# DR. ABDUS SALAM

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## Qualification

- PhD (Superplastic forming of Titanium base Materials) University of Leeds, UK.
- BSc Engineering (Metallurgy & Materials Science) University of the Punjab, Lahore.

## PhD RESEARCH PROJECT:

Study of relationship between high temperature deformation mechanisms, microstructures and mechanical properties of single phase and two phase titanium alloys.

#### AWARDS/HONOURS CONFERRED/MEMBERSHIP OF PROFESSIONAL ORGANIZATIONS:

- i) Selected for the award of a scholarship for PhD studies abroad by Ministry of Science and Technology, Govt. of Pakistan in 1985.
- ii) Selected for the award of a prestigious Postdoctoral fellowship at Queen Mary and Westfield College, University of London, UK by British Commonwealth Commission, UK in 2003 (Did not avail).
- iii) Life member (Professional Engineer) of Pakistan Engineering Council.
- iv) Former member of Institute of Metals (now Institute of Materials), UK.
- v) On the basis of one research paper, which appeared in Journal of Materials Science (US) in 2005, was granted research publication incentive award by University of the Punjab, Lahore.
- vi) Awarded Quaid-e-Azam Gold Medal by Idara-e-Istehkam-e-Pakistan, Lahore for rendering services in teaching and research at university level for more than twenty years.

### **MEMBERSHIP OF ACADEMIC BODIES:**

- i) Member Senate, University of the Punjab, Lahore.
- ii) Member Academic Council, University of the Punjab, Lahore.
- iii) Member Board of Faculty of Engineering & Technology, University of the Punjab, Lahore.
- iv) Member Board of Faculty of Science, University of the Punjab, Lahore.
- vi) Convener Board of Studies, Institute of Quality & Technology Management, University of the Punjab, Lahore.
- vii) Member Board of Studies, College of Engineering & Emerging Technologies, University of the Punjab, Lahore.
- viii) Convener Departmental Tenure Review Committee, Institute of Quality & Technology Management, University of the Punjab, Lahore.

- ix) Member Departmental Doctoral Program Committee, Department of Economics, University of the Punjab, Lahore.
- x) Member Departmental Tenure Review Committee, Institute of Materials Research, Bahauddin Zakriya University, Multan.

# **EMPLOYMENT RECORD:**

Designation/	Date		Name of Organization		Brief Job Description			
Title	From	То	Where working or worked					
Director	June, 2012	Date	Institute of Quality & Technology Management, University of the Punjab, Lahore.	i) ii) iii)	To look after administrative affairs of IQTM Teaching Research supervision			
Professor	June, 2012	Date	Institute of Quality & Technology Management, University of the Punjab, Lahore.	i) ii)	Teaching Research supervision			
Associate Professor/ Professor	Jan. 2005	May, 2012	Department of Metallurgy and Materials Engineering, College of Engineering & Emerging Technologies, University of the Punjab, Lahore.	i) ii)	Teaching/research Administrative work			
Lecturer/Assistant Professor/ Associate Professor	Sep. 1995	Dec. 2004	Institute of Chemical Engineering & Technology, University of the Punjab, Lahore.	i) ii)	Teaching/research Administrative work			

# **RESEARCH SUPERVISION AT MS/MPhil/PhD LEVEL:**

#### MPhil (Physics)

Centre of Excellence for Solid State Physics, University of the Punjab, Lahore

Supervised research thesis of five students.

# MSc Engineering (Metallurgy and Materials Engineering)

Department of Metallurgy & Materials Engineering (CEET), University of the Punjab, Lahore.

Supervised research thesis of five students.

### **MS Industrial Engineering & Management**

Institute of Quality & Technology Management, University of the Punjab, Lahore.

Supervised research thesis of seven students.

## **MS Total Quality Management**

Institute of Quality & Technology Management, University of the Punjab, Lahore.

Supervised research thesis of more than fifty students.

# **PhD Total Quality Management**

Institute of Quality & Technology Management, University of the Punjab, Lahore.

At present, five students are under supervision.

# **LIST OF PUBLICATIONS**

Sr. No.	Title of Publication	Name of Journal	Year	Vol.	Page. No.
1.	A comparison of High Temperature Deformation Processes in Two Beta titanium Alloys	Proceedings of 6 <sup>th</sup> World Conference on Ti held in France	1988		1355
2.	The Relationship between Diffusivity and Mean Linear Intercept in FCC Metal	Journal of Pakistan Institute of Chemical Engineers	1991	19-20	43
3.	Cold Compaction of Al Powder at Low Pressures	Journal of Faculty of Engg. & Technology	1995	1-2	21
4.	Green Compressive Strength of Cold Uniaxially Pressed Al P/M Compacts	Journal of Pakistan Institute of Chemical Engineers	1995	23	87
5.	Dimensional Stability of Al P/M compacts during Vacuum Sintering	Journal of Pakistan Institute of Chemical Engineers	1995	23	105
6.	Use of a Twin Pair of Atomizing Jets to Produce Metal Powders	Journal of Pakistan Institute of Chemical Engineers	1996	24	47
7.	Production of Al Powder by Gas Atomization in a Vertical Set Up	Journal of Pakistan Institute of Chemical Engineers	1996	24	83
8.	Gas Atomization Methods for Production of Rapidly Solidified Metal Powers	The Nucleus	1996	33	51
9.	Superplastic Behaviour in Ti- 3Al-4V	The Nucleus	1997	34	33
10.	Strain Hardening and Softening Effects in Ti-6Al-4V during High Temperature Deformation	Proceedings of 5 <sup>th</sup> International Symposium on Advance Materials held in Islamabad	1997		542
11.	Flow Stress-Strain Rate Behaviour of Ti-6Al-4V	The Nucleus	1998	35	35
12.	Strain Induced Hardening in ti- 3Al-4V at 910 °C	The Nucleus	1998	35	39
13.	Cavitation in Two Phase titanium Alloys during High Temperature Deformation	The Nucleus	1998	35	209
14.	Hardening Effect in Ti-3Al-2.5V During High Temperature Deformation	The Nucleus	1998	35	213
15.	The Effect of reduction in Aluminum Content in Ti-6Al-	Journal of Pakistan Institute of Chemical	1999	28	99

Sr. No.	Title of Publication	Name of Journal	Year	Vol.	Page. No.
	4V alloy on its Deformation behavior	Engineers			
16.	Activation Energy for Superplastic Flow in +Ti-6Al- 4V Alloy	Journal of Pakistan Institute of Chemical Engineers	1999	28	111
17.	High Temperature Deformation Behaviour of Ti- 6Al-4V Alloy with a Lamellar Structure	Proceedings of Pakistan Academy of Sciences	2000	37	57
18.	Activation Energy for Superplastic Flow in Ti-3Al-4V Alloy	Journal of Materials Science Letters	2000	19	2153
19.	Superplasticity in Ti-3Al-2.5V	Journal of Materials Science Letters	2000	19	1731
20.	Microstructural Influence on the Flow Stress-Strain Rate Behaviour of Ti-3Al-4V Alloy at 850 °C	Journal of Pakistan Institute of Chemical Engineers	2002	31	29
21.	Effect of Glass Fibers Reinforcements on the Tensile Properties of unsalurated Polyester	Engineering Horizon	2004	17	25
22.	High Temperature Deformation Behaviour of Ti- 10V Alloy and Associated Activiation Energy	Proceedings of Pakistan Academy of Sciences	2004	40 (1)	1
23.	The Evidence of Subgrain Formation in Ti-3Al-8V-6Cr- 4Mo-4Zr Alloy during Superplstic Deformation	Proceedings of Pakistan Academy of Sciences	2004	41	61
24.	Activation Energy for Superplastic Flow in Ti-3Al-2.5 V Alloy	Journal of Materials Science	2004	39(20)	6357
25.	The Role of Connectivity of B- Phase in the Superplastic Deformation of Ti-3Al-2.5 V alloy	Journal of Materials Science	2004	39(23)	7077
26.	Study on Rectangular Ducts with Ribs having different Aspect Ratios under Turbulent Flow Conditions	Engineering Horizon	2005	18	43
27.	Surface Hardening of Mild Steel by Pack Chromizing	Engineering News	2005	42	49
28.	Superplasticity and Associated Activation Energy in Ti-3Al-8V- 6Cr-4Mo-4Zr Alloy	Journal of Materials Science	2005	40	5475
29.	Increase in Surface Hardness of SG Iron and High Carbon Steel a Pack Chromizing	Engineering News	2006	42	34

Sr. No.	Title of Publication	Name of Journal	Year	Vol.	Page. No.
	Technique				
30.	Superplastic Response and Associated Microstructures in Ti-3Al-4V alloy at 800 °C	Journal of Scientific Research	2007	37	49
31.	Activation Energy for High Temperature Deformation of Ti-10V alloy on the basis of Second Strain Rate Cycles Data	Journal of Scientific Research	2007	37	41
32.	Improvement in Tensile Properties of a Structural Steel by Heat Treatment	International Journal of Material Science	2008	03	89
33.	Effect of Different Phase Proportions of Martensite on the Mechanical Properties of A Dual Phase Steel	Journal of Scientific Research	2009	39	35
34.	Relationship Between Case Depth and Hardness in an Induction Hardened Medium Carbon Steel	Journal of Pakistan Institute of Chemical Engineers	2009	37	29
35.	Quench Hardening and Tempering Behaviour of A Low Carbon Steel	Journal of Pakistan Institute of Chemical Engineers	2009	37	49
36.	Mechanical Properties of a Mild Steel Weld Produced by Shielded Metal Arc Welding Technique	Journal of Pakistan Institute of Chemical Engineers	2009	37	103
37.	Microstructural changes Associated with High Temperature Deformation of Ti 3Al-4V at 750° C	Proceedings of Pakistan Academy of Sciences	2010	47	103
38.	Flow Stress-Strain Rate Behaviour of Ti-3al-2.5v Alloy at Low Temperatures in the Superplastic Range	Materials Engineering & Performance	2011		Online
39.	The Development and Strengthening of 2219 Aluminum Alloy By Precipitation Hardening	Journal of Applied Sciences	2011		
40.	Peculiar Corrosion behavior of Type 316L SS in Simulated Cooling Water at various pH Values	Materials Performance	2014	53	44-47
41.	Effect of Cold Work on the Age Hardening Behaviour of Al2014 alloy	Submitted for publication in Technical Journal of UET Texila	2014		
42.	Heat treatment and microstructural characterization of a 12.70%	Submitted for publication in Technical Journal of UET Texila	2014		

Sr.	Title of Publication	Name of Journal	Year	Vol.	Page.
No.					No.
	Cr stainless steel				
43.	A Study of Corrosion	To be published			
	Behaviour of A 12.70% Cr				
	Stainless Steel in NaCl and				
	CaCl <sub>2</sub> Solutions				
44.	Characterization of Ferrite-	To be published			
	Martensite Steels Developed				
	from a 0.45% Medium Carbon				
	Steel				
45.	Study of Mechanical	To be published			
	behaviour and Micro-structure				
	of a Ferrite-Martensite Steel				
	Developed from an AISI 8620				
	Steel				