# MUHAMMAD UMAR

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To effectively employ the practical experience gained through internships and the theoretical knowledge acquired during the course of engineering program in tandem with the professional experience and knowledge to be learnt at your organizational vicinity in order to enhance practical knowledge and acquire professional excellence.

#### **EXPERIENCE**

JULY 21, 2016 - AUGUST 18, 2016

**INTERNEE**, OMV UPSTREAM PAKISTAN (MEHER GAS FIELD, SINDH)

A comprehensive overview of OMV's gas production facility in Meher Block Sindh along with onfield work as a mechanical maintenance internee.

Major jobs include calibration of PSVs (Pressure Safety Valves), preventive maintenance of Gas Engine Generator, survey of TLAS (Tank Loading Automation System), and rectification of foam tank bladder leakage.

PO (Purchase Order) inspection along with the ware house coordinator as a part of the on-field coordination between the plant's maintenance department and ware house.

**JULY 8, 2015 - AUGUST 5, 2015** 

**INTERNEE**, DESCON INTEGRATED PROJECTS LIMITED (LAHORE HEADQUARTERS, PAKISTAN)

One week work as an internee in Descon's Sub-Contracting Department.

Two weeks work as an internee in EPC (Engineering Procurement and Construction) Power Business Area Wind Projects comprising the theoretical knowledge gained about NORDEX Germany and Descon's joint venture in particular to the prospect of Wind Projects in Pakistan. Visits to already constructed and under construction Wind Power facilities in Gharo and Jhimpir.

#### **EDUCATION**

**NOVEMBER 2017** 

**BACHELOR IN MECHANICAL ENGINEERING,** UNIVERSITY OF ENGINEERING AND TECHNOLOGY TAXILA WITH CGPA OF 3.49

#### **TECHNICAL PROJECTS**

[2016-2017]

COMPARATIVE ANALYSIS OF EFFICIENCY OF PARABOLIC TROUGH COLLECTOR [PTC] USING WATER AND NANO-FLUIDS [FINAL YEAR PROJECT].

 The aim of the project was to analyze the performance of parabolic trough collector using water and nano-fluids. Aluminum and iron oxide water based nano-fluids along with water as a working fluid were used.
 The results of the project confirmed that nano-fluids had a considerable potential in terms of efficiency for use in parabolic trough collectors.

# COMPARATIVE ANALYSIS OF EFFICIENCY OF FLAT PLATE COLLECTOR USING WATER AND NANO-FLUIDS

 As a secondary assignment to the final year project the comparative analysis of the efficiency of flat plate collector using water and nano-fluids was also projected to the same conditions as were employed in the analysis of comparative analysis of parabolic trough collector. The results acquired implicated higher efficiencies for the nano-fluids based working fluids rather than water.

#### **SEMESTER PROJECTS**

- Acoustics and Noise control in HVAC Distribution System.
- Fabrication and Analysis of Plate Type Heat Exchanger using ANSYS
- Design and Control of the Automatic Mousetrap using Arduino
- Design and Fabrication of model Truss Bridge

#### INDUSTRIAL VISITS

- KSB pumps Hassan Abdal.
- Heavy Mechanical Complex Taxila
- Descon Karachi Manufacturing Works

#### **PLANT VISITS**

- FFCEL Wind Power Plant at Jhimpir.
- FWEL Wind Power Plant at Gharo.
- GWAPL Wind Power Plant at Jhimpir.
- Three Gorges Wind Power Plant at Jhimpir

#### **EXTRA-CURRICULAR ACTIVITIES**

- Team leader of British Entrepreneur YES program, leading the team at university level to stand as the 2nd best team among more than 300 teams. (2016-2017)
- General member of IMechE U.E.T. Taxila Chapter
- Organizer of SOFE (Speak Out for Engineering) North Contest held at U.E.T.
  Taxila in the year 2016.
- Considerable experience as a freelance expert.

### LANGUAGE PROFICIENCY

• Urdu: Native language

• English: Fluent (speaking, reading and writing)

## **TOOLS IN HAND**

- Microsoft Office 2013
- AutoCAD 15
- MATLAB R2017a

## **OTHER INTERESTS**

- Freelancing
- Reading articles particularly those related to Global Politics
- Playing Cricket and Badminton

#### REFERENCES

REFERENCES WILL BE PROVIDED ON REQUEST.