

Dr. MUHAMMAD YASIR



Gender: Male
Date of Birth: July 8, 1985
NIC No: 37406-1255059-3
Passport No: AW6820592
Present Address House No 26F/124 Wah Cantt, Pakistan
Permanent Address Manki Adda Tehsil Lahor, District Swabi, KPK, Pakistan
Mobile No (+92)3005223944
Email: muhammad.yasir@wecuw.edu.pk / yasirutp16@gmail.com
Skype id: unique470
Nationality: Pakistan
Current Affiliation Wah Engineering College, Wah Cantt, Pakistan
Current Position Chairperson/ Assistant Professor Mechanical Engineering

Career Objective

To work with a team of educational professionals in order to achieve a position to utilize my skills and abilities in the organization that offers Professional growth while being resourceful, innovative and flexible.

ACADEMICS QUALIFICATIONS

PhD Mechanical Engineering, 2016-2020
Universiti Teknologi PETRONAS, Bandar Seri Iskandar, Malaysia

MS Mechanical Engineering, 2014-2016
Universiti Teknologi PETRONAS, Bandar Seri Iskandar, Malaysia

BSc Industrial and Manufacturing, 2005-2010
University of Engineering & Technology, Lahore, Pakistan

ONLINE TEACHING EXPERIENCE

(4 YEARS)

Teaching & invigilation through Microsoft Team, Zoom. Assessment through Moodle in partnership with University Teknologi PETRONAS, and conducting quizzes online tests, exam and submission of assignment through AVICENNA in partnership with University of Wah.

TEACHING EXPERIENCE-UNIVERSITY LEVEL

(9 YEARS)

Chairperson/ Assistant Professor (2021-Present)
Mechanical Department, Wah Engineering College, Wah Cantt Pakistan

Duties & Responsibilities: Managing the administrative duties, member of the Board of the academic council, Board of faculty, Board of studies, Industrial advisory board, as deputy editor of the journal (UWJST), Teaching, Organizing short courses, CPD activities, building academia and industrial

linkages, students counseling, Graduate student research supervision, curriculum development, exam supervision, paper marking, student's seminars management.

Head of Department/ Assistant Professor (2020-2021)

Mechanical Department, NFC institute of Engineering and Technology, Pakistan

Duties & Responsibilities: Managing the administrative duties, member of the Board of the academic council, Board of faculty, Board of studies, Industrial advisory board, as deputy editor of the journal (UWJST), Teaching, Organizing short courses, CPD activities, building academia and industrial linkages, students counseling, Graduate student research supervision, curriculum development, exam supervision, paper marking, student's seminars management.

Graduate Research Assistant, (6 years, 2014-2020)

Centre of advanced functional Materials, Universiti Teknologi PETRONAS, Malaysia.

Duties & Responsibilities: Teaching tutorials, Exam supervision, Paper marking, Project writing, Lab demonstration.

Lab Engineer, (3 years, 2010-2013)

Comsats Institute of Technology, Pakistan

Duties & Responsibilities: Teaching tutorials, Exam supervision, Paper marking, Project writing, Lab demonstration.

Degree Students Supervised (2014 – 2020)

UTP

- Mr. Abdul Haleem (Master student, University of Wah, Pakistan, 2023).
- Miss. Jasmine (Final year student, Universiti Teknologi PETRONAS, Malaysia, 2018).
- Mr. Sarower Kabir (Master student, Universiti Teknologi PETRONAS, Malaysia, 2018).
- Mr. Afif Afiq (Final year student, Universiti Teknologi PETRONAS, Malaysia, 2018).
- Mr. Alif (Final year student, Universiti Teknologi PETRONAS, Malaysia, 2018).
- Mr. Ridhuan (Final year student, Universiti Teknologi PETRONAS, Malaysia, 2017).
- Miss. Syahirah Rodzhan (Final year student, Universiti Teknologi PETRONAS, Malaysia, 2017).
- Miss Clarisse (French exchange students Université de Bourgogne, France, 2016).
- Mr. Khalid Al Elam (French exchange students Université de Bourgogne, France, 2015).
- Miss Selam Boubou (French exchange students Université de Bourgogne, France, 2015).
- **Research Evaluation**
- **External Examiner**
- **Level: Master Dissertation**
- Modeling, Development and Hardware-In-Loop Simulation of a Robotic Module using MATLAB/Simulink
University of Wah, Pakistan

COURSES TAUGHT AT MS/PhD LEVEL OF EDUCATION

- Advanced Manufacturing Process – [University of Wah, Pakistan](#)
- Special topics in Manufacturing and Materials - [University of Wah, Pakistan](#)
- Advanced Engineering Materials - [University of Wah, Pakistan](#)
- Research Methodology - [University of Wah, Pakistan](#)
- Advanced Stress Analysis – [NFCIET Multan, Pakistan](#)
- Research projects - [NFCIET Multan, Pakistan](#)

COURSES TAUGHT AT UNDERGRADUATE (BSC) LEVEL OF EDUCATION

1. Introduction to Engineering - [University of Wah, Pakistan](#)
2. Manufacturing Processes - [University of Wah, Pakistan](#)
3. Fundamentals of Engineering - [University of Wah, Pakistan](#)
4. Engineering Drawing - [University of Wah, Pakistan](#)
5. Thermodynamics - [University of Wah, Pakistan](#)
6. Physics I & II - [Universiti Teknologi PETRONAS](#)
7. Workshop I & II [NFCIET Multan, Pakistan](#)
8. Material Science I & II – [Univeristi Teknologi PETRONAS](#)
9. Statics - [Universiti Teknologi PETRONAS](#)
10. Mechanics of Materials
11. Technical Writing – [COMSATS Islamabad](#)
12. Dynamics [University of Wah, Pakistan](#)
13. Engineering Economy - [Universiti Teknologi PETRONAS](#)
14. Product Design & Development - [University of Wah, Pakistan](#)
15. Engineering Measurements & Instrumentations [University of Wah, Pakistan](#)
16. Heat Transfer - [University of Wah, Pakistan](#)

Teaching Assistant (2014-2020)

Mechanical Engineering modules at [Universiti Teknologi PETRONAS, Malaysia](#) (Nov-2014 to Nov- 2020) (tutorial and labs)

1. Material Science and Engineering
2. Manufacturing Engineering
3. Mechanical Vibrations
4. Fluid Mechanics
5. Thermodynamics
6. Failure Analysis

RESEARCH INTEREST

- Intumescent Fire Retardant Coatings
- Metal cutting processes and Manufacturing techniques

- Welding and its parameters
- Polymer Composites
- Filament development and 3D printing
- Phase change materials

Work Assignments

Researcher (2014 – 2020)

UTP

The following projects were completed and worked on during the postgraduate degree:

Enhancement of Properties of Fire Retardancy and Strength of Intumescent Coatings by Refractory-Types Hybrid Fibre Reinforcement for Passive Fire Protection of Steel Structures.

Development of Silicon Epoxy Based Intumescent Fire Retardant Coating for Fire Protection of Oil and Gas Industry.

Improvement of Anti-Aging and Corrosion Resistance of Intumescent Coating by Geopolymer Topcoats for Steel Structures.

Resistance and Strength Properties of Intumescent Coatings by Refractory-Types Hybrid Fibers In situ Catalytic Cracking of Biomass.

The study of machinability and stress corrosion cracking susceptibility of AISI 316L SS using end-milling.

Development of T7A spring steel material.

Reviewer / Sub-reviewer of Research Publications (2014 – Current)

UTP

Journal of Multiscale and Multidisciplinary Modeling, Experiments and Design 2021

Journal of Building and Materials 2020

Symposium on Materials Lecture Competition 2018

National Symposium on powder Metallurgy and Particulate Materials 2017

Skill Set

Engineering Softwares: Oracle, Design of Experiments, AnSys, ABAQUS, Matlab

Characterization Equipments: Fourier Transform Infrared Spectroscopy (FTIR), Field Emission Scanning Electron Microscope (FESEM), X-ray Diffraction (XRD), Gas Chromatography (GCMS), Thermogravimetric Analysis (TGA), X-Ray Photoelectron spectroscopy (XPS), Thermogravimetric Mass Spectroscopy (TG-MS), Universal Testing Machine (UTM), Hardness Testing (Vickers, Brinell), Scratch testing (Revotest), Adhesion Testing (Elcometer 108), Grindometer (Elcometer)

Professional Collaborations

University of Jeddah, KSA

Eindhoven University of Technology, Netherland

Kano state Polytechnic, Nigeria

Université de Lille, France

Professional Courses

ANSYS Mechanical Course (Mechanical structures), Universiti Teknologi PETRONAS, Malaysia, 2015

CNCTRAIN course on Milling and turning, Universiti Teknologi PETRONAS, Malaysia, 2015

Workshop on PEC cost and contract documents, University of Engineering and Technology, Pakistan, 2010

POF technical training institute on machining of steel alloys, POF, Pakistan, 2008

Awards & Achievements

SILVER MEDAL on “Adoption of PBL for Large Engineering class to Promote Teamwork and social Integration” in **TLIF**, Universiti Teknologi PETRONAS, 2018

Remained **House Captain** of School for a year, Saint Paul High School, Pakistan, 2003

Ist Position overall in School in SSC board examination, Saint Paul High School, Pakistan, 2003

Appointed as head boy, Saint Paul High School, Pakistan, 2002-2003

Professional affiliation

- HEC Approved Supervisor
- Pakistan Engineering Council

Presentations & Talks

Presentation on “*Experimental Investigation to Improve Surface Integrity of Biomedical Devices by End-Milling AISI 316L Stainless Steel*” at:
ICMIE, Singapore, 2015.

Presentation on “*Synergistic effect of basalt fiber on the thermal properties of intumescent fire retardant coating*” at:
KSL Hotel & Resort JB, Malaysia, 2018.

Presentation on “*Effect of basalt fibres reinforcement and aluminum trihydrate on the thermal properties of intumescent fire retardant coatings*” at:
Kings Green Hotel Melaka, Malaysia, 2017.

Presentation on “*Evaluation of chips formation of AISI 316L SS using precision end- milling*” at:
Kuala Lumpur Convention Centre, Malaysia, 2016.

Representative Publications

<https://scholar.google.com/citations?user=uOwOoYIAAAAJ&hl=en>

Research Publications

Research Publications

1. **Muhammad Yasir**, Mohd Danish, Mozammel Mia, Munish Kumar Gupta & Murat Sarikaya, "Investigation into the surface quality and stress corrosion cracking resistance of AISI 316L stainless steel via precision end-milling operation", **The International Journal of Advanced Manufacturing Technology**, 112, 1065–1076, **2021**. (IF 3.2)
2. **M. Yasir**, F. Ahmad, P. S. M. M. Yusoff, S. Ullah, and M. Jimenez, "Latest trends for structural steel protection by using intumescent fire protective coatings: a review," **Surface Engineering**, pp. 1-30, **2019** (IF 2.8).
3. **Muhammad Yasir**, Faiz Ahmad, Puteri S.M.Megat-Yusoff, Sami Ullah and Maude Jimenez, "Quantifying the effects of basalt fibers on thermal degradation and fire performance of epoxy-based intumescent coating for fire protection of steel substrate", **Progress in Organic Coatings**, vol 132, Pages 148-158, **2019** (IF 6.3).
4. **Muhammad Yasir**, Norlaili Binti Amir, Faiz Ahmad, Sami Ullah, Maude Jimenez, "Effect of basalt fibers dispersion on steel fire protection performance of epoxy-based intumescent coatings", **Progress in Organic Coatings**, vol. 122, pp. 229-238, 9, **2018** (IF 6.3).
5. M. Ali, F. Ahmad, P. Melor, **M. Yasir**, N. Yahya, M. Aslam, "Influence of powder loading on densification and microstructure of injection molded Fe-50Ni soft magnetic alloys," **Materialwissenschaft und Werkstofftechnik**, vol. 50, pp. 274-282, **2019** (IF 2.4).
6. Shahid Iqbal, Adnan Tariq, Wajid Ali Khan, Waseem Shahzad, Muhammad Azeem, Waqas Javid, Haider Ali, **Muhammad Yasir**, Muhammad Shakeel, "Comparative Analysis of Static and Fatigue Strength of Carbon Fiber and Al 6061-T6 Double Strap Joint", **Materials Transactions**, 2022. (IF 1.38)
7. **Muhammad Yasir**, Faiz Ahmad, "Thermal performance of single and hybrid fibers reinforced epoxy-based intumescent fire resistant coating", **Materials Research Innovations**, **2022** (2.4).
8. **Muhammad Yasir**, Norlaili Binti Amir, Faiz Ahmad, Sami Ullah, Maude Jimenez, "The Influence of Fiber Length and Concentration on the Thermal Properties of Basalt Fiber Reinforced Intumescent Coating", **International Journal of Recent Technology and Engineering (IJRTE)**, **2018**.
9. **M. Yasir**, T. L. Ginta, A. U. Alkali, M. Danish, "Experimental Investigation to Improve Surface Integrity of Biomedical Devices by End-Milling AISI 316L Stainless Steel", **Applied Mechanics and Materials**, Vols. 789-790, pp. 141-145, Sep. **2015**.
10. **M. Yasir**, T. L. Ginta, B. Ariwahjoedi, A. U. Alkali and M. Danish, "Effect of cutting speed and feed rate on surface roughness of AISI 316L SS using end-milling", **ARNP Journal of Engineering and Applied Sciences**, pp. 2496-2500, vol. 11, Feb. **2016**.
11. **M. Yasir**, T. L. Ginta, B. Ariwahjoedi, A. U. Alkali and M. Danish, "Evaluation of chips formation of AISI 316L SS using precision end-milling", **ARNP Journal of Engineering and Applied Sciences**, pp. 12903-12907, Vol. 11, 22, November. **2016**.
12. M. Danish, T. L. Ginta, B. Ariwahjoedi, A. U. Alkali, and **M. Yasir**, "Thermal Analysis of Cryogenic Machining of Mg Alloy using FEM", **ARNP Journal of Engineering and Applied Sciences**, pp. 5134-5138, Mar. **2016**.
13. Mohd Danish, Turnad L. Ginta, Bambang Ari Wahjoedi, **Muhammad Yasir** and Adam Umar Alkali, "Investigation of the Temperature Distribution on the tool and workpiece during Cryogenic Machining of Mg Alloy By Finite Element Analysis", **ARNP Journal of Engineering and Applied Sciences**, pp. 14259-14263, Vol. 11, 12. **2016**.

14. Alkali, T. L. Ginta, A. M. Abdulrani, H. Fawad, **M. Yasir** and M. Danish, “*Study of Tool Life of Uncoated Wc-Co Insert During Flame Assisted Machining of 316l Stainless Steel*”, **ARPN Journal of Engineering and Applied Sciences**, pp. 13441-13447, Mar. **2016**.
15. Baig, O Mama, M Mustapha, S Ali, and **M Yasir**, “Low energy solution ball milling of graphene nanoplatelets (GNPs) reinforced aluminium nanocomposites and its mechanical properties”, **IOP Conf. Series: Materials Science and Engineering**, 2018.
16. **Muhammad Yasir**, Norlaili Binti Amir, Faiz Ahmad, Afif Afiq, Zeeshan Baig, "Effect of dispersing agent on the thermal properties of basalt fibre reinforced intumescent coating", **AIP Conference Proceedings**, Vol 324, 2018.
17. **Muhammad Yasir**, Norlaili Amir, Faiz Ahmad, Sami Ullah and Maude Jimenez, " Synergistic effect of basalt fiber on the thermal properties of intumescent fire retardant coating", **Materials Today: Proceedings**, Vol 16, page 2030-2038, 2019.
18. **Muhammad Yasir**, Faiz Ahmad, “Thermal performance of Hybrid Fibers Reinforced Epoxy Based Intumescent Coating for Fire Resistance of Steel Structures”, **Materials research innovations**, pp 1-12, 2022.
19. Maryam Arshad, Adnan Tariq, **Muhammad Yasir**, Bilal Islam, Ammar Ul Hassan, Waseem Shahzad, Murat Sarıkaya, “A parametric study on residual stresses and mechanical properties of W18Cr4V steel subject to pulsed magnetic treatment”, **Materials Testing** (Under review)
20. Sarmad mumtaz, adnan Tariq, Muhammad Yasir, Ammar Khalid, Munish Kumar Gupta” Influence of Al Addition on Microstructure, Mechanical Properties and Machinability of Eco-Friendly Lead-Free Brass by Gravity Casting Method”, **Journal of Materials Research** (under review)

Book Chapters

1. Mohd Danish, **Muhammad Yasir**, Mozammel Mia, Kamran Nazir, Tauseef Ahmad, Ahmad Majdi Abdul Rani, “*High speed machining of magnesium and its alloys*”, **Elsevier, 2020**.
2. M Danish, TL Ginta, **M Yasir**, AMA Rani, “*Light alloys and their machinability, - Machining of Light Alloys: Aluminum*, **Taylor And Francis, 2018**.

Extra Curricular Activities

Coordination and organizing Events.

Presentation in Workshops & Seminars.

Sports: Cricket & badminton.

REFERENCES

- Professor Dr Maude Jimenez, Unité de Matériaux et Transformations (UMET), (Université de Lille, France)
E: maude.jimenez@univ-lille.fr
P: +33 (0)3 20 33 71 96
- Associate Professor Dr Puteri Sri Melor Megat Yusoff, Department of Mechanical Engineering, (Univerisiti Teknologi PTERONAS, Malaysia)
E: puteris@utp.edu.my
P: +60 19-563 8254

- Assistant Professor Mohd Danish (University of Jeddah, KSA)
E: mdanish@uj.gov.sa
P: +966570153343