>						

## Parallel Session 1B: Chemistry, Location: 4-100

Session Chair: **Dr. Hasan A. Al-Muallem**

#	Title	Authors	Advisor	Dept	Judge	Time
<b>1B1</b>	توعية الطلاب بأهمية الكيمياء	ASEM ABDULLAH ALENAIZAN		CHEM	Dr. Abdel-Nasser Kawde Dr. W. Forner Dr. Belabbes Merzougi Dr. Khalid Al-hooshani	01:00-01:15
<b>1B2</b>	Fe-N-multiwalled Carbon Nanotube composite as electrocatalysts for Oxygen reduction reaction	Bukola Saheed Abidemi	Dr Belabbes Merzougi	CHEM		01:15-01:30
<b>1B3</b>	Highly sensitive electrochemical detection of Ketoconazole at glassy carbon electrode	Wael Mahfoz	Dr. Abdel-Nasser Kawde	CHEM		01:30-01:45
<b>1B4</b>	Alcohol Free Middle-Phase Microemulsion Using Mixed Surfactant System Of Anionic And Cationic With Short Chain Hydrophobe	Mohammed aljabari		CHEM		01:45-02:00
<b>1B5</b>	Synthesis and Characterization of Gold Nanoparticles Capped with Oleylamine in Different Solvents	Sadeq Hassan Alkhalifa	Dr. Mohammed Ali Morsy	CHEM		02:00-02:15
<b>1B6</b>	Adsorption of the organic dye methyl orange using activated carbon prepared from waste rubber tires	Mohammad Rajeh Al-Rajeh	Dr. Abdulaziz Abdulrahman Alsaadi	CHEM	Dr. Hasan A. Al-Muallem Dr. Musa Musa Dr. W. Forner Dr. Basheer Chanbasha	2.15-02:30
<b>1B7</b>	Application of electro-enhanced solid-phase microextraction for determination of phthalate esters and bisphenol A in blood samples and seawater	Mousa Yaser Amayreh	Dr. Basheer Chanbasha	CHEM		02:30-02:45
<b>1B8</b>	Determination of phthalate esters in six brands bottled water in Saudi Arabia by Dispersive Liquid - Liquid Microextraction coupled with Gas Chromatography Mass Spectrometry	Mousa Yaser Amayreh	Dr. Abdul Rahman Al-Arfaj	CHEM		02:45-03:00

## Parallel Session 1B: Physics, Location: 6-125

Session Chair: **Dr. Watheq Al-Basheer**

#	Title	Authors	Dept	Judge	Time
<b>1B1</b>	Physics Patents and Inventions	Tarek Haissam Majmoud	Physics	Dr. Watheq Al-Basheer	12:50 - 1:20 pm
<b>1B2</b>	Detection of Toxic elements in Cosmetic products using Laser Induced Breakdown Spectroscopy.	Yasin Maganda	Physics		1:20 - 1:40 pm
<b>1B3</b>	Synthesis of Hydrophobic Textures and Films as self-cleaning surfaces using Spray Gun	Muhammad Subkhi Sadullah	Physics	Dr. Mohamed M. Faiz	1:40 - 2:10 pm
<b>1B4</b>	Evolution of the Magnetic State and the Possible Spin Liquid State in Fe <sub>2</sub> -xCr <sub>x</sub> As System	Fandi Oktasendra	Physics	Dr. Mogtaba Mekki	2:10 - 2:30 pm
<b>1B5</b>	Magnetic and transport properties of Fe <sub>1-x</sub> Co <sub>x</sub> As single-crystal	Moch Syarif Romadhon	Physics	Dr. Mohamed M. Faiz	2:30 - 2:50 pm
<b>1B6</b>	Utilizing Cold Heavy Polar Molecules for Precise Measurement of Electron Electric Dipole Moment (EDM). During the last decade the production and simultaneous	Muhannad Khamis Alzahrani	Physics		2:50 - 3:10 pm

## Parallel Session 1C: Mathematics, Location: 5-101

Session Chair: **Dr. Abu-Sbeih**

#	Title	Authors	Dept	Judge	Time
1C1	Symmetry Analysis of the Wave Equation on a Non-static Spacetime		Math	Dr. Massoudi Dr. Zaman Dr. Jamal Al-Smail	11:00 am Feb. 3, 2013

## Parallel Session 1C: Earth science, Location: 3-109

Session Chair: **Dr. Ismail Kaka**

#	Title	Authors	Advisor	Dept	Judge	Time
1D1	ENVIRONMENTAL ASPECTS OF ENHANCED OIL RECOVERY; CO <sub>2</sub> INJECTION AND PRODUCED WATER, A REVIEW	Tajudeen	Dr Bassam Al-Tawabini	Env	Dr. Bassam Dr. Ahmet Dr. Abdulwahab	
1D2	Biofuel Production-A Review	Akeem Bello	Dr Bassam Al-Tawabini	Env		
1D3	ASSESSMENT OF PARTICULATE MATTER (PM) IN THIN-SECTION LABORATORY OF KFUPM	Tajudeen	Dr Bassam Al-Tawabini	Env		
1D4	ASSESSMENT OF INDOOR MICROBIAL LOAD IN KFUPM	Amana Jemal Kedir	Assad Ahmed Al-Thukair	Env		
1D5	Stable Oxygen and Carbon Isotope Evidence: Indicators of Cementation Environment of Holocene Beachrocks in The Arabian Gulf and The Gulf of Aqaba	Ardiansyah Koeshidayatullah	Khalid Alramadan	Geol		
1D6	Adsorption Nanotechnologies application in water treatment: A review	Amana Jemal Kedir	Dr Bassam Al-Tawabini			
1D7	Characterization of Reservoir Quality from the Outcrop Analog for the Palaeozoic Sarah Formation Glacial and Fluvial Reservoirs, Qaseem	ISLAM FARHAT	Osman Abdulatif	Geol		

	Area, Saudi Arabia					
1D8	SEM/EDS and XRD Analysis of KFUPM Rus Formation	Ayyaz Mustafa		Geol		
1D9	Seismic Fault Auto-picking by Curve-fitting	Mustafa Shoula		Geop		
Dohor Prayer & Lunch Break 12:00 – 1:00						

## Parallel Session 2A: Information and Computer Science

Location: **59-2022**

Coordinator: **Dr. Mahmoud Elish**

#	Title	Authors	Advisor	Judge	Time
2A1	MPI Implementation of Parsing for Predicting RNA	Ayaz ul Hassan Khan	Dr. Mohammad Al-Mulhem	<ul style="list-style-type: none"><li>• Dr. Muhammed Al-Mulhem</li><li>• Dr. Lahouari Ghouti</li><li>• Dr. Musab AlTurki</li></ul>	9:00 – 9:15
2A2	Class Stability Prediction: A Comparative Study and Analysis	Mojeeb Al-Rhman Ahmed Al-Khiaty	Dr. Mohammed Alshayeb		9:15 – 9:30
2A3	Generalizing Analysis and Design Practices in A Domain: A Framework	Mojeeb Al-Rhman Ahmed Al-Khiaty	Dr. Moataz Ahmed		9:30 – 9:45
2A4	A Survey on testing security of Web based Applications	Mohammed Rehan Riaz	Dr. Jameleddine Hassine		9:45 – 10:00
2A5	A Survey on Software Process Improvement & its Frameworks	Mohammed Rehan Riaz	Dr. Moataz Ahmed		10:00 – 10:15
Break and Time resynchronization 10:15-10:45					
2A6	English to Arabic Assistive Multimedia Tagging based on Speech Recognition	Ghazanfar Latif	---	<ul style="list-style-type: none"><li>• Dr. A. Alkhoraidly</li><li>• Dr. Lahouari Ghouti</li><li>• Dr. Husni Al-Muhtaseb</li></ul>	10:45 – 11:00
2A7	Parallel Processing XML Queries: A Survey Study	Sadam Hussein Alazani	Dr. Adam Salahadin		11:00 – 11:15
2A8	Authorship Attribution of English Texts Using Feature Mining	Sadam Hussein Alazani	Dr. Sabri Mahmoud		11:15 – 11:30
2A9	Arabic font Recognition using sobel and fractal features	Abdullah Hussein Owaidh	---		11:30 – 11:45
2A10	Using Transformation Languages to reconstruct Use Case exhibiting Anti-Pattern	Abdullah Hussein Owaidh	Dr. Mohamed El-Attar		11:45 – 12:00
Dohor Prayer & Lunch Break 12:00 – 1:00					
2A11	Automatic Semantic Annotation of Arabic Web Site Content related to Food, Nutrition and Health	Saeed Albukhitan	Dr. Tarek Helmy	<ul style="list-style-type: none"><li>• Dr. Tarek Helmy</li><li>• Dr. Muhammed Al-Mulhem</li><li>• Dr. Adam Salahadin</li></ul>	1:00 – 1:15
2A12	Arabic Data Preparation for Handwritten-to-Text Alignment	Yousef S. Elarian	Dr. Mohammad Al-Mulhem		1:15 – 1:30
2A13	Semantic Approaches for Query Analysis and User Modeling to Retrieve Personalized Food and Health Information	Ahmed Ali AlNazer	Dr. Tarek Helmy		1:30 – 1:45
2A14	SOA Based Services: A Quality Model Perspective	Mohammed Abdul Majid Qureshi	Dr. Moataz Ahmed		1:45 – 2:00
2A15	Testing Techniques for Android Applications: An Evaluation	Mohammed Abdul Majid Qureshi	Dr. Jameleddine Hassaine		2:00 – 2:15
2A16	Neural Networks-Based Wireless Node Mobility Prediction	Issam Hadj Laradji	Dr. Lahouari Ghouti		2:15 – 2:30

## Parallel Session 2B: Information and Computer Science

**Location: 22-105**

Coordinator: **Dr. Mahmoud Elish**

#	Title	Authors	Advisor	Judge	Time
2B1	Fuzzy Logic Model for the Prediction of Software Maintainability	Hamdi Ali Al-Jamimi	Dr. Moataz Ahmed	<ul style="list-style-type: none"><li>• Dr. Tarek Helmy</li><li>• Dr. Mahmood Niazi</li><li>• Dr. Wasfi Al-Khatib</li></ul>	9:00 – 9:15
2B2	Machine Learning Techniques for Efficient Prediction of Software Fault Proneness Classes and Modules	Hamdi Ali Al-Jamimi	Dr. Lahouari Ghouti		9:15 – 9:30
2B3	Management Framework for Multilingual Food and Health Ontologies	Ali Mazhar Iqbal	Dr. Tarek Helmy		9:30 – 9:45
2B4	Towards the reuse of of multi-view UML artifacts	Hamza Onoruoiza Salami	Dr. Moataz Ahmed		9:45 – 10:00
2B5	Plagiarism Detection Using Part-of-Speech Tags and Word Similarity	Taimoor Waheed Aslam	Dr. Wasfi G. Al-Khatib		10:00 – 10:15
Break and Time resynchronization 10:15-10:45					
2B6	Evolutionary Neural Network Model for Software Maintenance Prediction	Abdulrahman Baqais	Dr. Mohammed Alshayeb	<ul style="list-style-type: none"><li>• Dr. Sami Zhioua</li><li>• Dr. Farag Azzedin</li></ul>	10:45 – 11:00
2B7	Automatic Context-Sensitive Spell Checker for Non-Native Arabic Speakers using Context Words	Majed Mohammed Aljefri	Dr. Sabri Mahmoud		11:00 – 11:15
2B8	تحسين مرحلة بعد المعالجة في نظام التعرف الضوئي للأحرف (OCR)	Hamzah Abdullah Luqman	Dr. Husni Al-Muhtaseb		11:15 – 11:30
2B9	Test Automation for Graphical User Interfaces	Abdulrhman Ahmed Alsri	Dr. Jameleddine Hassine		11:30 – 11:45
2B10	ERP Systems Workaround Practices: Barriers or Remedies	Ali Busaleh	Dr. Ahmed Alojairi		11:45 – 12:00

## Parallel Session 2C: Systems Engineering: *Control and Instrumentation Systems Engineering*, Location: **59-2025**

Session Chair: **Dr. Muhammad Mysorewala**

#	Title	Authors	Advisor	Major	Judges	Time
2C1	Statistical Analysis of Arabic Phonemes for Continuous Arabic Speech Recognition	Khalid M.O Nahar	Dr. Moustafa Elshafei	CISE	Dr. Abdul-Wahed Saif  Dr. Amar Khoukhi	02:00 – 02:15
2C2	Design of constrained Model predictive control for a four tank process and performance study for refrence tracking under disturbances.	Gulam Dastagir Khan	Dr. Fouad Al-Sunni	CISE		02:15 – 02:30
2C3	An Experimental Study and Parameter Modeling of Radio Frequency Energy Harvesting	Amin-ud-din Qureshi	Dr. Uthman Baroudi	CISE		02:30 – 02:45
2C4	Nonholonomic Mobil Robots Leader-Follower Group Formation and Navigation Control for Known and Unknown Robot Dynamics	Omar Al-Buraiki	Dr. Sami El Ferik	CISE		02:45 – 03:00
Aser Prayer 3:00 – 03:15						
2C5	Self-Tuning Regulator Adaptive Control of Autonomous Bicycle Based Recursive Least Squares	Omar Al-Buraiki	Dr. Sami El Ferik	CISE	Dr. Moustafa Elshafei  Dr. Magdi Mahmoud	03:15 – 03:30
2C6	Integration of Taguchi’s loss function in the determination of Optimal production run length for products sold with warranty in a deteriorating production system with a time varying defective rate under allowable shortages	Gulam Dastagir Khan	Dr. Abdur Rahim	CISE		03:30 – 03:45
2C7	Neural Network Adaptive Control of Unmanned Aerial vehicle with Slung Load	Ghufran Ahmed	Dr. Sami El Ferik	CISE		03:45 – 04:00
2C8	Constrained Kalman Filter as Validity for Multi-Model Identification and Fault Diagnosis of Complex Systems	Ahmed Adeniran	Dr. Sami El Ferik	CISE		04:00 – 04:15

**Parallel Session 2D: Systems Engineering, Industrial Systems Engineering & Control and Instrumentation Systems Engineering, Location: 59-2027**

Session Chair: **Dr. Malick Ndiaye**

#	Title	Authors	Advisor	Major	Judges	Time
2D1	Optimum Target Levels for a Network of Processes	Walid Al-Zu'bi	Dr. Shokri Z. Selim	ISE	Dr. Lahouari Cheded  Dr. Wahab Ismail	02:00 – 02:15
2D2	Model based predictive control of Photovoltaic Reverse Osmosis Desalination System	Mohammed Riaz Ahmed	NA	CISE		02:15 – 02:30
2D3	Distributed Nonlinear MPC Formation Control with Limited Bandwidth	Bilal Ahmed Siddiqui	Dr. Sami El Ferik	CISE		02:30 – 02:45
2D4	Modeling Identification & Control of a Four-Stage Evaporator	Mohammed Riaz Ahmed	NA	CISE		02:45 – 03:00
Aser Prayer 3:00 – 03:15						
2D5	Modelling of Quad-Motor Directional Steering	Mohammad Talib	Dr. Moustafa Elshafei	CISE	Dr. Sami El Ferik  Dr. Samir Al-Amer	03:15 – 03:30
2D6	Controller Design of SMIB installed with STATCOM : A Linear, Robust and Optimal Approach	Syed Azher Hussain	Dr. Ahmad A. Masoud	CISE		03:30 – 03:45
2D7	Design of Reliable LQ Control	Syed A. Hussain	Dr. Magdi Mahmoud	CISE		03:45 – 04:00
2D8	Arabic Phonemes Transcription Using Data Driven Approach by Varying Number of HMM States	Khalid M.O Nahar	Dr. Moustafa Elshafei	CISE		04:00 – 04:15

## Parallel Sessions: 2E,2F & 2G: Computer Engineering

Session Chair: **Dr. Marwan Abu-Amara**

#	Title	Authors	Main Advisor	Judges	Time
2E – Computer Engineering 1 - Location: Room 22-347A					
2E1	Evaluation of Kinect 3D Sensors for Outdoor Monitoring of Construction Sites	Abdul Jabbar Siddiqui	Dr. Hosam Rowaihy	<ul style="list-style-type: none"><li>• Dr. Yahya Osais (chair)</li><li>• Dr. Mohammed Sqalli</li></ul>	08:30 – 08:45
2E2	Review of Silhouette based Gait Recognition Techniques for Biometric Authentication Systems	Abdul Jabbar Siddiqui	Dr. Zubair Baig		08:45 – 09:00
2E3	Investigating Security Vulnerabilities for Economic Denial of Sustainability (EDoS) Attack in Cloud Computing	Farid Binbeshr	Dr. Marwan Abu-Amara		09:00 – 09:15
2E4	Handwritten Digit Recognition through MLP-based Neural Networks	Ismail Keshta, and Abubakar Bala	Dr. Zubair Baig		09:15 – 09:30
2E5	Satellite Monitoring of Wireless Sensor Networks (WSNs)	Farrukh Shahzad	Dr. Ashraf Mahmoud		09:30 – 09:45
2E6	Real Time Publisher Subscriber Middleware Over Bluetooth	Mohammad F. Al-Hammouri	Dr. Basem Al-Madani		09:45 – 10:00
2F – Computer Engineering 1 - Location: Room 22-416					
2F1	Prototype Implementation of Recursive Time Synchronization Protocol (RTSP)	Danish Sattar	Dr. Tarek Sheltami	<ul style="list-style-type: none"><li>• Dr. Uthman Baroudi (chair)</li><li>• Dr. Zubair Baig</li></ul>	08:30 – 08:45
2F2	Tradeoff in Wireless Multimedia Sensor Networks (WMSNs)	Danish Sattar	Dr. Hosam Rowaihy		08:45 – 09:00
2F3	Quality of Service Provisioning in Bio-Sensor Networks	Muhammad Mohsin Butt	Dr. Yahya Osais		09:00 – 09:15
2F3	Design and Deployment of a Cloud Computing Platform for Testing Attacks	Mohammad Alkaf	Dr. Mohammed Sqalli		09:15 – 09:30
2F4	Implementation of a Hybrid Cloud for a University	Mohammad Alkaf	Dr. Mohammed Sqalli		09:30 – 09:45
2F5	UCloud: A Simulated Hybrid Cloud for A University Environment	Mohammed Siddiqui, Farid Binbeshr, and Mohammed Al-Saedi	Dr. Mohammed Sqalli		09:45 – 10:00
2G – Computer Engineering 2 – Location: Room 22-401					
2G1	Parallel Lossless Compression Using GPGPU's	Muhammad Mohsin Butt	Dr. Muhammad Mudawar	<ul style="list-style-type: none"><li>• Dr. Mayez Al-Mouhamed</li></ul>	08:30 – 08:45

#	Title	Authors	Main Advisor	Judges	Time
2G2	A Generalized Modular Redundancy Scheme for Enhancing Fault Tolerance of Combinational Circuits	Feras Chikh Oughali	Dr. Aiman El-Maleh	(chair) • Dr. Radwan Abdel-Aal	08:45 – 09:00
2G3	Binary Particle Swarm Optimization (BPSO) Based State Assignment for Area Minimization of Sequential Circuits	Ahmad T. Sheikh	Dr. Aiman El-Maleh		09:00 – 09:15
2G4	Secure Cloud Custom Computing Machines (SC3M) Using FPGAs	Amran Abdulrhman Al-Aghbari	Dr. Muhammad El-Rabaa		09:15 – 09:30
2G5	A Hybrid SW/HW Approach for Architectural Modeling and Simulation of Many Core CMPs	Ayman Ali Hroub	Dr. Muhammad El-Rabaa		09:30 – 09:45
2G6	CUDA – Based Strassen Matrix – Matrix Multiplication	Ayaz ul Hassan Khan	Dr. Mayez Al-Mouhamed		09:45 – 10:00
Break and Time resynchronization 10:00-10:30					
2E – Computer Engineering 3 – Location: Room 22-347A					
2E7	Inventory Management using a mix of Active and Passive RFID tags with a Mobile Reader	Mohammad Faizuddin, and Mohammed Younus Siddiqui	Dr. Hosam Rowaihy	• Dr. Mohammed Sqalli (chair) • Dr. Yahya Osais	10:30 – 10:45
2E8	DDS Discovery Protocol Scalability and Performance	Mohammed Al-Saeedi	Dr. Basem Al-Madani		10:45 – 11:00
2E9	Lamarckian Genetic Algorithm for Automatic Hardware/Software Partitioning for Heterogeneous Computing Clusters	Ayman Ali Hroub	Dr. Zubair Baig		11:00 – 11:15
2E10	Prospective Features of 5G Mobile Communication Networks	Muhammad Bajwa, Ghazanfar Latif, and Muhammad Omair Butt	Dr. Ashraf Mahmoud		11:15 – 11:30
2F – Computer Engineering 3 – Location: Room 22-416					
2F7	Efficient Computation of Distribution Function for Sum of Lognormal Random Variables Using Legendre Quadrature	Abdallah Rashed	Dr. Ashraf Mahmoud	• Dr. Zubair Baig (chair) • Dr. Uthman Baroudi	10:30 – 10:45
2F8	Resource Management for OFDMA Systems Using Ant Colony-based Optimization Technique	Mohammad Khalaf	Dr. Ashraf Mahmoud		10:45 – 11:00
2F9	Bittorrent Implementation using Real-Time Data Distribution Protocol	Mohammed Al-Mehdhar	Dr. Basem Al-Madani		11:00 – 11:15
2F10	Implementation of Bittorrent Protocol over Real Time Data Distribution Service	Abdulsalam S. Basabaa, and Ahmed S. BinIshaq	Dr. Basem Al-Madani		11:15 – 11:30

## Parallel Session 4A: Architectural Engineering and Construction Engineering & Management, Location **19-452-2**

**Session Chair:** Dr. Mohammad A. Hassanain (ARE and CEM)

**Time:** Sunday, February 2, 2013

#	Title	Authors	Advisor	Dept	Judge	Time
<b>4A1</b>	Rising trends in Facilities Management	Sanni-Anibire Muizz O.	Dr. Abdul-Mohsen Al-Hammad	ARE	Panel of Examiners	01:00-01:15
<b>4AE2</b>	Is energy conservation a key function in Facility Managers' sustainable practices? Review and Case study	Syed Samiuddin	Dr. Abdul-Mohsen Al-Hammad	ARE		01:15-01:30
<b>4A3</b>	An Indicative POE of A Student Housing	Syed Samiuddin & Sanni-Anibire Muizz O.	Dr. Mohammad Hassanain	ARE		01:30-01:45
<b>4A4</b>	Potential Of Emerging Glazing Technologies For Office Buildings In Hot Climate Of Saudi Arabia	Mohammed Abdul Fasi		ARE		01:45-02:00
<b>4A5</b>	Challenges Affecting the Implementation of Building Management Systems in Office Buildings in Saudi Arabia	Ameen Mabrook	Dr. Mohammad Hassanain	ARE		02:00-02:15
<b>4A6</b>	The Prospect of Implementing near-Zero Energy Buildings (nZEBs) in Saudi Arabia	Syed Ashraf Tashrifullahi		ARE		02:15-02:30

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#	Title	Authors	Advisor	Dept	Judge	Time
<b>4A7</b>	Trend Analysis of Causes of Construction Delays in Saudi Arabia	Muhammad Saiful Islam	Dr. Abdelaziz Bubshait	CEM	Panel of Examiners	02:30-2:45
<b>4A9</b>	Using Building Commissioning To Improve the Building Performance in Saudi Arabia	Qaid Mubarak Hadhbool	Dr. Abdelaziz Bubshait	CEM		02:45-03:00
<b>4A10</b>	A Case Study of Post-Occupancy Evaluation for a University Student Cafeteria	Hasan Mathar & Ameer Aker	Dr. Mohammad Hassanain	CEM		03:00-03:15

## Parallel Session 4B: City and Regional Planning, Location: **19-GIS Lab**

Session Chair: **Dr. Adel S. Aldosary**

#	Title	Authors	Advisor	Dept.	Judges	Time
<b>4B1</b>	Land Use Adaptation to Climate Change in the Urban Waterfront	Yusri Syahrir	Dr. Ali Al-Naser	CRP	Dr. Habib Al-Shuwaikhat Dr. Ali Al-Naser Dr. Jayprakash Chadchan	16.00-16.15
<b>4B2</b>	A critical study on the functional design of Eskan project in Dammam	Mohammad Abu Issa Anshary & Malik Karim	Dr. K. M. Nahiduzzaman	CRP		16.15-16.30
<b>4B3</b>	Participatory Process in Reshaping Policy for Urban Water's Edge Revitalization	Yusri Syahrir	Dr. Habib Al-Shuwaikhat	CRP		16.30-16.45

## Parallel Session 5A: Chemical Engineering, Location: 4-150

Session Chair: **Dr. Basim Abussaud**

#	Title	Authors	Advisor	Judges	Time
<b>5A1</b>	Hierarchical zeolites for liquid phase alkylation of benzene with dodecene: effect of desilication	Waqas Aslam	Dr. Basim Abussaud	Dr. Mutaz Atieh Dr. Ali AlShami	12:45-13:00
	Oxidative dehydrogenation of n-butane over bimetallic mesoporous and microporous zeolites with CO <sub>2</sub> as mild oxidant	Babajide Ajayi	Dr. Basim Abussaud		13:00-13:15
<b>5A2</b>	Kinetic modeling of n-butane dehydrogenation over CrOx-VOx MCM-41 catalyst in a fixed bed reactor	Babajide Ajayi	Dr. Basim Abussaud		13:15-13:30
<b>5A3</b>	Removal of phenol and 4 chlorophenol from water by carbon based adsorbents -a comparative analysis	Hamza Asmaly	Dr. Muataz Atieh		13:30-13:45
<b>5A4</b>	Enhancement of phenol and four chlorophenol adsorption on the aqueous solution by modified activated carbon with metal dioxides	Hamza Asmaly	Dr. Muataz Atieh		13:45-14:00
<b>5A5</b>	Study of the effect of synthesis parameters in reducing particle size of mesoporous Silica particles using Taguchi and Pareto analysis of variance	Idris Bakare	Dr. Adnann Al-Amer	Prof Adnan Al Amer Dr. Habib Al Ali	14:00-14:15
<b>5A6</b>	Synthesis of MTT type zeolite in a microwave reactor- effect of cosolvent	Idris Bakare	Dr. Adnann Al-Amer		14:15-14:30
<b>5A7</b>	Analytical study of Laminar Film Condensation on Infinite Size flat Plate	Abd Alwadood Elbadawi	Dr. Habib Al Ali		14:30-14:45
<b>5A8</b>	A Decision Tool for SO <sub>2</sub> Reduction in Power Generation	Mohammad Alsubaie	Dr. Muhammed Ba Shammakh		14:45-15:00

## Parallel Session 5B: Chemical Engineering, Location: 4-151

Session Chair: **Dr. Zuhair Malibari**

Paper No.	Title	Authors	Advisor	Judges	Time
<b>5B1</b>	Rheological and thermal behavior study on Non-Ionic surfactant used in cEOR	Izhar Malik	Dr. Usamah Al-Mubaiyedh	Dr. Zuhair Malibari Dr. Abdur Razzak Shaikh	13:00-13:15
<b>5B2</b>	Impact of Molecular Structure on Thermal Stability of Water Soluble Polymers Used for Enhanced Oil Recovery Applications	Muhammad Kamal	Dr. Ibnelwaleed Hussein		13:15-13:30
<b>5B3</b>	Rheological Investigation of Interaction between Anionic Surfactant and Polyacrylamide for Chemical Flooding in Saudi Arabian Reservoirs	Muhammad Kamal	Dr. Ibnelwaleed Hussein		13:30-13:45
<b>5B4</b>	CO2 mitigation by different microalgae species using photo bioreactor	Muhammad Ilyas	Dr. Abdur Razzak Shaikh		13:45-14:00
<b>5B5</b>	Enhancement in corrosion resistance of Waterborne Polyurethane coatings on steel substrate by addition of Carbon Nano Tubes	Qasim Habib	Dr. Sadhan Komar	Dr. Abdulhadi Al Juhani Dr. Ibnelwaleed Hussein	14:00-14:15
<b>5B6</b>	Heat Integration Analysis of Refinery Plant Using Pinch Technique	husamelden elkawad	Dr. Eid Al Mutairi		14:15-14:30
<b>5B7</b>	Energy Saving Opportunities for Crude Preheating Train of Heat Exchanger Network in Crude Distillation Unit	Badiea Babaqi	Dr. Eid Al Mutairi		14:30-14:45
<b>5B8</b>	Novel approach to control properties of polyethylene and polyethylene/polypropylene nano-composites	Omar Ba Katheer	Dr. Mamdooh Al Harithi		14:45-15:00

## Parallel Session 5C: Chemical Engineering, Location: 4-149

Session Chair: **Dr. Nadhir al Baghli**

Paper No.	Title	Authors	Advisor	Judges	Time
<b>5C1</b>	Thermodynamic model for the prediction of gas condensate behavior	Mogahid Osman	Dr. Nadhir Al-Baghli	Dr. Mohammad Hossain Dr. Nadher Al Baghli	13:00-13:15
<b>5C2</b>	Effects of acidity on the activity and product selectivity of HZSM-5 catalysts during ethylbenzene disproportionation and ethylation	Mogahid Osman	Dr. Mohammad Hossain		13:15-13:30
<b>5C3</b>	Isothermal vapor liquid equilibrium for 1,1-difluoroethan (HFC-152a) and n-butane (R-600)	Mohanned Alameen Shamseldin Mohamed	Dr. Nadhir Al-Baghli		13:30-13:45
<b>5C4</b>	Study of Vapor Liquid Equilibrium of Binary Mixture of Ethyl Acetate and Ethanol Mixture	Farrukh Shehzad	Dr. Nadhir Al-Baghli		13:45-14:00
<b>5C5</b>	Heterogeneous modeling of a fixed bed water gas shift reactor	Farrukh Shehzad	Dr. Mohammad Hossain		14:00-14:15
<b>5C6</b>	Removal Of hydrogen sulfide from air and water	M. N. Younis	Dr. Basim Abussaud	Dr. Nabeel Abo Ghander Dr. Nayef Al Saifi	14:15-14:30
<b>5C7</b>	Isomeric Effect in Ethylene/1-hexene and ethylene/4-methyl-1-pentene copolymerizations with supported MAO/metallocene systems	Sagir Adamu	Dr. Muhammad Atiqullah		14:30-14:45
<b>5C8</b>	Metathesis of 2-butane to propylene over tungsten oxide supported on mesoporous materials: development of catalyst	Tazul Bhuiyan	Dr. Sulaiman Al Khattaf		14:45-15:00

## Parallel Session 5D: Civil Engineering, Location: 16-165

Session Chair: **Dr. Talat A Bader**

#	Title	Authors	Advisor	Judges	Time
5D1	Self-Curing Concrete	Adeshina Adewumi	Dr. <b>Hamad I. AbdulWahhab</b>	Judges will be announced later	09:00-09:15
5D2	SUSTAINABLE TRANSPORTATION STRATEGIES AND THEIR RELAVANCE IN SAUDI ARABIA	Muhammad AbuBaker Dalhat	Dr. <b>Hamad I. AbdulWahhab</b>		09:15-09:30
5D3	Effect of Local Recycle waste on properties and performance of waterproofing asphalt mastic	Muhammad AbuBaker Dalhat	Dr. <b>Hamad I. AbdulWahhab</b>		09:30-09:45
5D4	A Meshless Solution of Steady State Seepage Problem in an Orthotropic Medium under a Dam with a Degenerate Domain	Saheed Kolawole Adekunle	Dr. <b>Husain Jubran Al-Gahtani</b>		09:45-10:00
5D5	RBF-based Meshless Method for the Analysis of Thin Plate Deflection with General Geometry and Boundary Conditions	Basheer AlGohi	Dr. <b>Husain Jubran Al-Gahtani</b>		10:00-10:15
Break and Time resynchronization 10:15-10:45					
5D6	Photocatalytic reduction of selenium oxyanions	Bashir Alhaji Labaran	Dr. <b>Muhammad S. Vohra</b>	Judges will be announced later	10:45-11:00
5D7	Development of Ultra-High Performance Concrete Utilizing Lime Stone Powder	Ibrahim Hakeem	Dr. <b>Abul Kalam Azad</b>		11:00-11:15
5D8	Effect of Composite Action on the Shear Strength of Steel Plate Girder	Mohammad Samaaneh	<b>Alfarabi M. Sharif</b>		11:15-11:30
5D9	Effects of Periwinkle Shell Powder and Lime on Geotechnical Properties of Lateritic Soil Samples	Adeshina Adewumi	Independence research		11:30-11:45
5D10	A Review of Traffic Forecasting Process: Comparison of Parametric Techniques with Artificial Neural	Uneb Gazder	Dr. <b>Nedal T. Ratrout</b>		11:45-12:00

	Networks				
Dohor Prayer & Lunch Break 12:00 – 1:00					
5D11	Evaluation of Drivers Response to Variable Message Signs	Yazan Issa	Dr. <b>Nedal T. Ratrout</b>	Judges will be announced later	01:00-01:15
5D12	Reducing of Roads Congestion Using Demand Management Techniques	Yazan Issa	Dr. <b>Nedal T. Ratrout</b>		01:15-01:30
5D13	Compliance of Access Management Techniques on Urban Arterial in Nablus City	Yazan Issa	Dr. <b>Nedal T. Ratrout</b>		01:30-01:45
5D14	The effect of possible Failure of Dewatering System in the Eastern Province	Mohammad Samaaneh	Dr. <b>Ali Algadhib</b>		01:45-02:00
Break 02:00-02:15					
5D15	Simulation of the Effect of Damage on Chloride Diffusion into Stressed Reinforced concrete	Faisal Mukhtar	Dr. <b>Ali Algadhib</b>	Judges will be announced later	02:15-02:30
5D16	Elastoplastic Response of a Pressurized Functionally Graded Tube	Faisal Mukhtar	Dr. <b>Ali Algadhib</b>		02:30-02:45
5D17	Self-Compacting Concrete, from practical to virtual experiment	Faisal Mukhtar	Dr. <b>Muhammed Baluch</b>		02:45-03:00

## Parallel Session 5E: Petroleum Engineering, Location: 3-223 (Conference Room)

Session Chair: **Dr. M. Enamul Hossain**

#	Title	Authors	Advisor	Judges	Time
5E1	Estimation of Water Saturation Using Electrical Measurements Data of Core Plugs for Different Wells in Carbonate Reservoir Using Artificial Intelligence Technologies	Badr S. Bageri	Dr. Abdulazeez Abdulraheem	Dr.Al-Yousef Dr. Al-Hashim	09:00-09:20
5E2	Evaluation of Properties of Nano particles admixed oil well cement under HTHP conditions	Mobeen Murtaza	Dr. Abdulaziz Abdulla E Al-Majed		09:20-09:40
5E3	Design and Evaluation of Hydraulic fracturing in Tight Gas Reservoirs	Mobeen Murtaza	Dr. Sami Al. Neaim		09:40-10:00
5E4	Evaluation of the Pressure Drop due to Multi Phase Flow in Horizontal Pipes Using Fuzzy Logic and Neural Networks	M. Attia	Dr. M.A. Mahmoud		10:00-10:20
Break 10:20 – 10:40					
5E5	Risk Assessment of Non-Productive Drilling Time	Mohammed A.Q. Siddiqui, and Ziad Sidaoui	Dr. Al-Hashim	Dr.Abu-Khamsin Dr. Doklah	10:40-11:00
5E6	Effect of Saturation on Acoustics of Carbonate Rocks	Murtada Abdein Ali Elhaj	Dr. Abdulazeez Abdulraheem		11:00-11:20
5E7	Improvement of Oil Recovery by Smart Water Flooding in Carbonate Slab Model	Qasim Sahu	Dr Wael Abdallah, Schlumberger		11:20-11:40
5E8	Well Placement Optimization in a Waterflood Project Using Particle Swarm Optimization Method	Saad Mehmood	Dr. Abeebe A. Awotunde		11:40-12:00
Dohor Prayer & Lunch Break 12:00 – 13:30					
5E9	Optimizing the Flow Rate of Wells: An Implementation of Particle Swarm Optimization Technique	Saad Mehmood	Dr. Sami Al-Nuaim	Dr. Abeebe Dr. Mahmoud	13:30-13:50
5E10	Effect of Pressure on Wormholes in Carbonate Rocks - Stretching the Experimental Limits	Sarmad Zafar Khan	Dr. Abdullah S. Sultan		13:50-14:10
5E11	Application of Global Optimization technique to Pressure Transient Analysis in Homogeneous Formations	Zaeem Hassan Khan	Dr. Abeebe A. Awotunde		14:10-14:30
5E12	Optimization of ICV Configuration Using Particle Swarm Optimization Technique in A Multilateral Well Formations	Zaeem Hassan Khan	Dr. Sami Al-Nuaim	Dr. Sultan Dr. Malekzadeh	14:30-14:50
5E13	Improving Well Performance through a Hydraulic Fracturing job that is Efficient and Economical	Zaid Jangda	Dr. M.A. Mahmoud		14:50-15:10

**Parallel Session 6A:Electrical Engineering, Location: 59-2103 (Room 1: 59-0017 (Telecommunications Research Laboratory, TRL))**

**3<sup>rd</sup> of February, 2013**

#	Title	Authors	Advisor	Dept	Judges	Time
6A1	Cooperative Spectrum Sensing Using an Improved Evidence-Based Algorithm	Yousef Naief Shnaiwer	Dr. Mohammed Deriche	TELE	AHMED MASOUD M.A. AL-GAHTANI	09:00-09:15
6A2	A HYBRID EGC-OR DETECTION ALGORITHM FOR COOPERATVIE SPECTRUM SENSING	Humayun Khalid Kathuria	Dr. Wessam Mesbah	TELE		09:15-09:30
6A3	Wavelet-Based Spectrum Sensing Techniques for Cognitive Radios: A Survey	Humayun Khalid Kathuria	Dr. Mohamed A. Deriche	TELE		09:30-09:45
6A4	Enhancing RSSI-Based Distributed Clustering Using Transmit Power Control	Yousef Naief Shnaiwer	Dr. Asrar Sheikh	TELE		09:45-10:00
6A5	A Two-Threshold Cooperative Spectrum Sensing Algorithm using Swarm Intelligence	Fahham Mohammed	Dr. Mohamed A. Deriche	EE		10:00-10:15
Break and Time resynchronization 10:15-10:45						
6A6	Weighted memory polynomial model for RF power amplifier behavioral modeling	Abdullah Abdulrahman	Dr. Azzedine Zerguine	EE	ABDULLAH AL-AHMARI ADIL BALGHONAIM	10:45-11:00
6A7	Analog Computational Unit for Low Power Applications	Karama Mohammed AL-Tamimi	Dr. Munir AL-Absi	EE		11:00-11:15
6A8	Realization of 96 dB-Linear Exponential Current Generator	Karama Mohammed AL-Tamimi	Dr. Munir AL-Absi	EE		11:15-11:30
6A9	Detection and Classification of Voltage Events Based on Wavelet Transform	Fouad Rashed Zaro	Dr. M. A. Abido	EE		11:30-11:45
6A10	Optimal Harmonic Estimation Using Intelligent Computing Techniques	Fouad Rashed Zaro	Dr. M. A. Abido	EE		11:45-12:00
Dohor Prayer & Lunch Break 12:00 – 1:00						
6A11	Minimization of Transmission Power Loss by Intelligently Tuned Interline Power Flow Controller	Mustafa Al Khabbaz	Dr. Mohamed Ali Abido	EE	A ZIDOURI A. HUSSEIN	01:00-01:15
6A12	A New Power Flow Control Scheme Using Interline Power Flow Controllers	Mustafa Al Khabbaz	Dr. Mohamed Ali Abido	EE		01:15-01:30
6A13	Adaptive Equalization Based on Hybrid Particle Swarm Optimization Technique	Adil Humayun Khan	Dr. Azzedine Zerguine	EE		01:30-01:45
6A14	Application of a PSO algorithm in adaptive equalization using	Adil Humayun Khan	Dr. Azzedine Zerguine	EE		01:45-02:00

#	Title	Authors	Advisor	Dept	Judges	Time
	adaptive inertia weights					
<b>Break 02:00-02:15</b>						
<b>6A15</b>	Compressed Sensing based schemes to mitigate nonlinear distortions in WiMAX Physical Layer	Anum Ali	Dr. Oualid Hammi	EE	HAMMI OUALID M ABDUR-RAHIM	02:15-02:30
<b>6A16</b>	Mitigation of Power Surges in a 500kV Tapped Transmission Network for Protecting Generating Sets – A Case Study	Muhammad Waqar Ahmed	Dr. Muhammad Ali Abido	EE		02:30-02:45

## Parallel Session 6B:Electrical Engineering: Location: 59-2103 (Room 2: 59-2103 (EE Conference Room))

3<sup>rd</sup> of February, 2013

#	Title	Authors	Advisor	Dept	Judges	Time
6B1	CSRR loaded MIMO antenna system for 802.11ac WLAN application	Muhammad Umar Khan	Dr. Mohammad S. Sharawi	EE	AZZEDINE ZERGUINE ESSAM HASSAN	09:00-09:15
6B2	PERFORMANCE EVALUATION OF A MIMO ANTENNA SYSTEM	Muhammad Umar Khan	Dr. Mohammad S. Sharawi	EE		09:15-09:30
6B3	Scattering from Circular Conductor and Dielectric Cylinders	Rifaqat Hussain	Dr. Hassan Ragheb	EE		09:30-09:45
6B4	Nanoscale Plasmonic Interferometry	Mohammed Tayyab Mohi Mujahid	Dr Mohammed Al-Sunaidi	EE		09:45-10:00
6B5	Isolation enhancement techniques for MIMO	Ahmed Bilal Numan	Dr. M. S. Sharawi	EE		10:00-10:15
Break and Time resynchronization 10:15-10:45						
6B6	Dust storms Layered Models with Probabilistic Particle Size Distributions	Muhammad Omair Butt	Dr. Kamal Menwal Harb	EE	HASSAN RAGHEB M MOHANDES	10:45-11:00
6B7	Link Budget of a Ka-Band High Altitude Platform Station Communication System in the Presence of Dust Storms	Abdi Talib Abdalla	Dr. Kamal Menwal Harb	EE		11:00-11:15
6B8	Emission-aware Energy Trading by Coordinating Thermal & Wind Power Generation	Ghous Muhammad Asim Akhtar	Dr. Ali Taleb Al-Awami	EE		11:15-11:30
6B9	RF Gamming System	Osama Kousa	Dr. Oualid Hammi	EE		11:30-11:45

#	Title	Authors	Advisor	Dept	Judges	Time
6B10	A Novel MOPSO Based on Mutual Information & Entropy for Medical Image Registration	Ayham Zaza	Dr. Mohammed Abido	COE		11:45-12:00
Dohor Prayer & Lunch Break 12:00 – 1:00						
6B11	Novel Particle Swarm Optimization For FIR Filter Design	Xia Yuanhai		EE	KAMAL HARB M AL-GHAMDI	01:00-01:15
6B12	Combining Distributed Cooperation with Centralized Spectrum Sensing: A Game Theoretic Approach	Raza Umar	Dr. Asrar U. H. Sheikh	EE		01:15-01:30
6B13	Optimal Coordination of Directional Overcurrent Relays using Intellignet Technique	Muhammad Abdul Hafeez Ansari	M. A. Abido	EE		01:30-01:45
6B14	Performance Evaluation of a Microgrid containing inertial and electronically coupled sources with storage technology	Mohammad Ashraf Ali	Dr. A H Abdur Rahim	EE		01:45-02:00
Break 02:00-02:15						
6B15	Economic Load Dispatch with stochastic wind power as constraint: penalty function method	Muhammad Fahad Zia		EE	IBRAHIM HABIBALLAH M LANDOLSI	02:15-02:30
6B16	Mitigating of power system oscillations by intelligently tuned STATCOM damping controller	Mohammed Asrar ur Rahman	Dr. M A Abido	EE		02:30-02:45

**Parallel Session 6C: Electrical Engineering: Location: 59-2103 (Room 1:59-0017 (Telecommunications Research Laboratory, TRL))**

**4<sup>th</sup> of February, 2013**

#	Title	Authors	Advisor	Dept	Judge	Time
<b>6C1</b>	A Novel Method of Parameter Identification for PV panel and Its Assessment Using Different PV Technologies	Muhammad Sheraz	Dr. Mohammad A. Abido	EE	JAMEEL BAKHSHWAIN K QURESHI	09:00-09:15
<b>6C2</b>	Mathematical Modelling of A Generalized PV Array	Muhammad Sheraz	Dr. Mohammad A. Abido	EE		09:15-09:30
<b>6C3</b>	A Novel No-Reference Image Quality Metric using Neural Networks	Amer Bin Ziyad	Dr. Mohamed Deriche	EE		09:30-09:45
<b>6C4</b>	A Novel Low-Complexity Relay Selection Protocol	Anas MA Ata Salhab	Dr. Salam Zummo	EE		09:45-10:00

#	Title	Authors	Advisor	Dept	Judge	Time
	for Decode-And-Forward Relay Systems with Interference					
6C5	Optimal Pilot Symbols Distribution for Narrowband Interference Mitigation in UWB Systems Based on Compressive Sensing	Saleh Ahmed Alawsh	Dr. Ali Muqaibel	TELE		10:00-10:15
Break and Time resynchronization 10:15-10:45						
6C6	Wind Thermal Generation Scheduling with Fuzzy Genetic Optimization	Muhammad Abdul Hafeez Ansari	Dr. Ali. T. Alawami	EE	IBRAHIM EL-AMIN A. SHEIKH	10:45-11:00
6C7	An Efficient Wind Power Scenario Generation Technique	Muhammad Waqas Khalid	Dr. Ali T. Al Awami	EE		11:00-11:15
6C8	Coordinated Trading of Solar Thermal Energy in Electricity Market	Muhammad Waqas Khalid	Dr. Ali T. Al Awami	EE		11:15-11:30
6C9	daily scheduling of producing electric powerfrom hybrid system contains Wind-Pump Storage Hydro facilities and tow thermal units	Mustafa Swaiti	Dr. Ali Awami	EE		11:30-11:45
6C10	Grid Connected Control of PV System with Reactive Load	Atta Ur Rahman	Dr. Ali Taleb Alawami	EE		11:45-12:00
Dohor Prayer & Lunch Break 12:00 – 1:00						
6C11	Cooperative Spectrum Sensing Using Dempster-Schafer Evidence Theory	Zahid Saleem	Dr. Mohamed A. Deriche	EE	MAAN KOUSA MAHMOUD KASSAS	01:00-01:15
6C12	Differential Evolution based Intelligent Control for Speed Regulation of a PMDC Motor	Syed Asim Hussain	Dr. M. A. Abido	EE		01:15-01:30
6C13	Robust Stabilizing Controller Design for a UAV Helicopter Disturbed with Wind Gust	Syed Asim Hussain	Dr. Samir Al Baiyat	EE		01:30-01:45
6C14	Design of Programmable Broadband Radio Frequency Feed Network	Sameir Deif	Dr. M. Sharawi	EE		01:45-02:00

## Parallel Session 6D:Electrical Engineering: Location: 59-2103 (Room 2: 59-2103 (EE Conference Room))

**4<sup>th</sup> of February, 2013**

#	Title	Authors	Advisor	Dept	Judges	Time
<b>6D1</b>	Efficient License Plate Localization	Arbab Latif	Dr. M. Deriche	EE	SHARAWI MOHAMMAD D AL-SUNAINY	09:00-09:15
<b>6D2</b>	No-Reference Image Quality Assessment using Blur and Noise	Arbab Latif	Dr. M. Deriche	EE		09:15-09:30
<b>6D3</b>	Wireless Tracking of Vehicles for Indoor Applications	Abdullah AlUthman	Dr. Mohammad S. Sharawi	EE		09:30-09:45

#	Title	Authors	Advisor	Dept	Judges	Time
6D4	Arabic Handwriting recognition using Combining classifier Neural networks	Mohammed Dahiru Buhari	Dr. Mohammed Al-Ahmadi	TELE		09:45-10:00
6D5	Automated License Plates Recognition	Mahmoud Marwan Alhelou	Dr. Mohamed A. Deriche	EE		10:00-10:15
Break and Time resynchronization 10:15-10:45						
6D6	Implementation of a Sensor-Based Smart Parking System in Saudi Arabia	Umair Ahmad Shaikh	Dr. Mohamed Mohandes	EE	MESBAH WESSAM MUHAMMAD ABUELMAATTI	10:45-11:00
6D7	Image-based System for Localization of Vacant Spaces in Parking Areas	Junzhao Liu	Dr. M.Mohandes; Dr. M.Deriche	EE		11:00-11:15
6D8	Mobile-Based Location Estimation Using Single Base Station	Samir Salem Al-Bawri	Dr. Abdelmalek Zidouri	EE		11:15-11:30
6D9	POWER PLANTS AND THE EFFECT ON ENVIRONMENT AND HEALTH	Mohannad Al-Mala		EE		11:30-11:45
6D10	Design and Implementation of a Microcontroller Based Multifunction Relay	Mohannad Al-Mala	Dr. Mohamed Abido	EE		11:45-12:00
Dohor Prayer & Lunch Break 12:00 – 1:00						
6D11	Behavioral Modeling of RF Power Amplifiers for LTE Applications	Abderezak Miftah Kedir	Dr. Oualid Hammi	EE	S AL-GHADBAN S AL-UBAIDI	01:00-01:15
6D12	Behavioral Modeling Of RF Transmitters Fir LTE Applications	Nassir Alrajhi	Dr. Oualid Hammi	EE		01:15-01:30
6D13	Analyzing IEEE 802.11 DCF for Finite User Finite Buffer Systems using Tagged User Analysis	Khurram Masood	Dr. Asrar U. H. Sheikh	EE		01:30-01:45
6D14	Substation Automation System Based on IEC61850	Emad Fuad Naim Areed	Dr. Mohamed Ali Dr. Abido	EE		01:45-02:00
Break 02:00-02:15						

## Parallel Session 7A: Mechanical Engineering- Sunday 3 February 2013

**Session Chair: Dr S.Mekid**

#	Title	Authors	Main Advisor	Judges	Time
<b>7A – Mechanical Engineering 1 - Location: Room 22-130</b>					
<b>7A1</b>	Acoustic noise control using multiple expansion chambers	M. Horoub	M.Hawwa	Mekid + TBA	8:00-8:15
<b>7A2</b>	Study of early bearing failure for a rod mill	A. Al-Musaqlab	Pasha		8:20-8:35
<b>7A3</b>	Finite Element Modeling and Life Prediction of a Photovoltaic Module	Osama Hasan	A.F.M. Arif		8:40-8:55

#	Title	Authors	Main Advisor	Judges	Time
7A4					
7B – Mechanical Engineering 2 – Location: Room 22-228					
7B1	Development of a novel hybrid storage system for solar powered aqua-ammonia absorption refrigeration cycle	Farooq Riaz Siddiqui	S.A.M. Said	Mekid+TBA	9:00-9:15
7B2	Experimental study of dust and its impact on optical	Farooq Riaz Siddiqui	N.Tabet		9:20-9:35
7B3					
Break and Time resynchronization 10:15-10:45					
7C – Mechanical Engineering 3 – Location: Room 24-120					
7C1	Effect of annealing temperature on corrosion behavior of mn containing austenitic stainless steel alloys	Jahanzaib Malik	Ihsan-ul-Haq Toor	Nouari + Mezghani	10:30-10:45
7C2	Effect of h2s and co2 on corrosion : a review	Muhammad Nauman Zafar	Luai M. Al-Hadhrami		10:50-11:05
7C3	Nanocomposites	Taib M. Arif			11:10-11:25
7C4	Effect of concentration and process parameters on the mechanical and surface properties of polyacrilonitrile	Fayez. M. Al-Nufaiei	Sarfaraz Furquan, Zafarullah		11:30-11:45
7C5	Defects in pvd hard coatings	Adesina Akeem Yusuf			11:50-12:05
7D – Mechanical Engineering 4 – Location: Room 22-125					
7D1					
7D2					
Dohor Prayer & Lunch Break 12:00 – 1:00					
7E – Mechanical Engineering 5 – Location: Room 24-120					
7E1	Study of Soiling Effect on Light Transmittance of Solatex Glass Used in the PV Panels	Ghazi Herry			1:00-1:15
7E2	Performance of a flat plate photovoltaic/thermal solar	Amin Elsafi			1:20-1:35
Break 02:00-02:15					

#	Title	Authors	Main Advisor	Judges	Time
7F – Mechanical Engineering 6 – Location: Room 24-120					
7F1	Effect of Dust on PV Module Glass Cover	Husam Walwill	S.A.M. Said	M.Antar-A. Khalifa	2:15-2:30
7F2	Effect of elastic photoelectron scattering in the measurement of overlayer thickness using xps methods: a critical review	Adesina Akeem Yusuf			2:35-2:50
7F3	Energy Analysis on Solar Photovoltaic (PV) Refrigeration System	Abdulafeez Adebisi	M.A.I. El-Sharawwi		2:55-3:10
Aser Prayer 3:00 – 03:15					
7G – Mechanical Engineering 7 – Location: Room 24-120					
7G1	Effect of Phase Change Particle (P.C.M.) Injection on Heat Transfer Characteristic in Microchannel Flow: Laminar and Turbulent Flow	Haider Ali	Bekir S. Yilbas	A.Khalifa , M.Antar	2:15-2:30
7G2	Effect of uniform axial heat flux on post dryout heat transfer	Muhammad Nauman Zafar	Meamer El-Nakla		2:35-2:50

## Parallel Session 7B: Mechanical Engineering- Monday 4<sup>th</sup> February 2013

**Session Chair: Dr Al-Sarkhi**

#	Title	Authors	Main Advisor	Judges	Time
7B – Mechanical Engineering 2 – Location: Room 22-228					
7B1	High Temperature Membranes for Oxyfuel Combustion	Zeeshan Alam	Khaled Mezghani	S.Nouari-T.Laoui	9:00-9:15
7B2	Nanocomposite Fibers of PET/CNT: Effect of Post Drawing Temperature on Mechanical Properties	Zeeshan Alam	Khaled Mezghani		9:20-9:35
7B3					
Break and Time resynchronization 10:15-10:45					
7C – Mechanical Engineering 3 – Location: Room 24-120					
7C1	Optimization of steam methane reforming process integrated with solar parabolic dish collector	Muhammad Ibrar Hussain	Esmail M. A. Mokheimer	Al-Sarkhi, M.Antar	10:30-10:45
7C2	Prediction of two-phase friction pressure drop multiplier by using look-up-table	Ihab Hisham H. Alsurakji	Meamer El-Nakla		10:50-11:05
7C3	Solar Tower Technologies for Steam Production	Mohammed Waseeuddin	S.A.M. Said		11:10-11:25
7C4	Status of Mechanical Subcooling	Bilal Ahmed Qureshi	S.M. Zubair		11:30-11:45
7C5	Subcooling of liquid refrigerant in a vapor	Nasiru Ishaq	A.A. Al-Farayehi		11:50

#	Title	Authors	Main Advisor	Judges	Time
	compression air conditioning system using condensate	Ibrahim			12:05
7D – Mechanical Engineering 4 – Location: Room 22-228					
7D1	Performance of a flat plate photovoltaic/thermal solar	Amin Elsafi		Mezghani, T.Laoui	10:30-10:45
7D2	Study of Soiling Effect on Light Transmittance of Solatex Glass Used in the PV Panels	Ghazi Herry			10:50-11:05
Dohor Prayer & Lunch Break 12:00 – 1:00					
7E – Mechanical Engineering 5 – Location: Room 24-120					
7E1	The Effect of Water Salinity on the Flow Pattern and the Pressure Drop in Oil-Water Flow	Ayman Wajih Mukhaymir	A. Al-Sarkhi	M.Antar-A.Khalifa	
7E2	The Pressure Drop Behavior in Oil-Water Flow for Low Viscosity Oils	Ayman Wajih Mukhaymir	A.Al-Sarkhi		
Break 02:00-02:15					