Masoud Mohammadtaheri

E-mail: [msctaheri@gmail.com](mailto:msctaheri@gmail.com) § Phone: 3062501432  
Address: 307-30 bridge street-West, Kitchener, Ontario, Canada, N2K1K4

SUMMARY

As a proven mechanical/materials engineer with more than 7 years of success in research, process engineering, and quality control in various industries, I have broad experience in following fields: failure analysis of industrial components, application of various methods and procedures for corrosion mitigation, utilizing laboratory instruments and other equipment. perform complex analysis using established technical procedures, calibrating and maintaining equipment as well as preparing reports and assisting in evaluating new equipment and testing techniques. Performing on-site analysis work at customer site locations (construction, operating sites, manufacturing facilities, etc.), conducting various tests including corrosion, positive material identification (PMI), portable hardness testing, in situ metallography, portable optical emission spectrometer (OES), ferrite testing, and tensile testing according to ASTM, NACE, ISO and other testing standards.

My background in R&D (Research & Development) and as a technical expert will be an added value to your company. My goal is to apply my 7 years of strong metallurgical engineering experience and knowledge successfully to my future employer.

WORK EXPERIENCE

University of Saskatchewan Sep 2015 — Jun 2019

*Research Assistant*

■ Designed research projects funded by NSERC and CFI, methodologies, writing grant proposals and compiled information for daily reports.

■ Analysis of wear and friction coefficient of the coatings in dry and humid conditions.

■ Electrochemical Impedance Spectroscopy, Tafel Polarization, Linear polarization analyzing the data with GAMRY to determine rate of corrosion, current density and protective efficiency of coatings.

■ Analyzed the microstructure, chemical and bond structure of coatings by Scanning Electron Microscope, Raman Spectroscopy, X-ray Photoelectron Spectroscopy and X-ray diffraction.

■ Investigated the mechanical properties of materials by Tensile test, Creep test, Rockwell and Vickers tests, Nanoindentation, Optical Profilometer.

■ Published more than 12 papers in peer-reviewed scientific journals.

University of Saskatchewan Sep 2018 — Apr 2019

*Official Residence Tutor*

■ Officially assigned as the university's residence tutor teaching:

* Engineering
* Physics
* Mathematics
* Chemistry

University of Saskatchewan Jan 2016 — Apr 2018

*Lab instructor*

■ Instructor for ME 214.3 introduction to materials and manufacturing

■ Instructor for ME 328-E3 welding metallurgy

■ Instructor for ME 318-S3 Wheatstone bridge circuits

Iran's National Standard Organization

Apr 2012 — Apr 2014

*Technical Expert*

■ Editing different national standards.

■ Laboratories auditing according to ISO/17025.

■ Auditing of different inspection bodies according to ISO/17020.

■ Selecting the related materials and operations with aim of preventing corrosion.

■ Doing test and related analysis on engineering materials and machinery for materials properties determination including, Strength, Hardness, Wear, Scratch, Creep, Corrosion etc.

■ Inspecting mechanical facilities of the factories under the coverage of INSO,

■ Studying the properties and specifications of engineering materials and process design and development related to heat treatment and welding of engineering materials.

Sep 2010 — Apr 2012

Iran Khodro

*Materials scientist*

■ Improved the scratch resistance of polymer-based coatings by processed Nano-diamond particles.

■ Working in a team and collaborating with laboratories to move forward the research.

■ Travel to major automobile manufacturing companies to take samples and test the designed coating on products.

■ Preparing reports and present the data to related funding industries

■ Coordinating with other team members including marketing, sales, production, and support personnel to achieve project objectives

QUALIFICATIONS

* Proficiency in Microsoft Office.
* Proficient in data analysis, DOE and statistical methods.
* Extensive corrosion science knowledge certified by NACE.
* Excellent technical ability and background in corrosion control measures.
* Analyze, interpret, and summarizing technical data.
* Experience in laboratory testing, research, and supervision.
* Familiar with International standards like ASME, ISO, BS etc.
* Management of complex projects, and familiarity with principles of project management.
* Excellent time management skills and commitment to meet deadlines.
* Excellent technical, analytical, problem-solving skills, with strong attention to details.
* Strong communication and organization skills.
* Class 5 driver’s license with acceptable driving record.
* Engineer-in training certificate under process.

EDUCATION

Doctor of philosophy in Mechanical Engineering

Sep 2015 — Mar 2019

*University of Saskatchewan*

Thesis title: Synthesize and Characterization of Superhard Cr-Zr-O Coatings. GPA: 91/100

Master of Science in Materials Engineering Sep 2008 — Sep 2011

*Ferdowsi University of Mashhad*

Thesis title: Effects of Heat Treatment and Cold Working on the Microstructure of Aluminum

Alloys Welded by Friction Stir Welding (FSW) Technique. GPA: 90/100

Bachelor of Science in Materials Engineering Sep 2004 — Sep 2008

*Yazd University*

Thesis title: Investigation of metallurgical and electrochemical properties on Al-Zn-In alloys. GPA: 87/100

HONORS AND AWARDS

■ Awarded Toyota Automotive Engineering and Safety Scholarships at University of Saskatchewan.

■ Awarded Department of Mechanical Engineering devolved Scholarship at University of Saskatchewan.

■ Awarded Dean's Scholarship at University of Saskatchewan, 2015-2018.

■ Top researcher student, Department of Materials Science Engineering, Ferdowsi University of Mashhad, Iran, 2011,

■ First Honor student (Summa Cum laude title), Department of Materials Science Engineering, Faculty of Engineering, Yazd University, Iran, Graduates Ceremony, 2008

REFERENCES

■ Dr. Qiaoqin Yang, Professor of department of Mechanical Engineering, University of Saskatchewan, Saskatoon, Canada. E-mail: [qiaoqin.yang@usask.ca](mailto:qiaoqin.yang@usask.ca), Phone: 3069665470

■ Dr. GLYN KENNELL, Ph.D., B. E., P.Eng. Associate professor of department of Chemical and Biological Engineering, University of Saskatchewan, Saskatoon, Canada. Email: [Glyn.Kennell@usask.ca](mailto:Glyn.Kennell@usask.ca), Phone: 306 261 3355