

CURRICULUM VITAE

WASEEM AKRAM / MECHANICAL ENGINEER

Career Objective



To encourage creativity, Psychomotor skills and higher order thinking in a way that increases student performance. A position that offers opportunities for career growth, and to keep up with cutting-edge teaching technologies.

Personal Information & contact details

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Work Experience

4 Lab Engineer

(Jan 2018 – Present)

Department of Mechanical Engineering International Islamic University Islamabad, Pakistan.

Lab Engineer

(Feb 2016 - Dec 2017)

Department of Mechanical Engineering CECOS University of IT and Emerging Sciences Peshawar KPK Pakistan.

Lecturer

(Sep 2015 - Feb 2016)

Department of Mechanical Govt. College of Technology Nowshera KPK Pakistan.

4 Internship

(Jul 2014 - Aug 2014)

Boiler Maintenance & Processes Heavy Industry Taxila, Punjab Pakistan.

Academic Qualification

PhD Mechanical Engineering

(3.66/4.00)

International Islamic University Islamabad

Research In Progress

MS Mechanical Engineering

(3.67/4.00)

University of Engineering & Technology (U.E.T) Peshawar

Thesis: Corrosion Prevention in 316L Stainless Steel, Exposed to Acidic Medium, using Polytetrafluoroethylene (PTFE) Coating

BS Mechanical Engineering

(3.49/4.00)

International Islamic University Islamabad

Thesis: Design of Heat Exchanger as per Section VIII Divison I and TEMA (R)

Final Year Project (MS)

↓ Corrosion Prevention in 316L Stainless Steel, Exposed to Acidic Medium, using Polytetrafluoroethylene (PTFE) Coating

The main objective of this research was

- To deposit of PTFE onto 316L SS through spray coating
- To investigate the electrochemical performance of coated sample
- To examine PTFE coated scratch hardness ability

Final Year Project (BS)

↓ Design of Heat Exchanger as per ASME codes Sec VIII Division I and TEMA (R) Using COMPRESS CODEWARE

The main objective of this Project was

- Design of shell and tube
- Design validation
- Material selection
- Fabrication and testing through compress codware

Courses/ Labs Taught

- ♣ MT-392 CNC Machine
- MT-382 Manufacturing Process
- ♣ MT-223 CAD/CAM
- ♣ GS-102L Applied Physics Lab
- ♣ ME-113L Engineering Mechanics I Lab
- ♣ ME-112L Workshop Practice Lab
- **♣** ME-417L Production Engineering Lab

Following Labs were taught throughOutcome based education.

- ME-215L Mechanics of Materials-II Lab
- ME-313L Manufacturing Processes Lab
- ♣ ME-116L Computer Aided Drawing (Cad) Lab
- ♣ ME-412L Introduction to Finite Element Analysis Lab
- ♣ ME-221L Thermodynamics-II Lab

Journal Publications

- Characterization of PTFE Film on 316L Stainless Steel Deposited through Spin Coating and Its Anticorrosion Performance in Multi Acidic Mediums Materials (ISSN 1996-1944) (Published)
- ♣ Waseem Akram, Afzal Khan. "Surface Enhancement of SS 304L via Polyurethane (PUR) using Airbrush Spray Coating", Volume. 4 Issue. 8, - 2019, International Journal of Innovative Science and Research Technology (IJISRT), www.ijisrt.com. ISSN - 2456-2165, PP: - 278-280. (Published)

♣ Corrosion Prevention Performance of 316L Stainless Steel exposed to sulfuric acid Medium, using PTFE Coating (Submitted)

Professional Membership

- Pakistan Engineering Council, PEC # (MECH/30645)
- ♣ American Society of Mechanical Engineers, ASME # (000102583927)

Professional Skills

- ANSYS Workbench (Static Structural)
- CES Edu-pack
- Solid works
- Pro-E Wildfire 5.0
- E-Draw Mind map
- Microsoft
- E-Cat carrier Building HVAC software
- Proteus
- Compress Codeware
- 20-Sim Simulator
- Denford VR Milling V5.55
- OPTIMUM L28 CNC LATHE W/SIEMENS CONTROL
- Computer programming C++

Professional Trainings

- ♣ Workshop on "Center of Training & Professional Development (CTPD)" held on Aug 29 to Sept 5, 2016.
- ♣ 4 days Professional Training Course on ANSYS Fluent for Engineering, Scientists, fresh graduates and professionals at Continuing Engineering Education Centre of University of Engineering & Technology Peshawar, 24th -27th October, 2017.
- ♣ 2 Days' Workshop on OBE by Dr. Kamran Afaq at CECOS University of IT & Emerging Science, Peshawar. August, 2017.
- ♣ 4th International conference on "Power Generation systems and Renewable Energy Technologies" 10-12 September 2018 Islamabad.
- ♣ Seminar Entrepreneurial Eco-System in Pakistan" held on 28th March 2017.
- ♣ 02 Days workshop on outcome based education (OBE) system from 3rd and 4th December 2017 at IIUI.

- ◆ 01- Day "Workshop on Managemnet & Leadership in Engineering Organization/ Institions to enhance Productivity/ Output" held on 21st Februray 2020 at DME, FET, IIUI in collaboration with Pakistan Engineering Council (PEC).
- ♣ 0.5 CPD Webinar on "Complex Engineering Problems (CEPs) & Complex Engineering Activities (CEAs)" held on 21st August 2020 by The University of Lahore.
- ♣ Workshop on "Cyber-security Awareness and Innovation" held on 25th October 2020 by DC&S in Collbration with Lincon Corner IIU Islmaabd.

Awards / Certificates

- ♣ 1st Position in School in Secondary School Examination
- ↓ 1st position in Poster Design in the Final Year Project exhibition 2015 at FET,IIUI
- ↓ 1st position in Poster Design 2016 DME, CECOS University of IT & Emerging science.

Research Intrest

- **♣** Application & Selection of Materials
- Composite Materials
- Corrosion
- **4** Thin Film Coating
- ♣ 3D Printing / Additive Manufacturing
- Material Charactrization
- Mechanical Properties
- Mechanical Behavior of Materials
- Material Characteristics
- **4** Microstructure
- Mechanics of Materials
- ♣ Heat Treatment of metal and alloys

References

Refences will be furnished upon request