

ADNAN KHAN

MECHANICAL ENGINEER | CORROSION | METAL MATRIX COMPOSITES

CONTACT Nationality: Pakistan

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OBJECTIVE

To utilize my expertise in management, materials, mechanical engineering and analytics for enhancing my experience in a reputed research-based organization.

ACADEMIC QUALIFICATION

- **BSc MECHANICAL ENGINEERING** Sep 2016
CECOS UNIVERSITY, PESHAWAR, PAKISTAN
Achieved **3.79 CGPA with Distinction**
- **MSc MECHANICAL ENGINEERING** Dec 2019
QATAR UNIVERSITY, Doha, Qatar
Achieved **3.56 CGPA with a Gold medal (Impact factor: 34.9)**

JOB EXPERIENCE

- **Research Assistant** Sep 2017 to present
Center for Advanced Materials (CAM), Qatar University
Have experienced the following experimental/characterization techniques;
 - Scanning Electron Microscopy (SEM)
 - Electrochemical Impedance Spectroscopy (EIS)
 - XRD and UV-Vis Spectroscopy
 - FTIR, TGA and DSC Analysis
 - Dip Coating Techniques
 - Abrasion Tests
 - Contact Angle Measurement
 - Vickers Micro-hardness
 - Synthesis of Nano and Micro Containers
 - Loading of Nano/Micro Containers
 - Zeta Potential Analyzer
 - Particle Size Analysis
 - Atomic Force Microscopy (AFM)
 - Powder Metallurgy Technique
 - Microwave Sintering Technique
 - Tensile and Compressive Test of the Aluminum Composites

INTERNSHIP EXPERIENCE

- **FRONTIER FOUNDRY LIMITED, Pakistan** Jan 2016
(INDUSTRIAL AREA, HAYATABAD, KHAYBER PAKHTOONKHWA)
- **OIL AND GAS DEVELOPMENT COMPANY LIMITED, Pakistan** Jan 2017
(RAJIAN OIL FIELD, PUNJAB)

CERTIFICATIONS

- AutoCAD (2D and 3D)
(From Pakistan Engineering Congress Lahore)
- CREO/Pro-Engineering
(From Pakistan Engineering Congress Lahore)
- ANSYS
(By Dr. Riaz Muhammad CECOS University)

JOURNAL PUBLICATIONS

1. **Adnan Khan**, Fareeha Ubaid, Eman M. Fayyad, Zubair Ahmad, R. A. Shakoor, M. F. Montemor, Ramazan Kahraman, Said Mansour, Mohammad K. Hassan, Anwarul Hasan, Aboubakr M. Abdullah. **“Synthesis and Properties of Polyelectrolyte Multilayered Microcapsules Reinforced Smart Coatings”**. (Published in **Journal of Materials Science Springer IF: 3.442**)
2. **Adnan Khan**, Mostafa H. Sliem, Ayman Arif, Mohammed A. Salih, R. A. Shakoor, M. F. Montemor, Ramazan Kahraman, Said Mansour, Aboubakr M. Abdullah, Anwarul Hasan **“Designing and performance evaluation of polyelectrolyte multilayered composite smart coatings”** (Published in **Progress in Organic Coatings IF: 4.469**)
3. Sehrish habib, **Adnan Khan**, Muddasir Nawaz, Mostafa H Sliem, Ramazan Kahraman, Aboubakr M Abdullah, Atef Zakri, R. A. Shakoor **“Self-Healing Performance of Multifunctional Polymeric Smart Coatings”** (Published in **Polymers MDPI IF: 3.426**)
4. Muddasir Nawaz, Sehrish habib, **Adnan Khan**, Ramazan Kahraman, R. A. Shakoor **“Cellulose Microfibers Self-Healing Polymeric Composite Coatings for Corrosion Protection of Steel”** (RCS New Journal of Chemistry **IF: 3.069**)
5. Sehrish Habib, Eman Fayad, Muddasir Nawaz, **Adnan Khan**, Abdul Shakoor, Ramazan Kahraman, Aboubakr Ali **“pH-responsive smart self-healing coatings based on modified nanocontainer for corrosion protection of steel”** (Published in **Nanomaterials IF: 4.034**)
6. **Adnan Khan**, Amani Hassanein, Sehrish Habib, Muddasir Nawaz, R. A. Shakoor and Ramazan Kahraman **“Hybrid halloysite nanotubes as smart carriers for corrosion protection of steels.”** (Published in **ACS Applied Materials & Interface IF: 8.758**)
7. **Adnan Khan**, Penchal Reddy Matli, Muddasir Nawaz, Manohar Reddy Mattli, Gururaj Parande, Vyasraj Manakari, Abdul Shakoor, Amina Sultan Aljaber and Manoj Gupta **“Improved mechanical properties of BiSn reinforced Al matrix fabricated through microwave sintering and hot extrusion process”** (Published in **Applied Sciences IF: 2.217**)
8. Manohar Reddy Mattli, **Adnan Khan**, Penchal Reddy Matli, Moinuddin Yusuf, A. Al- Ashraf, R.A. Shakoor, Manoj Gupta **“Effect of Inconel625 particles on the microstructural, mechanical, and thermal properties of Al-Inconel625 composites”** (Published in **Materials Today Communications IF: 2.678**)
9. **Adnan Khan**, M. Manohar Reddy, M. Penchal Reddy, R.A. Shakoor **“Development and properties of amorphous particles reinforced Al matrix composites”** (Published Book Chapter in Elsevier)
10. **Adnan Khan**, Motasem W. Abdelrazeq, Moinudin M. Yusuf, Abdullah Alashraf, Penchal Reddy Matli, R. A. Shakoor, and Manoj Gupta **“Structural and Mechanical Properties of Al-SiC-ZrO₂ Nanohybrid Composites Fabricated by Microwave Sintering Technique”** (Published in **Crystals IF: 2.404**)

LOCAL AND INTERNATIONAL CONFERENCES

- 1 **Adnan Khan**, R. A. Shakoor, Ramazan Kahraman, M.F. Montemor, Anwarul Hasan, “Hybrid microcapsules reinforced smart coatings for corrosion protection in oil and gas industry”, **30th Advanced Materials Congress, 31 Oct.2019-04 Nov. 2019, Singapore.**
- 2 **Adnan Khan**, Sehrish Habib, Fareeha Ubaid, R. A. Shakoor, Zubair Ahmad, Ramazan Kahraman, “Synthesis and properties of polyelectrolyte multilayered microcapsules reinforced smart coatings”, **EUROCORR 2019, 9-14 September (2019), Seville, Spain.**
- 3 **Adnan Khan**, Fareeha Ubaid, Eman M. Fayyad, Zubair Ahmed, R. A. Shakoor, M. F. Montemor, Ramazan Kahraman, Synthesis and Properties of Polyelectrolyte Multilayered Microcapsules Reinforced Smart Coatings”, **Qatar University Annual Research Forum and Exhibition (QUARFE), 23-24 April 2019, Doha, Qatar.**
- 4 **Adnan Khan**, Fareeha Ubaid, Eman M. Fayyad, Zubair Ahmed , R. A. Shakoor*, M. F. Montemor, Ramazan Kahraman, Siad Mansour, Mohammed K. Hassan, Anwarul Hasan, “ Synthesis and Properties of Polyelectrolyte Multilayered Microcapsules Reinforced Smart Coatings”, **2nd Youth Research Forum 2018, 27-28 Nov. 2018, Qatar University, Doha, Qatar.**

THESIS/WORKSHOPS ATTENDED

- MASTER THESIS “**Smart anti-corrosive polymeric coatings for oil and gas industries.**”
Supervised by Dr. Anwarul Hasan and Dr. Abdul Shakoor Qatar University.
- BACHELOR FINAL YEAR PROJECT “**Design and Fabrication of Human Jaw Simulator**”
Supervised by Dr. Naseer Ahmad (Faculty- CECOS University)
- Attended seminar on “Science and Technology.”
Organized by Science Society GIK University
- Attended workshop on “Biomedical Science.”
Organized by ASME CECOS Student Chapter
- Attended workshop on “Smart Anti-Corrosive Coatings.”
Organized by the Center for Advanced Materials (CAM) Qatar University
- Attending a workshop on “Professional Writing.”
Organized by Qatar University

PROFESSIONAL MEMBERSHIPS AND ACHIEVEMENTS

- Received the **best thesis award** in the entire engineering college in the Master Program.
- Consecutive **Academic rank** holder in every semester of bachelor program.
- Achieved **merit scholarship** in my bachelor’s based on excellent academic results.
- Secured **first position** in “essay competition” held at CECOS by National Accountability Bureau.
- Obtained **first position** in “3D modelling competition” held at GIK Institute of Science and Technology.
- Member of American Society of Mechanical Engineers (ASME-CECOS Student Chapter)
- **Vice President** (2015-2016) -CECOS Quran Society

PERSONEL SKILLS AND COMPETENCIES

- **LANGUAGES**
 - English-Advanced
 - Urdu- Native language
 - Pashto-Advanced
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➤ **SKILLS AND COMPETENCES**

- Excellent verbal communication skill.
- Excellent writing skills gained through preparing technical manuals and design documents.
- 3D modelling of Mechanical Objects.
- Exceptional at Biomedical Project.
- Strong command of Microsoft Office tools (Word, Excel and PowerPoint)
- Expert at research-based software like Origin, Gamry, Echem and Chemdraw.