

### MANAGEMENT COMMITTEE

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|--|---|
| Engr. Dr. Izhar ul Haq                   | President - IEP                                   |
| Engr. Syed Jamshed Ali Rizvi             | Past-President - IEP                              |
| Engr. Mian Sultan Mahmood                | Secretary General - IEP                           |
| Engr. Dr. Muzaffar Mahmood               | Vice President (Mechanical & Allied) IEP          |
| Engr. Farhat Adil                        | Vice-President (Civil & Allied), IEP              |
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| Engr. Capt (Retd) Sarfaraz Inayatullah   | Vice President - (Marine & Allied) - IEP          |
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| Engr. Khalid Rashid                      | Chairman - IEP Faisalabad Centre                  |
| Engr. Syed Raghob Abbas Shah             | Chairman - IEP Hyderabad Centre                   |
| Engr. Akhtar Ali Choudhry                | Chairman - IEP Gujranwala Centre                  |
| Engr. Muhammad Ashraf                    | Director General - IEP - HQ                       |
| Engr. Dr. M Nauman Qureshi               | Chairman, Mech. Engg. DHA Suffa University        |
| Dr. Parwaiz A. Khan                      | Chairperson, Industrial Engg. & Management, DUECT |
| Dr. Khuram Kamal                         | Pakistan Navy Engineering College                 |
| Dr. Tahir Ratlamwala                     | Pakistan Navy Engineering College                 |
| Engr. Irshad Ali                         | Incharge, Mech. Engg. BUITEMS                     |
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| Engr. Prof. Dr. Syed Amir Iqbal - NEDUET | Engr. Dr. Muhammad Shakaib - NEDUET               |
| Engr. Dr. Murtuza Mehdi - NEDUET         | Engr. Dr. Mahrukh - NEDUET                        |
| Engr. Dr. Zahoor Awan - NEDUET           | Engr. Dr. Muhammad Wasif NEDUET                   |
| Engr. Dr. Maqsood Ahmed - NEDUET         | Engr. Dr. Muhammad Fahad - NEDUET                 |
| Engr. Uzair Yousof - NEDUET              | Engr. Abdul Qadir - NEDUET                        |
| Engr. Ammar Javid - NEDUET               | Engr. Shehroze Tahir Khan - NEDUET                |
| Engr. M. Muzamil Ejaz - NEDUET           | Engr. Ramish - NEDUET                             |
| Engr. Dr. Syed Ali Hasnain Naqvi         | IEPKC   |
| Engr. Zaheer Ahmed Ather                 | IEPKC   |
| Engr. Moien Ahmed Khan                   | IEPKC   |
| Engr. Muhammad Taufiq Bilwani            | IEPKC   |

### 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)

### FEIC MEMBERS



### ABOUT KARACHI

Karachi is a bustling metropolis of over 200 million people, located on the southern coastline of Sindh province next to the Arabian Sea. It is the industrial and commercial hub of Pakistan with several industrial zones, an international airport, two seaports and rail and road linkages to the rest of the country. With several renowned universities located in the city, Karachi is a major center for education and higher learning in South Asia and the Muslim world. The city is an ongoing bonanza of shopping surprises that dazzles with enchanting sights and sounds of amazing bargains. Most hotels, restaurants and many shops accept international credit cards. Pakistan standard time is Greenwich Time (GMT) +5 hours. The electrical supply is 220-240 volts

### CONFERENCE VENUE

IEP Convention Center  
The Institution of Engineers Pakistan, Karachi Centre, 5th Floor, IEP Building, Shahrah-e-Faisal, Opposite: Hotel Regent Plaza, Karachi- Pakistan

### CONTACTS

For further details, kindly follow conference links and emails below:  
www.iepkarachi.org.pk/imec.html  
www.nediep.com  
imec@iepkarachi.org.pk  
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### The Institution of Engineers Pakistan

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### The Institution of Engineers Pakistan Karachi Centre

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26 & 27  
January, 2018  
Karachi, Pakistan



## 8th International Mechanical Engineering Conference (IMEC-2018)

### EMERGING TECHNOLOGIES AND INDUSTRIAL APPLICATIONS



Jointly Organized by

The Institution of Engineers Pakistan  
Karachi Centre  
&  
 NED University of Engineering & Technology  
Karachi

in collaboration with

Federation of Engineering Institutions of Islamic Countries (FEIC)  
 Federation of Engineering Institutions of South & Central Asia (FEISCA)  
 Dawood University of Engineering & Technology, Karachi  
 Pakistan Navy Engineering College - NUST, Karachi  
 Balochistan University of Information Technology Engineering & Management Sciences (BUIITEMS), Quetta  
 DHA Suffa University, Karachi



International Mechanical Engineering Conference (IMEC) is a regular feature in the calendar of events for Institution of Engineers Pakistan and its Organizing partner NED University of Engineering and Technology Karachi, it is being organized frequently for almost two decades now Seven International Mechanical Engineering Conferences have been organized in the past. Every year, the IMEC is held under an innovative theme related to contemporary issues that relate to Mechanical Engineering. The last version of IMEC was held on March 24 & 25, 2017 at Karachi. The Conference was organized in collaboration with Federation of Engineering Institutions of Islamic Countries (FEIC), Federation of Engineering Institutions of South and Central Asia (FEISCA), Balochistan University of Information Technology, Engineering & Management Sciences (BUIITEMS), Pakistan Navy Engineering College (NUST), Higher Education Commission, Pakistan (HEC). Theme of this conference was "Recent Development in Design, Energy & Alternate Fuels". 28 International Papers were presented at the 2017 conference including those from United State, United Kingdom, Malaysia. The conference was attended by a number of delegates both from academia and industry that provided a great opportunity for the stakeholders to meet and discuss various issues related to Mechanical Engineering Education, profession and recent advancements. This year the 8th International Mechanical Engineering Conference (IMEC-2018) will be organized on January 26th & 27th, 2018 under the theme "Emerging Technologies and Industrial Applications". There has been an exponential advancement in technology during recent years. Few examples include super alloys, protective coatings, molten salt plants, nanomaterials, 3-D printing, electric and smart cars, flying vehicles, state-of-the-art batteries, robots, virtual reality, magnetorheological fluids and others. These and other advancements have opened new frontiers of research in multi-disciplinary fields along with economic rewards for industry. Technological development has resulted in long life components with improved performances, and the journey has not ended yet. In order to provide a stimulus to research and address industrial applications in Mechanical Engineering, IEP and NED are intending to host Eighth International Mechanical Engineering Conference 2018. The conference will provide a platform to academicians, scientists, researchers and industry professionals around the world to present their research on the interlinked domains of IMEC-2018. The event will also provide an opportunity for enhancing linkages between industry and academia.

### CONFERENCE TRACKS

The Conference Encompasses all areas of Mechanical Engineering including (but not limited to) following:  
Nanotechnology, Powerplant Performance, Renewable Energy & Green Buildings, Energy Conversion, Hydrogen Production, Product and Process Optimization, Additive Manufacturing, 3-D Printing, Automotive Systems, Batteries, Robots, Smart Grids, Artificial Intelligence and Other related topics

### INSTRUCTIONS FOR AUTHORS

Authors are required to submit a detailed paper. Papers can be uploaded at following link:  
http://imec.neduet.edu.pk  
http://iepkarachi.org.pk  
https://easychair.org/conferences/?conf=imec20180  
Papers can also be directly emailed at:  
imec@iepkarachi.org.pk, nediep@neduet.edu.pk  
Authors of accepted papers will be informed through email.

### RECOGNIZED CPD ACTIVITY

PEC will award credit points (CPD) to participating engineers as per their defined criteria.

### THE INSTITUTION OF ENGINEERS PAKISTAN

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 and Jeddah Saudi Arabia, Tri States ( New Jersey, New York and Connecticut ) & Bahrain. 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. IEP Karachi Centre has been organizing International Mechanical Engineering Conferences for two decades. Since then it has organized 7 Conferences, the last being in 2017, Eight International Mechanical Engineering Conference will be a 2-day event jointly organized by The institution of Engineers Pakistan, Karachi Centre and NED University of Engineering & Technology, (Faculty of Mechanical Engineering).

### NED UNIVERSITY OF ENGINEERING AND TECHNOLOGY

NED University 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.

### DEADLINES

Paper Submission	20th December, 2017
Full Paper Acceptance Announcement	30th December, 2017
Camera Ready Paper Submission	10th January, 2018

### REGISTRATION FEE

Authors /Presenters/Foreign Delegates	Gratis
Early Bird IEP Non Members (Before 30 <sup>th</sup> December, 2017)	PKR 3000 or USD 30
Late Registration IEP Non Members (After 30 <sup>th</sup> December, 2017)	PKR 5000 or USD 50
IEP Members	PKR 2000 or USD 20
Students	PKR 1500 or USD 15
IEP Student Members	PKR 1000 or USD 10

Participants will get conference proceeding on DVD.

### Glimpses of 7th International Mechanical Engineering Conference



### ORGANIZING COMMITTEE

Engr. Prof. Dr. S.F.A. Rafeeqi Chairman, IEP, Karachi Centre	Engr. Prof. Dr. Sarosh Hashmat Lodi Vice-Chancellor, NEDUET
Real Admiral (R) Engr. Prof. Dr. Sarfraz Hussain TI (MI), SI (M) Vice Chancellor, DHA Suffa University	Engr. Prof. Dr. Faizullah Abbasi Vice-Chancellor Dawood University of Engineering & Technology
Engr. Ahmed Farooq Bazai Vice-Chancellor, BUIITEMS	Engr. Prof. Dr. Muhammad Tufail Pro Vice-Chancellor, NEDUET & Convener IMEC - 2018
Engr. Sohail Bashir Chief Organizer, IMEC-2018	Engr. Prof. Dr. Mubashir A. Siddiqui Chairman (Mechanical Engineering Department, NEDUET & Co-Convener IMEC-2018
Engr. Ayaz Mirza Secretary, IEP, Karachi Centre	Engr. Prof. Dr. Nasiruddin Shaikh Secretary, IMEC-2018 Email: nasiruddin@neduet.edu.pk
Engr. Jilani Yousuf Vice-Chairman (Mech.), IEP, Karachi Centre	Engr. Prof. Joher Khurshid Farooqi Dean Engineering & Applied Sciences, DHA Suffa University
Engr. Capt Tauqueer Ahmad Khawaja Head of Department Engineering Sciences Pakistan Navy Engineering College, NUST	Engr. Asim Murtaza Khan Member Central Council, IEP
Engr. Ghulam Farooq Maniar Member Local Council, IEP	Engr. Abdul Rahim Member Local Council, IEP

### TECHNICAL ADVISORS

- |                      |   |
|----------------------|---|
| Dr. Haroon Junaidi   | University of Abertay, Dundee, UK                     |
| Dr. Amir Siddique    | University of Aberdeen, UK                            |
| Dr. Saad Bin Mansoor | KFUPM, Saudia Arabia                                  |
| Dr. Sulaiman Pashah  | KFUPM, Saudia Arabia                                  |
| Dr. Muhammad Asif    | KFUPM, Saudia Arabia                                  |
| Dr. Muhammad Umar    | University of Dammam, Saudia Arabia                   |
| Dr. Iqbal Ahmed      | University of Malaysia, Pahang                        |
| Dr. Tariq Muneer     | Edinburgh Napier University, UK                       |
| Dr. Fakhir Hasani    | Imam Ibn Saud Islamic University, Saudia Arabia       |
| Dr. Muhammd Sohail   | Eastern Michigan University, USA                      |
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| Dr. Kamran Siddiqui  | University of Western Ontario, Canada                 |
| Dr. Ghaus Rizvi      | University of Ontario Institute of Technology, Canada |

