

# CURRICULUM VITAE

## PERSONAL PROFILE:

- Name Dr. Muhammad Rizwan
- Father's Name Mukhtar Ahmed
- Address L-737 Sector 5-A/3 North Karachi, Karachi.
- PEC registration number METAL/2628
- Researcher ID <https://orcid.org/0000-0003-1127-8801>
- Email [materialist.riz@gmail.com](mailto:materialist.riz@gmail.com)
- Tel# +92-3351221508

## ACADEMIC PROFILE

Education	Year	Board	Status /CGPA/Percentage
<b>PhD</b> (Bioceramic composite)	<b>2019</b>	<b>University of Malaya, Kuala Lumpur, Malaysia.</b>	<b>Completed</b>
<b>M.E</b> (MATERIALS ENGINEERING)	<b>June 2013</b>	<b>N.E.D University of Engineering &amp; Technology</b>	<b>3.07</b>
<b>B.E</b> (MATERIALS ENGINEERING)	<b>2010</b>	<b>N.E.D University of Engineering &amp; Technology</b>	<b>79%</b>
<b>INTERMEDIATE</b> (Pre-Engg)	<b>2006</b>	<b>Board of Intermediate Education Karachi</b>	<b>74%</b>
<b>METRIC</b> (Science)	<b>2004</b>	<b>Board of Intermediate Education Karachi</b>	<b>78%</b>

## EXPERIENCE:

- **Assistant Professor at Department of Metallurgical Engineering, NED University of Engineering and Technology, Karachi Pakistan.** [June 2019- Present]
  - Delivering Undergraduate and Masters lectures
  - Supervision of final year student Projects
- **Lecturer at Department of Metallurgical Engineering, NED University of Engineering and Technology, Karachi Pakistan.** [April 2011-Present]
- **Job Description**
  - Delivering Class lectures
  - Demonstration of Practicals
  - Supervisory of final year student Projects
  - Faculty advisor of Students' society MES
  - Chief coordinator of Departmental Annual Magazine
  - Member of University's Admission Committee
  - Lab in charge of Powder Metallurgy and Materials Deterioration Labs

## RESEARCH AREA

- Hydroxyapatite based composite
- Sintering and crystallization behavior of Bioglass<sup>®</sup>
- Advanced materials processing technique
- Plasma electrolytic oxidation coatings for biomedical applications

- Antibacterial coatings
- Physical vapor deposition magnetron sputtering
- Coatings for biomedical applications

## Journal Publications

- **Rizwan, M.**, Alias, R., Zaidi, U. Z., Mahmoodian, R., & Hamdi, M. (2018). Surface modification of valve metals using plasma electrolytic oxidation for antibacterial applications: A review. *Journal of Biomedical Materials Research Part A*, 106(2), 590-605. (**I.F=3.23**)
- **Rizwan, M.**, Hamdi, M., & Basirun, W. J. (2017). Bioglass® 45S5-based composites for bone tissue engineering and functional applications. *Journal of Biomedical Materials Research Part A*, 105(11), 3197-3223. (**I.F=3.07**)
- **Rizwan, M.**, Hamdi, M., Basirun, W. J., Kondoh, K., & Umeda, J. (2018). Low pressure spark plasma sintered hydroxyapatite and Bioglass® composite scaffolds for bone tissue repair. *Ceramics International*. (**I.F=3.05**)
- Alias, R., Mahmoodian, R., **Rizwan, M.**, & Abd Shukor, M. H. (2019). Study the effect of thermal annealing on adhesion strength of Silver-Tantalum Oxide thin film deposited by reactive magnetron sputtering. *Journal of Adhesion Science and Technology*, 1-18. **I.F=1.04**)

## SUBJECTS TAUGHT

- |  |                                       |
|--|---------------------------------------|
| • Refractories in Metallurgical industry | • Corrosion Protection and Prevention |
| • Foundry Principles and Methods         | • Powder Metallurgy                   |
| • Metal Forming and Shaping              |                                       |

## ACHIEVEMENTS

- Member **Pakistan Engineering Council (PEC)**
- Attended **International Conference On Energy And Sustainability.**
- Attended an **International Workshop On Fundamentals Of Intellectual Property.**
- Coordinated for first ever Departmental Annual Magazine with the name **METCRUX 13**
- Organized a Seminar on **Industrial Quality Control**
- Organized a Seminar on **Steel Giants**
- Organized a Seminar on **Engineers as Future Leaders**
- Attended a seminar on **Occupational Safety And Environment.**
- Attended a seminar on **Communication Skills.**
- Member of **N.E.D Materials Society (NMS).**
- Attended a **Seminar On Effective Teaching Practice.**
- Attended a seminar on **Advanced Structural Materials.**

## REFERENCES

- Prof. Dr. Mohd Hamdi Bin Abd Shukor  
Department of Mechanical Engineering, Faculty of Engineering,  
University of Malaya, 50603 Kuala Lumpur, MALAYSIA.  
hamdi@um.edu.my  
H/P # +60102260871
- Prof. Dr. Wan Jeffrey Basirun  
Department of Chemistry, Faculty of Science,  
University of Malaya, 50603 Kuala Lumpur, MALAYSIA.  
jeff@um.edu.my  
H/P # +60129354200