

AISHA JILANI

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Date of Birth: 10th Sept 1988

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Domicile: Karachi, Sindh

Nationality: Pakistani

Career objective

To succeed in an environment of growth and excellence and earn a job which provides me job Satisfaction and self-development and help me achieve personal as well as organization goals.

Education and training

2012 – 2014 MS (Thermal power/thermo fluid)	National University Of Science And Technology-Pakistan CGPA – 3.5
2008 – 2012 B.E. (Mechanical Engineering)	National University Of Science And Technology -Pakistan CGPA - 3.26
2005 – 2006 Intermediate Karachi Board	Bahria College Karachi-Pakistan 77%
2003 – 2004 Matriculation Federal Board	Bahria College Karachi-Pakistan 71%

Experience

- Working as a Lab Engineer in National University of Science and Technology (PNEC) since April 2013 till present.
Study Leave: September 2016 to September 2018
- **Responsibilities:**
 - i. To initiate repair/maintenance and procurement of new equipment in Thermodynamics lab.
 - ii. Responsible for conducting/overviewing the experiments/practical.
- Taught theory Course of Thermodynamics, Heat & Mass Transfer, Internal Combustion Engine, Engineering Mechanics, Mechanical Vibration

Computer Literacy

- MATLAB
- Pro E
- FORTRAN
- AutoCAD & Solid works
- ANSYS

Projects

- **MS (Thesis)**

Exergetic analysis and parametric optimization of variable flow solar chimney power plant

Environment: Renewable Energy/ Exergy analysis

My MS thesis is "Exergetic analysis and parametric optimization of variable flow solar chimney power plant". A mathematical model for energetic and exergetic analysis is developed by using the energy equation, momentum, equation of state, and Bernoulli equation, solved by using Engineering Equation Solver (EES) to investigate and determine the performance of the variable area flow solar chimney power plant. The effect of mass flow rate and solar radiation has been analyzed on power output and second law efficiency. The analysis showed that solar chimney power plant having sloped solar collector and divergent top solar chimney is the best chosen option in order to extract maximum power output and to achieve maximum second law efficiency. The developed analytical model is also used to analyze the effect of geometric parameters for this case. The analysis showed chimney height and collector radius are important parameters for the solar chimney design

- **B.E (Final Year Project)**

Design and fabrication of Hybrid Turbine System

Environment: Renewable Energy

My B.E project was design and fabrication of hybrid power turbine system. The system was designed such that it can adjust the water supply automatically depending on the wind speed so as to maintain a constant power output i.e. 250 watt. Fabrication of blades Horizontal axis wind turbine was done by using resin infusion technique. Impulse water turbine (Pelton wheel) was fabricated. Stress and flow analysis was done by using ANSYS and FLUENT

Major Courses Studied:

- Thermodynamics
- Fluid Mechanics
- Mechanics Of Solids
- Computational Fluid Dynamics
- Thermal Design Systems
- Gas Turbines
- Internal Combustion Engines
- AC and Refrigeration
- Power Plant Engineering
- Convective Heat Transfer

Technical Experience

- Attended a Three Day Workshop on "Vacuum Science and Technology" at Karachi University
- I have served a month in BYCO petroleum as intern in UNIVERSAL TERMINAL LIMITED.
- I have served a month in Karachi Shipyard in the capacity of intern
- I have served two weeks of internship at Pakistan International Airlines,

Publication

Title: A comparison of spray and combustion characteristics of biodiesel (soy methyl ester, rapeseed methyl ester) with diesel

Journal: Proceeding of institute of Mechanical engineering, Part D Journal of Automobile Engineering

Authors: Wenliang Qi , Pingjian Ming, **Aisha Jilani**, Haiyang Zhao and Ming Jia

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