Haroon Akhtar

Lecturer
Department of Mechanical
Engineering Technology
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OBJECTIVE:

Experienced and committed Lecturer in Mechanical Engineering, with a good record both in teaching and administration. Proficient at explaining highly complex engineering principles and practices in a simple and open way to a range of professional and non-professional audiences. Committed to giving my full attention and experience to interested students to help further their academic and professional goals and objectives.

EDUCATION:

PhD Mechanical Engineering (Materials Engineering), in progress
University of Engineering & Technology, Peshawar, Pakistan

M.S. Mechanical Engineering (Dynamics & Control Engineering), Aug 2018
University of Engineering & Technology, Peshawar, Pakistan

B.S. Mechanical Engineering, Dec 2012
University of Engineering & Technology, Peshawar, Pakistan

TEACHING INTERESTS:

Applied Thermodynamics, Refrigeration and Air-Conditioning, Dynamics, Mechanical Vibration, Fluid Mechanics, Economics, Project Management.

RESEARCH INTERESTS:

Nano-structure Materials, Mechanical Characterization, Synthesis of Nano-structured materials, Dynamics and Control

EXPERIENCE:

Lecturer, Engineering Technology Department, Mar 2018 – July 2018
ANSI Institute of Management & Sciences, Mardan, Pakistan

Lecturer, Engineering Technology Department, September 2014 – Feb 2018
Dir College of Science & Technology, Dir, Pakistan

SOFTWARE SKILLS:

- Creo Parametric
- AutoCAD
- MATLAB
- MS Office

RESEARCH PROJECTS:

- Design and Testing of Vibration Based Machine Monitoring System
- An Efficient and Novel technique for Electronic Load Controller to compensate the current and voltage harmonics
- Design of Pattern Analyzer for Fault Detection in Running Machines
- Frequency and Voltage Control of an Isolated Wind Turbine Through Electronic Load Controller

UNDERGRADUATE RESEARCH SUPERVISION:

- Design of Hybrid Power Generation System
- Design and Testing of Footstep Power Generation System
- Study and Analysis of Water Turbines
- Design and Analysis of Hydraulic Turbines for Micro-Hydro Applications
- Design of Vortex Turbine for Micro-Hydro Applications
- Design of Agriculture Spraying Machine
- Design and Fabrication of 2-axis Filament Winding Machine

RESEARCH PUBLICATIONS:

- Design and Testing of Vibration Based Machine Monitoring System in 2 Days National Conference Professional Trends in *Industrial and Systems Engineering (PTISE) 2018* (24, 25 April, 2018).
- An Efficient and Novel technique for Electronic Load Controller to compensate the current and voltage harmonics in *Engineering Science and Technology, an International Journal, Volume 23, Issue 5, October 2020, Pages 1042-1057.*
- Design of Pattern Analyzer for Fault Detection in Running Machines in *International Journal of Scientific & Engineering Research Volume 12, Issue 8, August-2021 411 ISSN 2229-5518, Pages 411-416.*
- Microstructural Characterization of Low carbon steel (AISI 1008) used in oil and gas pipeline in International Journal of Scientific & Engineering Research Volume 12, Issue 8, August-2021 609 ISSN 2229-5518, *Pages 609-614.*
- Frequency and Voltage Control of an Isolated Wind Turbine Through Electronic Load Controller in *Springer Journals, Electrical Engineering*