



Pakistan Engineering Council

(Constituted under Pakistan Engineering Council Act, 1976 enacted by the Parliament)

Ataturk Avenue (East), G-5/2, Islamabad



CHAIRMAN MESSAGE

I feel immense pleasure to address you through this message to mention that engineers serve the humanity, mankind, nation and the country. No doubt, PEC has provided the platform to engineering community to enrich their capabilities and expertise. Engineers are the assets of the country and bring about the innovative ways to cope with the major issues faced by the nation. Engineers are the catalyst for socio-economic advancement through industrial development and also helpful in providing the better infrastructure in our daily life covering all the aspects including improving and sustainability of our economy through industrial development.

Pakistan Engineering Council's vision is to implement and execute the latest technologies and trends in the field of engineering and to maximize the potential so as to deliver the extraordinary performance beyond perception.

Pakistan has a large population over 180 million and is rapidly developing economy. The needs of Pakistan's existing industrial base as well as those of new industry are growing. There is a dire need to facilitate local industry and business to meet the production requirements of local market and increase the exports.

PEC has recently made collaboration with World Trade Publishers to provide facilitation and capacity building of Pakistan's industry for successful completion of various projects. Growing income oriented industrial environment will be strong investment pillars of Pakistan.

Recently, the great milestone was accomplished by PEC in June 2017, when Pakistan became full signatory of the highest prestigious forum - the Washington Accord (WA) of International Engineering Alliance (IEA). This is a "landmark achievement" by PEC for the nation in the history of engineering profession and higher education in Pakistan. It is pertinent to mention that achieving WA-signatory status is so rigorous that only 18 countries have been declared as signatories in the last 27 years since its establishment in 1989 U.S.A. Alhamd-o-Lillah, Pakistan entered as 19th signatory economy of the world and 3rd Islamic country after Malaysia & Turkey. Certainly it is a great achievement and honor for the nation, stepping up Pakistan into an emerging knowledge-based economy.

Engineering graduates of engineering institutions qualified through these standards of accreditation by PC will be considered at par with world-class competent engineering professionals and will not be evaluated for any further educational assessment for professional jobs across the borders. This has ushered in an era of opportunities for our engineering graduates/professional to get access to global job-market as well as gain trust of the foreign engineering consultants/companies desiring to work in Pakistan and local engineering companies working abroad.

The Industrial Source Book of Pakistan is indeed a great contribution to develop intra industry linkages for mutual business. I wish them for its success and contribution towards progress of the country.

Engr. Jawed Salim Qureshi
Chairman



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VICE CHAIRMAN MESSAGE

It is of utmost importance that the industry and Engineering Sector is being supported by the efficient, handy and useful catalogue of industrial equipment manufacturers, stockiest, suppliers and importers by the name of Industrial Source Book of Pakistan.

The last edition was warmly welcomed by the industrial engineering, consultancy, contractors and fabrication sector for being the most comfortable solution of their day to day need of industrial equipment and accessories.

Pakistan Engineering Council highly appreciates the creative and the most useful effort by World Trade Publishers.

On the occasion of World Trade Publishers' next edition of Industrial Source Book of Pakistan for the year 2017-2018, we wish them all the best and expect the same level of production, quality and user friendly presentation.

Engr. Mukhtar A. Sheikh
Vice Chairman (Sindh)



Pakistan Engineering Council (PEC)

(Established under the Act of Parliament 1976)

INTRODUCTION

Pakistan Engineering Council (PEC), a statutory body, was constituted through an Act of Parliament in 1976, to regulate the Engineering Profession and engineering education in the country.

OBJECTIVES & FUNCTIONS

- Maintenance of a Register of persons qualified to work as registered engineers, professional engineers, consulting engineers, constructors and operators.
- Accreditation of engineering qualifications for the purpose of registration of registered engineers, professional engineers, consulting engineers.
- Promotion of engineering education and review of course of studies in consultation with the Universities.
- Ensuring and managing of continued professional development.
- Establishing standards for engineering contracts, cost and services.
- Assistance to the Federal Government as a Think Tank.
- Providing forum for arbitrations, pertaining to dispute in construction and consultancy contracts.
- Facilitating engineering sector industries.
- To recommend the bills for legislation pertaining to engineering profession, engineering education and engineering works.
- Promotion of engineering profession in totality.

PEC to become vigilant body under Qureshi's Leadership: Mamnoon Hussain

President Mamnoon Hussain stressed the need for devising an effective strategy for disaster risk reduction and disaster management in fire-related incidents to ensure safe living conditions for the people. He said this while addressing the Launching Ceremony of Fire Safety Provisions - 2016 of Building Code of Pakistan here at the Aiwan-e-Sadr.

The president said natural and unforeseen disasters could occur anytime, however with safety measures and better enforcement, losses could be avoided or at least curtailed.



He said it was a recognized international practice to have special arrangements to deal with all sorts of emergency situations including fire-related accidents at all public places including commercial and industrial units and residential areas. The Building Codes have been developed through the joint effort of Pakistan Engineering Council (PEC) and the National Disaster Management Authority (NDMA). The need for the same have been felt for the longest time. These codes cover all aspects for building industry with view to fire hazards.

The gathering was addressed by various speakers including Minister of Science & Technology, Rana Tanveer Hussain, Chairman NDMA, Maj. Gen. Asghar Nawaz, and Chairman PEC Engr Jawed Salim Qureshi.

Speaking on this occasion, Federal Minister for Science and Technology Rana Tanveer Hussain said the new fire safety laws would be instrumental in protecting peoples' lives and properties. Chairman PEC, Engr Jawed Salim Qureshi highlighted the importance of these codes and management of fire hazard in efficient and proactive manner. He also pointed out the weaknesses in the existing service structure of engineers, which is detrimental to growth and hence causes frustration.

Maj. Gen Asghar Nawaz highly appreciated the efforts gone in development of fire safety provisions and noted it as a fine example of cooperation between different public sector organizations.

Souvenirs / shields and certificates were awarded to the Professionals who contributed to the Building Code of Pakistan-Fire Safety Provisions. These provisions have been published in a book format and can be obtained from PEC office or downloaded from PEC website www.pec.org.pk

EQAPS Meeting, Makkah Saudi Arabia, 18-19 December 2016 – Signing MoU



A five-member PEC delegation headed by the Senior Vice Chairman PEC, Engr. I.A Osmani participated in the FEIC Executive Council meeting and the EQAPS Project meeting. Engr. Dr. Nasir M Khan gave detailed presentation on Accreditation and Professional system of Pakistan including National Qualification Framework.

Prof. Naji Mahdi (KHDA, Dubai UAE) presented various issues pertaining to Accreditation and professional System as they are facing in UAE and urged to focus with simple solutions, keeping in in view international practices and standards. Prof. Megat Johari talked about specifically Makkah Accord and Madinah Accord

followed by Q&A session. Most of the member countries agreed on the prepared document for both the accord with minor editing. Finally it was agreed that in the FEIC Council meeting that these agreements need to be signed by countries which are present with their Presidents/Chairmen so that the roadmap to get it implemented be developed by constituting a high level committee of FEIC.

Govt taking steps to streng then engineering education in Pakistan

Science and Technology is the pinnacle of success in the modern era. For any nation to keep itself from falling behind in the race for attainment of economic excellence, it is imperative to invest in engineering and technology. Today, life has become much easier than ever before courtesy the engineering inventions that have positively impacted areas such as health, governance, communication, transport, information technology, etc.

This was the crux of talk by Rana Tanveer Hussain, Federal Minister for Science & Technology, at the inaugural session of 4th International Convention of Federation of Engineering Institutions of Asia and the Pacific (FEIAP) here on Tuesday. Jointly organized by Pakistan Engineering Council, Higher Education Commission and National University of Sciences & Technology, and held at the main campus of NUST, the convention was attended by representatives from the member economies of FEIAP.

The minister further said that the goals and agendas of Ministry of Science & Technology (MoST) are perfectly aligned with the vision and mission of Federation of Engineering Institutions of Asia and the Pacific (FEIAP) that is to promote sound engineering practices in support of the socio-economic development objectives in the region. He maintained that the government has its strong focus on strengthening of engineering and technology institutions across Pakistan. He also eulogized PEC for their untiring efforts in continuously improving the engineering profession in Pakistan in line with recognized international engineering practices, and lauded NUST for their unceasing efforts towards grooming the brightest minds, especially in the engineering disciplines, into through professionals fully poised to lead and serve the nation.

Chairman PEC Engr Jawed Salim Qureshi, in his remarks, said that the council has always strived for the betterment of professional engineers and nourishment of budding engineers. He opined that the changing and challenging world demands a need for young, brilliant minds to innovate and create new ways to tackle the unprecedented challenges. Engr. Qureshi highlighted the significance attached to the convention, saying that it would have far-reaching positive dividends. He also apprised the audience of recent achievements made by PEC especially for provision of employment to 12000 engineers through supervisory certificate.



Prominent among other speakers were Engr Zahid Arif, Vice Chairman PEC, Dr John Chien-Chung Li, President FEIAP and Engr Chuah Hean Teik, the keynote speaker whose talk was themed around Globalization and Challenges Faced by Engineering Profession. In the second session of convention, as many as 40 engineering scholars from a total of 14 countries presented papers on engineering education and standardization, disaster mitigation, sustainable environment, etc.

Governor Khyber Pakhtunkhwa Iqbal Zafar Jhagra, while addressing the "Award Ceremony of 4th Convention of Federation of Engineering Institutions of Asia Pacific" (FEIAP-2017) said China Pakistan Economic Corridor (CPEC) would bring economic revolution in the whole region. He was addressing a jointly organized by Pakistan Engineering Council (PEC), Higher Education Commission (HEC), FEIAP and NUST University. Felicitating the award winners, the governor said, "We all are here to celebrate the remarkable achievements of these figures." He also extend warm welcome to foreign guests for travelling to attend



this event. The engineers had been in the front row in making inventions and application of modern technologies, he said, adding they had always been viewed with great expectations in developing every sphere of engineering system. He said CPEC would bring rapid progress within next few years across the region. Jhagra said the distinguished body of engineers should continue its leading role in development of engineering profession, making knowledge driven opportunities more accessible to its members. He appreciated the supportive role of FEIAP's president Dr John Chien-Chung Lie

for obtaining full membership of Washington Accord. "I am also grateful to FEIAP for awarding Pakistan as first economy and in getting FEIAP Accreditation in 2015," he maintained.

He also appreciated the role of Chairman PEC to bring reforms in his department to improve its performance. The governor on the occasion distributed awards amongst the engineers of the year.

PEC Chairman eyes on job opportunities for engineers in UAE

Engr Jawed Qureshi, Chairman PEC held a meeting with H.E. Mr Asif Durrani, Ambassador of Pakistan to the United Arab Emirates at Abu Dhabi. It was mutually agreed that utmost efforts will be put to explore the job opportunities for Pakistani Engineers in United Arab Emirates. Pakistan Engineering Council will develop a job portal on its website and its direct access will be given to UAE companies for recruitment of appropriate engineers. Chairman is keenly exploring various opportunities to create job opportunities for unemployed engineers.

New Registration Policy has provided 12000 Jobs to fresh engineers

With the view to provide better employment opportunities to fresh engineers and enhancing the quality of work in construction projects, engineers have been provided with opportunity and responsibility with the constructors to ensure that all works meet the desired quality standards. This has been the vision of Engr. Jawed Salim Qureshi, Chairman PEC and the management of PEC. In this regards, around 10,000 engineers who graduated in 2016 have been awarded with supervisory certificate. The names of supervisory certificate holders are available on PEC website www.pec.org.pk/suplist.aspx

Appointments of Non Engineers in Engineering Departments against PEC ACT

Chairman PEC Engr Jawed Salim Qureshi has written a letter to Prime Minister (PM) of Pakistan and expressed council's misgivings on the appointments of Non Engineers in Engineering Departments against PEC ACT 1976. This news aired in all Electronic and Print Media.

Penal Provisions on Building Code Violations

Chairman PEC Engr Jawed Salim Qureshi gave presentation to Senate's Standing Committee on implementation of building codes with special provisions for seismic protection, suggesting penal

provisions and mechanism regarding violations. He told the committee that the council has prepared a detailed document which talks about standardizing authority for construction material, monitoring on architectural and structural design, implementation authorities at federal and provincial level, rating of implementation status and the role of CDA, PSQCA, NHA, PHA, PWD and other stakeholders.

FEIAP Engineer of the Year Award

The Federation of Engineering Institutions of Asia and the Pacific (FEIAP) conferred Engineer of the Year Award upon Dr Shahbaz Khan, Director UNESCO who was jointly nominated by PEC and Engineers Australia. This was awarded during the 24th FEIAP General Assembly meeting, July 2016 at Perth, Australia.



**“Engr. Prof. Dr. Niaz Ahmad Akhtar,
Vice Chairman PEC (Punjab)
Inaugurating the E-Rozgar Center
Established at UET Taxila”**

Impact of Climate Change on Water Resources in Pakistan and Mitigation Options

The honorable minister of Science and Technology Rana Tanveer Husain presided a consultative high powered workshop with representatives from all relevant stakeholders including provinces and ministries was held on January 11, 2017 at PEC head quarter in Islamabad to discuss the most important issue of climate change and its effect on the water resources of the country. The workshop titled “Impact of Climate Change on Water Resources in Pakistan and Mitigation Options, was organized by the PEC here. Prominent engineers and secretaries Agriculture, Livestock and Irrigation Department of Azad Jammu and Kashmir, Water and Power Department of Gilgit Baltistan, Irrigation Khyber Pakhtunkhwa, Irrigation Punjab, Irrigation Sindh and Irrigation Balochistan were among others who attended the workshop and gave their presentations.

Minister for Science and Technology Rana Tanveer Hussain underlined the need for tackling challenges and threats posed by the climate change and its impact on water resources. Addressing the inaugural session of a day-long workshop, he expressed confidence that the Pakistan Engineering Council (PEC) through its Think Tank Sub Committee on Water would link up Research and Development (R&D) institutions and academia to synchronize their collective wisdom to grapple with the climate change challenges and threats.

Minister for Science and Technology Rana Tanveer Hussain said “Climate change is a four tier approach; prevention, assessment, mitigation and rehabilitation,” adding that the approach needed close interaction among all the stakeholders dealing with issues relating to the climate change. Appreciating PEC for holding the workshop on an important issue, Rana Tanveer said the council had not only excelled in promoting the engineering profession in line with the national requirements but also made efforts to highlight most pressing issues like scarcity of water resources in the country. He said impact of climate change was the most crucial and obvious on our lives as well as economy, adding that Pakistan was amongst the most vulnerable countries facing the climate change effects, especially on its water resources. “The government of Pakistan, being a responsible members of international community, has been actively participating in international endeavors to combat this global issue and is party to several international treaties,” the minister remarked. Besides, Rana Tanveer said he was confident that the PEC Think Tank on Water what he called a ‘big initiative’ would further integrate the national efforts and

response to tackle the challenges. He hoped that the consultative workshop, participated by eminent engineers, professionals, scientists and experts from federal and provincial governments, would devise a road map to reduce the impacts of climate change on the country's water resources. He said the Ministry of Science and Technology, being the national focal point for S&T, was also striving to achieve the vision for prosperous and progressive Pakistan. Rana Tanveer said Pakistan Council for Research in Water Resources (PCRWR) had taken a number of initiatives covering desertification control and a network of laboratories for checking quality of drinking water throughout the country.

The minister said he believed that the collaboration among PEC, provincial governments and irrigation departments would go a long way in working out the mechanism for implementation of water related policies and suggest ways and means to significantly reduce the impact of climate change on the country's fastly depleting water resources. In his opening remarks, convener PEC Think Tank Sub-Committee on Water Engineer Raghieb Abbas Shah apprised the participants about working of the council. He said water resource management had a great potential in Pakistan that needed to be developed without any further delay, adding that negative impacts of climate change were badly affecting the country's water resources and resulting decline in per capita water availability, food insecurity, lower agricultural yields, deforestation and shortage of water for industrial and domestic usage.

He said macro-scale hydrological model for river flow suggested that runoff the Indus river would decrease by 27 percent by the year 2050 due to global climate change, adding "This implies that the availability of fresh water would further decrease because Pakistan had already ranked at 23rd among most water stressed countries worldwide." PEC Chairman Engineer Jawed Salim Qureshi in his welcome address said the Think Tank was acting as a bridge between various government departments to facilitate, identify gaps, challenges and providing policy guidelines on various national issues to the government.

He said the workshop would help in finding out workable guidelines and strategy in the light of deliberations and presentations given by the participants.

Engineer-in-Chief Lt Gen Khalid Asghar also spoke and suggested to adopt modern techniques in irrigation sector to preserve water and its maximum utilization. He said piped and drip irrigation were one of the most effective strategies to meet water needs of different seasonal yields. Later, souvenirs were presented to Minister for Science and Technology Rana Tanveer Hussain and Engineer-in-Chief Lt Gen Khalid Asghar.

Washington Accord Verification Visit for Pakistan's Full Signatory Status

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Achieving full signatory status of WA which is the apex body in engineering accreditation/recognition globally will be a milestone in the history of PEC towards substantial equivalence and international recognition of engineering qualifications and to facilitate mobility of engineers across the borders. This will result in further promoting job opportunities without requiring any additional assessments and passing exams etc in other countries.

