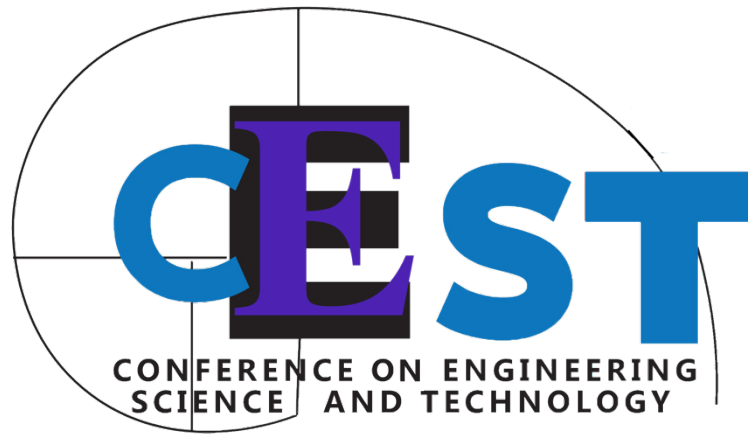


# The Sixth Conference for Engineering Sciences and Technology

## CEST-2024



# **Program Booklet**

**October 21-22 /2024- Tarhuna - Libya**

**Higher Institute of Science and Technology,  
Tarhuna**

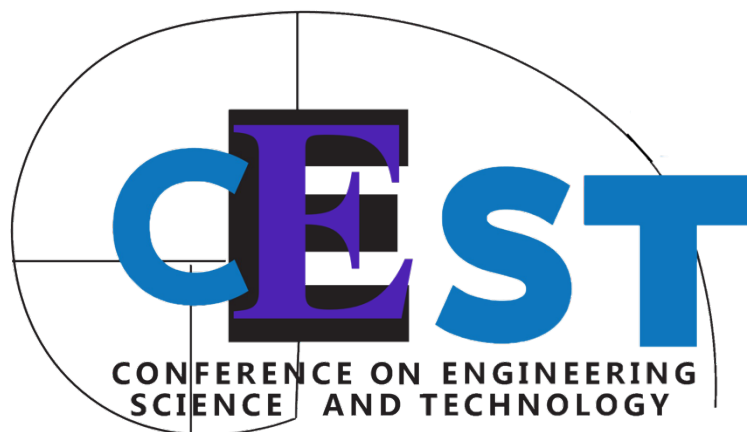
# **The Sixth Conference for Engineering Sciences and Technology**

## **CEST-2024**

**October 21-22 /2024- Tarhuna - Libya**

**Higher Institute of Science and Technology, Tarhuna**

## **Conference Program**



## The Scientific Committee

| Name                 | Email                             | University                               |
|----------------------|-----------------------------------|--|
| Abdelrazak Ben Jaber | a.benjaber@academy.edu.ly         | Libyan Academy for Postgraduate Studies  |
| Abdelsalam Asweisi   | a.amhmed@uot.edu.ly               | University of Tripoli                    |
| Abduel Majid Najjar  | aknajjar@elmergib.edu.ly          | Elmergib University                      |
| Abdulghani Ramadan   | amramadan@elmergib.edu.ly         | Elmergib University                      |
| Abdulkhalek Zatout   | abdulkhalek.m@uod.edu.ly          | Derna University                         |
| Abdullah Ben Mahmoud | a_benmahmod@yahoo.com             | Elmergib University                      |
| Abdulmajed Elbkosh   | aalbkosh@elmergib.edu.ly          | Elmergib University                      |
| Adel Abosdel         | ADELABOSDEL@gmail.com             | Azytona Universty                        |
| Adel Elgelani        | a.elgelani@uot.edu.ly             | UNIVERSITY OF TRIPOLI                    |
| Ahmad Ismail         | dr.ahmad_ismail_alrabty@yahoo.com | Gharyan University                       |
| Ahmed Abdunnnabi     | ahmedelhadi1964@gmail.com         | Tripoli University                       |
| Ahmed Abougarair     | a.abougarair@uot.edu.ly           | University of Tripoli                    |
| Ahmed Al-Naghi       | a.alnaghi@uoh.edu.sa              | University of Hail                       |
| Ahmed Alkilany       | A.Alkilany@uot.edu.ly             | University of Tripoli                    |
| Ahmed Hamruni        | elhamrouni@hotmail.com            | Elmergib University                      |
| Ahmed M. Bufares     | ahmed.bofares@uob.edu.ly          | University of Benghazi                   |
| Ali Ebshish          | aliebshish@gmail.com              | Elmergib University                      |
| Ali Mansour          | a.mnsur@uot.edu.ly                | University of Tripoli                    |
| Almahdi Alhwaige     | a.alhwaige@uot.edu.ly             | University of Tripoli                    |
| Amad Deen Alghwail   | aaalghwail@elmergib.edu.ly        | Elmergib University                      |
| Atef Elsaïad         | aelsaiad@gmail.com                | Zagazig Univ.                            |
| Ausama Ahmed         | ausama.ahmed@gmail.com            | Elmergib University                      |
| Ayad Keshlaf         | ayad.keshlaf@sabu.edu.ly          | Sabratha University                      |
| Azeddien Sllame      | a.sllame@uot.edu.ly               | University of Tripoli                    |
| Bashir Aburawi       | aburawi2018@gmail.com             | Elmergib University                      |
| Bashir Hassan Arebi  | arebi_bashir@yahoo.co.uk          | University of Tripoli                    |
| Basim Belgasim       | basim.belgasim@yahoo.com          | Libyan Authority for Scientific Research |
| Adnan Krzma          | Akrzma@cavc.ac.uk                 | Cardiff and Vale College                 |
| Elhaj A. I. Ahmed    | elhaj.ahmed@limu.edu.ly           | Libyan International Medical University  |

|                       |                              |  |
|-----------------------|------------------------------|--|
| Faraj Eldabee         | feddubei1965@gmail.com       | University of Tripoli                    |
| Fawzi Elhamshri       | faalhamashri@elmergib.edu.ly | ElMergib University                      |
| Fawzi Arael           | fawzi6664@gmail.com          | ElMergib University                      |
| Foad Elkut            | foad.elkut@yahoo.com         | Elmergib University                      |
| Haitham Ben Abdelmula | hsaa8383@gmail.com           | College of Computer Technology Zawia     |
| Hassan Zawia          | hassan.zawia@azu.edu.ly      | Zaitouna university                      |
| Hatem Hadia           | hahadia@elmergib.edu.ly      | Elmergib University                      |
| Hazem Zubi            | hazemzubi@gmail.com          | University of Tripoli                    |
| Hend Eissa            | namarek2010@gmail.com        | Faculty of Electronic Technology Tripoli |
| Husam A Elghannay     | husam.elghannay@uob.edu.ly   | University of Benghazi                   |
| Husen Alhawat         | haalhawat@elmergib.edu.ly    | Elmergib university                      |
| Ibrahim Almerhag      | i.almerhag@uot.edu.ly        | University of Tripoli                    |
| Khairyah Alhadar      | Kheahaddr132@gmail.com       | Elmergib University                      |
| khaled El Hadad       | kmelhadad@elmergib.edu.ly    | Elmergib University                      |
| Khalid Krayz allah    | Khalid.krayz@gmail.com       | University of Gharyan                    |
| Lamen Sryh            | lssryh@elmergib.edu.ly       | Elmergib University                      |
| Mabrouk Algamil       | Malgamil57@gmail.com         | Sabratha University                      |
| Mahmud Benhamid       | mdbenhamid@elmergib.edu.ly   | Elmergib University                      |
| Malek Karaim          | 9mk24@queensu.ca             | Queen's University                       |
| Matouk M. Elamari     | matoukelamari@yahoo.com      | Research Center                          |
| Meftah Alfatni        | meftah_salem@aonsrt.ly       | Libyan Authority for Scientific Research |
| Mohamed Akreim        | maekrem@elmergib.edu.ly      | Elmergib University                      |
| Mohamed Almakhtar     | almokhtar@ceet.edu.ly        | University of Benghazi                   |
| Mohamed Sbeta         | Sbita6@yahoo.com             | Libyan Climate Change Research Center    |
| Mohamed Akreim        | maekrem@elmergib.edu.ly      | ElMergib University                      |
| Mohamed Alrayes       | mo.alrayes@uot.edu.ly        | University of Tripoli                    |
| Mohamed Baqar         | msb134@case.edu              | Azzaytuna University                     |
| Mohamed Elalem        | moh.elalem@gmail.com         | Elmergib University                      |
| Mohamed Kamel Elewa   | elewa.kamel45@outlook.com    | TIMS                                     |
| Mohamed S Majdub      | mamajdub@elmergib.edu.ly     | Elmergib University                      |
| Mohammed Ali          | M.hjaji@uot.edu.ly           | University of Tripoli                    |
| Mohammed Karim        | omgaon2x@yahoo.com           | Almergheb university                     |
| Mohsen Isa            | mohsenfaraj@yahoo.com        | University of Tripoli                    |
| Muamer Hawej          | m.malhwaij73@gmail.com       | Elmergib University                      |
| Mustafa Alasswad      | mustafaasawd@gmail.com       | Sabrahta Univeristy                      |
| Nabil Drawil          | n.drawil@uot.edu.ly          | University of Tripoli                    |
| Nagmden Shtewi        | najmeddindf@yahoo.com        | NMSS                                     |

|                          |                            |   |
|--------------------------|----------------------------|---|
| Naser Alfed              | naser.alfed@gu.edu.ly      | Gharyan University                                      |
| Omar Alameen             | omar3228570@gmail.com      | Elmergib University                                     |
| Omar Abusaeeda           | omar.abusaeeda@uot.edu.ly  | University of Tripoli                                   |
| Omar Bouzid              | drombouzid@gmail.com       | Gharyan University                                      |
| Omar Elmabrouk Al-Denali | omar.elmabrouk@uob.edu.ly  | University of Benghazi                                  |
| Omar G. Mrehel           | O.Mrehel@uot.edu.ly        | ACECS   |
| Osama Alkishriwo         | alkishriwo@yahoo.com       | University of Tripoli                                   |
| Otman Imrayed            | o.imrayed@su.edu.ly        | Sirte university  |
| Ramzi Elghanuni          | r.elghanuni@uot.edu.ly     | University of Tripoli                                   |
| Saad Ghareba             | saad.ghareba@gmail.com     | Elmergib University                                     |
| Saad El Ebaidi           | elebaidisaad@gmail.com     | University of Benghazi                                  |
| Salem Mohamed Musa       | S.musa@uot.edu.ly          | University of Tripoli                                   |
| Salah G. Abokhatwa       | sgabokhtwa@elmergib.edu.ly | Elmergib University                                     |
| Salhin Alaud             | s.alaud@elmergib.edu.ly    | Garaboulli Engineering Faculty                          |
| Wael Elhrari             | wael@prc.ly                | Libyan Polymer Research Center                          |
| Walid Khalifa            | w.khalifa@uoh.edu.sa       | University of Ha'il                                     |
| Wedad El-Osta            | e_wedad@hotmail.com        | The Libyan Center for Solar Energy Research and Studies |
| Yousif Mohamed Khalifa   | khalifa.y@gmail.com        | Libyan Climate Change Research Center                   |



Program of The Sixth Conference for Engineering Sciences and Technology (CEST-2024)

| Program of The Sixth Conference for Engineering Sciences and Technology ( <b>CEST-2024</b> )<br>October 21 - 22, 2024 – Tarhuna, Libya<br><i>General Program</i> |                   |                |
|--|-------------------|----------------|
| Time   | Monday            | Tuesday        |
| 09:00 - 10:00  | Registration      |                |
| 10:00 - 10:30  | Coffee Break      | Oral Sessions  |
| 11:00 - 12:00  | Open Ceremony     | Coffee Break   |
| 12:00 - 12:45  | Invited Speaker 1 | Oral Sessions  |
| 12:45 - 13:30  | Invited Speaker 2 |                |
| 13:30 - 14:30  | Lunch Time        |                |
| 14:30 - 16:00  | Oral Sessions     | Close Ceremony |
| 16:00 - 16:15  | Coffee Break      |                |
| 16:15 - 17:15  | Oral Sessions     | Dinner Time    |



**Monday, October 21, 2024**  
**Program Details**

| Hall      | Time          | Event  |
|-----------|---------------|--|
| Desk      | 09:00 - 10:30 | Registration   |
| Main Hall | 10:30 - 11:00 | Coffee Break   |
|           | 11:00 - 12:00 | Open Ceremony  |
|           | 12:00 - 12:45 | Invited Speaker 1  |
|           | 12:45 - 13:30 | Invited Speaker 2  |
|           | 13:30 - 14:30 | Lunch Break  |
| Room 1    | 14:30 - 16:00 | Oral Session [ <b>Electrical and Computer Engineering &amp; Information Technology</b> ] |
|           | 16:00 - 16:15 | Coffee Break   |
|           | 16:15 - 17:30 | Oral Session [ <b>Chemical and Oil Engineering</b> ]                                     |
| Room 2    | 14:30 - 15:45 | Oral Session [ <b>Civil Engineering</b> ]  |
|           | 16:00 - 16:15 | Coffee Break   |
|           | 16:15 - 17:15 | Oral Session [ <b>Civil Engineering</b> ]  |

**Tuesday, October 22, 2024**  
**Program Details**

| Hall          | Time          | Event  |
|---------------|---------------|--|
| <b>Room 1</b> | 10:00 - 11:00 | Oral Session [ <b>Information Technology</b> ]             |
|               | 11:00 - 11:30 | Coffee Break   |
|               | 11:30 - 12:45 | Oral Session [ <b>Civil Engineering</b> ]                  |
| <b>Room 2</b> | 10:00 - 10:45 | Oral Session [ <b>Architecture and Urban Planning</b> ]    |
|               | 10:45 - 11:30 | Coffee Break   |
|               | 11:30 - 12:45 | Oral Session [ <b>Engineering Management and Quality</b> ] |
|               | 13:00 - 14:30 | Lunch Time   |
|               | 14:30 - 15:30 | Close Ceremony   |

**Room 1****Monday, October 21, 2024**  
**[14:30- 16:00]****Session: Electrical and Computer Engineering and Information Technology**

| Chairs        | Prof. Omar M. Bouzid and Ayad Keshlaf |  |  |
|---------------|---------------------------------------|--|--|
| Time          | Paper ID                              | Paper  | Author(s)  |
| 14:30-14:45   | CEST_24                               | Efficient Object Detection in Autonomous Driving Systems Using YOLOv5 and CARLA Simulator                                | Bader N. Awedat                                    |
| 14:45 - 15:00 | CEST_41                               | Optimizing Extended Kalman Filter for Speed Sensorless Control of Induction Motors Using Artificial Bee Colony Algorithm | Abobkr Hamid<br>Mohamed Darfoun                    |
| 15:00-15:15   | CEST_60                               | Implementing Zigbee Networks for Monitoring and Tracking Electricity Meters  | Mohammed Altayib<br>Milad Azzoka<br>Mohamed Elalem |
| 15:15 - 15:30 | CEST_92                               | Efficient Low-Complexity Spatial Modulation Techniques for MIMO Technology   | Nagea M. ALSANOSE<br>Abdullah MASRUB               |
| 15:30 - 15:45 | CEST_14                               | Types of Decision Support Systems: Review  | Awatef Salem Ibrahim<br>Rabia Ali Alkhazmi         |
| 15:45 - 16:00 | CEST_15                               | Older Adults Daily Living Activities Detection using Machine Learning  | Hawa Abu Snina<br>Abubaker Elbayoudi               |

**Room 2****Monday, October 21, 2024**  
**[14:30- 15:45]****Session: Civil Engineering**

| Chairs      | Prof. Mohamed Ali Karim and Muftah Mohamed Sreh |   |  |
|-------------|---|---|--|
| Time        | Paper ID  | Paper Title   | Author(s)  |
| 14:30-14:45 | CEST_12   | دراسة مرجعية حول تأثير الاضافات المعدنية على بعض خواص الخرسانة ذاتية الدمك عالية المقاومة                 | عائشة جمعة جبريل<br>نوري محمد الباشا                             |
| 14:45-15:00 | CEST_13   | A Comprehensive Analysis of Moisture Damage in Hot and Warm Mix Asphalt and Associated Research Inquiries | Bashir M. Aburawi  |
| 15:00-15:15 | CEST_26   | تأثير احلال ركام مخلفات الإطارات المطاطية علي بعض خواص الخرسانة   | أيمن هدية الكوت<br>سالم فرج البربار                              |
| 15:15-15:30 | CEST_34   | Applications and Advancements of 3DP in Construction  | Salhin Alaud   |
| 15:30-15:45 | CEST_39   | تدعيم الطوب الإسمنتي بأساليب التسليح المختلفة للحوائط الحاملة في ليبيا                                    | ابوالقاسم يحيى ابو صبيح<br>نجيب حسن سويبي<br>مروان سالم اشكندالي |

**Room 1****Monday, October 21, 2024**  
**[16:15- 17:30]****Session: Chemical and Oil Engineering**

| Chairs      | Prof. Abduel Majid Najjar and Abdulmajed Alagtab |  |  |
|-------------|--|--|--|
| Time        | Paper ID   | Paper  | Author(s)  |
| 16:15-16:30 | CEST_28  | Preserving oil refinery and petrochemical facilities to prevent Corrosion during inactivity                            | Ahmed Kharidege<br>Nasser Abushrenta                                   |
| 16:30-16:45 | CEST_68  | The Possibility of Treating the Surface Water of Ayin Kiam with Aleppo Pine Extracts                                   | Asmaa jumaah Alshireedi<br>Samira Omar Hribesh<br>Rabia Omar Eshkourfu |
| 16:45-17:00 | CEST_79  | Synthesis, Characterization, and Extraction of Segmented Siloxane-Aliphatic-Aromatic Copolymers: A Comprehensive Study | Nuha almuktar M krir<br>Abduelmaged Abdullallah                        |
| 17:00-17:15 | CEST_95  | Solar Desalination by Evaporation-Condensation Process   | Ali Abusaloua<br>Ruqaia A Sheliq                                       |
| 17:15-17:30 | CEST_94  | Dynamic Study of Hydrogen Absorption in Metal Hydride-based Storage Systems  | Fawzi ELHAMSHRI<br>Abdulmajed Alagtab                                  |

**Room 2****Monday, October 21, 2024**  
**[16:15- 17:15]****Session: Civil Engineering**

| Chairs      | الأستاذ الدكتور: ابوالقاسم يحيى ابوصبيح و صالحين العود |   |   |
|-------------|--|---|---|
| Time        | Paper ID   | Paper   | Author(s)   |
| 16:15-16:30 | CEST_48  | اختيار أفضل مسار طريق مقترح باستخدام نظم المعلومات الجغرافية (GIS) وما تأثيره على الجانب العلمي العملي  | فاضل مسعود العالم<br>عادل محمد الكيلاني                               |
| 16:30-16:45 | CEST_58  | التقديرات الأولية لكميات المباني السكنية باستخدام الشبكات العصبية الاصطناعية داخل نطاق دولة ليبيا       | غرياني احمد احمد<br>فاطمة ادريس احمد<br>سماء حفاظ الشيخ               |
| 16:45-17:00 | CEST_59  | Analytic Study of Linear Analysis vs. Nonlinear Analysis: Optimum and Sustainable Structure Perspective | Mohamed Ali Karim   |
| 17:00-17:15 | CEST_61  | تأثير الجهد على التسرب أسفل المنشآت الهيدروليكية ذوات القواعد الهابطة                                   | إسماعيل إبراهيم حمودة<br>الفيثوري إبراهيم أبوعلة<br>عائشة على القنطوش |

**End of 1<sup>st</sup> day**

**Room 1****Tuesday, October 22, 2024**  
**[10:00- 11:00]****Session: Information Technology**

| Chairs        | Rabia Ali Alkhazmi and Mohamed Nagi Elshibani |  |  |
|---------------|---|--|--|
| Time          | Paper ID                                      | Pape   | Author(s)  |
| 10:00-10:15   | CEST_27                                       | The Possibility of using the Cloud Computing in e-learning in Modern Libyan High Schools | Fjria A. Saleh Zalita<br>Mohamed Nagi Elshibani  |
| 10:15 - 10:30 | CEST_37                                       | Predicting Cyber Threats From Twitter Using Codelees LSTM Knime Model                    | Inass A. Husien Alhashimi<br>Farij O. Ehtiba<br>Haitham Saleh Ben Abdelmula<br>Hend Abdelgader Eissa |
| 10:30-10:45   | CEST_85                                       | Predicting Course Difficulty in Online Education Using Machine Learning                  | Abeer Farag Al-Nair  |
| 10:45 - 11:00 | CEST_91                                       | Enhancing Citizen Engagement in E-Government Services through AI-Driven Chatbots         | Abraheem Mohammed<br>Sulayman Alsubayhay<br>Mohamed A. E. Abdalla                                    |

**Room 2****Tuesday, October 22, 2024**  
**[10:00- 10:45]****Session: Architecture and Urban Planning**

| Chairs        | Prof. Fawzi Agaei and Abdulghani Ramadan |  |  |
|---------------|--|--|--|
| Time          | Paper ID                                 | Paper Title  | Author(s)  |
| 10:00-10:15   | CEST_35                                  | الملاحح المكانية لمدينة ترهونة   | فوزي محمد عقيل<br>محمد رمضان عمار  |
| 10:15 - 10:30 | CEST_43                                  | أنسنه المدن ومعايير التصميم الحضري المسندام وتأثيرها على المدن (مركز مدينة مسلاته حالة دراسية) | عبد السلام محمد الرشيدى<br>خلود الهادي منصور   |
| 10:30-10:45   | CEST_45                                  | تأثير الساحات والمناطق المفتوحة على البيئة الحضارية (عمارات الهلال بمدينة ترهونة حالة دراسية)  | أسامة أبو الخير إمهير<br>عبد السلام محمد الرشيدى<br>محمود إلهام فرحات<br>وليد عبدالسلام فريوان |

**Room 1**

**Tuesday, October 22, 2024**  
**[11:30- 12:45]**

| <b>Session: Civil Engineering</b> |  |  |  |
|-----------------------------------|--|--|--|
| Chairs                            | Prof. Bashir M. Aburawi and Foad Mohamed Elkut |  |  |
| Time                              | Paper ID                                       | Paper  | Author(s)  |
| 11:30-11:45                       | CEST_71  | تقييم ثبات المنحدر الموازي للطريق الجبلي البيب شمالي غرب ليبيا   | أبو القاسم الأخضر<br>عبد الباسط شلفوح                                |
| 11:45 - 12:00                     | CEST_72  | دراسة معملية لتحديد النسب الأمثل لبعض أنواع الملدنات الفائقة وتأثيرها على الخواص الميكانيكية للخرسانة الطرية والمتصلبة | نجيب حسن الشريف<br>محمد العربي المحروق                               |
| 12:00-12:15                       | CEST_80  | دراسة مرجعية: تقييم طرق المعالجة وتأثيرها على الخواص الميكانيكية لإسمنت الخبث المنشط قلويا                             | هناء فرحات محمد حمد  |
| 12:15 - 12:30                     | CEST_83  | Impact of Silica Fume and POFA on Workability, Strength, and Absorption of High Strength Mortars                       | Mohamed Alnsosi Karem<br>Megat Azmi Megat Johari<br>Faesal Alatshan  |
| 12:30 - 12:45                     | CEST_84  | دراسة تأثير طريقة المعالجة على خواص الخرسانة   | الحسين فرج عليوان<br>محمد ابراهيم العبود<br>عبدالخالق عبدالهادي محمد |

**Room 2**

**Tuesday, October 22, 2024**  
**[16:15- 17:00]**

| <b>Session: Engineering Management and Quality</b> |   |   |  |
|--|---|---|--|
| Chairs   | Prof. Mohamed Alalem and Abdelrazak Ben Jaber |   |  |
| Time   | Paper ID                                      | Paper Title   | Author(s)                                      |
| 16:15-16:30  | CEST_16                                       | تأثير سوء التخطيط في تنفيذ المشاريع الانشائية (دراسة تطبيقية لشركة الأشغال العامة مصراته) | مصطفى الطاهر عبدالعزيز<br>عبد السلام محمد بشيش |
| 16:30-16:45  | CEST_32                                       | أثر تطبيق إدارة المخاطر على تقليل الخسائر في المنظمة                                      | علي رمضان الفقي<br>ابوبكر نور الدين ابوغالبة   |
| 16:45-17:00  | CEST_70                                       | دراسة أسباب التأخير في تنفيذ المشاريع الإنشائية بمنطقة بالجبل الغربي                      | ضو عمر امحمد الشيباني                          |

**End of 2<sup>nd</sup> day**