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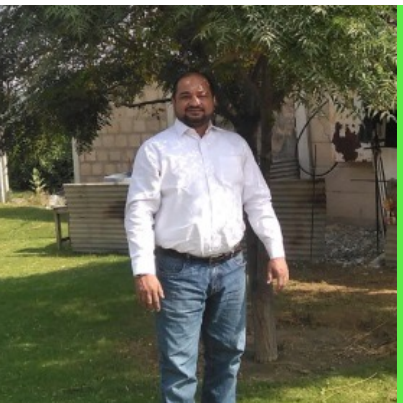
Green careers guide

Syed Faraz Jafri
Pakistan



Syed Faraz Jafri
Pakistan

Engr. Syed Faraz Jafri is currently employed within the capacity of Chairperson, Civil Engineering Department, Ziauddin University, Faculty of Engineering, Science, Technology and Management (ZUFESTM) Karachi, Pakistan. The candidate has completed BS Civil Engineering from Sir Syed University of Engineering and Technology – Karachi, Pakistan in 2002 and MS Civil Engineering from University of East London (UK) in 2006. Research based MS was produced by the candidate covering the modern aspects and advancements in Civil Engineering. The candidate bears 12 years experience of education sector with 2 years field experience.

Contribution towards Renewable/ Green Energy Sector

Being the educationist and researcher, contributions were made and presented in terms to promote green environment amongst the concerned stakeholders of Pakistan. Not only this, suggestions are put forward for Green Energy trends in order to bridge the gap between industry and academia further. In the next phase of respective document, intellectual steps or short stories are discussed that are actually the initiatives of Engr. Syed Faraz Jafri (UK Alumni) in Pakistan within his capacity of associated academic and administrative responsibilities till to date.

1. Bridge-Stone of Polluted Free Department of Civil Engineering, Ziauddin University Faculty of Engineering, Science, Technology & Management, Karachi, Pakistan

Since 2017, Department of Civil Engineering, Ziauddin University Faculty of Engineering, Science, Technology and Management is dedicated at Education City, Link Road Campus, Karachi, Pakistan. The selected area is bit

far away from urban problems imparting the polluted free healthy environment for students and teachers. The construction of campus is proposed in a way to produce green outlook for visitors all around its periphery along with the deputation of certain staff for its routine/ periodic maintenance. This step should be appreciated as the green construction of first university in education city, Karachi, Pakistan.

2. Provision of Solar Panel all Around in Education City Campus

Another story pertinent to green energy restoration is the installation of solar panels all around in the campus of Ziauddin University situated in Education City, Karachi, Pakistan. Solar panels are provided in campus to channelize the reservation of energy in economic terms considering the available resources and facilities of university. This arrangement is in-fact an indigenous task to utilize the natural assets and minimizing the depletion effects using sunlight and green building ideas.

3. Practicing GREEN DAY with Students and Faculty of Department of Civil Engineering, Ziauddin University

It is the common practice adopted in department to allocate a Green Day in order to promote sustainable and healthy environment. Students and faculty are encouraged to clean the campus in particular day and plant at-least a single tree by his/ her own and monitor its flourish. This is actually a way forward step in the area of renewable/ green energy sector providing natural environment for users and ensuring the maximized control of pollution within the specific area.

4. Curriculum Advancements in terms of Green Metric Ranking

At the moment, the department is offering two degree programs namely; BE Civil Engineering and BS Civil Technology. Number of courses is offered in both programs which eventually cover the broader perspective of green energy effects, sustainable developments and green buildings. In addition to that, the department is also striving hard to actively participate in Green Metric International University Ranking Systems.

The courses offered in said perspective in BE Civil Engineering Program are as follows:

1. Engineering Geology
2. Environmental Engineering
3. Structural Analysis
4. Construction Engineering
5. Soil Mechanics
6. Water Resource Management
7. Irrigation & Drainage Engineering

The courses offered in said perspective in BS Civil Technology Program are as follows:

1. Concrete Technology
2. Engineering Geology
3. Soil Mechanics
4. Water Supply & Waste Water Management
5. Structural Analysis
6. Occupational Health & Safety Management
7. Construction Engineering
8. Environmental Management
9. Hydrology & Irrigation Engineering
10. Construction & Project Management

5. Allied Way Forward Steps/ Proposals prepared for Green Energy Efficient Systems

a. Intellectual Energy Efficient Green building Infrastructure system

Existing or planned infrastructure of university may be transformed or promoted with intellectual energy efficient system followed by green building concepts. This may include solar panels, roof top planting, improved insulation, enhanced ventilation, use of efficient materials, modulate lightening, water conservation, sensors control light, building orientation and light fixtures etc. Existing campus of university is equipped with one of these advanced facilities for users.

b. Sprinkler systems followed by Horticulture requirements

Sprinkler system is the advancement in the field of water resource management and Irrigation Engineering. With this approach, campus may be facilitated with efficient use of water for horticulture requirements. This system allows application of water under high pressure with uniform distribution. Despite of that, this is one of the methods for preservation of resources along with economical constraints.