Curriculum Vitae





Name	:	Dr. AQIL INAM	
Designation/Positions	:	 Professor of Metallurgy and Materials Engineering Dy. Director ORIC, University of the Punjab , Lahore Joint Secretary, Pakistan Institute of Metallurgy and Materials Engineers Member PHEC Review and Award Committee for International Research Support Fellowship (IRSF) Member PHEC Best Book Award Committee 	
Institute	:	Institute of Metallurgy and Materials Engineering, Quaid-e-Azam Campus, University of the Punjab, Lahore (54590), Pakistan.	
E-mail	:	aqil.imme@pu.edu.pk	
Phone (cell)	:	0321 4230073	

• Academic Record

Examination	Institution	Subject	Year of Passing	Division	Grade/ CGPA
Matric /SSC	Govt. Model High School No. 1, Sargodha	Science	1988	First	A-One
F.Sc.	Govt. College University Lahore	Pre-Engineering	1991	First	А
B.Sc. (Engg.)	University of Engineering and Technology, Lahore	Metallurgical Engineering and Materials Science	1998	First	А
M.Sc. (Engg.)	University of the Punjab, Lahore	Metallurgy and Materials Science	2007	First	3.90
Ph.D. (Engg.)	University of Leeds, England.	Metallurgical Engineering	2013	N/A	N/A

• Distinction

- Stood first in M.Sc. Metallurgy and Materials Engineering Examination (session 2004-05) in the University of Punjab, Lahore.
- Got 3rd prize on the research project titled "Track Link of Al-Zarrar Tank" in the 3rd Invention to Innovation National Summit 2014 held on 19-20 March 2014 at Main corrode door, Quaid-e-Azam Campus, University of the Punjab, Lahore.

- Got second prize on the research article titled "Quenching, Partitioning and Tempering of AISI 1141 Steel" for Poster Presentation in the 5th Invention to Innovation National Summit 2016 held on 02-03 March 2016 at Main corrode door, Quaid-e-Azam Campus, University of the Punjab, Lahore.
- Got 7th position on the research project titled "Development of Artificial Gold(Al Bronze) for Jewelry" in the 5th Invention to Innovation National Summit 2016 held on 02-03 March 2016 at Main corrode door, Quaid-e-Azam Campus, University of the Punjab, Lahore.
- Won "Engineering Innovation Award 2020" of worth Rs. 75,000/-. by PAAPAM in the International Exhibition and Conference titled "Pakistan International Auto Show 2020".
- Won Innovation Award 2022" of worth Rs. 100,000/- in the "All Punjab Universities Innovation Expo 2022" organized by PHEC.

• Professional Affiliations

- Professional Engineer, Pakistan Engineering Council (Metal/1322)
- Joint Secretary, Pakistan Institute of Metallurgy and Materials Engineers (AM-1)
- Member, Society of Corrosion Engineers Pakistan (SOCEP, M-76)
- Member, The Institution of Engineers Pakistan (M-15740/LHR-4173)
- Member, Pakistan Engineering Congress (M-4039)
- Member, The American Ceramic Society, USA (ACerS, M-001190657)
- Member, Association of Iron and Steel Technology (AIST), USA (M-174776)
- Member, The Minerals, Metals and Materials Society, USA

• Formal Training Courses

Sr. No.	Name of Course Attended	Place	Type of	Year		Certificate
			training	From	То	obtained
1.	"Corrosion Management in Industry"	Department of Chemistry, University of Engineering and Technology, Lahore	Theoretical	01-07- 2002	12-07- 2002	Yes
2.	" Faculty Orientation Program"	HRDC, University of the Punjab, Lahore	Theoretical & Practical	July 2003		Yes
3.	"Corrosion Management and Integrity of Coating-cathodic Protection System (Level – I)"	I.C.E.T (Institute of Chemical Engineering and Technology), University of Punjab, Lahore	Theoretical & Practical	30-08- 2004	03-09- 2004	Yes
4.	"Corrosion Management and	I.C.E.T, University of Punjab, Lahore	Theoretical & Practical	04-09- 2004	09-09- 2004	Yes

1.	Research & Development	Research Scholar Ins En Un La	stitute of Ch gineering and Techn iversity of the l hore.	nemical 00 nology, Punjab,	5-12-2001	20-08-2002
Sr. No.	NATURE OF EXPERIENCE	DESIGNATION	INSTITUTE		PEI From	RIOD To
	• Employment R	ecord				
	Research Commercialization: Ways and Means"					
14.	"Train the Trainers Workshop	Jinnah Women Universi Karachi organized by Hl	ty, Theoretical & EC Practical	02-11- 2023	03-11- 2023	Yes
13.	"Intellectual Property Rights & Patent Filing"	UVAS, Lahore organize by PHEC	d Theoretical & Practical	13-09- 2023	14-09- 2023	Yes
12.	"From Lab to Market-Mastering Research Commercialization & Innovation"	Superior University Lahore organized by HE	Theoretical & C Practical	16-08- 2023	18-08- 2023	Yes
11.	"One Day Workshop on Outcome Based Education (OBE)"	IMME, University of the Punjab, Lahore	e Theoretical & Practical	26-07- 2022		Yes
10.	"Advanced TEM Programme"	IMR, University of Leed U.K	ls, Theoretical & Practical	04-08- 2011	08-08- 2011	no
9.	"LabView course (Advance Level)"	School of Mechanical Engineering, University of Leeds, U.K.	Theoretical & Practical	12-01- 2011		Yes
8.	"LabView course (Basic Level)"	School of Mechanical Engineering, University of Leeds, U.K.	Theoretical & Practical	15-12- 2010		Yes
7.	"Safety Certificate Course"	IMR, University of Leeds, U.K.	Theoretical & Practical	26-02- 2009		Yes
6.	"Research & Development Needs in Pulp and Paper Industry"	I.C.E.T, University of Punjab, Lahore	Theoretical	20-09- 2006		Yes
5.	"Plant Conditioning & Assets Optimization"	Avari Tower Hotel, Lahore	Theoretical & Practical	10-2004		Yes
	Integrity of Coating-cathodic Protection System (Level – II)"					

2.	Teaching and Research Development	&	Lecturer	Institute of Chemical Engineering and Technology, University of the Punjab, Lahore.	21-08-2002	31-12-2004
3.	Teaching and Research Development	&	Lecturer	Department of Metallurgy and Materials Engineering, College of Engineering and Emerging Technologies, University of the Punjab, Lahore.	01-01-2005	13-01-2009
4.	Research Development	&	Ph.D. scholar at University of Leeds, UK & Lecturer on study leave at University of the Punjab, Lahore	Institute for Materials Research (IMR), University of Leeds, UK Completed Ph.D. under supervision of Prof. David Edmonds and Prof. Rik Brydson in April 26, 2013.	01-02-2009	26-04-2013
5.	Teaching and Research Development	&	Assistant Professor	Department of Metallurgy and Materials Engineering, College of Engineering and Emerging Technologies, University of the Punjab, Lahore.	29-05-2013	02-05-2023
6.	Teaching and Research Development	&	Professor of Metallurgy and Materials Engineering	Institute of Metallurgy and Materials Engineering	02-05-2023	To date
7.	Research, Commercialization & administration	on	Dy. Director, ORIC	University of the Punjab, Lahore	16-05-23	To date

• Teaching Experience

Taught following Subjects to the undergraduate classes of Metallurgy & Materials Engineering and Electronics & Telecommunication Engineering:

- Heat Treatment & Phase Transformations
- Iron Manufacturing
- Steel Manufacturing
- Non-ferrous Production Metallurgy
- Foundry Engineering
- Corrosion Engineering
- Mechanical Testing
- Mechanical Workshop

- Basic Mechanical Engineering
- Engineering Drawing
- Mineral Processing
- Physical Metallurgy

• Research Experience

- Machinability of Steel
- Production of Ferrous and Non-ferrous Alloys
- Free-cutting steels
- Production of Advance High Strength Steels (AHSS) for Automobiles
- Foundry Engineering
- Heat Treatment & Phase Transformations
- Light Optical & Electron Microscopy
- Corrosion Engineering

• Research Publications

Research Articles

Sr. No.	Title of Research Article	Published in
1.	"Porosity Formation and Remedial Measures in High Pressure Die Cast Aluminum Alloy Components"	"Proceedings of the Pakistan Academy of Sciences" (Journal of Pakistan Academy of Sciences). Vol. 39 No. 2, Published in December 2002
2	"Re-precipitation of Carbides in Austenitic Manganese Steel Parts in service"	Proceedings of First International Conference on "Frontiers of Advanced Engineering Materials (FAEM- 04)" held on 20-22 September 2004 organized by PCSIR Labs Complex, Lahore. Published in 2005. ISBN 978-969-9457-00-5
3.	"A Study of Electroplating of Nickel and Chromium on Mild Steel"	"Journal of Faculty of Engineering and Technology", University of the Punjab, Lahore, Published in 2007
4.	"Development of G-Al-Si 10 Mg (LM 09) Alloy and Effect of Artificial Aging Time on Its Hardness"	Proceedings of Second International Conference on "Frontiers of Advanced Engineering Materials (FAEM-06)" held on 04-06 December 2006 organized by PCSIR Labs Complex, Lahore. 2008 ISBN 978-969-9457-01-2
5.	"Effect of Silicon Content on the Hardness of Artificially Aged LM25 Alloy"	Proceedings of Third International Conference on "Frontiers of Advanced Engineering Materials (FAEM-08)" held on December 15-17, 2008 organized by PCSIR Labs Complex, Lahore. 2009

ISBN 978-969-9457-02-9

"Proceedings of 15th European Microscopy

carbon steel" Congress", held in Manchester, U.K. on September 16-21, 2012. ISBN 978-0-9502463-5-2 "Machinability of Graphitised Carbon Steel" 7. Ph.D. Thesis, University of Leeds, 2013. "Corrosion Inhibition of 316L Stainless Steel in 8. "International Journal of Chemistry and Material Plain Tap Water" Science", Vol. 2(2), March, 2014 "Effect of Post Heat-treatment on Hardness and 9 "Journal of Pakistan Institute of Chemical Case Depth of 17NiCrMo6-4 Gear Steel after Engineers", JPIChE Vol. 42 (2) 2014: 87-92. Liquid Carburizing" "Maleated High Oleic Sunflower Oil-Treated 10. "Polymer Composites", 2014. Cellulose Fiber-Based Styrene Butadiene Rubber IF 3.17 Composites" "Effect of Starting Microstructure on Material 11. "Journal of Pakistan Institute of Chemical Removal Rate (MRR) of AISI 1045 Steel in Engineers", JPIChE Vol. 43 (2) 2015 (Die-Sinking) Electric Discharge Machining" "Effect of starting microstructure upon the "Materials Characterization" Vol. 106, pp. 86-12. nucleation sites and distribution of graphite 92, May, 2015. particles during a graphitising anneal of an IF 4.34 experimental medium-carbon machining steel" "Graphitisation: A Potential New Route to Free-Proceedings of "HSLA Steels 2015 and 13. Microalloying 2015 and OES 2015 Conference" machining Steels" held in Zhejiang Hotel, Hangzhou, China on November 11-13, 2015 organized by The Chinese Society for Metals and Chinese Academy of Engineering. Online on 6 NOV 2015, Wiley Online Library. "Arabian Journal for Science and Engineering" 14. "Carburising of Low-Carbon Steel Using Carbon Black Nanoparticles" June, 2016 IF 2.8 "Published in the ASTM International Journal of "High-Resolution Metallography of a 15. Coarse Microstructure: Graphite Formation in Materials Performance and Charaterization" Vol. the Solid-State in Steel" 5, pp. 780-795, 2016. IF 0.7 Online journal "Materials Science Forum" Vol. "Machinability of an Experimental Graphitised 16. Carbon Steel" 879, pp. 477-482, 2017 IF 0.48 "Effect of Surface Profile of Mild Steel "Journal of Faculty of Engineering and 17. Substrate upon Adhesion Strength of WC-Technology", University of the Punjab, Lahore, 11%Co Flame Spray Coating" Vol. 24 No.2, 2017 "A high-resolution study of graphite nodule "Materials Characterization" Vol. 131, pp. 508-18. formation in experimental Medium carbon 516, July, 2017 machining steel" IF 4.34 Prof. Dr. Aqil Inam 6

"Heterogeneous Nucleation of Graphite in

6.

19.	"Quenching and Partitioning of AISI 4340 Steel"	"Journal of Faculty of Engineering and Technology", University of the Punjab, Lahore, Vol. 24 No.2, 2017
20.	"Graphene Oxide Coatings Deposited on Steel Substrate Using Electrophoretic Deposition and Electrochemical Evaluation of Coatings in Saline Media"	"Key Engineering Materials" 778, pp.111-117, 2018
21.	"Investigation on microstructural, mechanical, and electrochemical properties of water, brine quenched and tempered low carbon steel"	"Materials Research Express" Vol. 6 (2019) IF 2.02
22.	"Development of high strength austempered ductile iron(ADI) from conventional pig iron"	"Materials Research Express" Vol. 6 (2019) IF 2.02
23.	"Effect of morphology of manganese oxide on the capacitive behavior of electrodes"	"Materials Research Express" Vol. 6 (2019) IF 2.02
24.	"Mechanical properties of graphene oxide coated- glass fiber reinforced unsaturated polyester composites"	"Materials Research Express" Vol. 6 (2019) IF 2.02
25.	"Effect of tempering time on microstructure, mechanical, and electrochemical properties of quenched–partitioned–tempered Advanced High Strength Steel (AHSS)"	"Materials Research Express" (2019) IF 2.02
26.	" γ -Fe ₂ O ₃ photo catalyst immobilized on a porous Ni substrate for recyclable solar photo catalysis"	"Journal of Nanoparticle Research" (2019) IF 2.53
27.	"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" (2019) IF 2.02
28.	"Mechanical and corrosion properties of medium carbon low alloy steel after cyclic quenching and tempering heat– treatments"	"Materials Research Express" (2019) IF 2.02
29.	"Optimized Corrosion Performance of AISI 1345 Steel in Hydrochloric Acid Through Thermo–Mechanical Cyclic Annealing Processes"	"Crystals" Vol. 10 (2020) IF 2.67
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30.	"Effect of hot rolling on microstructures a mechanical properties of Ni base superalloy"	nd	"Vacuum" Vol. 174 (2020) IF 4.11
31.	"Raman spectroscopy study of the crystallin of graphite formed in an experimental free machining steel"	ity ee-	"Materials Characterization" (2020) IF 4.34
32.	"Synthesis and characterization of titanin dioxide nanoparticles by chemical and gree methods and their antifungal activities again wheat rust"	um en nst	"Chemosphere" Vol. 258 (2020) IF 8.94
33.	"Thermally Reduced Graphe Oxide-Reinforced Acrylonitrile Butadie Styrene Composites Developed by Combin Solution and Melt Mixing Method"	ene ene led	"Arabian Journal for Science and Engineering" (2020) IF 2.8
34.	"Microstructural, Mechanical, a Electrochemical Properties of Quenched a Partitioned 3 wt% Mn Steel"	ind ind	"Arabian Journal for Science and Engineering" (2020) IF 2.8
35.	"La0. 75Sr0. 25Cr0. 5Mn0. 5O3 perovsk developed for supercapacitor applications"	ite	"Journal of Energy Storage " Vol. 32 (2020) IF 6.58
36.	"Corrosion study of zinc rich epoxy es paints for cold galvanizing of mild steel	ter	"Surface Review and Letters" (2021) IF 1.24
37.	"Biological synthesis, characterization of three metal-based nanoparticles and their anticancer activities against hepatocellular carcinoma HepG2 cells"		"Ecotoxicology and Environmental Safety" Vol. 223 (2021) IF 7.13
38.	"An investigation of accelerated graphitisation kinetics to improve the machinability of an experimental medium-carbon free-machining steel"		"Journal of Manufacturing Processes" Vol. 69 (2021) IF 5.01
39.	"Corrosion Study Of Zinc-Rich Epoxy Ester Paints For Cold Galvanizing Of Mild Steel"		"Surface Review and Letters (SRL)" Vol. 28 (2021) IF 1.24
40.	"Biodegradable properties of AZ31-0.5 magnesium alloy"	Ca	"Materials Technology" (2022) IF 3.85
41.	"Influence of spark plasma sintering temperate and hydroxyapatite nanoparticles on propert of HA based functionally graded materials to bone prosthesis"	ure ies for	"Ceramics International" (2022) IF 5.53
42.	"Microstructural, mechanical, a	nd	"Applied Microscopy" 52 (1), (2022)
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	electrochemical analysis of carbon doped AISI carbon steels"	
43.	"Effect of Multiple Thermal Cycles on the Microstructure and Mechanical Properties of AISI 1045 Weldments"	"MASAA" (2022) IF 4.12
44.	"Corrosion Study of TiC, TiN, TiAlN, TiO, TiCN PVD Nano-Coatings On AISI 420 J1 Surgical Steel"	"Journal of faculty of engineering & technology" 26 (1) (2022)
45.	"Synthesis, characterization and antifungal potential of titanium dioxide nanoparticles against fungal disease (<i>Ustilago tritici</i>) of wheat (<i>Triticum aestivum</i> L.)"	"Environmental Research" 228 (2023) IF 8.3
46.	"Enhancing chromium removal and recovery from industrial wastewater using sustainable and efficient nanomaterial: A review"	"Ecotoxicology and Environmental Safety" 263 (2023)
		IF 6.8
47.	"Development and characterization of lower, upper, and inverse bainite in an experimental 0.8wt.% C steel"	"Journal of Pakistan Institute of Chemical Engineers", JPIChE Vol. 51 (2) 2023
48.	"Polypyrrole coated carbon fiber/magnetite/graphene oxide reinforced hybrid epoxy composites for high strength and electromagnetic interference shielding"	"Materials Today Communications" 38 (2024) IF 3.8
49.	"Effect of laser scanning speed on the morphological properties of CO2 laser modified, wire-arc sprayed aluminum bronze coatings, deposited on AISI-304 stainless steel "	"Journal of Pakistan Institute of Chemical Engineers", JPIChE Vol. 52 (1) 2024
50.	"Microstructural, mechanical, and electrochemical analysis of carbon doped AISI carbon steels"	"Applied Microscopy" Vol. 54 (8) 2024 IF 0.42
51.	"Unveiling the potential of electric-arc sprayed aluminum bronze coatings on 316L stainless steel for high-temperature environments"	"Engineering Research Express" 2024 IF 1.5

Books/Reports

Sr. No.

Title

1.

"A Manual of Corrosion Testing and Corrosion Control Research Cell (ICET), Engineering Monitoring Using Advanced Electro- Research Centre, Faculty of Engineering &

Published by

chemical Techniques"

- 2. "Recommended Standard Operating procedures For SSGC Future Gas Pipeline Projects"
- 3. Final Technical Report of the Research Project "Disbondment of 3L Epoxy/PE Coating & Integrity of Gas Transmission Pipeline" (PSF/ILG/002/03)

Technology, University of the Punjab, Lahore. 2007

Corrosion Control Research Cell (ICET), Engineering Research Centre, Faculty of Engineering & Technology, University of the Punjab, Lahore. 2007

Corrosion Control Research Cell (ICET), Engineering Research Centre, Faculty of Engineering & Technology, University of the Punjab, Lahore. 2008

Paper Presented in Foreign Conferences

Sr. No.	Paper Presented	Conference
1.	"Heterogeneous Nucleation of Graphite in carbon steel"	"15 th European Microscopy Congress", held in Manchester, U.K. on September 16-21, 2012, organized by the Royal Microscopical Society, UK.
2.	"Machinability of an Experimental Graphitised carbon steel"	Thermec'2013 International Conference on Processing & Manufacturing of Advanced Materials (Processing, Fabrication, Properties, Applications) held in Rio Hotel, Las Vegas, USA on December 2- 6, 2013.
3.	"Heterogeneous Nucleation of Graphite Nodules Formed in Medium Carbon Steel After Graphitising Anneal"	"Materials Science and Technology 2014 Conference (MS&T14)", held in Pittsburgh, PA, USA on October 12-16, 2014, jointly organized by American societies; AIST, ASM, TMS and ACerS.
4.	"Growth Morphology of Graphite Particles formed from Staring Microstructures, Ferrite-pearlite, Bainite and Martensite after Graphitising Anneal of Medium Carbon Steel"	"Materials Science and Technology 2015 Conference (MS&T15)", held in Greater Columbus Convention Center, Columbus, Ohio, USA on October 4-8, 2015, jointly organized by American societies; AIST, ASM, TMS and ACerS.
5.	"Corrosion Study of Quenched and Partitioned AISI 4340 Steel"	"Materials Science and Technology 2015 Conference (MS&T15)", held in Greater Columbus Convention Center, Columbus, Ohio, USA on October 4-8, 2015, jointly organized by American societies; AIST, ASM, TMS and ACerS.
6.	"Graphitisation: A Potential New Route to Free-machining Steels"	"HSLA Steels 2015 and Microalloying 2015 and OES 2015 Conference" held in Zhejiang Hotel, Hangzhou, China on November 11-13, 2015 organized by The Chinese Society for Metals and Chinese Academy of Engineering.
7.	"Machinability of an Experimental Graphitised Carbon Steel"	THERMEC' 2016, International Conference on Processing & Manufacturing of Advanced Materials, Processing, Fabrication, Properties, Applications, Graz, Austria, May 29- June 03, 2016
8.	"Effect of Starting Microstructure on the Graphite Dispersion Size, Formed after Graphitising Anneal of High Si and Al Medium Carbon Steel"	Materials Science & Technology Conference (MS&T 16), held in the Salt Palace Convention Center in Salt Lake City, Utah, USA on October 23-27, 2016. Jointly organized by American societies; AIST, ASM, TMS and ACerS.
9.	"Characterization of TiC, TiN, TiAlN, TiO and TiCN PVD Nano Coatings on AISI	Materials Science & Technology Conference (MS&T 16), held in the Salt Palace Convention

 "Effect of Surface Profile of Mild Steel Substrate upon the Adhesion Strength of WC- 11%Co Flame Spray Coating" Center in Salt Lake City, Utah, USA on October 23-27, 2016. Jointly organized by American societies; AIST, ASM, TMS and ACerS.

Materials Science & Technology Conference (MS&T 16), held in the Salt Palace Convention Center in Salt Lake City, Utah, USA on October 23-27, 2016. Jointly organized by American societies; AIST, ASM, TMS and ACerS.

• Industrial Liaison

- TATA Steel, Rotherham, Sheffield, UK
- Chenab Engineering Works & Foundries PVT Ltd. Faisalabad
- New Shalimar Steel Pvt. Ltd, Lahore
- Supras Steel, Gujranwala
- Wahid Industry; Universal Piston, Lahore
- Hadeed Steel Pakistan (Pvt.) Ltd
- Hero Electrical Wiring Accessories, Sargodha
- Prime Wire and Cable, Sargodha
- Heavy Industries of Taxila (HIT), Taxila
- Batala Steel Pvt. Lahore
- Afaq Steel Pvt. Lahore
- Quenchage Surgical, Sialkot

• Research Liaison with Foreign Faculty

Prof. David Edmonds (Emeritus)

- Ex Director IMR, University of Leeds
- University of Oxford
- University Cambridge

Prof. Rik Brydson

- Director LEMAS, & Head
 Nanoengineering and Nanotechnology Program, University of Leeds
- Founder of SuperSTEM Project (<u>www.superstem.org</u>)
- Member Executive committee Royal Microscopy Society, UK
- Member Management Board European Microscopy Society

Prof. Dr. Waseem Haider

Professor, Central Michigan University, USA





