

HUMAIR AHMED

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SYNOPSIS

A versatile, analytical, hardworking and smart working person with hands-on knowledge of different aspects of **Materials and Metallurgy Engineering**. Able to collect and analyze information, digest facts/figures and quickly respond to complex technical issues and problems. Extremely reliable documentation, management presentation, negotiation and problem solving skills and swiftly identify the root of any problem and develops an effective solution. Proven ability to manage and complete projects to the highest standard, with a meticulous attention to detail and within agreed deadline.

EDUCATION/QUALIFICATION

S.No.	Degree	Major Subject(s)	University/Institute	Duration	Final Grades
1	Masters of Engineering M.Engg.	Materials Engineering	NED University of Engineering & Technology	2011-2013	1 st Division CGPA: 3.56/4
2	Bachelors of Engineering B.E	Materials Engineering	NED University of Engineering & Technology	2007-2010	A ¹ Grade 83.92% 3 rd Position
3	Intermediate F.Sc	Pre-Engineering (Maths, Physics, Chemistry)	Adamjee College	2005-2006	A Grade
4	Matriculation	Science (Maths, Physics, Chemistry)	Federal Secondary School	2003 - 2004	A ¹ Grade

Research Publications

1. (Submitted: Preprint Available online) M.Faizan, Humair Ahmed, S.M.Mohsin Jafri, Syed Asad Ali and Azhar Mehmood, "In-situ Electrochemical Investigations for Monitoring Pitting Corrosion Potential of Passivated Steel under Diverse Cl⁻ Anion Stress and its Micro Structural Evaluation". The journal of corrosion Science and Engineering, University of Manchester, ISSN 1466-8858, Volume 19, January 2016.
2. Silver Nanoparticles - Synthesis, Characterisation and their application as Polymer Reinforcement, published in the proceedings of 5th Conference on Energy, Sustainability and Mechanical Design.
3. Synthesis of Alumina - Aluminum Titanate Nano Composite by Reaction Sintering and its Characterisation, published in the proceedings of 5th Conference on Energy, Sustainability and Mechanical Design.
4. Effect of Ball Milling of Structural Characteristics of Shape Memory Cu-Al-Mn Alloy (to be published in 1st International Conference on Advance Materials & Process Engineering (AMPE-2015), Dec 14-15, 2015)
5. Synthesis and Characterization of Anatase Titanium Dioxide Nanoparticles by Sol-Gel Method (to be published in 1st International Conference on Advance Materials & Process Engineering (AMPE-2015), Dec 14-15, 2015)
6. Synthesis and Characterization of Copper Nanoparticles (to be published in 1st International Conference on Advance Materials & Process Engineering (AMPE-2015), Dec 14-15, 2015)
7. Synthesis of Iron Oxide Magnetic Nanoparticle By Sol-Gel Method and Their Characterization (to be published in 1st International Conference on Advance Materials & Process Engineering (AMPE-2015), Dec 14-15, 2015)

EXPERIENCE

- ❖ **Assistant Professor** in Department of Materials Engineering, NED University. May 2016 – Today
- ❖ **Lecturer** in Department of Materials Engineering, NED University. April 2011 – May 2016

Key Responsibilities

- **Lab incharge** : Advanced ceramic Materials lab, Magnetic Materials lab, Powder Characterisation lab, Nanomaterials lab, Coatings lab, Magnetic Materials Lab.
- **Lab Engineer**: Lab Development/upgradation, Inhouse and Commercial Testing of Materials
 - **Lab Development/upgradation**: Installation of sophisticated lab equipments like,
 - ✓ Laser Particle Size Analyser,
 - ✓ Spectrophotometer,
 - ✓ Atomic Force Microscope,
 - ✓ Laser Workstation,
 - ✓ X-Ray Diffractometer,
 - ✓ Viscometer, etc),
 - Maintenance and Management of installed machines.
 - **Inhouse and Commercial Testing of Materials**: Sample Preparation and Testing of Inhouse samples related to Final Year Projects and other research activities, Commercial sample preparation and Testing particularly related to Metals and Construction Materials.
- **Lectureship**: Lectures and Practical demonstrations particularly in Final Year and Masters of Engg.
- **Managerial**: Student Advisor of Final Year Class.
 - Final Year Projects Coordinator.
 - Masters of Engineering (M.Engg) Coordinator.
 - Member of Departmental Asset Management committee
 - Member of Self-Assessment Team of Department.
 - Workshops organizer/conductor of different softwares like Solidcast, Ms-Office etc
 - Workbook up gradation and its management.
 - Member of University Admission Committee since last four years.
- **Research**: Departmental/Non departmental, Masters and Undergraduate research activities.
 - **Departmental/Non departmental**: Manufacturing of in-house Alumina Crucibles for Carbon-Sulphur Analyzer, Slip casting molds etc
 - **Masters**: Activities particularly related with Nanomaterials, Corrosion and Ceramics. Currently making proposal for Higher Education Commission and Pakistan Science Foundation to provide grant for a project.
 - **Undergraduate**: Research work particularly involving 2D nanomaterials like, Graphene & Phosphrene. Corrosion/failure studies of crude oil pipeline and of steels in different environments, development of corrosion inhibitors (green) from different fruit extracts, plants and over the counter drugs. Nanotechnology like Carbon Nanotubes, copper nanocubes, construction materials like Cement/Geopolymers. While majority of research work involves the development of Composites like wood plastic composites and simulation studies.

TECHNICAL SKILLS

- Hand on Experience with common Non Destructive Testings.
- Skilled in Metallography, Optical and Stereo Microscopy.
- Trained in Muffle Furnaces and treatments
- Trained in Mechanical Properties testing.
- Expert in Ceramic powder processing.
- Expert in Composite manufacturing through conventional methods.
- Expert in laser particle analysis.
- Quite sufficient skill in SEM (scanning electron microscope)
- Hand on Experience with Chemical Testing of Materials using XRF, C-S Analyser and XRD.

COMPUTER SKILLS

- Skilled in AUTO CAD software
- Skilled in MS-PROJECT.
- Trained in POM software (management).
- Trained in TORA software (management).
- Skilled in MS-OFFICE 2003/ 2007/ 2010.
- Skilled in Solid Cast (Simulation)
- Skilled in PRO- E (WILD FIRE).
- Skilled in Adobe Photoshop.
- Competent in Windows 7/ VISTA/ XP/ 2000/98.

SOFT SKILLS

- Excellent communication, documentation and presentation skills.
- Good learning Skills by recognizing and utilizing learning techniques to apply and adapt new knowledge and skills in both familiar and challenging situations.
- Good Management skills.
- Proficient in writing skills such as report writing & documentation.
- Strong decision making skills that helps me to take sensible decisions by setting hierarchy of priorities

SEMINARS/WORKSHOP

- Attended training on Project Management
- Attended seminar on Advanced Structural Materials
- Attended seminar on Time and Stress Management.
- Attended seminar on Communication Skills.
- Attended training workshop on Disaster Risk Management.
- Attended seminar on Presentation Skills

EXTRA CURRICULAR ACTIVITIES

- Organizer of different events like Guest Lectures, Exhibition etc.
- Designing and making of websites, blogging and articles.
- Designing and making of different Magazines, Newsletters, Flyers, Posters, Banners etc.

ACHEIVEMENTS

- **1st Position** according to cumulative result of M.Engg.
- **3rd Position** according to cumulative result of BE.
- **Position holder** in 4th year engineering exams, 3rd Position.
- **Position holder** in 3rd year engineering exams, 3rd Position.

REFERENCES:

Will be furnished upon request