

RESUME



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PERSONAL INFORMATION

Date of Birth: 15-04-1988
N.I.C #: 36502-3534972-9
Marital Status: Married

PROFESSIONAL EXPERIENCE

Lecturer (On Permanent Basis)

Institute of Metallurgy & Materials Engineering, University of the Punjab, Lahore, Pakistan
(March 2018 – Present).

Lecturer (On Contract Basis)

Department of Metallurgy & Materials Engineering, College of Engineering and Emerging Technologies, University of the Punjab, Lahore, Pakistan (December, 2016 – December, 2017).

Core Subjects include Introduction to Metallurgy and Materials Engineering, Iron Manufacturing Technology, Physical Metallurgy, Engineering Ceramics and Glasses, Non-Ferrous Production Metallurgy, Composite and Polymeric Materials.

Lab Engineer

Department of Metallurgy & Materials Engineering, College of Engineering and Emerging Technologies, University of the Punjab, Lahore, Pakistan (December 2013 – December, 2016).

Trainee Engineer

Ammarians Industries, Lahore, Pakistan (July, 2009 – August, 2009).

ACADEMICS

Master of Science in Metallurgical and Materials Engineering (2012-2014)

University of Engineering and Technology, Lahore, Pakistan

Major Course work includes Phase transformations in solids, Deformation and Fracture, Corrosion Engineering, Characterization Techniques, Powder Metallurgy, Electric and Magnetic Materials

Research Title: Comparative study of liquid and gas carburizing of gear steels

Bachelor of Science in Metallurgy and Materials Engineering (2006-2010)

University of the Punjab, Lahore, Pakistan

Major Course work includes Foundry Engineering, Mechanical Properties of Engineering Materials, Corrosion Engineering, Heat treatment and Phase transformations, Ceramics and Glasses, Iron and Steel Making

Research Title: A comparative study of heat treated AISI 1045 medium carbon steel and AISI 4340 alloy steel.

Intermediate in Pre-Engineering (2004-2006)

College of Advanced and Scientific Techniques (CAST), Sahiwal, Pakistan

Grade: A

RESEARCH INTERESTS

Advanced Materials, Surface Engineering, Corrosion Engineering, Physical Metallurgy & Heat Treatment, Ceramics and composite materials.

ADDITIONAL RESPONSIBILITIES

- 1) In-charge Mechanical Testing laboratory, Institute of Metallurgy & Materials Engineering, University of the Punjab, Lahore.
(Mechanical Testing on UTM, Tensometer, Charpy Tester, Izod Testor, and Electrochemical Testing on Gamry Potentiostat)
- 2) In-charge Character Building Society, Institute of Metallurgy & Materials Engineering, University of the Punjab, Lahore.

RESEARCH PUBLICATIONS

- 1) A. Inam, M.A. Hafeez, M. Atif, **M. Ishtiaq**, M.H. Hassan, T. Hussain, M.S. Mughal, M.A. Raza, M.A.Q. Abbas, I. Ullah. 2020. Microstructural, mechanical, and electrochemical properties of quenched and partitioned 3 wt% Mn steel, Arabian Journal for Science and Engineering. **IF 1.711**
- 2) A. Inam, M.A. Raza, M.A. Hafeez, S.B. Shah, **M. Ishtiaq**, M.H. Hassan, M. Irfan, A. Nasik, I. Siddique, O. Butt, A. Maqbool, H. Waseem. 2020. Effect of voltage and spray-off distance of electric-arc spray technique on surface properties of nickel-chrome (Ni-Cr) coating developed on 304L stainless steel, Materials Research Express. **IF 1.449**, Vol. 7, No. 1.
- 3) A. Inam, Y. Imtiaz, M.A. Hafeez, S. Munir, Z. Ali, **M. Ishtiaq**, M.H. Hassan, A. Maqbool, W. Haider. 2019. Effect of tempering time on microstructure, mechanical, and electrochemical properties of quenched-partitioned-tempered Advanced High Strength Steel (AHSS), Materials Research Express. **IF 1.449**, Vol. 6, No. 12.
- 4) M.H. Hassan, A. Inam, **M. Ishtiaq**, M.U. Shahid, M. Irfan. 2017. Effect of Surface Profile of Mild Steel Substrate upon Adhesion Strength of Wc-11%Co Flame Spray Coating, Journal of Faculty of Engineering and Technology. 24(2)
- 5) A. Inam, **M. Ishtiaq**, M.A. Hafeez, M. Nawaz, M. Rizwan, H.H. Hassan. 2017. Quenching and partitioning of AISI 4340 steel, Journal of Faculty of Engineering and Technology, Volume 24(1): 47-56.
- 6) M.R.Z. Chaudhry, M.A.M. Qureshi, A. Inam, M.M.A. Bhutta, **M. Ishtiaq**. 2015. Effect of Starting Microstructure on Material Removal Rate (MRR) of AISI 1045 Steel in (Die-Sinking) Electric Discharge Machining, Journal of the Pakistan Institute of Chemical Engineers. 43(2): 75-84.
- 7) M. Hamza, L. Ali, **M. Ishtiaq**. 2015. Effect of thermo-mechanical processes on the refinement of ferrite grains, Journal of the Pakistan Institute of Chemical Engineers. 43(1): 117-124.
- 8) **M. Ishtiaq**, F. Ahmed, B. Saleem, L. Ali, A. Inam, T.A. Tabish. 2014. Effect of post heat treatment on hardness and case depth of 17NiCrMo6-4 gear steel, Journal of the Pakistan Institute of Chemical Engineers. 42(2): 85-90.

CONFERENCE PROCEEDINGS

- 1) Corrosion properties of High Si and Mn quenched, partitioned and tempered steel, Symposium of Advanced Steel Metallurgy: Products and Processing, Session: Dual Phase and Q&P Steels, International Conference of Material Science and Technology, 14-18 Oct, 2018, Greater Columbus Convention Center - A226, USA
- 2) Development of Nanostructured Bainitic Steel, Symposium of Advanced Steel Metallurgy: Products and Processing, Session: General Steel Session I, International Conference of Material Science and Technology, 14-18 Oct, 2018, Greater Columbus Convention Center - A226, USA
- 3) Quenching and Partitioning of Experimental Steel, Symposium of Materials Property Understanding through Characterization, International Conference of Material Science and Technology, 08-12 Oct, 2017, David L. Lawrence Convention Centre Pittsburgh, Pennsylvania, USA
- 4) Effect of Aging Time on the Mechanical and Corrosion Properties of Aluminum Silicon Alloy, 6th Symposium on Engineering Sciences, 21-22 Dec, 2016, University of the Punjab, Lahore, Pakistan
- 5) Effect of Starting Microstructure, Coarse Ferrite-pearlite, Fine Ferrite-pearlite, Bainite and Martensite of AISI 4340 and 4140 steels on Corrosion Properties, International Conference on Advanced Materials & Emerging Technologies, 28-29 Dec, 2016, University of Engineering & Technology, Lahore, Pakistan
- 6) Characterization of TiC, TiN, TiAlN, TiO and TiCN PVD Nano Coatings on AISI 420 J1 Steel, International Conference of Material Science and Technology, 23-27 Oct, 2016, Salt Lake City, UT, USA
- 7) Effect of Carbon Content on Corrosion Properties of Plain Carbon Steels, International Conference of Material Science and Technology, 23-27 Oct, 2016, Salt Lake City, UT, USA.
- 8) Corrosion study of quenched and partitioned AISI 4340 steel, International Conference of Material Science and Technology 2015, USA
- 9) A study of Quenched and Partitioned AISI 1141 Steel, 2nd International Conference on Engineering Sciences, 2-3 Dec, 2015, University of the Punjab, Lahore, Pakistan
- 10) A Study of Starting Microstructure of AISI 1045 Steel on the Roughness of Electric Discharge Machined Surface, 2nd International Conference on Engineering Sciences, 2-3 Dec, 2015, University of the Punjab, Lahore, Pakistan

RESEARCH PROJECTS (Supervision/ Co-supervision)

- 1) Development and Characterization of nan-bainite in an experimental steel (Rizwan Ahmad Khan, MS-MME-14-06, M.Sc. Engg. Session 2014-16)
- 2) Quenching and Partitioning of Experimental Steel (Hina Mumtaz, MS-MME-15-01, M.Sc. Engg. Session 2015-17)
- 3) Single Step Quenching and Partitioning Treatment of Experimental Steel (Azmat Ullah Makhdoom, MS-MME-15-07, M.Sc. Engg. Session 2015-17)
- 4) Corrosion Study of Graphitized Carbon Steel (Muhammad Atif, MS-MME-16-03, M.Sc. Engg. Session 2016-2018)
- 5) Effect of Heat treatment on Dry Corrosion of Ni-Cr Electric Arc Spray Coated 316L Stainless Steel (Misbah Ul Hassan, MS-MME-16-05, M.Sc. Engg. Session 2016-2018)
- 6) Nucleation study of graphite in carbon steel (Muhammad Awais, MME-18-05, M.Sc. Engg. Session 2018-2020)

AWARDS & HONORS

- 1) Participation as “Oral Presenter” in “6th Invention to Innovation Summit 2017”, (Mar, 08-09, 2017), held at University of the Punjab, Lahore.
- 2) Participation as “Oral Presenter” in “6th Symposium on Engineering Sciences”, (Dec, 21-22, 2016), held at University of the Punjab and UET Lahore.

- 3) Participation in workshop on “ Entrepreneurship, Use of Business Intelligence for Development” , (8th Nov, 2016) by ORIC, University of the Punjab (new campus), Lahore
- 4) Participation as “Project Exhibitor” in “5th Invention to Innovation Summit”, (2-3 March, 2016) by ORIC, University of the Punjab (new campus), Lahore
- 5) 2nd position for the Poster Presentation Award for the project titled “Quenching, Partitioning and Tempering of AISI 1141 Steel” in “5th Invention to Innovation Summit”, (2-3 March, 2016) by ORIC, University of the Punjab (new campus), Lahore.
- 6) Participant for the “ Faculty Development Workshop” (29th January, 2016) held in Department of Electrical Engineering, College of Engineering and Emerging Technologies, University of the Punjab (new campus), Lahore
- 7) Participation as “Presenter” in “2nd International Conference on Engineering Sciences” (2-3 December, 2015) Lahore, Pakistan.
- 8) Got merit Scholarships in Matric, F.Sc. and B.Sc. (Engg.)

TRAINING COURSES

- 1) Attended the 16th Annual Short Course on “ Cathodic Protection of Pipelines, Storage Tanks and Well Casings” (29th March-01st April, 2016) organized by Department of Metallurgy and Materials Engineering, College of Engineering and Emerging Technologies, University of the Punjab, Lahore.
- 2) Attended the 16th Annual Short Course on “ Fundamentals of Corrosion and Cathodic Protection Technology” (21-24 March, 2016) organized by Department of Metallurgy and Materials Engineering, College of Engineering and Emerging Technologies, University of the Punjab, Lahore.
- 3) Attended a two days short course on “Non-Destructive Evaluation of Weldments and their Remedies” (13-14 December, 2010) organized by Department of Metallurgy and Materials Engineering, College of Engineering and Emerging Technologies, University of the Punjab, Lahore.
- 4) Attended a two days short course on “ ISO 14001:2004” (07-08 June, 2008) organized by Pakistan Engineering Council in collaboration with Institute of Quality and Technology Management, University of the Punjab, Lahore

MEMBERSHIPS

- Registered Engineer (METAL/3167) Dated: 13th November 2013, “Pakistan Engineering Council Act 1976, Pakistan
- Executive Member of Pakistan Institute of Metallurgy and Materials Engineers (PIMME) for the term 2016-2018.

REFERENCES

Dr. Mohsin Ali Raza
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Director, IMME
University of the Punjab,
Lahore, Pakistan
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