

Muhammad Ibrahim

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QUALIFICATION

- **PhD in progress, International Islamic University Islamabad.**
- **2017 M.S in Manufacturing System Engineering**
University of Engineering & Technology Peshawar, Pakistan. (91.50%)
- **2010 B.S in Mechanical Engineering**
Ghulam Ishaq Khan Institute of Engineering Sciences & Technology, Topi, Pakistan. (69.00%)
- **2005 FSc (Pre-Engineering)**
Brains Postgraduate Degree College Peshawar, Pakistan. (72.54%)
- **2002 Matriculation**
Government High School Swabi, Pakistan. (71.05%)

TECHNICAL SKILLS

- MATLAB
- Pro-E
- ANSYS (Work Bench)
- Minitab
- Tora

EXPERIENCE

1. Lecturer at Islamic International University Islamabad (July 2018-till date)

- Member of Departmental Quality Assurance Committee (DQAC).
- Member and Secretary of Curriculum Review Committee (CRC).
- Member of Class Inspection Committee (CIC).
- Deputy Lab Manager DME.
- Supervisor of BSc & B-Tech final year projects.
- In-Charge FET sports gala-2018 event IIUI.
- Member organizing committee of 4th international conference on "Power Generation Systems & Renewable Energy technologies (PGSRET-2018).
- Taught Lab
 - Engineering Drawing and Graphics
- Taught Theory Courses
 - Engineering Drawing and Graphics
 - Linear Algebra and Ordinary Differential Equations
 - Machine Design & CAD II
 - Industrial Materials

2. LAB Engineer at Islamic International University Islamabad (Feb 2013-July 2018)

- Member and Secretary of Departmental Quality Enhancement Cell (DQAC).
- Secretary Departmental Faculty Meetings (DFM) on outcome based education system.
- Supervisor of two BSc final year projects 2017-2018.
- Co-supervisor of three BSc final year projects 2013-2014.
- Design layouts for all Mechanical Engineering Labs.
- Member of two Committees of 5th open house 2014.
 - Committee *for* Industrial Stall
 - Committee *for* Floor Planning
- In-charge of transport Committee of 6th open house 2015.
- In-charge of transport Committee of 7th open house 2016.
- In-charge of transport Committee of 8th open house 2017.
- Member organizing committee of 2nd international conference on “Power Generation Systems & Renewable Energy technologies (PGSRET-2015).
- In-charge of transport Committee of 2nd international conference on “Power Generation Systems & Renewable Energy technologies (PGSRET-2015).
- Taught Labs.
 - Workshop Technology
 - Mechanics of Material
 - Heat & Mass Transfer
 - Production Engineering
 - Mechanics of machines
 - Engineering Drawing & Graphics
 - Basic Mechanical Technology
- Taught Theory Courses.
 - Material Handling
 - Industrial Materials
 - Basic Mechanical Technology
 - Engineering Drawing & Graphics
 - Mechanics of Material-I
 - Linear Algebra and Ordinary Differential Equations

3. Internee at Cherat Cement Company Ltd (1 Nov 2010 to 15 Dec 2010)

Understanding of the whole plant process of how cement is produced

- Crushing
- Raw mill
- Kiln
- Cement mill
- Packing

4. Internee at KSB Pumps Hassanabdal (30 June 2008 to 8 August 2008)

To calculate the value-added and non-value-added time in assembling different types of pumps, causes of non-value-added time and their recommendations.

- Centrifugal pumps
- Reciprocating pumps
- Submersible pumps

MASTER THESIS PROJECT

Optimization of Gas Tungsten Arc Welding Parameters by Using Taguchi Method

Gas tungsten arc welding (GTAW) is a widely used welding technique in which a non-consumable electrode of tungsten material and shielding gas is used to produce arc for melting of the base metal. The objective of this thesis is to use Taguchi optimization technique to find the optimal results for GTAW. Taguchi L25 orthogonal array has been used for the design experiments. Welding experiments have been performed on stainless steel 304L grade specimen having a thickness of 3mm. GTAW parameters namely arc current, torch angle, torch speed, shielding gas flow rate and arc length effects on response parameters. The response parameters depth of penetration and bead width has been investigated. Optimal parameters have been determined through signal to noise ratio approach. Significant factors have been determined through analysis of variance approach. It was observed that the arc current is the significant factor for depth of penetration and bead width, while torch angle is significant only for bead width. Predicted results have been verified through confirmation test for each response parameter.

RESEARCH PAPER (Journal)

Muhammad Ibrahim, Shahid Maqsood, Rafiullah Khan, Muhammad Amjad, Sakhi Jaan (2016), "OPTIMIZATION OF GAS TUNGSTEN ARC WELDING PARAMETERS ON PENETRATION DEPTH AND BEAD WIDTH USING TAGUCHI METHOD", J. Engg. and Appl. Sci. (JEAS) Vol. 35, No. 2, pp 55-59.

SHORT COURSES

Attended and completed "Engineering analysis with ANSYS work bench" training course conducted at Skill development council, Islamabad, from 11, February 2016 to 05, March 2016.

HONOURS AND AWARDS

- Awarded certificate of participation in the 02-Days workshop on outcome based education (OBE) System organized by Faculty of Engineering & Technology, International Islamic University, Islamabad in collaboration with Pakistan Engineering Council from 03-04, December, 2017.
- Awarded certificate of participation in the workshop on "Applications of Primavera" organized by Faculty of Engineering & Technology, International Islamic University, Islamabad in collaboration with Pakistan Engineering Council on 02, January, 2017.
- Awarded certificate of achievement in the 05-Days continues professional development workshop on "Faculty Skills Development" organized by Department of Mechanical Engineering, Faculty of Engineering & Technology, International Islamic University, Islamabad, from 15th -19th, June, 2015.
- Awarded certificate of participation in the 04-Days HEC 18th master trainers-faculty professional development program (MT-FPDP) cascading workshop organized by Faculty of Engineering & Technology, International Islamic University, Islamabad, from 15th -19th, June, 2015.
- 1st position in college.
- Performance award for BS final year project.
- Member of Pakistan Engineering Council (PEC).
- Certified Professional Engineer from Pakistan engineering council in Manufacturing Engineering.