

Advisory Board

Engr. Sohail Bashir Chairman, IEP, Karachi Centre Engr. Tafseer Ahmed Khan Vice-Chairman (Electrical & Allied) IEP, Karachi Centre & Chief Organizer IEEC-2022 Engr. Dr. Ehsanullah Kakar Vice-Chancellor, BUET-Khuzdar Prof. Dr. Syed Shabib Ul Hasan Vice-Chancellor, Hamdard University, Karachi Engr. Asim Murtaza Khan President, NEDIAN Association- Pakistan Engr. Prof. Dr. Muzaffar Mahmood Dean (GSSE), PAF-KIET, Karachi	Engr. Prof. Dr. Sarosh Hashmat Lodi Vice-Chancellor, NEDUET, Karachi Engr. Prof. Dr. Muhammad Tufail Pro-Vice Chancellor, NEDUET, Karachi Engr. Prof. Dr. Saad A. Qazi Dean ECE, NEDUET & Convener, IEEC-2022 Engr. Prof. Dr. Asim Imdad Wagan Dean, FoE, MAJU, Karachi Prof. Dr. Mukhtiar Ahmed Unar Dean (ECE) MUET, Jamshoro Engr. Prof. Shoaib Zaidi Provost, UIT, Karachi Dr. Syed Ali Raza Shah Dean (FoE), BUET, Khuzdar	Engr. Prof. Dr. M. Afzal Haque Vice-Chancellor, DHA Suffa University, Karachi Engr. Ahmed Farooq Bazai (S.I) Vice-Chancellor, BUITEMS, Quetta Engr. Prof. Dr. Vali Uddin Vice-Chancellor, SSUET, Karachi Engr. Prof. Dr. Saleem Raza Samo Vice-Chancellor, QUEST, Nawabshah Engr. Dr. Farah Haroon Principal, IIEE, Karachi Engr. Dr. Jawwad Shamsi Director and Professor, FAST-NUCES, Karachi Engr. Farooq Arbi Secretary, IEP, Karachi Centre
--	--	---

IEP Headquarters Committee

Engr. Dr. Javed Younas Uppal President, IEP Engr. Mian Sultan Mahmood Vice-President (Electrical & Allied), IEP Engr. Amir Zamir Ahmed Khan Secretary General, IEP	Engr. Masood Ahmed Khan Chairman Lahore Centre Engr. Hafiz M. Ehsan Ul Haq Qazi Chairman Islamabad Centre Engr. Azhar Habib Chairman Peshawar Local Centre Engr. Prof. Dr. Ehsan Ullah Kakar Chairman Quetta Local Centre	Engr. Syed Raghbir Abbas Shah Chairman Hyderabad Centre Engr. Khalid Rashid Chairman Faisalabad Centre Engr. Muhammad Murtaza Khurshid Chairman Multan Local Centre
---	--	--

Organizing Committee

Engr. Prof. Dr. Saad A. Qazi Dean ECE, NED UET & Convener IEEC-2022 Engr. Prof. Dr. Attullah Khawaja Chairman, EE Dept., NEDUET & Co-Convener, IEEC-2021 Prof. Ashfaq Ahmed Hashmani HoD (EE Dept), MUET Jamshoro Engr. Prof. Dr. M. Usman Keerio Dean, FoECE, QUEST-Nawabshah Engr. Dr. Abdul Ghani Abro Conference Secretary, IEEC-2022 Engr. Dr. Abdurrahman Javed Shaikh Program Secretary, IEEC-2022 Engr. Dr. Mirza Muhammad Ali Baig Academic Secretary, IEEC 2022	Engr. Dr. Muhammad Mohsin Aman Industrial Engagement Secretary IEEC-2022 Engr. Dr. Riaz Uddin Deputy Chief Organizer, IEEC 2022 Engr. Dr. Krishan Lal Khatri Universities Coordination Secretary IEEC 2022 Engr. Syed Muhammad Zahid IT Support, IEEC 2022 Engr. Anjum Darakhshan Vice Principal IIEE, Karachi Dr. Attullah Khidrani, Chairman (EED) BUET Khuzdar Engr. Dr. Ghazanfar Monir MAJU, Karachi	Engr. Dr. Raja Masood Larik Event Secretary, IEEC 2022 Engr. Dr. Syed Ali Raza Shah Dean (Engineering), BUET-Khuzdar Prof. Dr. M. Aamer Saleem Dean (FEST), HU Karachi Dr. Surar Khan HoD, EE (BUITEMS), Quetta Engr. Dr. Dur E Jabeen SSUET, Karachi Engr. Dr. Bizzat H. Zaidi (EE HoD), DHA Suffa University, Karachi Dr. Sameer Qazi HoD (EE) PAF-KIET, Karachi Dr. Burhan Khan FAST-NUCES, Karachi
--	--	---

Technical and Programme Team

Engr. Shariq Shaikh Engr. Ayesha Saeed Engr. Adnan	Engr. Nabeel Fayaz Engr. Muhammad Uzair Khan Engr. Muhammad Arshad	Engr. Hassan ul Haque Engr. Najia Naveed Engr. Hiba Kamal Zubairi
--	--	---

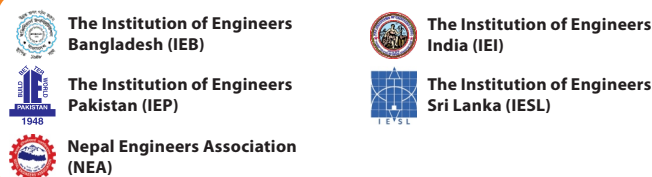
Technical Review Committee

Engr. Prof. Dr. Attullah Khawaja, NEDUET Engr. Dr. Muhammad Ali Memon, NEDUET Engr. Prof. Dr. Syed M. Usman Ali Shah Engr. Prof. Dr. Ali Raza Jafri, NEDUET Engr. Prof. Muhammad Ali Ismail, NEDUET Engr. Prof. Muhammad Khurram, NEDUET Engr. Dr. Muhammad Mohsin Aman, NEDUET Engr. Dr. Riazuddin, NEDUET Engr. Dr. Muhammad Javed Engr. Dr. Abdul Ghani Abro, NEDUET Engr. Dr. Abdurrahman Javed Shaikh, NEDUET Engr. Dr. Mirza Muhammad Ali Baig, NEDUET Engr. Dr. Raja Masood Larik, NEDUET Engr. Dr. Krishan Lal Khatri, NEDUET Engr. Dr. Umbreen Sultana, NEDUET Engr. Dr. Beenish Sultana, NEDUET Engr. Dr. Imran Aslam, NEDUET Engr. Dr. Engr. Ejay Humayun Mirza, NEDUET Engr. Dr. Muhammad Abul Hasan, NEDUET Engr. Dr. Sadia Muniza Faraz, NEDUET Engr. Dr. Hashim Raza Khan, NEDUET	Engr. Dr. Farah Haroon, IIEE Engr. Asif Memon, IIEE Engr. Dr. Inayat Ali Jamali, BUET Khuzdar Engr. Dr. Imran Qureshi, BUITEMS Engr. Dr. Attique Ur Rehman, BUITEMS Engr. Dr. Mehr Gul, BUITEMS Engr. Dr. Talha Mir, BUITEMS Engr. Dr. Mudassir Hussain, BUITEMS Engr. Dr. Abdul Ali, BUITEMS Engr. Dr. Muhammad Abid Mengal, BUET Engr. Dr. Kashif Ishaque, MAJU, Karachi Engr. Prof. Dr. Abdul Sattar Saand, QUEST Prof. Dr. Rashid Hussain, HU Engr. Dr. Muhammad Ahmed Sikander, HU Engr. Dr. Tayyab Ahmed Shaikh, HU Engr. Dr. Nayyar Hussain Mirjat, MUET Engr. Dr. Faheemullah Shaikh, MUET Engr. Dr. Muhammad Arif, PAFKIET Engr. Dr. Saba Javed, PAFKIET Engr. Dr. Mazher Iqbal, PAFKIET Engr. Dr. Faheem Sherwani, FAST-NUCES	Engr. Dr. Burhan Khan, FAST-NUCES Engr. Dr. Fahim ul Haq, NEDUET Engr. Dr. Sunila Akbar, NEDUET Engr. Dr. ING. Shehzad Hasan, NEDUET Engr. Dr. M. Asad Arfeen, NEDUET Engr. Dr. Saneha Ahmed, NEDUET Engr. Dr. Majida Kazmi, NEDUET Engr. Dr. Tariq Rehman, NED UET Engr. Dr. Urooj Ainnuddin, NEDUET Prof. Dr. Abdul Qadir, UIT Prof. Dr. Abid Karim, UIT Engr. Dr. Babar Khan, UIT Engr. Dr. Rana Javed, UIT Engr. Dr. Aamir Zeb, NEDUET Engr. Dr. Tahir Malik, NEDUET Engr. Dr. Riaz ul Nabi Jafri, NEDUET Engr. Dr. Razia Maroof, SSUET Engr. Dr. Amber Israr, SSUET Engr. Dr. Ingila Raheem, SSUET Engr. Dr. M. Ibrar Ul Haq, SSUET
--	---	---

FEIC MEMBERS



FEISCA MEMBERS



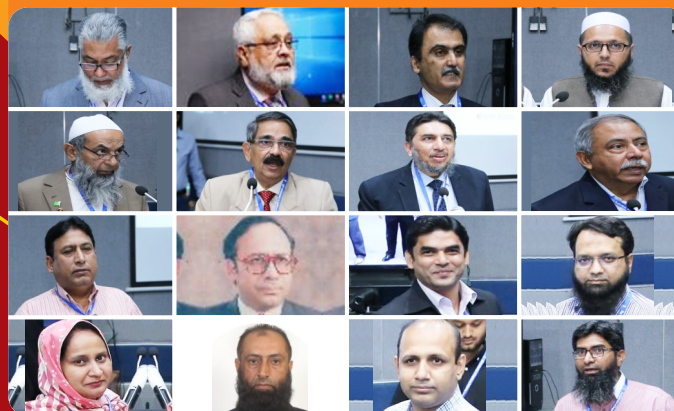
DATE & CONFERENCE VENUE

1st Day Friday 25th March, 2022 Inaugural Session
2nd Day Saturday 26th March, 2022 Technical Sessions
At Video Conferencing Hall, Department of Civil Engineering
NED University of Engineering & Technology, Karachi

CONTACT DETAILS

For further information please contact:
Engr. Farooq Arbi, FIE, PE, Secretary
The Institution of Engineers Pakistan, Karachi Centre
4th Floor, IEP Building, 177/2, Liaquat Barracks, Karachi-75530, -Pakistan.
Telephone: +92-21-32780233, 32781492
E-mail: main@iepkarachi.org.pk, lepkc1948@gmail.com
Website: www.iepkarachi.org.pk &
Engr. Dr. Abdul Ghani Abro, Conference Secretary, IEEC-2022
NED University of Engineering & Technology, University Road
Karachi Phone: 92-21-99261261-8, Cell & Whatsapp: 0311-3808597
E-mail: ieec@neduet.edu.pk
Web link: <https://easychair.org/conferences/?conf=ieec2022>
<http://ieec.neduet.edu.pk>, <http://iepkarachi.org.pk/ieec.html>

GLIMPSES OF 6th IEEC-2021



7th INTERNATIONAL ELECTRICAL ENGINEERING CONFERENCE

Theme: The Aspiring Pathways In
Electrical Engineering (ASPIRE -2022)"



being held on the occasion of NED Centennial Year (1921-2021)

(HYBRID MODE)
(Physical & Online through ZOOM)



JOINTLY ORGANIZED BY



IN COLLABORATION WITH



7th International Electrical Engineering Conference (IEEC-2022)

International Electrical Engineering Conference (IEEC) is now a regular feature in the events-calendar of the Institution of Engineers Pakistan and its organizing partner NED University of Engineering & Technology, Karachi. Six International Electrical Engineering Conferences have been organized in the past in as many years. Every year, the conference is held under an innovative theme related to contemporary advancements and challenges in Electrical Engineering.

6th IEEC-2021 was held on February 8th February, 2021 at IEP Karachi and NED University. The conference was organized in collaboration with FEISCA, FEIC, BUITEMS, BUT-Kuzdar, Bahria University, DUET, MUET, QUEST, SSUET, DHA Suffa University, National University of Computer and Emerging Sciences, Hamdard University, Iqra University, IIEE, PAF-KIET, MAJU, PNEC-NUST, UIT, IET, IEEE, Karachi Chapter. Theme of the Conference was Aspiring Pathways in Electrical Engineering (ASPIRE-2021). 40 papers were presented. The conference was attended by a number of delegates both from academia and industry that provided a great opportunity for stakeholders to meet and discuss various challenges and advancements in Electrical Engineering. Considering the rapid advancements in Electrical Engineering, IEP, its organizing partner NED University of Engineering & Technology and NED International Alumni Network (NEDIAN) Association - Pakistan are going to organize **7th International Electrical Engineering Conference (IEEC-2022) on Friday 25th & Saturday 26th March, 2022**

The Institution of Engineers Pakistan (IEP)

IEP was established in 1948 as a premier national body working for the advancement of the engineering profession. Besides having biggest center at Karachi and headquarter in Lahore, IEP centers are 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. The IEP Karachi Centre successfully organized the 1st, 2nd, 3rd, 4th, 5th & 6th International Electrical Engineering Conferences, jointly with NED University in the years 2016, 2017, 2018, 2019, 2020 & 2021 respectively. The events received tremendous response from international and local researchers and participants. The benchmarking event emerged as platform for professional and academia collaboration. IEP, NEDUET & NED International Alumni Network Association are going to organize 7th International Electrical Engineering Conference which will be held on Friday 25th & Saturday 26th March, 2022 at Karachi. The Theme of the Conference is **"Aspiring Pathways In Electrical Engineering (ASPIRE -2022)"**

NED University of Engineering & Technology Karachi

NED University is one of the oldest engineering institutions of Pakistan currently offering Bachelors, Masters and Doctoral degree programs. The programs are 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.

7th IEEC 2022 Conference Proceedings Publications

- Conference proceedings will be published by MDPI - Switzerland
- Extended version of selected paper will be published in NED University Journal of Research.

The organizers are very glad to inform to the contributors that the 7th IEEC proceedings will be published by **MDPI PUBLISHER** in their journal titled **"ENGINEERING PROCEEDINGS"**. Multidisciplinary Digital Publishing Institute (MDPI) is an international publisher of the excellent reputation. Further details regarding the journal can be found at MDPI website. Moreover, extended versions of the selected papers submitted to 7th IEEC will be sent to **"NED UNIVERSITY JOURNAL OF RESEARCH"** for possible publication. Kindly visit the conference website (<https://ieec.neduet.edu.pk/>) for terms and conditions of journal publications. Additional details regarding the journal can be found at; https://www.neduet.edu.pk/NED-Journal/abstract_index.html

Areas of Interest Including But Not Limited

Electrical Power Systems and Policies	Embedded Systems
Renewable Energy Technology	Electronics and Applications
Controls, Robotics, and Automation	Information and Communication
Signal, Image and, Speech Processing	Technologies
IoT, Big Data and Artificial Intelligence	Computer Systems and Networks

About Karachi

Karachi is a bustling metropolis of over 25 million people, located on the southern coastline of Sindh province near 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 them 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 dazzling bargains. Most hostels, restaurants and many shops accept international credit cards. Pakistan standard time, is Greenwich Time (GMT) +5 hours. The electrical supply is 220-240 volts.

GLIMPSES OF 6th IEEC-2021



DEADLINES

Full Paper Submission	20th February, 2022
Full Paper Acceptance	5th March, 2022
Final Manuscript/Camera Ready Paper	10th March, 2022
Presentation Submission	15th March, 2022

INSTRUCTIONS FOR AUTHORS

Authors are required to submit a detailed paper. Instructions to the authors are given at <http://ieec.neduet.edu.pk>. Papers can also be directly emailed at ieec@neduet.edu.pk. Authors of accepted papers will be informed through email.

REGISTRATION FEE (FOR PHYSICAL PARTICIPATION)

Authors / Presenters / Online	Gratis (Free)
IEP Members	PKR 2000 or USD 20
Non-Members	PKR 3000 or USD 30
Students	PKR 1500 or USD 15
IEP Student Members	PKR 1000 or USD 10

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.

CPD

PEC will award 1 CPD credit point to participating engineers as per their defined criteria

Chairman Gold Medal

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

IEP Management Committee

Engr. Dr. Tehseen Rahim Vice-Chairman (Electronic), IEP, Karachi Centre	Engr. Aftab Ahmed Member, Local Council, IEP, Karachi Centre	Engr. Masood Ahmed Memon Member, Local Council, IEP, Karachi Centre
Engr. Gulzar Ahmed Memon Member Central Council, IEP	Engr. Afaq Ali Siddiqui Member, Local Council, IEP, Karachi Centre	Engr. Nabil Kalu Member, Local Council, IEP, Karachi Centre
Engr. Muhammad Idris Member Central Council, IEP	Engr. Sheeraz Ali Member, Local Council, IEP, Karachi Centre	Engr. Abdul Samad Member, Local Council, IEP, Karachi Centre
Engr. Syed Anwer Ali Member Central Council, IEP	Engr. Mariam Anwar Member, Local Council, IEP, Karachi Centre	Engr. Muhammad Shariq Khan Member, Local Council, IEP, Karachi Centre
Engr. Obaid ur Rehman Khan Kamal Zai Member, Local Council, IEP, Karachi Centre	Engr. Talha Ahmed Farooqi Member, Local Council, IEP, Karachi Centre	

Coordination Committee

Dr. Surat Khan Chairperson Electrical Engineering BUIEMS	Engr. Anjum Darakshan Principal Instructor, IIEE	Dr. Ghulam Mujtaba Chairman/Director National Centre of Robotics & Automation
Dr. Imtiaz Hussain HoD Electrical Engineering, DHA Suffa	Engr. Dr. Sameer Qazi, (PAF-KIET)	Dr. M. Faisal Khan Manager (IRD) HU Karachi
Engr. Dr. Nayyar Hussain Mirjat Associate Professor, Electrical, MUET	Engr. Dr. Raza Haider BUET-Khuzdar	Dr. Muhammad Ayub BUIEMS
Prof. Dr. Abid Karim, (UIT)	Dr. Muhammad Burhan Khan Assistant Prof, FAST-NUCES-Karachi	Dr. Razia Maroof SSUET Karachi