### Advisory Board

Engr. Sohail Bashir Chairman IEP. Karachi Centre Engr. Asim Murtaza Khan President, NED International Alumni Network (NEDIAN) Association-Pakistan Engr. Abdul Rahim Vice-Chairman (Mechanical & Allied) IEP, KC & Chief Organizer 13th IMEC-2024 Engr. Ayaz Mirza

Vice-President (Mechanical &

Allied), IEP Karachi Centre

Engr. Prof. Dr. Sarosh Hashmat Lodi Vice-Chancellor NED University of Engg.& Tech., Karachi Engr. Prof. Dr. Muhammad Tufail Pro Vice-Chancellor NED University of Engg. & Tech. Karachi

& Convener 13th IMEC-2024 Engr. Prof. Dr. Amir Iqbal Dean, Department of Mechanical Engg., NEDUET & Co-Convener, 13th IMEC-2024 Engr. Prof. Dr. Mubashir Ali Siddiqui Chairperson, Department of Mechanical Engg., NEDUET & Co-Convener, 13th

Engr. Muhammad Abbas Sajid Ex. President ASHRAE Pakistan Chapter

Engr. Prof. Dr. Mirza Jahanzaib Dean, Faculty of Industrial Engg., University of Engg. & Tech., Taxila Engr. Dr. Abdullah Mengal Chairman, Mechanical Engineering Department, BUET-Khuzdar

### Technical Review Committee

Engr. Dr Inam UI Ahad Dublin City University, Ireland Dr. Marialaura TOCCI University of Brecia, Italy Assoc. Prof. Dr. Noorhafiza Muhammad University of Malaysia, Perlis

Engr. Dr. Asnul Hadi Ahmad Universiti Malaysia Pahang, Malaysia Engr. Dr. M. Kashif Khan Coventry University, UK Engr. Dr. Sohaib Zia Khan Islamic University of Madinah, Saudi

Engr. Prof. Dr. Wasim Ahmad UET, Taxila Engr. Dr. Salman Hussain UET, Taxila

Engr. Dr. Anis Fatima NEDUET, Karachi Engr. Prof. Dr. Murtuza NEDUET, Karachi Engr. Dr. Muhammad Shakaib

NEDUET, Karachi Engr. Dr. Muhammad Uzair NEDUET, Karachi Engr. Dr. Ing. Usman Allauddin NEDUET, Karachi

Engr. Dr. Haider Ali

NEDUET, Karachi Engr. Dr. M. Ehteshamul Hague NEDUET, Karachi

Engr. Dr. Mumtaz Hussain Qureshi NEDUET, Karachi Engr. Dr. Syed Ahmad Raza

NEDUET, Karachi Engr. Dr. Muhammad Muzamil NEDUET, Karachi

Engr. Dr. M. Uzair Yousuf NEDUET, Karachi Engr Dr. Kashif Noor

NEDUET, Karachi

### IEP Headquarter Committee

Engr. Farhat Adil President, IEP Engr. Masood Ali Khan Chairman, IEP Lahore Centre Engr. Abdur Rab Chairman, IEP Islamabad Centre Engr. Amir Zamir Ahmed Khan Secretary General, IEP Engr. Syed Raghib Abbas Shah Chairman, IEP Hyderabad Centre Engr. Dr. Zaka Ullah Khan Chairman, IEP Peshawar Centre

Engr. Muhammad Waseem Asghar Chairman IEP Quetta Centre Engr. Muhammad Kashif Kaleem Chairman, IEP Faisalabad Centre Engr. Muhammad Murtaza Khursid Chairman, IEP Multan Centre

### IEP Management Committee

Engr. M.Aijaz ul Haque Member Central Council, IEP Engr. Mustafa Hussain Khan Member Central Council, IEP Engr. Ghulam Farooq Maniar Member Central Council, IEP

HI

Engr. Muhammad Farooq Member Central Council, IEP Engr. Syed Ali Hasnain Naqvi Member Local Council, IEP, KC Engr. Ifrah Asif Member Local Council, IEP, KC

Engr. Abdul Wahab Tajwani Member Local Council, IEP. Karachi Centre Engr. Muhammad Kanzul Qavi Member Local Council IEP, Karachi Centre

# Organizing Committee

Engr. Dr. Tariq Jamil Secretary, IMEC-2024 NEDUET, Karachi Engr. M. Farooq Arbi Secretary, IEP, Karachi Centre Engr. Dr. Ali Raza Jafri Chairperson, Dept. of Automotive & Marine Engg, NEDUET Engr. Dr. Magsood Ahmed Khan Chairperson, Dept. of Industrial & Manufacturing Engg., NEDUET

Prof. Engr. Dr. Zahoor-ul-Hussain Chairperson, Dept. of Food Engg., NEDUET Engr. Dr. Muhammad Wasif

Engr. Dr. Shehroz Tahir Khan Engr. Dr. S.M Asad Akhtar

NEDUET, Karachi NEDUET, Karachi NEDUET, Karachi Engr. Dr. Aun Ali

NEDUET, Karachi

Engr. Bushra Fatima NEDUET, Karachi Engr. Talha Bin Nadeem NEDUET, Karachi Engr. Zain Shahid NEDUET, Karachi Engr. Shehzaib Yousuf NEDUET, Karachi Engr. Muhammad Bilal

Project Manager - Erasmus+ CBHE

Project (GetInnovative4Impact)

#### CPD

PEC will award CPD credit point to participating engineers as per their defined criteria.

# Chairman Gold Medal Award

Chairman Gold Medal will also be awarded to the best paper selected by the expert committee

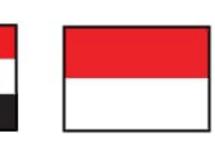
### FEIIC Members























### **FEISCA Members**

\* \*



The Institution of Engineers Bangladesh (IEB)



The Institution of Engineers India (IEI)



The Institution of Engineers Pakistan (IEP)



The Institution of Engineers Sri Lanka (IESL)



Nepal Engineers Association (NEA)

### Conference Venue

Inaugural Session

1st Day Monday 4th March, 2024 Syed Mahmood Alam Auditorium, Main Campus

**Technical Session** 

2<sup>nd</sup> Day Tuesday 5<sup>th</sup> March, 2024 Parallel Sessions at Mechanical and Civil AV Halls NED University of Engineering & Technology, Karachi

### Contact

Engr. M. Farooq Arbi, Secretary

The Institution of Engineers Pakistan - Karachi Centre 4th Floor, IEP Building, 177/2, Liaquat Barracks, Shahrah-e-Faisal, Opp: Hotel Regent Plaza, Karachi-75530- Pakistan

Telephone: +92-21-32780233, 32781492 E-mail: main@iepkarachi.org.pk / iepkc1948@gmail.com Website: www.iepkarachi.org.pk

Engr. Abdul Rahim

Vice-Chairman (Mechanical & Allied), IEP, Karachi Centre & Chief Organizer, 13th IMEC-2024

Cell:+92-300-2536460, E-mail: a.rahim@modtechservices.com

Engr. Dr. Tariq Jamil

Conference Secretary, 13th IMEC-2024 Department of Mechanical Engineering, NEDUET, Karachi Tel: (+92-21) 99261261(8) Ext: 2315 Cell: +92-332-8225815

E-mail: imec@neduet.edu.pk Website:https://imec.neduet.edu.pk



The Institution of Engineers Pakistan Karachi Centre

**NED University of Engineering & Technology** 

**Jointly Organizing** 

13th International Mechanical Engineering Conference IMEC-2024

Industry 4.0 and Allied Digital Trends: Current Perspective and Future Direction

4th - 5th MAR 2024

For More Information



In Collaboration with



Co-funded by the European Union

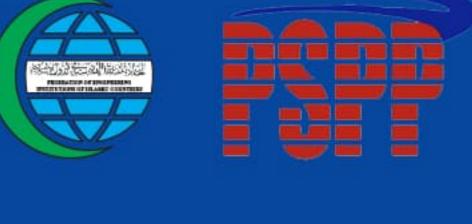












Call For Papers

### 13th International Mechanical Engineering Conference

The Institution of Engineers Pakistan-Karachi Centre, and its organizing partners; NED University of Engineering & Technology and NED International Alumni Network (NEDIAN) Association-Pakistan are organizing the 13th International Mechanical Engineering Conference (IMEC-2024) on Monday 4th & Tuesday 5th March 2024 under the theme "Industry 4.0 and Allied Digital Trends: Current Perspective and Future Direction". International Mechanical Engineering Conference (IMEC) is the flagship conference of The Institution of Engineers Pakistan (IEP) and its Organizing partner NED University of Engineering & Technology, Karachi. IMEC is being organized frequently for almost two decades. It has become a regular forum for researchers, students, and engineers to present and exchange ideas on the latest technological advancements and innovations.

With the increase in demand for large energy requirements, Mechanical engineers can be at the forefront of developing new technology for environmental remediation, housing, transportation safety, security, healthcare, and water resources. In 2023, the 12<sup>th</sup> International Mechanical Engineering Conference was jointly organized by IEP, NEDUET, & NEDIAN Association Pakistan. The IMEC 2024 will offer a wealth of resources regarding the latest mechanical and industrial engineering activities and processes in the world. Extensive participation from scientists engineers Industry managers, NGO representatives, legislators, and policymakers are anticipated.

# The Institution of Engineers Pakistan (IEP)

The Institution of Engineers Pakistan (IEP) was established in 1948. It is the premier national body of engineers working for the advancement of engineering profession. It has headquarters at Lahore and centers in all major cities of Pakistan as well as in Riyadh, Saudi Arabia, Bahrain & Tri States (New Jersey, New York and Connecticut). IEP has signed technical collaboration agreements with more than forty professional Engineering Organizations across the globe. IEP is also the member of six international / regional engineering bodies and has the honor to represent Pakistan at these forums. IEP Karachi Centre is the biggest center of IEP.

# NED University of Engineering & Technology

NED University of Engineering & Technology is one of the oldest engineering institutions in Pakistan. It offers Bachelors, Masters and Doctoral degree programs, aimed at preparing students to shoulder their professional responsibilities and enable them to contribute in research and development in related fields. Various seminars and conferences are held every year which not only provide practical exposure to students but also a platform for academia industry collaboration

### Department of Mechanical Engineering

Department of Mechanical Engineering strives to attain an ideal balance between theoretical instruction and practical exposure to mechanical engineering with the help of qualified faculty and several well-equipped laboratories. We aspire to offer an education that develops a firm foundation in mechanical engineering but allows the students to pursue their career goals in diverse fields. Our flagship B.E. program is the starting point for careers in several disciplines. With an enrolment of over 1000 students, this is one of the oldest and most valued mechanical engineering programs in the country.

### **About Karachi**

Located on Sindh Province's southern coast near to the Arabian Sea, Karachi is a thriving metropolis with a population of over 20 million. Many industrial zones, an international airport, two seaports, and connections by rail and road to the rest of Pakistan make it the nation's commercial and industrial centre. Karachi is a significant centre for higher education in South Asia and the Muslim world, with a number of prominent universities situated there. The city is teeming with unexpected shopping delights, enticing sights, and the sounds of incredible deals. Several stores, restaurants, and hotels accept credit cards. Greenwich Time (GMT) is five hours ahead in Pakistan.



# Glimpses of 12th Internatinal Mechanical Enginering Conference



### Deadlines

Paper Submission	08th Feb, 2024
Paper Acceptance	20th Feb, 2024
Camera-Ready Submission	23th Feb, 2024
Earlybird Registration	26th Feb, 2024
Final Registration	04th Mar, 2024

#### Instruction For Authors

Authors are advised to visit the website for submission and registration details.

For Further Inquiry please email at imec@neduet.edu.pk

### Registration Fee (For Participation In-Person)

#### **Authors / Presenters Gratis**

Early Bird Registration	PKR 5000 or USD 20
Registration (After Early Bird)	PKR 7500 or USD 30
IEP Members	PKR 2500 or USD 10
Students	PKR 1250 or USD 5

Registration can be made on the prescribed forms available on the conference website. The filled forms should be emailed at iepkc1948@gmail.com, main@iepkarachi.org.pk or sent through mail at the postal address of IEP Karachi Centre. Payments for registration should be made through Pay Order / Cross Cheque / Cash in the name of "The Institution of Engineers Pakistan, Karachi Centre" and sent through mail to the IEP Karachi Postal Address. For further updates visit IMEC website.

### Topics

The Conference encompasses all areas of mechanical engineering, including (but not limited to) following:

- Implementation of Digital/Smart Manufacturing Systems
- Applications of Artificial Intelligence and AR/VR and MR
- Advancements in Additive & other Manufacturing Processes
- > Role of Cloud Computing in Mechanical & Manufacturing Engg.
- > Adoption of Big Data Analytics, Visualisation and Dashboards
- Advanced Robotics and Material Handling system
- Advancements in Material Science and Technology
- Energy 4.0, Advancements in Power Generation & Transmissions