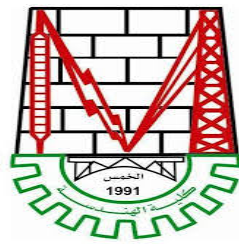


The Third Conference for Engineering Sciences and Technology CEST-2020



Program Booklet

December 01-03 /2020- Al Khums - Libya

Faculty of Engineering

The Third Conference for Engineering Sciences and Technology

CEST-2020

December 01-03 /2020- Al Khums – Libya

Faculty of Engineering

Conference Program



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Dr. Mohamed Elmelah (LBY), University of Tripoli, Professor

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Dr. Faraj Farhat Eldabee (LBY), Elmergib Uni, Assistant Professor

Dr. Redha Mahmoud Elhuni, (LBY), Libyan Oil Institution, Associate researcher

Dr. Abdelrazak BenJaber(LBY), Libyan Center for Standardization & Metrology, Managing Director

Eng. Husein Ali Darawe (LBY), Elmergib Uni, Lecturer

Dr. Fawzi Mohamed Arael (LBY), Elmergib Uni, Lecturer

Eng. Tareq Ramadan Alzabet (LBY), Elmergib Uni, Lecturer

Dr. Abubaker Omar Krit Alla (LBY), Elmergib Uni, Lecturer

Eng. Khalid Attia Elbkory (LBY), Elmergib Uni, Lecturer

Dr. V.S. Raja (India), Indian Institute of Technology, Bombay, Professor

**Program of The Third Conference for Engineering Sciences and
Technology (CEST-2020)
December 01 - 03, 2020 – Al Khums, Libya**
General Program

Time	Tuesday	Wednesday	Thursday
09:00 - 10:00	Registration	Oral Sessions + Lecture 1	Oral Sessions + Lecture 2
10:00 - 10:30	Coffee Break		
10:30 - 11:30	Open Ceremony	Coffee Break	
11:30 - 12:15	Invited Speaker 1	Oral Sessions + Workshop 2	Workshop 4
12:15 - 13:00	Invited Speaker 2		Workshop 5
			Workshop 6
13:00 - 14:30	Lunch Time		
14:30 - 15:30	Oral Sessions + Workshop 1	Oral Sessions + Workshop 3	Close Ceremony
15:30 - 16:00	Coffee Break		
16:00 - 17:00	Oral Sessions + Workshop 1	Oral Sessions + Workshop 3	
		Dinner Time	

Tuesday, December 01, 2020
Program Details

Hall	Time	Event
Desk	09:00 - 10:00	Registration
Main Hall	10:00 - 10:30	Coffee Break
	10:30 - 11:30	Open Ceremony
	11:30 - 12:15	Invited Speaker 1
	12:15 - 13:00	Invited Speaker 2
	13:00 - 14:30	Lunch Break
Room 1	14:30 - 15:30	Oral Session [Electrical and Computer Engineering]
	15:30 - 16:00	Coffee Break
	16:00 - 17:00	Oral Session [Mechanical and Industrial Engineering]
Room 2	14:30 - 15:30	Oral Session [Civil Engineering]
	15:30 - 16:00	Coffee Break
	16:00 - 17:20	Oral Session [Chemical and Oil Engineering]
Room 3	14:30 - 17:00	Workshop 1 [Performance of on-Grid Wind Turbine with East Libyan Wind Speed Data]

Wednesday, December 02, 2020
Program Details

Hall	Time	Event
Room 1	09:00 - 10:40	Oral Session [Information Technology]
	10:40 - 11:20	Coffee Break
	11:20 - 13:00	Oral Session [Civil Engineering]
	13:00 - 14:30	Lunch Break
	14:30 - 15:50	Oral Session [Electrical and Computer Engineering]
Room 2	09:00 - 10:40	Oral Session [Electrical and Computer Engineering]
	10:40 - 11:20	Coffee Break
	11:20 - 13:00	Oral Session [Mechanical and Industrial Engineering]
	13:00 - 14:30	Lunch Break
	14:30 - 15:30	Oral Session [Civil Engineering]
Room 3	09:00 - 10:40	Lecture 1 [استحضار الرموز والتمائم التارقية وتزواجها مع الهندسة المعماري]
	10:40 - 11:20	Coffee Break
	11:20 - 13:00	Workshop 2 [IEEE Organization, Definition, Aims and Benefits]
	13:00 - 14:30	Lunch Break
	14:30 - 15:30	Worksop3 [أكثر عيوب طلاء المعادن شيوعا وأسباب انتشارها بالشركة الليبية للحديد والصلب]

Thursday, December 3, 2020

Program Details

Hall	Time	Event
Room 1	09:00 - 10:20	Oral Session [Engineering Management and Quality + Mechanical and Industrial Engineering]
Room 2	09:00 - 10:20	Oral Session [Electrical and Computer Engineering + Information Technology + Chemical and Oil + Civil Engineering]
Room 3	09:00 - 10:20	Lecture 2 [الموروث الثقافي الليبي التونسي]
	10:20 - 11:00	Coffee Break
Room 1	11:00 - 13:00	Workshop 4 [دراسة أسباب توقف مفاجي لمنظومة حماية من التآكل بالشركة الليبية [للحديد والصلب]
Room 2	11:00 - 13:00	Workshop 5 [الصناعة النفطية ودورها في ترسيخ التعاون مع الجامعات]
Room 3	11:00 - 13:00	Workshop 6 [تلوث الهواء في مدينة الخمس وعلاقته بالاورام والأمراض المستعصية]
Room 3	13:00 - 14:30	Lunch Break
	14:30 - 16:00	Close Ceremony

Room 1	Tuesday, December 01, 2020 [14:30-15:30]
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Session: Electrical and Computer Engineering			
Chairs	Prof. Abobaker Alshekhi and Dr. Mahmoud Khamaira		
Time	Paper ID	Paper Title	Author(s)
*14:30-14:50	CEST_029	Comparative Study of the Electromagnetic Performance of Yokeless and Segmented Armature YASA Machine with Different Rotor Pole Combinations	<u>Mohammed Khatab</u> Aiman Nouh
14:50 - 15:10	CEST_036	Investigation of Renewable Electricity Generation from Solar-Hydrogen Hybrid System in Tripoli	Ehsan Altayef Adel Jaber Fatih Anayi Bdereddin Samad Shaima Dhabaa
15:10 - 15:30	CEST_059	Maximum Area Aggregation Approach For Cumulant-Basead Probabilistic Optimal Power Flow Studies	<u>Ali Tamtum</u> Khalid Alajel Kairi Abusabee

Room 2	Tuesday, December 01, 2020 [14:30-15:30]
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Session: Civil Engineering			
Chairs	Prof. Abdussalam Rifai, Dr. Mohamed Karim and Dr. Waled Alnaas		
Time	Paper ID	Paper Title	Author(s)
*14:30-14:50	CEST_011	Sustainable Concrete with Low Carbon Footprint	<u>Abdurrahman</u> <u>Elgalhud</u>
14:50 - 15:10	CEST_047	Effect of Sawdust on The Mechanical Properties of Mortar Using Local Materials	Nurdeen Altwair <u>Lamen Sryh</u>
15:10 - 15:30	CEST_033	Performance of Recycled PVC Aggregates in Concrete – Comparative Study	Salhin Alaud Suvash Paul

Room 1 **Tuesday, December 01, 2020**
[16:00-17:00]

Session: Mechanical & Industrial Engineering			
Chairs	Prof. Hosen Jawan and Dr. Ali El Shrif		
Time	Paper ID	Paper Title	Author(s)
16:00 - 16:20	CEST_005	Effects of a Curved Surface of the Blade on the Performance Characteristics of Axial Flow Rotors	<u>Ali Kwedikha</u>
*16:20 - 16:40	CEST_009	Cyclic Voltammetry Studies of PEO Processes in Alkaline and Silicate/Phosphate Electrolytes and Resulting Coatings	<u>Husein Meshregi</u> Mikhail Gorbatkov Aleksey Yerokhin Allan Matthews
16:40 - 17:00	CEST_086	Frequency Response Function (FRF) Technique for the Diagnosis of Suspension System.	<u>Moamar Hamed</u> Mohamed Elrawemi Feng Sho

Room 2 **Tuesday, December 01, 2020**
[16:00-17:20]

Session: Chemical & Oil Engineering			
Chairs	Prof. Abdel Majid Najjar, and Dr. Abdelrahman Sultan		
Time	Paper ID	Paper Title	Author(s)
16:00 - 16:20	CEST_023	Evaporation Process Control using MIMO MPC	Yousif Alsadiq
16:20 - 16:40	CEST_050	Removal of Hexavalent Chromium from Aqueous Solution using Magnetic Sepiolite Nanocomposite as an Adsorbent	Aysha Ahribesh <u>Atega Aljenkawi</u> Asma Milad Hanan Abosdil Rada Petrović
16:40 - 17:00	CEST_068	Application of the TDS Technique in Gas Reservoirs	Laila Saleh Hayat Elhaj <u>Mohaned Kaiba</u> Ahmed Abulqasem
17:00 - 17:20	CEST_081	Transient Pressure Analysis and Productivity Index Estimation in Horizontal Wells for X Oil Field	Haiat Alhaj Laila Saleh Rabia Hunky

End of 1st day

Room 1 **Wednesday, December 02, 2020**
[09:00-10:40]

Session: Information Technology			
Chairs	Dr. Mustafa Almahdi Algaet and Dr. Hadya Hawedi		
Time	Paper ID	Paper Title	Author(s)
09:00 - 09:20	CEST_016	The Virtual University: Trends and Challenges in Libya Elmergib University as Case Study	<u>Muna Adrah</u> Gharsa Elmarash
09:20 - 09:40	CEST_019	Performance Evaluation of LSB Technique into visual Objects based on Steganography	<u>Bashir Mujber</u> Ali Melad
09:40 - 10:00	CEST_030	Implementation of Smart Home using Packet Tracer 7.3 and Arduino Board	<u>Aboagela Dogman</u> Mohamed Jewiley Hassen Dornba Abu Ther Ramadan
10:00 - 10:20	CEST_042	Comparison of BER Performance of Cooperative Wireless Systems Based on D-OSTBC, D-EOSTBC and DF Relaying Protocol	Masoud Eddaghel Mohamed Nashnush Adnan Bensaiid Alhossin Aljadai
*10:20-10:40	CEST_048	Developing a mobile game app themed about Libyan culture using Unity engine	<u>Khaled Ben Hamed</u> Nahed Fareh Mohanned Binmiskeen Mohamed Bashagha

Room 2 **Wednesday, December 02, 2020**
[09:00-10:40]

Session: Electrical and Computer Engineering			
Chairs	Prof. Omran Murad and Prof. Elabid Soud		
Time	Paper ID	Paper Title	Author(s)
09:00 - 09:20	CEST_012	A Novel Denoising Method Based on Discrete Linear Chirp Transform	<u>Osama Alkishriwo</u>
09:20 - 09:40	CEST_018	Optimum Backoff in CSMA-CA for Ad-Hoc Vehicles Network in Motorway	<u>Sami Alahmar</u> Omar Aldawibi
09:40 - 10:00	CEST_045	Database for Arabic Speech Commands Recognition	Lina Benamer Osama Alkishriwo
10:00 - 10:20	CEST_053	An Energy Efficiency Evaluation of MIMO Based LTE RANs with DTX Operation	<u>Abdelrahman Arbi</u> Timothy O'Farrell
10:20 - 10:40	CEST_058	Decision-Making Rules in Cooperative Cognitive Radio Networks: Evaluation and Comparison	Magda A. Abunab Mohamed Elalem

Room 1**Wednesday, December 02, 2020**
[11:20-13:00]

Session: Civil Engineering			
Chairs	Dr. Amad.Deen Alghwail and Ramadan Edaaef and Dr. Abdelhamed Ganaw		
Time	Paper ID	Paper Title	Author(s)
11:20 - 11:40	CEST_037	The Influence of Ageing on Asphalt Mastic Properties Incorporating Calcium Carbonate	<u>Foad Elkut</u> Meor Othman Hamzah
11:40 - 12:00	CEST_040	تأثير نوع الملدنات الفائقة على التشغيلية والخواص الميكانيكية للخرسانة ذاتية الدمك	<u>Abduraouf Abuthina</u> أيمن محمد محمد الهادي
12:00 - 12:20	CEST_024	العوازل الحرارية ودورها في تحسين البيئة الداخلية لمباني المناطق الصحراوية	<u>Rawad Krayem</u> Ezeddin Alshbuki Nezar Gomeed
*12:20 - 12:40	CEST_0E3	Effect of Crude Oil pollution on some Sandy Soil properties	<u>Abir Ahmed Elazzabi</u>
12:40 - 13:00	CEST_0E9	Experimental Study of Drowned Hydraulic Jump Characteristics Through Different Counterflow Dimensions	Amad.Deen Abdusalam Alghwail

Room 2**Wednesday, December 02, 2020**
[11:20-13:00]

Session: Mechanical and Industrial Engineering			
Chairs	Dr. Mohamed Elrawemi and Dr. Bashir Younise		
Time	Paper ID	Paper Title	Author(s)
11:20 - 11:40	CEST_075	تقدير الكلفة الخفية لإنحراف خيوط الصوف الخالص المستخدم في صناعة السجاد	عبدالرزاق عطية علي مصباح محمد قريميدة سهيلة الشوشان عبدالسلام دومة
11:40 - 12:00	CEST_017	Dimensions Effect of the Rotating Fluid Zone on the Results when CFD Modeling of Friction Stir Welding	<u>Esam Hamza</u>
12:00 - 12:20	CEST_089	Study the performance and behavior of the hybrid system.	<u>Hamza Ahmed</u>
12:20 - 12:40	CEST_0E7	SCARA Robot Links Length Optimization And Verification With MATLAB/SimMechanics and Solidworks	Mustafa Mashali Miftah Addeif Mohamed Embarak
12:40 - 13:00	CEST_065	Lammps as Nano-scale Lab to Estimate Fluid Thermal Properties from Molecular Dynamics	<u>Abdusalam Al Khwaji</u> Salem Elbahloul Mohamed Farhat

Room 1 **Wednesday, December 02, 2020**
[14:30-15:50]

Session: Electrical and Computer Engineering			
Chairs	Dr. Abdulmajed Elbkosh and Dr. Abdullah Masrub		
Time	Paper ID	Paper Title	Author(s)
14:30 - 14:50	CEST_066	Design of a Non-Isolated Solar PV Inverter for Household Applications	Abdallah Hussein
14:50 - 15:10	CEST_083	Face Recognition with Symmetrical Face Training Samples Based on Histograms of Oriented Gradients	<u>Saad Allagwail</u> Abdulmajed Elbkosh
15:10 - 15:30	CEST_093	Quick-Response Fuzzy-Controlled Induction Motor Drive	<u>Mohamed Elsharif</u> Tareq Elgargani
15:30 - 15:50	CEST_094	Electricity Load Profiling for Coastal Housing Complexes based on the Measurements of Flats Actual Load	Salem Ahbil Hamid Sherwali

Room 2 **Wednesday, December 02, 2020**
[14:30-16:10]

Session: Information Technology			
Chairs	Dr. Ali Melad and Dr. Alhadi Klaib		
Time	Paper ID	Paper Title	Author(s)
14:30 - 14:50	CEST_057	Classifying Various Bacteria Genera by Transfer Learning Model	Mohammed Elgaed Khaled Elgdamsi <u>Ali Ganoun</u>
14:50 - 15:10	CEST_067	Comparison of BER Performance of SISO, MISO and MIMO Systems Based on OSTBC and EO-STBC Techniques	Usama Hamouda Mohammed Daw T Buzid Masoud Eddaghel
15:10 - 15:30	CEST_082	Design the new secret key to increase the security of LSB algorithm	Jalal Mehalhal Adem Bensaid Muhmed Agbisha
*15:30-15:50	CEST_084	Internet of Things for Libya Healthcare System: Challenges and Issues	<u>Sarah Makhluif</u> Ali Abdulshahed
15:50 - 16:10	CEST_088	Enhancement of VoIP Performance in MANET using Fuzzy Logic	<u>Abdusalam Yahya</u> Ashraf Abdalla

End of 2nd day

Room 1	Thursday, December 03, 2020 [09:00-10:20]
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Session: Engineering Management and Quality + Mechanical and Industrial Engineering			
Chairs	Prof Taieb Elbakkosh, Dr. Faraj Eldabee and Eng. Fathi Kawan		
Time	Paper ID	Paper Title	Author(s)
09:00 - 09:20	CEST_070	دراسة أثر استخدام استراتيجيات التنفيذ المختلفة للمشروعات الانشائية على أداء الاطراف الرئيسية في مشاريع الانشاءات باستخدام نموذج الأداء العام	<u>أسماء بن حميد</u> وسام بيت المال
09:20 - 09:40	CEST_056	استراتيجية الابتكار ودورها في تحسين أداء المؤسسات: حالة دراسية بشركة النسيم للصناعات الغذائية	<u>حسن اسميو</u> فاطمة موسى
09:40 - 10:00	CEST_072	تخفيض الاحمال الكهربائية باستبدال السخانات الكهربائية بأنظمة تسخين المياه بالطاقة الشمسية	Ayad Alwaer Ali Alneidh
*10:00 - 10:20	CEST_085	Risk-Based Maintenance (RBM) Approach for Identifying the Optimum Time of Whole Shutdown (SD) for Gas Liquid Recovery Unit; Processing Columns as a Case Study	<u>Abdelnaser Elwerfalli</u> Salih Alsadaie

Room 2	Thursday, December 03, 2020 [09:00-10:40]
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Session: Electrical and Computer Engineering + Information Technology + Chemical and Oil + Civil Engineering			
Chairs	Dr. Bashir M. Aburawi, Dr. Osama Ahmed, and Dr. Waleed Elaswed		
Time	Paper ID	Paper Title	Author(s)
*09:00-09:20	CEST_014	Optimized Maximum Loadability of Power Systems using an Enhanced Dynamic JAYA Algorithm	<u>Ibrahim Farhat</u> Abdullah Hawal
09:20 - 09:40	CEST_074	An Extensive Study on Online and Mobile Ad Fraud	Hala Shaari Nuredin Ahmed
*09:40 - 10:00	CEST_023	Evaporation Process Control using MIMO MPC	<u>Yousif Alsadiq</u>
*10:00 - 10:20	CEST_044	Simulation of Butanol Production through Hydrogenation of Butanal: Effects of Different Reactor Schemes and Operating Conditions	<u>Mohammed Faraj Saeid</u> Sim Yee Chin
*10:20 - 10:40	CEST_010	دراسة تأثير ألياف البولي بروبيلين والألياف الزجاجية على الخواص اللدنة و الصلدة للخرسانة ذاتية الدمك	خالد امحمد عبد الباسط التركي <u>عبد الله عمرو</u> بخلف زكري

End of 3rd day