

King Fahd University of Petroleum & Minerals

Deanship of Graduate Studies



**6th GRADUATES' SEMINAR DAY
PROGRAM**

Sunday, Feb 12, 2012

Introduction

This Graduate Seminar 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 is inaugurated by H.E. the Rector.

The 6th Graduate Seminar Day has the following features:

- Presentations by graduate students of KFUPM as a preparation for the 3rd Saudi Student Conference to be held in April 2012. 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, the number of presentations is about three times compared with the 5th Graduate Seminar Day. Out of 238 submitted contributions, a total of 168 papers are selected for presentation. The overall acceptance ratio is 70%. 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 6th Graduate Seminar Book of Abstracts.

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

Thank you...

Dr. Salam A. Zummo
Dean of Graduate Studies

6th Graduate Seminar Day Organizing Committee:

- | | |
|---------------------------|----------------------|
| • Ali Muqaibel (Chairman) | • Mourad Mansour |
| • Abdel-Salam Eleiche | • Mohammad Hassanain |
| • Mohamed Abu-Sbeih | • Mahmoud Elish |
| • Basim Abussaud | • Abdullah Alshuhail |

Program

Activity	Time	Location
Dr. Salam A. Zummo Dean of Graduate Studies Opening Remarks	8:15-8:20am	B20-103
H.E. Dr. Khalid Al-Sultan University Rector	8:20-8:30am	

Parallel Sessions

Summary of Contributions & Departments Coordinators

College	Session	Chair	Numbering format	Dept.	Page #	Department Coordinator	Contributions			
							Submitted	Accepted	% Acce	Total Acce
Science	1	Dr. Mohamed Abu-Sbeih	1Axx	CHEM	3	Dr. Hasan Al-Muallem	16	12	75	22
			1Bxx	PHYS	4	Dr. Ali H. Al- Ramadhan	6	6	100	
			1Cxx	MATH	4	Dr. Mohammad Z. Abu-sbeih	4	4	100	
CCSE	2	Dr. Mahmoud Elish	2Axx	ICS	5	Dr. Mahmoud Omar Elish	23	19	82	55
			2Bxx, 2Cxx	SE	6	Dr. Mujahed Al- dhaifallah	19	13	68	
			2Dxx, 2Exx	COE	7	Dr. Tarek R. Sheltami	26	23	88	
CIM	3	Dr. Mourad Mansour	3Axx	MBA	8	Dr. Mourad Mansour	2	1	50	1
CED	4	Dr. Mohammad Hassanain	4Axx	ARE	9	Dr. Mohammad A. Hassanain Mr. Mohammad Babsail	14	7	50	10
			4Bxx	CRP	9	Dr. KhMd Nahiduzzaman	3	3	100	
College of Engineering Sciences and Applied Engineering	5	Dr. Basim Abussaud	5Axx	CHE	10	Dr. Basim Ahmed Abussaud	4	4	100	80
			5Bxx	CE	10	Dr. Talat Bader	8	5	62	
			5Cxx	PETE	11	Dr. Enamul Hossain	32	12	37.5	
			5Dxx	AE	12	Dr. Farooq Saeed	3	3	100	
	6	Dr. Ali Muqaibel	6Axx, 6Bxx	EE	12	Dr. Ali Hussein Muqaibel	52	32	61.6	
	7	Dr. Abdel- Salam Eleiche	7(A to G)xx	ME	14	Dr. Abdel-Salam M. Eleiche	26	24	92	
						TOTAL	238	168	70	168

Note: for the soft copy version, you can click on the department name to go to its program. For the hardcopy the page number is listed in the table.

Parallel Session 1A: Chemistry, Location: 5-103

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

#	Title	Authors	Advisor	Dept	Judge	Time
1A1	Microtitration by Differential electrolytic potentiometry using bare and Carbon nanotubes modified Silver electrodes	Abdulaziz Amro	Abdallah M. Abulkibash	CHEM	Dr. Assad Al-Thukair • Dr. Anvarhusein A. Isab • Dr. ShaikhAsrof Ali	09:00-09:15
1A2	Microtitremetric Assay of Ascorbic Acid by Differential Electrolytic Potentiometry	Abdulaziz Amro	Abdallah M. Abulkibash	CHEM		09:15-09:30
1A3	Synthesis of polysulfonates using cyclopolymerization of specialty diallylammonium salts	Shamsuddeen A. Haladu	Shaikh Asrof Ali	CHEM		09:30-09:45
1A4	Synthesis and solution properties of a novel electrolyte-zwitterionic/sulfur dioxide copolymer	Shamsuddeen A. Haladu	ShaikhAsrof Ali	CHEM		09:45-10:00
1A5	Synthesis, characterization and hydrodesulfurization (HDS) of Mo-SBA-15 catalyst with increased and well dispersed MoO ₃ particles	ZakariyahJamiuAbdulkareem	Mohammed Al-Daous	CHEM	Dr. Nouri Hassan • Dr. Abdallah M. Abulkibash • Dr. Mohammed Al-Daous	10:00-10:15
1A6	Synthesis, characterization and anti-proliferative effect of [Au(diamine)Cl ₂]Cl complexes on human cancer cell lines	M. Monim-ul-Mehboob	Anvarhusein A. Isab	CHEM		10:15-10:30
1A7	Anti-cancer activity of new gold(III) complexes of [Au(en) ₂]Cl ₃ and its derivatives against human prostate and gastric cancer cell lines	M. Monim-ul-Mehboob	Anvarhusein A. Isab	CHEM		10:30-10:45
1A8	Investigation of acid-base character of gold nanoparticles supported on alumina and magnesia-alumina supports: Use of 2-propanol decomposition as test reaction	Abdullah A. Manda	Than Htun Maung	CHEM		10:45-11:00
Dohor Prayer & Lunch Break 12:00 – 1:00						

Parallel Session 1A: Chemistry, Location:4-125

Session Chair: **Dr.Abdel-Nasser Kawde**

#	Title	Authors	Advisor	Dept	Judge	Time
1A9	Electrochemical Investigation and Analytical Determination of Ciprofloxacin in Pure and Drug Formulation Form	Nurudeen A. Odewunmi	Abdel-Nasser Kawde	CHEM	Dr. Abdel-Nasser Kawde Dr. BasheerChambasha Dr. Than HtunMaung	01:00-01:15
1A10	Removal of heavy metal ions using a novel cross-linked polyphosphonate	Othman C. Al-Hamouz	Shaikh A. Ali	CHEM		01:15-01:30
1A11	pH-Responsive Polyphosphonates Using Butler's Cyclopolymerization	Othman C. Al-Hamouz	Shaikh A. Ali	CHEM		01:30-01:45
1A12	Efficiency Optimization in a Distillation Unit exhibiting Excessive Scale Formation	Said Salman Al-Jaroudi	-	CHEM		01:45-2:00

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

#	Title	Authors	Dept	Judge	Time
1B1	Simulation of Linear Accelerator Photon Beam and Dose Calculation in a Patient Using Monte Carlo Technique	Abdullah Adeleke	PHYS	<ul style="list-style-type: none"> Dr. N. Maalej, Prof. M. Al-Jarallah 	2:30 - 2:45
1B2	Investigation of Beam Setup for Total Skin Electron Therapy (TSET) Technique.	Muhammad Salman	PHYS		2:45 - 3:00
1B3	Thermal Oxidation of Electron-beam Evaporated Iron Thin Films	Muhammad Saleem	PHYS	<ul style="list-style-type: none"> Dr. M. Al-Kuhaili, Prof. F. Al-Adel 	3:00 - 3:15
Aser Prayer 3:15 - 3:30					
1B4	Optical Properties of Iron Thin Films	Muhammad Saleem	PHYS	<ul style="list-style-type: none"> Dr. M. Al-Kuhaili, Prof. F. Al-Adel 	3:30 - 3:45
1B5	Synthesis and Characterization of Zinc Oxide (ZnO) nanopowders assisted by sol method.	Esam Al-Nahari	PHYS	<ul style="list-style-type: none"> DR. S. Al-Quraishi, Prof. A. Naqvi 	3:45 - 4:00
1B6	Determination of Mercury Concentration in Water Samples using PGNAA Technique by Analyzing the Response of LaBr3:Ce Detector	Faris Almatouq	PHYS		4:00 - 4:15

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

#	Title	Authors	Dept	Judge	Time
1C1	Symmetry Analysis and Exact Invariant Solutions of Linear Klein Gordon Equation on a Sphere	Khaled Ali AyedAlanezy	MATH		2:00- 2:15 PM
1C2	Symmetries and Exact Solutions of the Wave Equation on Torus	Kassimu Mpungu	MATH		2:15- 2:30 PM
1C3	Symmetry Analysis of the Wave Equation on Schwarzschild Spacetime	Usamah S. Al-Ali	MATH		2:30- 2:45 PM
1C4	Existence of Solutions for Nonlinear Parabolic Equations with Integral Initial Conditions	IFTIKHAR ALI	MATH		2:45- 3:00 PM

Session 2A: Information and Computer Science

Location: **59-2017**

Session Chair: **Dr. Mahmoud Elish**

#	Title	Authors	Advisor	Judge	Time
2A1	Automatic Diacritics Restoration for Arabic Text	Omar Shaaban	Dr. Husni Al-Muhtaseb	<ul style="list-style-type: none">Dr. Kanaan FaisalDr. Husni Al-MuhtasebDr. Muhammed Al-MulhemDr. MusabAlTurki	09:00-09:15
2A2	مولدأنحويللجمالعربية	ZaherBamasood, SamehBellegdi	Dr. Husni Al-Muhtaseb		09:15-09:30
2A3	ترجمة نشرات الأدوية من الإنجليزية إلى العربية أليا	NaserKhashan, Mohammad Amro	Dr. Husni Al-Muhtaseb		09:30-09:45
2A4	A Comparison of Mamdani and Sugeno Adaptive Fuzzy Inference Systems for a Software Effort Prediction Model	Mohammed Kamal	Dr. Moataz Ahmed		09:45-10:00
2A5	Investigating students' perceptions of Learning Management Systems: A case study of the Blackboard WebCT system	Mohammed Kamal	Dr. Mohammad Al-Ahmadi		10:00-10:15
Break and Time resynchronization 10:15-10:45					
2A6	Prioritization of Requirements Based on UCPD and Relations between Use Cases	AkramHezam, Mustafa Ghaleb	Dr. Mohamed El-Attar	<ul style="list-style-type: none">Dr. Tarek HelmyDr. Mahmoud NiazDr. Mohamed El-Attar	10:45-11:00
2A7	Security in State Chart	HamzahLuqman, Hassan Al-kaff	Dr. Mohamed El-Attar		11:00-11:15
2A8	The relationship between the UML design metrics and the external software Quality attributes: A systematic literature review	Mawal Mohammed, Ahmed Naef, Bashar Ahmad	Dr. Mahmoud Elish		11:15-11:30
2A9	Agent-based Framework for Semantic Query-Manipulation and Personalized Retrieval of Health and Nutrition Information	Ahmed AlNazer	Dr. Tarek El-Basuny		11:30-11:45
2A10	A Network of Heterogeneous and Distributed Ontologies for Health and Nutrition Information System	Ali Iqbal	Dr. Tarek El-Basuny		11:45-12:00
Dohor Prayer & Lunch Break 12:00 – 1:00					
2A11	Mining Frequent Structural Patterns fromXML Datasets	Mohsin Ali	Dr. Salahadin Mohammed	<ul style="list-style-type: none">Dr. Wasfi Al-KhatibDr. Sultan Al-MuhammadiDr. Khaled AljaserDr. Abdulaziz Alkhoraidly	01:00-01:15
2A12	Parking-Lot Monitoring System Based On Video Object Tracking Technique	KhaldounHalawani, Imran Haq	Dr. Wasfi Al-Khatib		01:15-01:30
2A13	Framework For Distributed Real-Time Educational Systems	Abdulrahman Baqais	Dr. Basem Al-Madani		01:30-01:45
2A14	Software Cloning : A Quest For A solution (AI Perspective)	Abdulrahman Baqais	Dr. Moataz Ahmed		01:45-02:00
2A15	Relationships between CK Metrics and External Software Quality Attributes: A Systematic Literature Review	Yasser Khan, Mohsin Ali, Khalid Wahabi, Mustafa Alsaleh	Dr. Mahmoud Elish		02:00-02:15
2A16	Linux-based Mobile Operating Systems Native Code Malware: The Android Experience	Ayaz Khan, MajedAlhajry	Dr. FaragAzzedin	<ul style="list-style-type: none">Dr. Sabri MahmoudDr. Md. Rafiul HassanDr. FaragAzzedin	02:15-02:30
2A17	Extracting of Courtesy and Legal Amounts of Bank Checks	SamehBellegdi	Dr. Sabri Mahmoud		02:30-02:45
2A18	Scalable Fast Parallel SVM on Cloud Clusters for Large Datasets Classification	GhazanfarLatif	Dr. Md. Rafiul Hassan		02:45-03:00
2A19	Multilingual Framework for Ontology-Based Semantic Annotation of Health and Nutrition Websites	Saeed Al-Bokhitan	Dr. Tarek El-Basuny		03:00-03:15

Parallel Session 2B: Systems Engineering: Control and Instrumentation Systems Engineering,

Location: **59-2025**

Session Chair: **Dr. LahouariCheded**

#	Title	Authors	Advisor	Dept	Judge	Time
2B1	Acoustic mixture Classification using ICA and a Novel Coarse Grade AR Modeling	AMIN UD DIN QURESHI Rifaqat Hussain	Dr. LahouariCheded	SE	<ul style="list-style-type: none">• Dr. Amar Khoukhi• Dr. Bo Liu• Dr. M. Mysorewala	01:45-02:00
Break 02:00-02:15						
2B2	Overlapping Decentralized sliding mode control design for H. B. Robinson Nuclear Power Plant	AMIN UD DIN QURESHI	Dr. Magdi S. Mahmoud	SE	<ul style="list-style-type: none">• Dr. Amar Khoukhi• Dr. Bo Liu• Dr M. Mysorewala	02:15-02:30
2B3	ANFIS based-Kinematic Modeling of Mobile Parallel Robot	MutazHamdan	Dr. Amar Khoukhi	SE		02:30-02:45
2B4	Revisiting Non linear Control Design of a Ball on a Beam System: Sliding Mode Controller with an UKF Observer	Muhammed Ezmir Ghufran Ahmed	Dr. Sami El Ferik	SE		02:45-03:00
Aser Prayer 3:00 – 03:15						
2B5	Augmented Boiler –NOx model control using Model Predictive Technique	Syed Minhajullah	Dr.Moustafa El Shafei	SE	<ul style="list-style-type: none">• Dr. Moustafa El Shafei• Dr. A. Al-Saif• Dr. Sami El-ferik	03:15-03:30
2B6	In-pipe Leak Detection Based on Pressure Gradient	Mahmoud Elfeky	Dr. Atia E. Khalifa	SE		03:30-03:45
2B7	Water Desalination Using Solar Energy	Mahmoud Elfeky	Dr.Moustafa El Shafei	SE		03:45-04:00
2B8	OKID-Based System Identification on Experimental Data of DC- Moto	Omar Al-buraiki	Dr. Sami El-ferik	SE		04:00-04:15

Parallel Session 2C: Systems Engineering, Industrial Systems Engineering

Location: **59-2027**

Session Chair: **Dr. Mohammad AlDurgam**

#	Title	Authors	Advisor	Dept	Judge	Time
2C1	Determining Process Means and Optimal Rectifying Inspection Plans for Machines in Series	Ashraf El-Ga'aly	Dr. ShokriSelim	SE	Dr. A. Shamayleh Dr. M. Osman Dr. SalihDuffuaa	02:15-02:30
2C2	Multi-objective optimization models for process targeting under absence and presence of inspection error	Ashraf El-Ga'aly	Dr. SalihDuffuaa	SE		02:30-02:45
2C3	Production planning with reworkable and scraped items	Omar Alsawafy	Dr.ShokriSelim	SE		02:45-03:00
Aser Prayer 3:00 – 03:15						

#	Title	Authors	Advisor	Dept	Judge	Time
2C4	Economic production lot sizing with two types of non-conforming items and shortages	Omar Alsawafy	Dr.ShokriSelim	SE	<ul style="list-style-type: none"> • Dr. Malik • Dr.ShokriSelim • Dr Y. Gaipal 	03:15-03:30
2C5	Optimal Means for a Network of Continuous Processes	Walid K. Al-Zu'bi	Dr.ShokriSelim	SE		03:30-03:45

Parallel Sessions: 2D & 2E: Computer Engineering

#	Title	Authors	Main Advisor	Judges	Time
2D – Computer Engineering 1 - Location: Room 22-105					
2D1	Geo-Cipher: Design, implementation and analysis of a map-based graphical password system	Abdul-Rahman Ibrahim, TaimoorAslam	Dr. ZubairBaig	Dr. Tarek Sheltami (Chair), • Dr. Marwan AbuAmara, • Dr. YahyaOsais	09:00-09:15
2D2	A Multi-Click, Multi-Cursor Graphical Password Scheme (MC)2 for Effective User Authentication	HamzaIjazAbbasi, Abdul JabbarSiddiqui	Dr .ZubairBaig		09:15-09:30
2D3	LP Formulation for Thermal Management of A Biosensor Network	Ayazul Hassan Khan	Dr. Ashraf Mahmoud		09:30-09:45
2D4	Rank Based Sleep Scheduling (RBSS) Protocol for WSNs in a Fixed Grid Topology	HamzaIjazAbbasi, Abdul JabbarSiddiqui	Dr. Tarek Sheltami		09:45-10:00
2E – Computer Engineering 2 – Location: Room 22-401					
2E1	A low-cost Test and Characterization Processor for at-speed testing of ASICs	AmranAbdulrhmanAl-Aghbari, Mohammed alasli	Dr. Muhammad Elrabaa	Dr. , Mayez Al-Mouhamed (Chair), • Dr. Radwan Abdel-Aal, • Dr. Atef Al-Najjar, • Dr. MuhamedMudawar	09:00-09:15
2E2	OPC-Enabled Distributed Control Systems over Data Distribution Service (DDS)	Ayman Ali Mohammad Hroub	Dr. Basem Al-Madani		09:15-09:30
2E3	High-capacity Steganographic Scheme Based on Overlapping PVD Method	Azzat Ahmed Al-Sadi	Dr. El- Sayed El-Alfy		09:30-09:45
2E4	Security Improvement of PVD Steganographic Method against Histogram Attack	Azzat Ahmed Al-Sadi	Dr. El- Sayed El-Alfy		09:45-10:00
Break and Time resynchronization 10:15-10:45					
2D – Computer Engineering 3 – Location: Room 22-105					
2D5	TCP Congestion Control Using H _∞ Methods	Ali Al-Mohammadi, AllamFatayer, IrfanCanan	Dr. Tarek Sheltami	• Dr. Tarek Sheltami (Chair), • Dr. Marwan AbuAmara, • Dr. YahyaOsais	10:45-11:00
2D6	Identifying the direction of a phenomenon in wireless sensor networks	Mohammed Alasli, AbdulsalamBasabaa	Dr. Tarek Sheltami		11:00-11:15
2D7	Security Implication of Cloud Computing : A Survey	Saad Ahmed Khan, Saif Ahmed	Dr. UthmanBaroudi		11:15-11:30
2D8	Hardware implementation Of Collection Tree Protocol	Saad Ahmed Khan, Saif Ahmed	Dr. UthmanBaroudi, Dr. Abdulaziz Y. Barnawi		11:30-11:45
2D9	Resource Allocation in Multiuser OFDMA Using The Slope Method	Saeed Alsowail, Azzat Ahmed Al-Sadi	Dr. Ashraf Mahmoud		11:45-12:00

#	Title	Authors	Main Advisor	Judges	Time
2D – Computer Engineering 4 – Location: Room 22-401					
2E5	Real Time System for Health Monitoring of Civilians Transportation Drivers	khalid Mohamed OqlahNahar	Dr. Basem Al-Madani	Dr. Radwan Abdel-Aal (Chair), • Dr. , Mayez Al-Mouhamed, • Dr. Atef Al-Najjar	10:45-11:00
2E6	Enhanced Algorithm for Modular Division	Mohamed Abuobaida Mohamed	Dr. Alaaeldin Amin		11:00-11:15
2E7	Single Sign On (SSO) for Enterprise Search using Real Time Publish/Subscribe (RTPS) Middleware	Mohammed YounusSiddiqui	Dr. Basem Al-Madani		11:15-11:30
2E8	Real-Time Publish/Subscribe Middleware for Mobile Computing	Ayazul Hassan Khan	Dr. Basem Al-Madani		11:30-11:45
2E9	Enhancing BLAST Runtime Using Diskless-Based High Performance Clusters	RaedAlShaikh	Dr. Mohammed Al-Mulhem		11:45-12:00
Dhuhur Prayer & Lunch Break 12:00 – 1:00					
2D– Computer Engineering 5 – Location: Room 24-105					
2D10	Design Issues in Industrial Wireless Sensor Networks (IWSNs) and Proposed Solutions: A Survey	Saif Ahmed	Dr. UthmanBaroudi	Dr. Tarek Sheltami (Chair), • Dr. Marwan AbuAmara, • Dr. YahyaOsais	13:00-13:15
2D11	Efficient Variants of Square Contour Algorithm for Blind Equalization of QAM Signals	Ahmad Tariq Sheikh	Dr. Shahzad Amin		13:15-13:30
2D12	Verilog Implementation of a Blind Channel Equalizer	Ahmad Tariq Sheikh	Dr. Shahzad Amin		13:30-13:45
2E – Computer Engineering 6 – Location: Room 24-401					
2E10	Indoor Navigation Algorithm for MAROFEX	Mohammad SouheibChenoua, Amer Ahmed Bualhasan	Dr. Abdul-HafidBouharaoua	• Dr. , Mayez Al-Mouhamed (Chair), • Dr. Radwan Abdel-Aal, • Dr. Atef Al-Najjar	13:00-13:15
2E11	Remotely Controlled Vehicle	Mohammed WalidSidkia Al Tenbakjii, Abdul JabbarSiddiqui, HamzaIjaz Abbas	Dr. Abdul-HafidBouharaoua		13:15-13:30

Parallel Session 3A: College of Industrial Management, Location:**24-284**

Session Chair: **Dr. Murad Mansour**

#	Title	Authors	Advisor	Dept	Judge	Time
3A1	KFUPM Library Information System: A Case Study	SIDDHARTH NAIR HUMAYUN KHALID MOHAMMED RAFIUDDIN	Dr. Mustafa Eid	MBA	<ul style="list-style-type: none"> • Dr. Murad Mansour, • Dr. Khalifa • Mustafa F. Ahmed 	3:00 PM

Parallel Session 4A: College of Environmental Design, Location:19-452-2

Session Chair: **Dr. Mohammad A. Hassanain**

#	Title	Authors	Advisor	Dept	Judge	Time
4A1	Post Occupancy Evaluation of Cubicle Workspaces in Architectural Design Studios	Syed Ashraf Tashrifullahi	Dr. Abdul-Mohsen Al Hammad	ARE	Dr. A. Elazouni Mr. H. Balfaqih • •	09:00-09:15
4A2	A Simulation Model for Emergency Evacuation Time of a Library Facility using EVACNET4	Syed Ashraf Tashrifullahi	Dr. Mohammad Hassanain	ARE		09:15-09:30
4A3	Assessment of Maintenance Services of Residential Buildings in Saudi Arabia: Needs and Difficulties	Ahmed Baharoon	Dr. Abdul-Mohsen Al Hammad	ARE		09:30-09:45
4A4	Investigation of Fire Prevention Measures and Escape Rescue Systems in High Rise Buildings	Fadi A. Fatayer	Dr. Mohammad Hassanain	ARE		09:45-10:00
4A5	Impact of Building Systems Design on Energy Consumption in Residential Buildings under Hot Humid Climate	Fadi A. Fatayer	—	ARE		10:00-10:15
Break and Time resynchronization 10:15-10:45						
4A6	Effective Window Design for Reducing Solar Heat Gain	Mohammed Abdul Fasi	Dr. Ismail Budaiwi	ARE	Dr. A. Elazouni Mr. H. Balfaqih • •	10:45-11:00
4A7	Evaluation of Fire Safety in Design and Operation of Typical Administrative Building Located in a University Campus	Mohammed Abdul Fasi	Dr. Mohammad Hassanain	ARE		11:00-11:15

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

#	Title	Authors	Advisor	Dept	Judge	Time
4B1	Inexpensive Competitive Public Transportation Solution for al-Khobar	Olzhas Bilyalov	K. Mohammad Nahiduzzaman	CRP	Scientific review committee & faculties of the department	3.00-3.20 pm
4B2	A Study on Awareness of Nuclear Energy and Perception of its Risk in Saudi Arabia: an Educated Learning from KFUPM Community	Myungcheol Shin	K. Mohammad Nahiduzzaman	CRP		3.20-3.40 pm
4B3	Prospects of Public Transport System in Eastern Province of Saudi Arabia. Lessons Learnt from Dammam, Dhahran and Khobar Cities	Mohamad Abu IssaAnshary	K. Mohammad Nahiduzzaman	CRP		3.40-4.00 pm

Parallel Session 5A: Chemical Engineering, Location: 4-258

Session Chair: **Dr. Basim Abussaud**

Paper No.	Title	Authors	Advisor	Judge	Time
5A1	Kinetics of Toluene alkylation with methanol catalyzed by HZSM-5, ZM13 and MOR/ZSM-5 zeolites	wahabolaiyaAlabi	prof.Sulaiman Al-khattaf	Dr. Hakeeb Al-Ali Dr. Ma,dooH Al-Harithi • •	9:00-9:15
5A2	Styrene as a promoter, modifier and copolymer in ethylene polymerization	Muhammad Shahzad Kamal	Dr. Mamdouh A. Al-Harhi		9:15-9:30
5A3	Recycling Of Mixed Plastics Waste Containing Polyethylene, Polyvinylchloride And Polyethylene Terephthalate	UmerMehmood	Dr. Mamdouh A. Al-Harhi		9:30-9:45
5A4	CO ₂ Flooding Monitoring Model Using Material Balance Equation	H.M.Zaheer	Dr. Hakeeb Al-Ali		9:45-10:00

Parallel Session 5B: Civil Engineering, Location:16-165

Session Chair: **Dr. Talat Bader**

#	Title	Authors	Advisor	Judge	Time
5B1	Finite Element Modeling of Composite Plate Girder	Mohammad Samaaneh	Dr.Alfarabi Sharif	Dr. Ali Alghadie Dr. Shamsad • •	09:00-09:15
5B2	The Modeling Impact of Dewatering on Soil Structure Interaction Using SAP	Mohammad Samaaneh	Dr. A. Alghadie		09:15-09:30
5B3	Numerical Simulation of Slump Flow and L-box Tests for Self-Compacting Concrete (SCC)	Faisal Mukhtar	Dr. M. Baluch		09:30-09:45
5B4	Simulation of the Effect of Damage on Chloride Diffusion into Stressed Reinforced Concrete	Faisal Mukhtar	Dr. A Alghadie		09:45-10:00
5B5	Self-Compacting Concrete Utilizing Local Material- Literature Review and Preliminary Research	Salami, BabatundeAbiodun	Dr. M. Maslehuddin		10:00-10:15

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

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

Paper No.	Title	Authors	Advisor	Judge	Time
5C1	An Experimental Investigation toward the Development of a Sustainable Drilling Fluid using Canola Oil	ApalekeAdeleyeSanmi	Dr. M. Enamul Hossain And Dr. Al-Majed	Dr.Al-Yousef Dr. Abeeb	10:00-10:15
5C2	Evaluating the pressure drop due to multi phase flow in horizontal pipe using fuzzy logic	M. Attia and Ahmed Al-Shammari	Dr AbdulazeezAbdulrah eem and Dr.Sami Al-Nuaim		10:15-10:30
5C3	Effect of trapped gas saturation on oil recovery during the application of water flooding	M. Attia and MobeenMurtaza	Dr. Fahd A. Al-Ajmi		10:30-10:45
5C4	New view for predicting the gas compressibility factor and a new model	M. Attia	Dr.Al-Marhoun	Dr.Doklah Dr.Malekzadeh	10:45-11:00
5C5	Impact of Drilling Fluid Sand content on Filter Cake	Bader S. Bageri	Dr.Al-Majed		11:00-11:15
5C6	Prediction and Comparison of Well Deliverability in Tight Gas Sands using different Hydraulic Fracturing Schemes	MohammadDanishHash mat and Muhammad MansoorAlam	Dr.KashifAmkad		11:15-11:30
Dohor Prayer & Lunch Break 11:30 – 1:00					
5C7	Analysis of Empirical Correlation of the Viscosity of Formation Brine	Mohammed YousefJabbar	Dr.Al-Marhoun	Dr.Mahmoud Dr.Al-Hashim	01:00-01:15
5C8	Capillary Pressure Vs Water Saturation relationship for Low Permeability Gas Shale Reservoirs	Mohammed YousefJabbar	Dr.Malekazadeh		01:15-01:30
5C9	A New Correlation for the Viscosity of Formation Brine	Moshood O. Kassim	Dr.Al-Hashim		01:30-01:45
5C10	A Numerical Investigation of Wettability Alteration during Immiscible CO ₂ Flooding Process	Saad M. Al-Mutairi	Dr. M.Enamul Hossain and Dr.Sidqi Abu-Khamsin		01:45-02:00
Break 02:00-02:15					
5C11	Effect of Nano-Silica on the rheological Properties of Portland Saudi Cement Type 'G'	Sami Amer	Dr.Al-Majed	Dr.Abdulraheem Dr.Abu-Khamsin	02:15-02:30
5C12	Furui’s IPR Model Correction and its Application in Horizontal Well Cresting & Inflow Control Device Installation	Lateef Kareem	Dr.Sami Al-Nuaim		02:30-02:45

Parallel Session 5D: Aerospace Engineering, Location: **59-2002**

Session Chair: **Dr. Prasetyo Edi**

#	Title	Authors	Advisor	Dept	Judge	Time
5D1	A MATLAB Program for the Solution of Generalized Quasi-One Dimensional Compressible Flows with Friction and Heat Addition	Mohamed Yunus	Dr. Farooq Saeed	AE	Dr. Wael Dr. Edi	09:10-09:25
5D2	Approach and Landing Accident Reduction Strategy	Kamran.Z. Ahmed	Dr. WaelAbdelrahman	AE	Dr. Farooq Dr. Edi	09:30-09:45
5D3	A Case Study of In-Flight shut down of GE CF6-80C2 Engine Oil System due to Fuel-Oil contamination	Mohamed Yunus	Dr. Farooq Saeed	AE	Dr. Wael Dr. Edi	09:50-10:05

Parallel Session 6A: Electrical Engineering:Communications, Signal Processing & Electronics, Location:**59-0017** (Telecommunications Research Laboratory, TRL)

Session Chair: **Dr. Munir Al-Absi**

#	Title	Authors	Advisor	Dept	Judge	Time
6A1	Efficient Implementation of Tap Delay Line Filter Using High Speed DSP	Muhammad Imran Akram	Dr.Asrar U. Sheikh	EE	Dr. Saad Al-Ahmadi Dr. Oualid Hammi	09:00-09:15
6A2	Amplify and Forward Relay System with Co-Channel Interference over Rayleigh/Nakagami-m Fading Channels	Anas M A Salhab	Dr. Salam A Zummo	EE		09:15-09:30
6A3	A New Switch-and-Examine Selection Scheme for Amplify-and-Forward Cooperative Networks	Anas M A Salhab	Dr. Salam A Zummo	EE		09:30-09:45
6A4	Robust Blind Spectrum Sensing for Cognitive Radio	RAZA UMAR	Dr. Asrar U. H. Sheikh	EE		09:45-10:00
6A5	Application of Tagged User Analysis (TUA) to Stability Analysis of Slotted ALOHA over Frequency Selective Fading Channels	Khurram Masood	Dr. Asrar U. H. Sheikh	EE		10:00-10:15
Break and Time resynchronization 10:15-10:45						
6A6	Post-compensation of Transmitter's Non-Linear Distortions at the Receiver Using Compressive Sensing Techniques for OFDM Applications	Damilola Sadiq Owodunni	Dr. Tareq Al-Naffouri	EE	Dr. Wesam Mesbah Dr. KamalHarb	10:45-11:00
6A7	A Novel Approach for Spectrum Sensing using the Wavelet Transform	Humayun Khalid Kathuria	Dr. Mohamed A. Deriche	TELE		11:00-11:15
6A8	On the Use of Blind Source Separation for Peak Detection in Spectrum Sensing	ZahidSaleem	Dr Samir Al-Ghadhban	EE		11:15-11:30
6A9	Spectrum Sensing Using Sub-Nyquist rate Sampling	ZahidSaleem	Dr. Samir Al-Ghadban	EE		11:30-11:45

#	Title	Authors	Advisor	Dept	Judge	Time
6A10	Practical Implementation of Compressive to Ultra Wideband Signals	Mohammad Tamim Alkhodary	Dr. Ali Hussain Muqaibel	TELE		11:45-12:00
Dohor Prayer & Lunch Break 12:00 – 1:00						
6A11	Diffusion Particle Swarm Optimizer for Wireless Sensor Networks	Sameer Husain Arastu	Dr. Azzedine Zerguine	TELE	Dr. M. Deriche Dr. A. Zidouri	01:00-01:15
6A12	Direct Blind MMSE Channel Equalization Based on Second-Order-Statistics	Ali Al-Mohammedi		TELE		01:15-01:30
6A13	Diffusion Normalized Least Mean Squares Over Wireless Sensor Networks	Syed Abdul Baqi	Dr. Azzedine Zerguine	EE		01:30-01:45
6A14	Fast Analytical FIR Maximally Flat Notch Filter Design	Ali M. Al-Mohammedi		EE		01:45-02:00
Break 02:00-02:15						
6A15	A Low-Voltage and Low-Power Current-Mode Logarithmic Circuit Design Using MOSFETs	Karama Mohammed AL-Tamimi	Dr. Munir A. AL-Absi	EE	Dr. Alaa El-Din H. Dr. M. Al-Gahtani	02:15-02:30
6A16	A Novel CMOS Logarithmic-Control Variable-Gain Amplifier (LCVGA)	Karama Mohammed AL-Tamimi	Dr. Munir A. AL-Absi	EE		02:30-02:45

Parallel Session 6B: Electrical Engineering:Energy,(Control&Electromagnetic), Location: **59-2103 (EE Conference Room)**

Session Chair: **Dr. M. Kassas**

#	Title	Authors	Advisor	Dept	Judge	Time
6B1	Electromagnetic modeling of Optical waveguide amplifier with Si-NanoCrystals as gain medium using ADE-FDTD method.	Javeed Ali Khan Mohammed	Abdul A. Al Sunaidi	EE	Dr. KhuramQurashi Dr. M. Sharawi	09:00-09:15
6B2	An Embedded Planar Antenna Array within UAV structures for communication link improvements during surveillance missions	Mohamed Adel Ibrahim	Dr. M. S. Sharawi	EE		09:15-09:30
6B3	A Printed V-Shaped Circular Antenna Array for Vehicular Direction Finding	Farooq Sultan	Dr. M.S. Sharawi	EE		09:30-09:45
6B4	UWB Stacked Patch Antenna with Defected Ground Plane	Ahmed Bilal Numan	Dr. Seikh Sharif Iqbal	EE		09:45-10:00
6B5	Gain Dynamics in Quantum Dashes	Javeed Ali Khan Mohammed	Abdul A. Al Sunaidi	EE		10:00-10:15
Break and Time resynchronization 10:15-10:45						
6B6	A Broadband 1x4 Power Divider with Progressive Phase Shift for Antenna Array	Muhammad Umar Khan	Dr. Sheikh Sharif Iqbal	EE		10:45-11:00
6B7	Microstrip Linear Array Antenna with Increased Directivity	Rifaqat Hussain	Dr. Sheikh Sharif Iqbal	EE		11:00-11:15
6B8	Strategic Bidding for Load Serving Entity in Electricity Markets	MOHD AFZAL BIYABANI	Dr. Ibrahim-El-Amin	EE	Dr. Z. Al-Hamouz Dr. Ali Al-Awami	11:15-11:30
6B9	Impact of Transmission Constraints on Bidding Strategy of a Load Serving Entity in Electricity Markets	MOHD AFZAL BIYABANI	Dr. Ibrahim-El-Amin	EE		11:30-11:45
6B10	Dynamical Analysis of STATCOM Connected in Single Machine Infinite Bus System (SMIB)	Syed Ahmed Raza	Dr. M. Abido	EE		11:45-12:00
Dohor Prayer & Lunch Break 12:00 – 1:00						

#	Title	Authors	Advisor	Dept	Judge	Time
6B11	Transmission Lines Induced Currents in Human Bodies using Charge Simulation Method	Muhammad Waqas Khalid	Dr. Zakariya Al hamouz	EE	Dr. M. Kasas Dr. M. Abdurahim	01:00-01:15
6B12	Study on Impacts of Large-Scale Photovoltaic Power Station on Power Grid Voltage Profile	Muhammad Sheraz	Dr.M. Abido	EE		01:15-01:30
6B13	Performance Analysis of a Hybrid Intelligent Controller in the Design of PSS for a Synchronous Generator	Syed Ahmed Raza	Dr. M. Abido	EE		01:30-01:45
6B14	Multi-Objective Particle Swarm Optimization for Optimal Power Flow in a Deregulated Environment	Fouad Zaro	Dr. M. Abido	EE		01:45-02:00
Break 02:00-02:15						
6B15	Performance Evaluation Of A Microgrid Including Wind and PV Generation	Mohammed Touseef Hussain	DR. ABU HAMED M. ABDUR-RAHIM	EE	Dr. M. Kasas Dr. Abdio	02:15-02:30
6B16	Modeling And Control Of A Microgrid Including Wind And PV Generation	Mohammed Touseef Hussain	DR. ABU HAMED M. ABDUR-RAHIM	EE		02:30-02:45

Session 7: Mechanical Engineering

#	Title	Authors	Main Advisor	Judges	Time
7A – Mechanical Engineering 1 - Location: Room 22-130					
7A1	CFD Modeling of a 2D Ion Transport Membrane	Pervez Shaik	Dr. R. BenMansour	Dr. Mohamed Habib and Dr. Ismail Mokheimer	09:00-09:15
7A2	Combustion Characteristics of Micro-channel Flows	Pervez Shaik	Dr. M. Habib		09:15-09:30
7A3	Development of Continuously Operating Solar Powered Refrigeration System	Umar Siddiqui	Dr. S. Said		09:30-09:45
7A4	Exergetic Performance Analysis of an Air Conditioning System Suitable for Hot and Humid Climates	Nasiru Ibrahim	Dr. A. Al-Farayedhi		09:45-10:00
7B – Mechanical Engineering 2 – Location: Room 22-125					
7B1	Simulation of an inclined solar water distillation (ISWD) system with realistic parameters	Ahmad Eter	Dr. Gandhidasan	Dr. Gandhidasan and Dr. Shuja	09:00-09:15
7B2	Evaluation of the effective thermal conductivity of the CNT based polymer composite	Haris Malik	Dr. A.M. Arif		09:15-09:30
7B3	Thermodynamics Energy and Exergy Analysis of Absorption Refrigeration System for Cooling Operation	KabirSuara	Dr. A. Al-Farayedhi		09:30-09:45
Break and Time resynchronization 10:15-10:45					
7C – Mechanical Engineering 3 – Location: Room 24-120					
7C1	Development of Multiphase flow prediction Tools for Oil-Water Flow Characterization in Pipes	AymanMukhaymir	Dr. A. Al-Sarkhi	Dr. W. H. Ahmed and Dr. M. El-Nakla	10:45-11:00
7C2	Modeling of Ion Transport Reactor for Oxyfuel Combustion	Azharuddin Farooqui	Dr. H. Badr		11:00-11:15
7C3	Evaluate two-phase frictional pressure drop prediction methods	Ihab Alsurakji	Dr. M. El-Nakla		11:15-11:30
7C4	Study on the Performance of Three-Phase Horizontal Separator	Lukman Okunrinjeje	Dr. Luai Al-Hadrami		11:30-11:45
7C5	Experimental and Numerical Investigations of Flow-Accelerated Corrosion (FAC) Downstream of Orifices	Mufatiu Bello	Dr. W. H. Ahmed		11:45-12:00
7D – Mechanical Engineering 4 – Location: Room 22-125					
7D1	Fabrication of a multilayered ceramic membrane for water purification	AbdelMohsen Alsahli	Dr. T. Laoui	Dr. A.M. Arif and Dr. A. Khalifa	10:45-11:00
7D2	Design and manufacturing of an insert for drilling tool using WC-Co nanocomposite	Ebrahim Almahdi	Dr. T. Laoui		11:00-11:15
Dohor Prayer & Lunch Break 12:00 – 1:00					
7E – Mechanical Engineering 5 – Location: Room 24-120					
7E1	A Study on a Non-Homogeneous Array of One and Two Degree of Freedom Helmholtz Resonators	Maaz Farooqui	Dr. S. Mekid	Dr. S. Mekid and Dr. S. Khan	01:00-01:15
7E2	Balancing of Flexible Rotors at Low Speed	Oke Wasiu	Dr. Y. Khulief		01:15-01:30

#	Title	Authors	Main Advisor	Judges	Time
Break 02:00-02:15					
7F – Mechanical Engineering 6 – Location: Room 24-120					
7F1	Experimental Evaluation of Commercial Available TFCs Reverse Osmosis Desalination Membranes	Khwaja Mohammad	Dr. Z. Khan	Dr. A. Sahin and Dr. Z. Khan	02:15-02:30
7F2	Influence of synthesis parameters on MFI zeolite layer for reverse osmosis (RO) water desalination process	Turki Baroud	Dr. T. Laoui		02:30-02:45
7F3	Effect of Drawing Temperature on the Mechanical Properties of PET/CNT Nanocomposite fibers	Zeechan Alam	Dr. K. Mezghani		02:45-03:00
Aser Prayer 3:00 – 03:15					
7G – Mechanical Engineering 7 – Location: Room 24-120					
7G1	Effect of Post Treatment on the Mechanical Properties of ElectrospunNanofiber Mats using Polyethylene Oxide (PEO)	Abdullahi Gujba	Dr. Z. Khan	Dr. T. Laoui and Dr. S.F. Hassan	03:15-03:30
7G2	Characterization of Mechanically Milled and CNTs-Reinforced Al-based Nanocomposites	Abdullahi Gujba	Dr. N. Al-Aqeeli	Dr. T. Laoui and Dr. S.F. Hassan	03:30-03:45
7G3	Study of microstructure and properties of VC addition as grain growth inhibitor and effect of initial particle size in ultrafine WC-9Co cemented carbides fabricated by spark plasma sintering	Khwaja Mohammad	Dr. T. Laoui		03:45-04:00
7G4	Effect of Carbon Nanotube (CNT) Content on the Mechanical Properties of PET/CNT Nanocomposite Extruded Fibers	Mohammed Farooqui	Dr. K. Mezghani		04:00-04:15
7G5	Production and Quality of Melt Spun Nanocomposite Fibers Made of Polyethylene Terephthalate (PET) and Multiwall Carbon Nano-Tubes (CNT)	Mohammed Farooqui	Dr. K. Mezghani		04:15-04:30