

CURRICULUM VITAE (CV)

Objective: Passionate to work in a dynamic environment that encourages creativity so that I can apply my knowledge and experience for the growth of organization.

Dr. Muhammad Muzamil

Date of birth: 23 march 1988

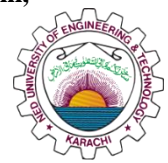
•Citizenship: Pakistan

Contact

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Education (From Top to Bottom)

- 2016 to 2020 PhD (Mechanical Engineering) from the School of Mechanical Engineering, Northwestern Polytechnical University, Xi'an, PR China. (Completed in July 2020)
Thesis Title: Experimental Investigation of Tungsten Inert Gas (TIG) Welding Process on Aluminum Alloy for Improved Mechanical Behavior
- 2011to 2013 MS in Mechanical Engineering (Design) with Thesis, NEDUET, Karachi, Pakistan.
- 2007 to 2010 Bachelors of Materials Engineering, NEDUET, Karachi, Pakistan.



Experiences (From Recent to Previous)

Teaching in NED University of Engineering & Technology in the Faculty of *Mechanical Engineering Department*.

Lecturer (December 2012 - April 2016)

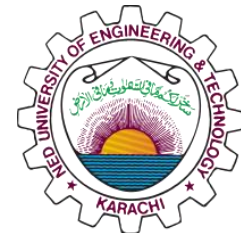
Assistant Professor (May 2016- Till Today)

Teaching the particular subjects are listed below in Under-Graduation:

- Engineering Mechanics
- Manufacturing Processes /Production Engineering I and II
- Operations Management
- Materials and Metallurgy
- Plant Maintenance

Teaching in Post-Graduation

- Project Management
- Organizational System
- Quality and Reliability Engineering



Worked in ALSONS Industries (PVT.) LTD, from April 2011 to December 2012, in Quality Control & Assurance Department as an Assistant Manager for Manufacturing & Process Auditing.

- Responsible of making QSP (Quality system Procedure) and Inspection Procedures
- Leading Final and In-process Quality Control section
- Lead Process Auditor of Manufacturing processes

Research Profile (Journal Paper Publications)

Publications on Joining / Welding (Manufacturing Processes)

- [1] **Muhammad Muzamil**, Jianjun Wu, Maaz Akhtar, Kashif Azher, Arfan Majeed, Zengkun Zhang, Atif Shazad. Nanoparticle induced control (MWCNTs-TiO₂) on grain size and tensile strength response and multi response optimization on TIG welded joints (Accepted: Transaction Canadian Society of Mechanical Engineering, 2022 (Impact Factor: 1.450)
- [2] **Muhammad Muzamil**, Jianjun Wu, Muhammad Samiuddin, Arfan Majeed, Sumair Uddin Siddiqui, Muhammad Mudassir. "Macro-Mechanical behavior of unique surface welded joints (AA5083) utilizing tungsten inert gas welding against single-stage homogenization annealing". Rev. Metal 56, no. 3 (2020): e173. (Impact Factor: 0.8)
- [3] **Muhammad Muzamil**, Jianjun Wu, Maaz Akhtar, Vivek Patel, Arfan Majeed, and Junzhou Yang. "Multicomponent enabled MWCNTs-TiO₂ nano-activating flux for controlling the geometrical behavior of modified TIG welding joint process." Diamond and Related Materials 97 (2019): 107442. (Impact Factor: 2.650)
- [4] **Muhammad Muzamil**, Jianjun Wu, Maaz Akhtar, Zengkun Zhang, Arfan Majeed, and Junzhou Yang. "Modified TIG welding joint process: An approach to improve microstructure and fracto-mechanical behavior by MWCNTs inducement in Al-Mg-Si alloy." Materials 12, no. 9 (2019): 1441. (Impact Factor: 3.057)
- [5] **Muhammad Muzamil**, Jianjun Wu, and Muhammad Samiuddin. "Modified utilization of semi-sectioned tubes as filler coated with MWCNTs-TiO₂ in TIG arc welding to recover fusion lost mechanical properties of the weldment." Journal of the Brazilian Society of Mechanical Sciences and Engineering 41, no. 1 (2019): 1-13. (Impact Factor: 2.220)
- [6] **Muhammad Muzamil**, Jianjun Wu, Muhammad Samiuddin, Arfan Majeed, and Zengkun Zhang. "The response of heat-treatable filler on non-heat-treatable aluminum alloy substrate against age hardening cycle for intelligent development of surface welded joints using TIG welding process." Journal of the Brazilian Society of Mechanical Sciences and Engineering 41, no. 5 (2019): 1-12. (Impact Factor: 2.200)

Publications on Additive Manufacturing (SLM)

- [7] Zhang Yingfeng, Arfan Majeed, **Muhammad Muzamil**, Jingxiang Lv, Tao Peng, and Vivek Patel. "Investigation for macro mechanical behavior explicitly for thin-walled parts of AlSi10Mg alloy using selective laser melting technique." Journal of Manufacturing Processes 66 (2021): 269-280. (Impact Factor: 4.086)
- [8] Majeed, Arfan, Altaf Ahmed, Jingxiang Lv, Tao Peng, and **Muhammad Muzamil**. "A state-of-the-art review on energy consumption and quality characteristics in metal additive manufacturing processes." Journal of the Brazilian Society of Mechanical Sciences and Engineering 42, no. 5 (2020): 1-25. (Impact Factor: 2.220)
- [9] Majeed, Arfan, **Muhammad Muzamil**, Jingxiang Lv, Bufan Liu, and Fiaz Ahmad. "Heat treatment influences densification and porosity of AlSi10Mg alloy thin-walled parts manufactured by selective laser melting technique." Journal of the Brazilian Society of Mechanical Sciences and Engineering 41, no. 6 (2019): 1-13. (Impact Factor: 2.220)
- [10] Majeed, Arfan, **Muhammad Muzamil**, Muhammad Zaheer Awan, and Aurangzeb Siddiqui. "Developing of manufacturing cycle architecture for fused deposition modeling technique." International Journal of Lightweight Materials and Manufacture 2, no. 3 (2019): 212-216. (Index in Scopus)

Publications on Design, Manufacturing Processes, and Materials Engineering

- [11] Atif Shazad, Junaid Jadoon, Muhammad Uzair, Maaz Akhtar, Abdul Shakoor, **Muhammad Muzamil**, Mohsin Sattar. Effect of composition and microstructure on the rusting of MS Rebars and ultimately their impact on mechanical behavior joints (Accepted: Transaction Canadian Society of Mechanical Engineering, 2022. (Impact Factor: 1.450)
- [12] Samiuddin, Muhammad, Li Jinglong, **Muhammad Muzamil**, Muhammad Ali Siddiqui, Sufyan Naseem, and Xiong Jiangtao. "A Study of Induction Hardening Parameters for the DIN 42CrMo4 Alloy through Its Microhardness, Corrosion Resistance, and Microstructure Examination." *Physics of Metals and Metallography* 122, no. 11 (2021): 1121-1131. (Impact Factor: 0.97)
- [13] Samiuddin, Muhammad, Jinglong Li, Ali Dad Chandio, **Muhammad Muzamil**, Sumair Uddin Siddiqui, and Jiangtao Xiong. "Diffusion welding of CoCrNi medium entropy alloy (MEA) and SUS 304 stainless steel at different bonding temperatures." *Welding in the World* 65, no. 11 (2021): 2193-2206. (Impact Factor: 2.103)
- [14] Akhtar, Maaz, Muhammad Imran Lashari, **Muhammad Muzamil**, Mohsin Sattar, Muhammad Imran Shabir, Sumiya Mohsin, and Muhammad Samiuddin "Comparative investigation of corrosion rate on A-36 steel with different coatings include ZnO and TiO." *Revista de Metalurgia* 57, no. 2 (2021): e193. (Impact Factor: 0.8)
- [15] Yang, Junzhou, Jianjun Wu, Dongshen Yang, Qishuai Wang, Kaiwei Wang, Zengkun Zhang, Mingzhi Wang, and **Muhammad Muzamil**. "A modified constitutive model with grain rotation for superplastic forming of Ti-6Al-4V alloy." *Journal of Engineering Materials and Technology* 142, no. 2 (2020). (Impact Factor: 4.669)
- [16] Yang, Junzhou, Jianjun Wu, Dongshen Yang, Qishuai Wang, Kaiwei Wang, Zengkun Zhang, Mingzhi Wang, and **Muhammad Muzamil**. "A modified constitutive model with grain rotation for superplastic forming of Ti-6Al-4V alloy." *Journal of Engineering Materials and Technology* 142, no. 2 (2020). (Impact Factor: 1.144)
- [17] Sheikh, Muhammad Zakir, Wang Zhen, Suo Tao, Li Yulong, Zhou Fenghua, Arfan Majeed, **Muhammad Muzamil**, Uzair Ahmed Dar, and Guozhong Gao. "Dynamic failure of un-strengthened aluminosilicate glass." *Theoretical and Applied Fracture Mechanics* 104 (2019): 102325. (Impact Factor: 3.021)
- [18] Akhtar, Maaz, Sayyad Zahid Qamar, **Muhammad Muzamil**, and Ali Nadeem. "Optimum heat treatment of aluminum alloy used in manufacturing of automotive piston components." *Materials and Manufacturing Processes* 33, no. 16 (2018): 1874-1880. (Impact Factor: 3.046)
- [19] **Muhammad, Muzamil**, Mubashir Ali Siddiqui, and Samiuddin Muhammad. "Experimental investigation and optimization of process parameters for through induction hardening using factorial design of experiments." *Journal of Engineering Research* 5, no. 3 (2017). (Impact Factor: 0.5)
- [20] **Muhammad Muzamil**, Maaz Akhtar, Muhammad Samiuddin, and Murtuza Mehdi. "Effect of heat treatment on impact resistance of AU5GT and AS7G06 aluminum alloys." *Journal of Mechanical Science and Technology* 30, no. 10 (2016): 4543-4548. **(Impact Factor: 1.345)**
- [21] **Muhammad Muzamil**, Mubashir Ali Siddiqui, and Jianjun Wu. "Numerical and experimental investigation of wind loadings on vertical axis wind turbine blade deflection." *Journal of Mechanical Science and Technology* 30, no. 12 (2016): 5555-5563. **(Impact Factor: 1.345)**

Honors and Awards

- Won Best Post Presentation award in 2022 in IMEC (IEP Award for Best Poster), 11th International Mechanical Engineering Conference.
- Award Full Scholarship for PhD Studies (Chinese Government Scholarship CSC for the duration of 4 years, 2016-2020).
- Nominated for Top-Five Excellent International Student award 2019, International School, Northwestern Polytechnical University, NPU.
- Received Best-Researcher Award from NED University of Engineering & Technology for Publishing Research Articles in 2019 and 2021.
- Received letter of commendation and award for research publications in 2016 and 2019 from NEDAASC (NED Alumni Association of Southern California, USA).
- Received Certificate of Appreciation from the Managing Direction of Alsons Industries PVT LTD for well-organizing and the Best Decorated Stall in IDEAS 2012.

Supervised/Supervising Post-Graduate and Undergraduate Projects

Post-Graduate

- Post treatment mechanical behavior assessment of SLM (Selective laser melting) additively manufactured specimens.
- Thermal analysis of welding heat-source on Metallic Materials.
- Experimental study of the new surface development (Additive) for repairmen works.
- Analysis of Machining on additively fabricated specimens through welding.
- Mechanical behavior assessment of additively manufactured layer by layer structure of ER-4043 and ER-4047 fillers.

Under-Graduate

- Static Testing of Wind Turbine Blade
- Mechanical Characterization of Aluminum
- TIG welding on Aluminum 2024
- Crack Propagation Modeling on Abaqus Software
- Wind Turbine Blade Manufacturing through VRTM
- Utilization of Welding Operations for Repair & Maintenance Work

Research Funding Awarded

- Awarded with “Seed Funding” Independent Research Project (IRP) in 2021 of 1Million PKR.