

# CURRICULUM VITAE

## Prof. Dr. Rafiq Ahmad

College of Engineering and Emerging Technologies, Faculty of Engineering and Technology, University of the Punjab, Quaid-i-Azam Campus, Lahore-54590, Pakistan.  
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### PERSONAL INFORMATION

Father's Name: Muhammad Siddique (Late)  
Date of Birth: 03-01-1959  
N.I.C #: 35200-1432293-5  
Educational Qualification: PhD Metallurgical Engineering (University of Leeds, UK),  
M.Sc (Engg.) Metallurgical Engineering (UET),  
B.Sc (Engg.) Metallurgy and Materials Science (PU).  
Area of Specialization: Foundry Engineering, Corrosion Engineering

### ACADEMIC / ADMINISTRATIVE RESPONSIBILITIES

- **Principal**, College of Engineering and Emerging Technologies, University of the Punjab, Lahore. (September 10, 2011 to date)
- **Chairman**, Department of Metallurgy and Materials Engineering, College of Engineering and Emerging Technologies, University of the Punjab, Lahore. (June 23, 2008 to date).
- **Chairman**, Department of Electrical Engineering, College of Engineering and Emerging Technologies, University of the Punjab, Lahore. (June 25, 2010 to date).
- **Professor**, Institute of Chemical Engineering and Technology, University of the Punjab, Lahore (July 25, 2004 to June 30, 2005).
- **Professor**, College of Engineering and Emerging Technologies, University of the Punjab, Lahore (July 01, 2005 to date).
- **Director**, Directorate of Students Affairs, University of the Punjab, Lahore. (May 28, 2012 to January 01, 2013)
- **Research Papers**, More than ninety research papers have been published in International and National reputed journals including impact factors and HEC recognized journals.

- **Proceedings, Conferences and Seminars,** Attended and presented research papers in various International/National proceedings, conferences and seminars.
- **Research Projects,** Four research projects of international/national level were completed. (funded by various organizations like PSF, HEC etc.)
- **M. Phil/M.Sc (Engg.) Research Projects,** Various M.Phil/M.Sc (Engg.) research projects were supervised at Institute of Chemical Engineering and Technology, Department of Solid State Physics, Department of Chemistry, Forman Christian College, Lahore and Department of Metallurgy and Materials Engineering, College of Engineering and Emerging Technologies, University of the Punjab, Lahore.
- **Expert Member,** Various PhD research projects at University of Engineering and Technology, Lahore.
- **Present Research Work,** Various post-graduate projects of M.Phil/M.Sc (Engg.) are in process.
- **Collaborative Research,** Collaboration of research activities of College of Engineering and Emerging Technologies with various industries as well as with other universities.
- **Labs Development,** Foundry and Corrosion labs were mechanized and new labs including Physical Metallurgy as well as welding labs were developed.
- **Member Curriculum Committee,** Courses prepared for the Postgraduate Diploma in Foundry Technology and Corrosion Technology, Institute of Chemical Engineering and Technology, University of the Punjab, Lahore.
- **Member,** Technical committees of various International/National seminars.
- **Teaching Experience,** A large number of engineering subjects both at undergraduate level and post graduate level were taught at University of Leeds, England, University of Engineering and Technology, Lahore and University of the Punjab, Lahore.
- **Expert Member,** Selection Board, University of Engineering and Technology, Lahore.
- **Expert Member,** Selection Board, University of Engineering and Technology, Taxila.
- **Convener/Member,** Curriculum development of various courses for Pakistan Engineering Council (PEC) and Technical Education & Vocational Training Authority (TEVTA).

- **Member**, Disciplinary Committee, University of the Punjab, Lahore
- **Member**, Various selection boards of University of the Punjab, Lahore.
- **Member**, Academic Council, University of the Punjab, Lahore.
- **Member**, Board of Faculty, Faculty of Engineering and Technology, University of the Punjab, Lahore.
- **Member**, Board of Faculty, Faculty of Pharmacy, University of the Punjab, Lahore.
- **Member**, Committee to Supervise the Laptop Distribution, University of the Punjab, Lahore.
- **Chairman**, Management Board of Benevolent Fund for “A” Class Employees, University of the Punjab, Lahore.
- **Member**, Board of Under-graduate and Post Graduate Studies for Metallurgy and Materials Engineering, University of Engineering and Technology, Taxila.
- **Member**, Departmental Tenure Review Committee, Bahuddin Zakariya University, Multan.
- **Member**, HEC Need Based Scholarship Committee, University of Engineering and Technology, Lahore.
- **Member**, Departmental Purchase Committee of Quality Enhancement Cell, University of the Punjab, Lahore.
- **Member**, Departmental Purchase Committee of Department of Polymer Engineering and Technology, University of the Punjab, Lahore
- **Member**, Departmental Purchase Committee of Institute of Quality and Technology Management , University of the Punjab, Lahore
- **Convener**, Board of Studies, College of Engineering and Emerging Technologies, University of the Punjab, Lahore.
- **Member**, Board of Studies, Institute of Quality and Technology Management, University of the Punjab, Lahore.
- **Member**, Board of Studies, Textile Engineering and Technology , University of the Punjab, Lahore
- **Member**, Committee for Preliminary Hearing of Appeals in the Disciplinary Cases, University of the Punjab, Lahore.
- **Member**, Board of Studies, Institute of Chemical Engineering and Technology, University of the Punjab, Lahore.

- **Member**, Selection Committee of Institute of Chemical Engineering and Technology, University of the Punjab, Lahore.
- **Member**, Selection Committee of Department of Textile Engineering and Technology, University of the Punjab, Lahore.
- **Member**, Selection Committee of Institute of Quality and Technology Management, University of the Punjab, Lahore.
- **Member**, Purchase Committee of Faculty of Engineering and Technology, University of the Punjab, Lahore.
- **Member**, Corrosion Control Research Cell (CCRC), Faculty of Engineering and Technology, University of the Punjab, Lahore.
- **External Examiner**, A large number of theses both at undergraduate, post graduate and PhD level were examined, supervised and evaluated at various universities including University of Engineering and Technology, Lahore, Govt. College University, Lahore and Ghulam Ishaq Khan Institute of Science Topi, Swabi.
- **Student Advisor**, Institute of Chemical Engineering and Technology (ICET), Lahore. (More than five years)
- **Editor/Member**, The Journal "The Pakistan Metallurgist", an official publication of the Pakistan Institute of Metallurgical Engineers, Lahore.
- **Professional Engineer (Metall/410)**, Pakistan Engineering Council, Pakistan.
- **Member**, Society of Corrosion Engineers, Pakistan.
- **Fellow**, Institute of Pakistan Foundrymen, Lahore.
- **Fellow**, Pakistan Institute of Metallurgical and Materials Engineers, Lahore. (PIMME)

## **ACHIEVEMENTS / HONORS**

- Second Position in B.Sc. (Engg.) Metallurgy & Materials Science Examination of the University of the Punjab, Lahore.
- Merit Scholarship holder during B.Sc Engineering examinations.
- Central Overseas Training (COT) Scholarship for Ph.D. Studies in England, awarded by Ministry of Education, Government of Pakistan from January 7, 1993 to January 6, 1997.
- Shields were awarded from various organizations on the occasion of International/National seminars.

- Elected as Executive Member of Pakistan Institute of Metallurgical Engineers for three consecutive years (1990-1992).
- Elected as Treasurer of Pakistan Institute of Metallurgical Engineers for two consecutive years (1998-1999).
- Elected as Finance Secretary of Institute of Pakistan Foundrymen for the year 1999.
- Elected as General Secretary of Pakistan Institute of Metallurgy and Materials Engineers for the year 2012, 2013 and 2014.
- Got 3<sup>rd</sup> position for the Innovation Award in the 3<sup>rd</sup> Invention to Innovation Summit, 2014 by ORIC, University of the Punjab, Lahore.

### **ADMINISTRATIVE ACHIEVEMENTS**

- Department of Electrical Engineering has won a lot of competitions, prizes, trophies, shields etc during the year 2010, 2011, 2012, 2013, 2014 and 2015.
- Department of Metallurgy and Materials Engineering also won competitions on various occasions.
- B.Sc. (Engg.) Electrical Engineering degree was accredited.
- M.Sc. (Engg.) Electrical Engineering degree was started.
- B.Sc. (Engg.) Metallurgy and Materials Engineering degree was accredited.
- M.Sc. (Engg.) Metallurgy and Materials Engineering degree was started.
- Ph.D. (Engg.) Metallurgy and Materials Engineering degree was started.
- New labs of Electrical Engineering and Metallurgical Engineering were established.

### **ACADEMIC RECORD**

<b>Examination</b>	<b>Year of Passing</b>	<b>Subject</b>	<b>Board/University</b>
Matric/SSC	1974	Science	Board of Intermediate and Secondary Education, Lahore
Intermediate (F.Sc.)	1977	Pre-Engineering	Board of Intermediate and Secondary Education, Lahore
B.Sc. (Engg.)	1984	Metallurgy and Materials Science	University of the Punjab, Lahore
M.Sc.(Engg.)	1988	Metallurgical Engineering	University of Engineering and Technology, Lahore

Ph.D.	1996	Metallurgy	University of Leeds, Leeds LS2 9JT England, U.K.
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## **EMPLOYMENT RECORD**

1984-86	Research Officer at the Institute of Chemical Engineering and Technology, University of the Punjab, Lahore, Pakistan, sponsored by Pakistan Science Foundation. 2 Years experience as Research Officer (01-12-84 to 30-11-86)
1986-88	Part-Time Lecturer (Metallurgy) at the Institute of Chemical Engineering and Technology, University of the Punjab, Lahore, Pakistan. 2 Years experience as Part-Time Lecturer (01-12-86 to 14-09-88)
1988-95	Lecturer (Production Metallurgy) at the Institute of Chemical Engineering and Technology, University of the Punjab, Lahore, Pakistan. 7 Years experience as Lecturer (15-09-88 to 17-07-95)
1995-2000	Assistant Professor (Materials Science) at the Institute of Chemical Engineering and Technology, University of the Punjab, Lahore, Pakistan. 5 Years experience as Assistant Professor (18-07-95 to 20-04-2000)
2000-2004	Associate Professor (Metallurgy) at the Institute of Chemical Engineering and Technology, University of the Punjab, Lahore, Pakistan. 4 Years experience as Associate Professor (21-04-2000 to 24-07-2004)
2004 to 2005	Professor (Chem.Engg./Metallurgy) at the Institute of Chemical Engineering and Technology, University of the Punjab, Lahore, Pakistan. (25-07-2004 to 30-06-2005)
2005 to date	Professor (Metallurgy) at the College of Engineering & Emerging Technologies, Faculty of Engineering & Technology, University of the Punjab, Lahore, Pakistan (01-07-2005 to date).

## **TRAINING COURSES**

- Worked as Trainee Engineer in Ittefaq Foundries Ltd., Kot Lakhpat, Lahore for a period of six weeks (20-06-82 to 31-07-82).
- Worked as Trainee Engineer in Reliable Machinery Corporation, Badami Bagh, Sham Nagar, Lahore for a period of five months (18-03-84 to 25-08-84).
- Worked as Trainee Engineer in Pakistan Engineer Co. Ltd., Badami Bagh works, Lahore for a period of three months (29-08-84 to 24-11-84).
- Successfully completed Accu–Type keyboard proficiency course—a certificate course by University of Leeds, Leeds LS2 9JT U.K.
- Attended a short course on “Welding” (September 10 – 20, 1990) organized jointly by University of Engineering & Technology, Lahore and the Institution of Engineers Pakistan, Lahore Centre.
- Attended a short course on “Heat Treatment and Metallography” (October 1 – 11, 1990) organized jointly by University of Engineering & Technology, Lahore and the Institution of Engineers Pakistan, Lahore Centre.
- Attended a two days short course on “Non-Destructive Evaluation of Weldments and their Remedies” (December 13 – 14, 2010) organized by Department of Metallurgy and Materials Engineering, College of Engineering and Emerging Technologies, University of the Punjab, Lahore.
- Attended a two days short course on “ASME Section VIII Division 1” (April 2 – 3, 2011) organized by Department of Metallurgy and Materials Engineering, College of Engineering and Emerging Technologies, University of the Punjab, Lahore.

## **OTHER TEACHING EXPERIENCE IN INTERNATIONAL/NATIONAL UNIVERSITIES**

- Worked as demonstrator in School of Materials, University of Leeds, Leeds LS2 9JT Uk for a period of 3 months (17-02-94 to 12-05-94).
- Worked as visiting teacher in the Department of Metallurgical Engineering and Materials Science, University of Engineering and Technology, G.T. Road, Lahore during the academic session 1998 – 1999.

## LIST OF RESEARCH PROJECTS

The following research projects were successfully completed:

- Disbondment of 3L Epoxy/PE Coating and Integrity of Gas Transmission Pipeline Sponsored by SSGC, PSF and Institute of Chemical Engg. & Technology.
- Studies of Atmospheric, Underground and Industrial Corrosion Processes Sponsored by Pakistan Science Foundation.
- Development of High Purity Alloy Steel Sponsored by Pakistan Atomic Energy Commission.

## LIST OF RESEARCH PUBLICATIONS

### International Publications (With Impact Factor)

Sr. No.	Title of Paper	Name of the Journal	Impact Factor	Vol.	Page Nos.	Year of Publication
1.	Analysis of Metallurgical Aspects and their role in Processing and Performance of Super alloys: A Review	Journal of Fundamental and Applied Sciences	4.57	9(1)	485-498	2017
2.	Studying the Effect of Precipitation Hardening on 6061 Aluminum Alloy Weldments	Advanced Materials Research	0.23	1133	300-304	2016
3.	Effect of Thal Silica Sand nanoparticles and glass fiber reinforcements on epoxy-based hybrid Composite	Iranian Polymer Journal	1.806	24(1)	21-27	2015
4.	Estimating the degradation of methylethionium chloride dye on nanotubular TiO <sub>2</sub> structure	Journal of Industrial and Engineering Chemistry	2.063	22(0)	153-158	2015
5.	Maleated high oleic sunflower oil-treated cellulose fiber-based styrene butadiene rubber composites	Polymer Composites, Article first published online: DOI: 10.1002/pc.23273	1.4	-	-	2014



6.	Corrosion behavior of X-70 pipe steel in crude oil environments depending upon surface characteristics	The Arabian Journal for Science and Engineering	0.367	39(7)	5393-5404	2014
7.	Peculiar corrosion behavior of type 316L SS in simulated cooling water at various pH values	Materials Performance, NACE International	0.1	53(10)	44-47	2014
8.	Studying the formation of Fe <sub>2</sub> SiO <sub>4</sub> and Pearlite phases in Iron-Silica Sand Nanoparticles Composites.	Defect and Diffusion Forum	0.31	337-338	39-47	2013
9.	Studying the Effects of adding Silica Sand Nanoparticles on Epoxy based Composites: Nano/Microstructured Materials:	Rapid, Low-Cost, and Eco-Friendly Synthesis Method	-	1(1)	-	2013
10.	Investigating the failure of bevel gears in an aircraft engine	Case Studies in Engineering Failure Analysis	1.028	1(1)	24-31	2013
11.	Effect of Different Modifier on Microstructure Strength of Locally Developed A356 Al-Si Alloy	Defect and Diffusion Forum	0.31	344	9-17	2013
12.	Studying the Effect of Different Combinations of Modifier on the Mechanical Properties and Microstructure of A356 Al-Si Alloy	Defect and Diffusion Forum	0.31	344	27-36	2013
13.	Investigating the Pitting Resistance of 316 Stainless Steel in Ringer's Solution using the Cyclic Polarization Technique	Defect and Diffusion Forum	0.31	344	1-7	2013
14.	Evaluation of Surface Preparation Techniques for Steel Substrates Prior to Coating Application	Defect and Diffusion Forum	0.31	344	55-70	2013
15.	Physico-mechanical Properties of Sintered Iron- Silica Sand Nanoparticles Composites	Defect and Diffusion in Semiconductors	0.31	332	7-16	2012

16.	Intergranular Pitting Tendency of Yttrium Implanted Inconel 600 Acidic Chloride Media	Surface and Coating Technology	2.102	212	61-66	2012
17.	Corrosion behaviour of Ti-Ta-Sn alloy systems in 0.9% NaCl solution	Materials and Corrosion	1.077	63	-	2012
18.	Remaining Life Assessment of Plate Forming Reactor Vessels	Engineering Failure Analysis, Netherlands	0.765	18	1247-1252	2011
19.	Development and Strengthening of 2219 Aluminium Alloy by Mechanical Working and Heat Treatment	Journal of Applied Sciences, Pakistan	0.04	11	1857-1861	2011
20.	Failure Investigation of Heat Exchanger Plates due to Pitting Corrosion	Engineering Failure Analysis, Netherlands	0.765	17	886-893	2010
21.	Microstructural and Electrochemical Characterization of Ni/Ti <sub>2</sub> N Composite Coating for Sintered NdFeB Permanent Magnets	Key Engineering Materials, Germany	0.224	442	255-262	2010
22.	Microstructural Study and Electrochemical Behavior of Low Alloy Steel Weldment	Materials and Design, Netherlands	1.694	31	3051-3055	2010
23.	Effect of Superheating on Iron-rich Plate-type Compounds in Aluminium-Silicon Alloys	International Journal of Cast Metals Research, UK	0.418	15	497-504	2003

#### International Publications (Without Impact Factor)

Sr. No.	Title of Paper	Name of the Journal	Vol .	Page Nos.	Year of Publication
24.	Spheroidisation of Iron Containing Intermetallic Sludge Particles	Foundry Trade Journal, United Kingdom	177	20-21	2003
25.	Effect of Filtration in Sand Cast Al-Si Alloy	Foundry International Journal, United Kingdom	22	46-48	1999

### National Publications (HEC Recognized Journals)

Sr. No.	Title of Paper	Name of the Journal	HEC Category	Vol.	Page Nos.	Year of Publication
26.	A Comparative Study of Different Electrolytes on Anodizing of 2024 Aluminum Alloy and Electrochemical Behavior of Anodized Film	Journal of Pakistan Institute of Chemical Engineers	'Y'	44(1)	29-40	2016
27.	The Production and Characterization of Ultrafine-Grained Metal Sheets Produced by Accumulative Roll Bonding Process	Journal of Pakistan Institute of Chemical Engineers	'Y'	43(2)	1-8	2015
28.	Computer Aided Materials Selection	Journal of Quality and Technology Management, Pakistan	'X'	8	53-59	2012
29.	The Role of Cu Additions in Al on the Properties of Hot-Dip-Aluminized Steel	Journal of Quality and Technology Management, Pakistan	'X'	6	149-164	2010
30.	Corrosion Protection Evaluation of Mild Steel Painted Surface by Electrochemical Impedance Spectroscopy	Journal of Quality and Technology Management, Pakistan	'X'	5	82-93	2009
31.	Controlling Inclusions Through Filtration in Investment Casting Process	Journal of Pakistan Academy of Sciences, Pakistan	'X'	41	121-128	2004
32.	Porosity Formation and Remedial Measures in High Pressure Die Cast Aluminium Alloy Components	Journal of Pakistan Academy of Sciences, Pakistan	'X'	39	233-239	2002

33.	Microscopy of As-Received and Used Ceramic Foam Filters	Journal of Pakistan Academy of Sciences, Pakistan	'X'	37	165-170	2000
34.	Degassing of Aluminium Alloys using a Mobile Degassing Unit	Journal of Pakistan Academy of Sciences, Pakistan	'X'	35	87-97	1998
35.	Identification of Weld Discontinuities in 304L SS by Radiographic Testing (RT)	Journal of Faculty of Engineering & Technology, Pakistan	'Y'	17	95-105	2010
36.	Glass Fiber-Reinforced Phenolic Composite	Journal of Pakistan Institute of Chemical Engineers, Pakistan	'Y'	XXX VII	55-60	2009
37.	Corrosion Inhibition Evaluation Of Alpha-Beta Brass In Tap Water	Journal of Pakistan Institute of Chemical Engineers, Pakistan	'Y'	XXX VII	69-72	2009
38.	Characterization of Mild Steel Pre Rusted and Rust Converted Surface through Advanced Electrochemical Analysis	Journal of Pakistan Institute of Chemical Engineers, Pakistan	'Y'	XXX VI	1-8	2008
39.	Coupons Corrosion Test Methods with Special Reference To Corrosion Gauge Points	Journal of Pakistan Institute of Chemical Engineers, Pakistan	'Y'	XXX VI	41-48	2008
40.	A Study of Electroplating of Nickel and Chromium on Mild Steel	Journal of Faculty of Engineering & Technology, Pakistan	'Y'	-	21-29	2006

41.	Modification of the Structure of Automobile Pistons	The Pakistan Engineer, Pakistan	'Y'	-	39-43	2005
42.	Monitoring Coatings Failure and Integrity of Coating – CP System for Pipeline Corrosion Control (Part-III)	Journal of Pakistan Institute of Chemical Engineers, Pakistan	'Y'	XXXI I	11-22	2003
43.	Effect of Temperature and Holding Time on the Coating Thickness and Concentration of Phases Found on Aluminium – Iron Interface	Journal of Pakistan Institute of Chemical Engineers, Pakistan	'Y'	XXXI	1-6	2002
44.	Monitoring Coatings Failure and Integrity of Coating – CP System for Pipeline Corrosion Control (Part-2)	Journal of Pakistan Institute of Chemical Engineers, Pakistan	'Y'	XXXI	17-27	2002
45.	General Overview of 3L Epoxy/PE Underground Pipeline Coating	Journal of Faculty of Engineering & Technology, Pakistan	'Y'	-	23-42	2001-2002
46.	Monitoring Coatings Failure and Integrity of Coating – CP System for Pipeline Corrosion Control (Part-1)	Journal of Pakistan Institute of Chemical Engineers, Pakistan	'Y'	XXX	39-46	2001
47.	Identification of Phases Formed at the Al-Fe Interface during Aluminizing Process of Medium Carbon Steel	Journal of Pakistan Institute of Chemical Engineers, Pakistan	'Y'	XXX	69-74	2001
48.	Image Analysis – A Technique for Quantification of Fibre Orientation in Short Fibre Reinforced Metal Matrix Composites	Journal of Pakistan Institute of Chemical Engineers, Pakistan	'Y'	XXVI II	11-15	1999

49.	Development of Nickel Aluminium Bronze and its Corrosion Evaluation in Sea Water	Journal of Pakistan Institute of Chemical Engineers, Pakistan	'Y'	XXVI I	19-24	1998
50.	Processing and Microscopy of Iron-Rich Compounds	Journal of Pakistan Institute of Chemical Engineers, Pakistan	'Y'	XXVI I	13-18	1998

### National Publications (Reputed Journals of Pakistan)

Sr. No.	Title of Paper	Name of the Journal	Vol./No.	Page Nos.	Year of Publication
51.	Localized Corrosion Study of 316L Bio-Implant in Simulated Body Fluids	Engineering Horizons, Pakistan	XXIV	27-31	2011
52.	Modification of Al-Si (13%) Alloy Using Different Modifiers	Journal of Scientific Research, Pakistan	XXXVII	55-69	2007
53.	Modification of the Structure of Automobile Pistons	The Pakistan Engineer, Pakistan	-	39-43	2005
54.	Development of Aluminium Magnesium Alloy using Locally Available Techniques	The Pakistan Engineer, Pakistan	-	37-40	2003
55.	Advanced Materials in Armour Protection	Engineering Horizons, Pakistan	132	17-20	1999
56.	Ceramic Foam Filters – A Better Approach for Inclusions Retention in Molten Metals	Engineering Horizons, Pakistan	125	15-17	1998
57.	Scaling or Oxidation of Steel Components	The Pakistan Metallurgist, Pakistan	12	64-65	1990
58.	Corrosion Characteristics of Silicon-Aluminium Bronze	The Pakistan Metallurgist, Pakistan	12	23-26	1990
59.	A Substitute for Patented Commercial Simple Process of Electroplating	The Pakistan Metallurgist, Pakistan	11	36-38	1989

60.	Failure Analysis of New Boiler Tubes	The Pakistan Metallurgist, Pakistan	11	12-21	1989
61.	Data on Atmospheric Corrosion of Mild Steel at Lahore	The Pakistan Metallurgist, Pakistan	10	47-52	1988
62.	Corrosion Behaviour of Copper-Manganese-Aluminium Alloy in Sea Water	The Pakistan Metallurgist, Pakistan	10	15-21	1988
63.	A Study of Corrosion of Aluminium Bronze Containing Iron	The Pakistan Metallurgist, Pakistan	9	41-46	1987

### International Proceedings (With Impact Factor)

Sr. No.	Title of Paper	Organizer and Place
64.	Effect of Modification using NaF with BaCl <sub>2</sub> on Microstructure and Mechanical Properties of A356 Al-Si Alloy	International Young Engineers Convention, IYEC, 17-19 April, 2014
65.	Studying the Effect of Precipitation Hardening on 6061 Aluminum Alloy Weldments,	2nd Advanced Materials Conference (AMC) 2014, 25-26 November, Lankawi, Malaysia
66.	Anti-corrosion behaviors of Ni/Ti <sub>2</sub> N composite coated sintered NdFeB permanent magnets	Proceedings of 18 <sup>th</sup> International Corrosion Congress, Perth Australia, 20-24 November 2011.
67.	A Study of Aging Effects on Hardness and Tensile Properties of 2219 Aluminum Alloy	Proceedings of the International Conference of Materials Science and Technology (MS & T07), September 16-20, 2007 at COBO Centre in Detroit U.S.A. by American Society for Materials(ASM), U.S.A.

### International Proceedings (Without Impact Factor)

Sr. No.	Title of Paper	Organizer and Place
	Sliding Friction Behavior of Aluminum Based Hybrid Composites	Materials Science and technology(MS & T) 2016 October 23-27, 2016, Salt Palace Convention Center, Salt Lake City, Utah, USA

68.	Study of the Microstructure and Mechanical Properties of locally developed Carbon Fiber-Silica Sand Nanoparticles Aluminum based Hybrid Composites	Materials Science and technology(MS & T) 2015 October 4 – 8, 2015, Greater Columbus Convention Center, Columbus, Ohio, USA
69.	Comparison of Thermal Interfacial Performance of Carbon Nanofiller-Based Polymer Composites	Carbon 2013, Windsor Atlântica Hotel – Copacabana Beach – Rio de Janeiro, 14-19 July, 2013
70.	Engineering Failure Analysis in Chemical Process Industries	Proceeding of International Conference on Engineering Sciences ICES 2012, 28-29 February, 2012
71.	Electrochemical Comparison of API X-70 Steel Surfaces in Base Oil	Proceeding of International Conference on Engineering Sciences ICES 2012, 28-29 February, 2012
72.	Investigating the Effect of Welding on Electrochemical Behavior of SA516 (Grade 70)	Proceeding of International Conference on Engineering Sciences ICES 2012, 28-29 February, 2012
73.	Corrosion and Corrosion Damages in Practice	Proceedings of 3rd International Conference on Corrosion and Pipeline Integrity Management 2012, 17 <sup>th</sup> May 2012.
74.	Development and Characterization of Hydroxyapatite Powder from Natural Bovine Bones	Proceedings of the 2nd International Symposium on Biomedical Materials: Current Research and Future Signposting, IRCBM, 6-7 July, 2010.
75.	Effect of Silicon Content on the Hardness of Artificially Aged LM 25 Alloy	Proceedings of the 3rd International Conference on Frontiers of Advanced Engineering Materials, 15-17 December 2008 organized by Pakistan Institute of Technology for Minerals and Advanced Engineering Materials, PCSIR Laboratories Complex, Lahore .
76.	Semi-Solid Metal Processing of Al-Si alloys	Proceedings of the 3rd International Conference on Frontiers of Advanced Engineering Materials, 15-17 December 2008 organized by Pakistan Institute of Technology for Minerals and Advanced Engineering Materials, PCSIR Laboratories Complex, Lahore.
77.	Development of G-Al-Si 10 Mg (LM 09) Alloy and Effect of Artificial Aging Time on Its Hardness.	Proceedings of the 2nd International Conference on Frontiers of Advanced Engineering Materials, 4-6 December 2006 organized by Pakistan Institute of Technology for Minerals and Advanced Engineering Materials, PCSIR Laboratories Complex, Lahore



78.	Influence of Welding Parameters on Tensile Properties of Friction Stir Welded A 2219 Aluminum Alloy	Proceedings of the 2nd International Conference on Frontiers of Advanced Engineering Materials, 4-6 December 2006 organized by Pakistan Institute of Technology for Minerals and Advanced Engineering Materials, PCSIR Laboratories Complex, Lahore.
79.	Development of ADI (Austempered Ductile Iron) and Effect of Austempering Temperature on its UTS	Proceedings of First International Conference on Frontiers of Advanced Engineering Materials, 20-22 September 2004, organized by Pakistan Institute of Technology for Minerals & Advanced Engineering Materials, PCSIR Laboratories Complex, Lahore.
80.	Re-Precipitation of Carbides Austenitic Manganese Steel Parts in Service	Proceedings of First International Conference on Frontiers of Advanced Engineering Materials, 20-22 September 2004, organized by Pakistan Institute of Technology for Minerals & Advanced Engineering Materials, PCSIR Laboratories Complex, Lahore.
81.	Application of Ceramic Foam Filters to Aluminium Alloys In-Mould Filtration	Proceedings of 6th International Symposium on Advanced Materials, 19-23 September 1999, organized by Dr. A.Q. Khan Research Labs. Islamabad, Pakistan.

### National Proceedings

Sr. No.	Title of Paper	Organizer and Place
82.	Production of Thal Silica Sand Nanoparticles for Metal Matrix Composites,	1 <sup>st</sup> International Conference of Applied Chemistry, 18-20 November 2013, Faisalabad Pakistan
83.	Synthesis and Electrochemical Characterisation of $\text{La}_{0.75}\text{Sr}_{0.25}\text{Mg}_x\text{Mn}_{1-x}\text{O}_{3-\delta}$ Perovskite	International Conference on Solid State Physics, University of the Punjab, Lahore, 1-6 Dec 2013
84.	Effect of Surface Profile on Electrochemical behavior of API X-70 in Simulated Crude Oil Environment	1 <sup>st</sup> National Science conference held at PMAS-AAUR Jan 10-12, 2012
85.	Oxidation behavior of Ytria Stabilized Thermal barrier coating on Mild Steel in Artificial Sea Water	1 <sup>st</sup> National Science conference held at PMAS-AAUR Jan 10-12, 2012
86.	Effect of Alloying Additions in Al on Growth and Morphology on	Proceedings of 3rd Symposium on Engineering Sciences, 10th March 2010, organized by Institute

	Intermetallic layer in hot-dip-aluminized Steel	of Chemical Engineering and Technology, University of the Punjab, Lahore.
87.	Corrosion of Alpha Brass in Plain Water in Sodium Benzoate Containing Inhibitor	Proceedings of 3rd Symposium on Engineering Sciences, 10th March 2010, organized by Institute of Chemical Engineering and Technology, University of the Punjab, Lahore
88.	Characterization of Intentional Sensitization in TIG-Welded AISI 316L Austenitic Stainless Steel	Proceedings of 3rd Symposium on Engineering Sciences, 10th March 2010, organized by Institute of Chemical Engineering and Technology, University of the Punjab, Lahore.
89.	Study of Medical Grade 316L Stainless Steel Weldment in Different Simulated Fluids	Proceedings of 3rd Symposium on Engineering Sciences, 10th March 2010, organized by Institute of Chemical Engineering and Technology, University of the Punjab, Lahore.
90.	A Comparative study of GTAW and SMAW Weldments of AISI 1030 Carbon Steel	Proceedings of 3rd Symposium on Engineering Sciences, 10th March 2010, organized by Institute of Chemical Engineering and Technology, University of the Punjab, Lahore.
91.	Characterization of Mild Steel Surface Through Electrochemical Impedance Spectroscopy (EIS)	1st all Pakistan Conference on Materials Technology Ma Tech '08', January 25-27 2008, organized by GIKI, ASM (America) Student Chapter at Faculty of Materials Science and Engineering, GIK Institute of Engineering Sciences & Technology, Topi, NWFP, Pakistan.
92.	Comparative Study of Nylon and PVC Fluidized Bed Coating on Mild Steel	Proceedings of the Pakistan Engineering Congress, 70th Annual Session 2004-2006 organized by Pakistan Engineering Congress, PEC Building, Engineering Centre Gulberg-III, Lahore.
93.	Design of a Cooling Water Test Loop for Inhibitors Evaluation	Proceedings of Institution of Engineers Pakistan, October 1990, 32nd Annual Convention, Lahore.
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