

CURRICULUM VITAE

Name: Prof. Dr. AMIN BADSHAH (T.I)

Fellow, Pakistan Academy of Sciences

Fellow, Chemical Society Pakistan

Father's Name: GHALIM SHAH
Date of Birth: 15th April, 1960
Domicile: Karak (NWFP) Pakistan
Nationality: Pakistani
Marital Status: Married with three children
Present Address: Chairman
Chemistry Department,
Quaid-I-Azam University, 45320 Islamabad (PAK.).
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ACADEMIC RECORD

Ph.D. Quaid-i-Azam University 1989-1994
Islamabad, Pakistan

Thesis topic: Organotin(IV) Derivatives Of Donor Ligands.

Post-doc. (DAAD Fellowship) Organosilicon and Boron Chemistry, Univ. of
Bayreuth, Germany, 1996-1997

Post-doc. (Min. S&T Fellowship) Organosilicon and Boron Chemistry, Univ. of
Bayreuth, Germany, 2001-2002.

Post-doc. (DAAD Fellowship) Alkynylsilane & 1,1-Organoboration, Univ. of
Bayreuth, Germany, 2004-2004.

TEACHING EXPERIENCE

Tenured Professor Department of Chemistry Feb., 26, 2005-to date.
Quaid-I-Azam University,
45320 Islamabad (PAK.).

Associate Professor Department of Chemistry April 5, 2002-Feb.,25,
2005.
Quaid-I-Azam University,
45320 Islamabad (PAK.).

Assistant Professor Department of Chemistry 1992-2002
Gomal University, D. I Khan

Lecturer -Do- 1984-1992

Administrative services.

1. **Member** Advanced Studies and Research Board, Quaid-I-Azam University, Islamabad from 2008 to 2013.
2. Member Quaid-I-Azam University Syndicate 2004-2005.
3. Head of Inorganic/Analytical Section Since, 2009 -2012
4. **Chairman**, hostel discipline committee Since, 2009-2010
5. **Chairman**, University discipline committee Since, 2011 to 2013
6. **Co-editor**, Journal of Chemical Society Pakistan Since, 2010 to date
7. **Chairman**, Department of Chemistry, QAU, Islamabad Since, 13th August 2012 to date.
8. Chairman house allotment committee, QAU, Islamabad Since, 2014 to date

Awards:

S.No	Title of the Award	Organization
1.	Awarded civil award (Tamgha-e-Imtiaz) from Govt of Pakistan	2013
2.	Awarded PAS Gold Medal from Pakistan Academy of Sciences, Islamabad, Pakistan	2013
3.	Awarded Best Teacher Award, HEC, Pakistan	2014
4.	Research Productivity Award 2001 to 2014	PCST
5.	Awarded DAAD fellowship (Germany) from 01 Dec., 1996 to 28 Feb., 1997.	DAAD (Germany)
6.	Awarded Ministry of S and T fellowship (Germany) from 01 Oct., 01 29 March 2002	Ministry of Science and Technology
7.	Awarded DAAD fellowship (Germany) from June 1, 2004 to Aug.31, 2004.	DAAD (Germany)
8.	<i>Selected national representative to Division II, Inorganic Chemistry, of IUPAC 2014-2015</i>	IUPAC

Books/Chapter Written:

Electrochemical and spectroscopic investigations of metal based anticancer drugs-DNA binding, in DNA Binding and DNA Extraction: Methods, Applications and Limitations,

MEMBER:

Lifetime membership of Chemical Society of Pakistan.
Fellow Chemical Society of Pakistan.

Research Interests: The inorganic aspects of our research are concerned primarily with the syntheses, spectroscopic characterization and biological activities of inorganic compounds, especially organometallic and transition metal complexes with Nitrogen, phosphorus, oxygen and sulfur donor ligands. A new research area recently initiated involves the synthesis of nanomaterials and transition metal complexes having potential application in the field of catalysis (homogeneous and heterogeneous).

Research Supervision:

1a: PhD Produced

S.No	Student's Name	Thesis title	Year
1	Wajid Rehman Gora	Synthesis and Characterization of Organotin(IV) Complexes with Donor Ligands.	2005
2	Farkhanda Shaheen	Synthesis, Characterization and Biological Studies of Palladium(II) & Platinum(II) Complexes with Nitrogen, Sulfur and Phosphorus based ligands.	2008
3.	M.K. Rauf	Solution phase synthesis of a combinatorial N, N-disubstituted their library. Complexation, Characterization and biological studies.	2010
4	Maliha Asma	Synthesis, characterization and catalytic activity of transition metals complexes.	2010
5.	G. Murtaza	Synthesis, characterization and biological studies of novel guanidines and their complexes.	2011
6	Hizbullah	Complexation, characterization and biological activities of NPS donor ligands with palladium.	2011
7	Rafia Naheed	Catalytic studies of butadiene/ethylene polymerization.	2012
8	M. Irshad Ali	Synthesis, Characterization and bioassay of some antimony (V) organometallics.	2012
9	A.A. Altaf	Synthesis, characterization and biological studies of ferrocenyl ureas and thioureas	2012
10	Bahjan Lal	DNA binding potency of ferrocene based thioureas.	2013
11	M. Said	Complexation of substituted guanidines with transition metals and their biological screening.	2013

12	Shafiqullah	Synthesis, characterization and structure elucidation of nano materials for electrochemical devices.	2014
13	Nasir Khan	Organotin(IV) derivatives of ferrocenyl benzoates and their applications..	2014
14	Azadar Hussain	Robust synthetic protocol for new ferrocene incorporated selenourea and their applications.	2015
15	Rabia Mushtaq	Research work in progress	
16	Kamal Badshah	Research work in progress	
17	Faiza Asghar	Synthesis, characterization and biological evaluation of new ferrocene incorporated diamides	Thesis in process
18	Syed Ishtiaq Khan	Research work in progress	
19	Inayat Ali Khan	Thesis in progress	
20	Shaista Tahir	Research work in progress	
21	Atta ur Rehman	Research work in progress	
22	Shumaila Zubir	Research work in progress	
23	Jahangeer Patujo	Research work in progress	
24	Saira Fatima	Research work in progress	

1b. PhD thesis submitted 1.

1c. PhD's produced to-date: 14

1d. PhD's under supervision: 10

Ph.D supervised as co-supervisor from Gomal University

1	Rukhsana Gul	Synthesis, characterization and biological applications of ferrocene based guanidines.	2014
2	M. Riaz	Synthesis, characterization and biological screening of Pd (II) complexes with [P, S] donor ligands.	Thesis in process

2a: M. Phil Produced

S.No	Student's Name	Thesis title	Year
1	Farooq Ahmad Kiani	An Increment System for 10- and 11-Vertex <i>nido</i> -Boranes and Heteroboranes.	2003
2	Maliha Asma	Synthesis and Characterization of Palladium(II) Complexes.	2004
3	Ezzat Khan	Complexes of Late Transition Metals with Dithiocarbamates.	2004
4	M. Adeel Saeed	Synthesis & Structural Elucidation of Organotin(IV) Complexes.	2006
5	Iffat Imtiaz	A Study of Spectroscopic Analysis of Some Selected	2006

		Metal Complexes.	
6	Uzma Habib	Synthesis and Structural Characterization of Transition Metal Complexes with N-donor Ligands.	2006
7	M. Said	Synthesis and Characterization of Guanidines and their complexation.	2007
8	Hizbullah Khan	Synthesis and Characterization of Transition Metal complexes with Sulphur and Nitrogen Donor Ligands.	2007
9	Syed Ishtiaq Khan	Synthesis, Structure Elucidation and Biological Studies of Metal Complexes with Nitrogen and Sulphur Donor Ligands.	2007
10	Sarwat Sultana	Synthesis, Spectral Characterization and Biological Studies of Metal Complexes with Thioureas Derived from Pivaloic Acid.	2007
11	Naureen Shaukat	Synthesis, Spectral Characterization and Biological Studies of Metal Complexes with N, N-Disubstituted Thioureas.	2007
12	Hafiz Hamid Nawaz	Synthesis and Characterization of Nitrogen and Oxygen Mix Donor ligands and their Complexation with different Transition Metals.	2007
13	Azadar Hussain	Synthesis and Characterization of Imine Based Nitrogen Donor Ligands and its complexation with Different Transition Metals.	2007
14	Afifa Naeen	Synthesis, Characterization and Biological Studies of Metal Complexes with Nitrogen & Oxygen Donor Ligands	2008
15	Atif Ali Altaf	Transition Metal complexes of Oxygen and Nitrogen Chelating Ligands.	2008
16	Bhajan Lal	Effect of synthetic procedures on physical and electrochemical properties of Pt/Ru catalysts for fuel cell applications.	2009
17	Ammarah Kanwal	Effect of carbon support on physical and electrochemical properties of Pt/Ru catalysts for fuel cell applications.	2009
18	Rabia Mushtaq	Synthesis of biologically active antimony(V) organometallics.	2010
19	Sadia Jamal	Synthesis and characterization of metal nano particles and their applications in metal hydrides batteries.	2010
20	Fatima Javed	Synthesis, characterization and biological applications of ferrocenyl amide derivatives	2011
21	Sohaila Andleeb	Synthesis and characterization of antimony (V) Xanthates	2011
22	Hafiz M. Ammad	Nanocatalysts for the conversion of methanol into DME (dimethyl ether).	2011
23	Shafqat Ali	Synthesis, characterization and biological screening of ferrocene based bimetallic thiourea	2011
24	Faiza Asghar	DNA binding studies of new antimony based	2011

		organometallics	
25	Rashid Alvi	Silver and cobalt co-modified nitrogen doped nophotocatalysts for eradication of bacteria from water	2011
26	M. Ibrar	Reduction of N ₂ O to N ₂ by new transition metal nanocatalysts.	2012
27	Saqib Kamal	Synthesis and characterization of transition metal nanocatalysts for oxidation of CO.	2012
28	M. Ayaz	Synthesis and applications of ferrocenyl derivatives.	2012
29	Qurate-ul-Ain	Solid and solution states characterization of new organotin(IV) complexes.	2012
30	Inayat Ali Khan	Synthesis and characterization of porous carbon for super capacitors and fuel cell applications.	2012
31	Samad Yaseen	Synthesis, characterization and enzyme inhibition studies of Ni(II) complexes with O, S donor ligands.	2013
32	Shabib Hussain	Biological screening of ferrocene incorporated N,N-disubstituted thioureas	2013
33	Sadia Akhtar	DNA binding and antioxidant activities of ferrocene incorporated N,N-disubstituted thioureas	2013
34	Hameeda Ayaz	Comparative studies of Cu-based metal organic frameworks and Cu-Ag/ γ -Al ₂ O ₃ bimetallic nano catalysts for the oxidation of CO	2013
35	M. Imran	Effect of support on efficiency of nanocatalyst for N ₂ O decomposition reaction.	2013
36	Saira Fatima	Study of Ferrocene Based Thiourea as Potential Non-ionic Surfactants	2014
37	Maryam Batool	New Heteroleptic Cu(I) Complexes as Potent DNA Binders	2014
38	Shumaila Zubir	New bioactive ferrocene benzoate based heteroleptic copper complexes	2014
40	Shaista Tahir	Antioxidant and DNA binding studies of new ferrocene incorporated guanidines	2014
41	Jahangeer Patujo	Bioassay of new nitro substituted thioureas and their copper complexes	2014
42	Zakir Zaman Khan	Ceria and Zirconia supported transition metal catalysts for automobile exhaust (N ₂ O, CO) control.	2015
43	Muhd Blawal	Synthesis characterization and biological studies of thiourea and their Cu(II) complexes	2015
44	Umair Shamraiz	Fabrication of CuS nano-particles from single source precursors for photocatalytic and battery applications.	2015
45	Wajid Hussain	Synthesis of transition metal sulfides from single and multi source precursors for photocatalytic and battery applications	2015
46	Sana Sabahat	Iron Chalcogenides from single source precursors for dye degradation	2015
47	Ume Habiba	Surfactant aided synthesis of iron selenide nanoparticles: Photodegradation and morphological studies.	2016

48	Bareera Raza	Synthesis and applications of di-substituted ferrocene incorporated thioureas, selenoureas and amides	2016
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- 2b. M.Phil produced to-date: **48**
 2.b. M.Phil students currently under supervision: 7

M. Phil supervised as co-supervisor from Hazara University

1	S. Rashid Saeed	Aliphatic acyl substituted guanidines, synthesis, complexation and characterization	2010
2	Jamil Ahmad	Synthesis, characterization of aromatic and pavidoyl substituted guanidines and their complexation with transition metals	2010
3	M. Shaheen Shah Adil	Synthesis and characterization of O, N mix donor ligands and their complexation with Cu(II).	2011

TRAINING RECEIVED

1. Attended pre-service training program at University Grant Commission Islamabad, Since Oct., 1997 to Dec., 1997
2. Participated in Chemical Safety and Security Workshop Bangkok. Thailand, 24-25 June, 2008, Sponsored by the United States Department of State.
3. Visiting Professor at the Key Laboratory of Engineering Plastics, Institute of Chemistry, the Chinese Academy of Sciences, Beijing, China 14th July to 3rd August, 2006.

Research Projects:

Project Title	Principal / Co-Principal Investigator	Amount	Sponsoring Agency	Duration
Novel Catalysts for the production of 21 st century polyethylene materials and for the specific medical usages.	Principal Investigator NO.20-623/R7D/2519	Rs. 4.347695/- Million	Higher Education Commission	3 years 2007-2011
Nano catalysts for industrial exhaust control.	P.I. No.20-1638/R&D/10	Rs. 4.541774/- Million	HEC	2011-13
Synthesis of metal-organic framework as hydrogen storage materials.	CoP.I No.	0.5 million	HEC	2013-14
Development of Antimony(III)/ (V) based Anti-leishmanial Drugs	P.I. No.20-1826/NRPU?R7D/HEC/12/5748	4.640710 Million	HEC	2013-16
Robust protocols for the synthesis of new potent anticancer ferrocenyl guanidine	P.I.	2.8 Million	PSF	2014-17
Porous carbon derived from MOFs. Gas and energy storage applications	Co P.I	5 Million	HEC	2013-16

Workshop Organized

5- day workshop on working, handling and maintenance of some basic instruments at the department of chemistry Quaid-I-Azam University, Islamabad (September 03-07, 2012).

Conferences/ Workshops Participated

Conference Title	Organizer	Location	Date	Sponsoring Agency
Presented paper in 3 rd international conference on drug discovery and therapy.	Eureka Science Ltd.	Dubai	5-10 Feb., 2011	HEC Pakistan
Presented paper in PETRA International Chemistry Conference (PICC) Transmediterranean Colloquium on Heterocyclic Chemistry (TRAMECH-5).	Tafila Technical University and Jordanian Chemical Society	Jordan	25-28 June, 07.	HEC Pakistan.

Participated in Chemical Safety and Security Workshop Bangkok.	Sandia National Laboratories.	Thailand	24-25 June, 08.	US Department of State
Attended one week workshop on Adv. 1D and 2D NMR Spect. Course in Fallanden, Switzerland	Broker	Switzerland	2 nd Sept. to 8 th Sept. 2005.	Broker .
Attended one day seminar on Measurement Uncertainty for Testing Labs.		Islamabad	09 June, 2003	
Attended 2 nd International Symposium on Advances in Chromatographic and Electrophoretic Separations (ACES II) at University of Bayreuth, Germany	Chemistry Department	Germany	8-10 Oct., 2001	Bayreuth University
Delivered lecture on, Use of Mass spectrometry in Pharmacy, the first training workshop in Pharmacy, at Gomal University D. I. Khan.	Faculty of Pharmacy	Gomal University D.I. Khan	26-31 March, 2001	HEC, Islamabad
Attended and presented paper in the 5th National Chemistry Conference, at the Department of Chemistry Quaid-i-azam Univ. Islamabad.	Chemistry Department	Quaid-I-Azam University	25-28 Oct., 1993	Chemical Society, Pakistan
Attended a Series of Seminars on, "Applications and Multinuclear NMR Studies of Tin and Silicon Complexes.	Chemistry Department	Quaid-I-Azam University	03-05 Oct., 1992	DAAD
Attended 3rd National Chemistry Conference of the Chemical Society of Pakistan at Gomal University, Dera Ismail Khan.	Chemistry Department	Gomal University D.I. Khan	20-23 Dec., 1991	Chemical Society, Pakistan
Attended 3rd DAAD follow-up seminar on, "Mass Spectrometry and Spectroscopy", at the Chem. Dept., Quaid-i-Azam Univ. Islamabad	Chemistry Department	Quaid-I-Azam University	29-30 Sept., 1991	DAAD
Attended 2nd DAAD follow-up seminar on, "Modern Trends in Stereochemistry", at the Chem. Dept., Quaid-I-Azam Univ. Islamabad	Chemistry Department	Quaid-I-Azam University	11-13 Feb., 1990	DAAD

RESEARCH EXPERIENCE

1. Five years research experience during Ph.D., research work entitled, Organotin (IV) derivatives of donor ligands (Aug., 1989 to Jul., 1994).
2. Three months post-doctoral research at the labs. of Inorganic Chemistry, University of Bayreuth, Germany on, Hydroboration and Organoboration of 1-alkynyl- silanes (Dec. 1, 1996 to Feb. 28, 1997).
3. Three months post-doctoral research at the labs. of Inorganic Chemistry, Quaid-i-Azam University Islamabad on, Synthesis, Characterization and Multinuclear NMR Studies of Biologically Active Organotin Compounds (June, 1998 to Aug., 1998).
4. Six months post-doctoral research at labs. of Inorganic Chemistry, University of Bayreuth, Germany on, Hydroboration and Organoboration of 1-alkynyl- disilanes (Oct. 1, 2001 to March. 28, 2002.).
5. Three months post-doctoral research at the labs. of Inorganic Chemistry, University of Bayreuth, Germany on, Alkynylsilane and 1,1-Organoboration (June. 1, 2004 to August. 31, 2004).

Focal Person of Chemistry, selected by COMSTECH to prepare a document for the 2nd OIC "Ten Year Plan of Action" (TYPOA)