

Engr. Abdul Rauf

Assistant Professor,
Materials Engineering Department,
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Academic Qualifications

2019-present: Ph.D. (Materials Engineering), NED University of Engg. & Tech.
2012-2015: M.Phil. (Materials Science & Engineering), University of Kiel, Germany
2007-2011: B.Egg. (Metallurgy and Materials Engineering) Mehran University

Work Experience

01.2018-Present: Assistant Professor, (Materials Engineering), NED University Karachi
02.2016-01.2018: Lecturer, (Metallurgical Engineering Department), NED University Karachi
08.2013-09.2015: Research Assistant, (Nanochemistry & Nanoengineering), University of Kiel
07.2012-02.2016: Lecturer, (Metallurgy & Materials Engineering), Dawood University Karachi
05.2011-07.2012: Production Engineer, Amreli Steel Limited Karachi

Recent Publications

F. Akhter, S.A. Soomro, **A.R. Jamali** and V.J. Inglezaki "Structural, Morphological and Physiochemical Analysis of SiC₈H₂₀O₄/C₂H₅O/C₇H₁₆ Modified Mesoporous Silica Aerogels" published physical chemistry research.

A.R. Jamali, M. Batool, S Asghar, F. Akhter" Synthesis of Green Metaloxide Nanoparticles using Aloe-Barbadensis Leaf Extract (Acid Red 28) for Dye Removal Applications "accepted Jurnal Kejuruteraan.

A.R. Jamali, A.D. Chandio, A. Shaikh, "Nano-based biodegradable food packaging for Vitis-Vinifera synthesized by PVA/ZnO nanocomposites" under review physical chemistry research.

Akhter, **A.R. Jamali**, "Rice Husk Ash as Green and Sustainable Biomass Waste for Construction and Renewable Energy Applications", published Biomass Conversion and Biorefinery.

S. Abro, A.D. Chandio, **A. R. Jamali** "Influence of Austenite Phase Transformation on Existing Microstructure of Low C-Mn Steel", published Engineering, Technology & Applied Science Research.

A. R. Jamali, A.A Jamali, Kelash Kanwar, Majid Hussain, Bhagwan Das "Manipulation of Surface Plasmon Resonances for Novel Nanocomposites Matrices", published in Technical Journal UET Taxila.

A. R. Jamali, A.D. Chandio, W.Khan, Z. Anwer, I. A. Soomro, "Plasmonic effect of gold nanoparticles surrounded by multi dielectrics matrices", published in Mehran University Research Journal of Engineering and Technology.

A. R. Jamali, W. Khan, A.D. Chandio, Z. Anwer and M. H. Jokhio, "Effect of Cryogenic Heat Treatment on Mechanical Properties of AISI 4340 Steel", published in Mehran University Research Journal of Engineering and Technology.

A.D. Chandio, S.H. Abro, and **A. R. Jamali**, “Effect of Temperature and Time on Nickel Aluminide Deposition”, published in Mehran University Research Journal of Engineering and Technology.

M. K. Hedayati, M. Abdelaziz, **A. R. Jamali**, Dr. M. Elbahri, “Tailored Metamaterial Perfect Absorber”, The 9th International Congress on Advanced Electromagnetic Materials in Microwaves and Optics, 7-12 September 2015, Oxford, UK.

Academic Responsibilities

- Lectures and practical demonstration in undergraduate students
- Student class advisor
- Final Year Projects Supervisor
- Member of Departmental Asset Management committee
- Member of Self-Assessment Team of Department
- Workshops organizer/conductor for laboratories
- Actively involved in industry-academia linkage

Rewards/Honors

- Prize award for best master thesis from international center University of Kiel, Germany
- PhD research reward from NED University of Engineering and Technology
- Prize award for top student in 2nd and 3rd year, metallurgy and materials engineering MUET

Material Science Laboratory Skills

- Destructive and Nondestructive Testing Lab
- Heat Treatment and Phase Transformation Lab
- Clean Room (Photolithography, MEMS and NEMS)
- Physical and Chemical Vapor Deposition (PVD and CVD) Techniques
- Analytical Methods for material characterization (SEM, TEM, AFM, STM, XPS, XRD, OES, AAS & GCMS)
- Optical characterization lab (UV-Vis spectrometer & Spectroscopic ellipsometry & Profilometer)

Internship Trainings

- Pakistan Steel Mill, Karachi, Pakistan
- Peoples Steel Mills (PSM) Limited, Karachi, Pakistan
- Pakistan Machine Tool Factory (PMTF), Karachi, Pakistan
- Pakistan International Airlines (PIA), Karachi, Pakistan
- Hussein Engineering Works Private Limited, Pakistan
- Metropolitan Steel Corporation (MSC) Limited, Pakistan

Software Skills

Lab View, Mat Lab, Origin, Latex, End Note, Zotero, SPSS and MS Office

Language Skills

English: Professional

German: Intermediate