

## CURRICULUM VITAE

### Fazal Akbar Jan (*PhD in Chemistry, HEC approved supervisor*)

**Objective:** *To work in a challenging atmosphere in a reputable organization to use all of my capabilities for the betterment of mankind & organization's repute.*



#### Personal Information

Name : Fazal Akbar Jan  
Father 's Name : Rahman Said  
Date of Birth : February 4,1983  
Domicile : District Dir (lower)  
C.N.I.C No. : 15302-0865623-3  
Nationality : Pakistani  
Religion : Islam  
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of Chemistry ,  
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#### Permanent Address

**Village Chinar Kot, Area  
Maidan, Tehsil Lal Qila, P.O  
Kumber , District Dir  
(lower)**

#### Academic Qualifications

Qualification	Year	Marks Obtained/CGPA	Division	Board/University
<b>D.Ph</b>	2008-2011	3.5 CGPA	1 <sup>st</sup>	<i>Institute of Chemical Sciences University of Peshawar, Peshawar</i>
<b>M.Phil</b>	2005-2008	3.6 CGPA	1 <sup>st</sup>	<i>Institute of Chemical Sciences University of Peshawar, Peshawar</i>
<b>M.Sc</b>	2005	795/1200	1 <sup>st</sup>	<i>Department of Chemistry University of Peshawar, Peshawar</i>
<b>B.Sc</b>	2003	364/550	1 <sup>st</sup>	<i>University of Peshawar, Peshawar</i>
<b>F.Sc</b>	2001	726/1100	1 <sup>st</sup>	<i>Board of Intermediate and Secondary Education Saidu Sharif Swat</i>

S.S.C	1999	577/850	1 <sup>st</sup>	<i>Board of Intermediate and Secondary Education Saidu Sharif Swat</i>
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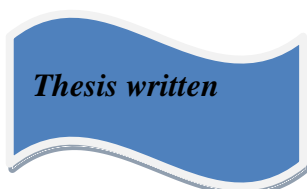
### *Areas of Research Interest*

- Δ Synthesized and Characterization of Various Metal Based Nanocatalysts, their Doped Counterparts and their Application for the Removal of Dyes from Wastewater.
- Δ. Characterization, Pretreatment and Adsorption Study of Aquatic Pollutants (acids, dyes) on modified adsorbents.
- Δ. Study of Fate and Transport Polycyclic Aromatic Hydrocarbons (PAHs) and Heavy Metals in Plant, Soil, Industrial Effluents and Drinking Water and Their Transfer to Human Beings through Food Chain
- Δ. Risk Assessment for human beings due to Environmental Pollutants (Heavy metals and organics)
- Δ. Characterization of Commercial Supported Co-Mo Hydro treating Catalysts through in-situ IR spectroscopy for the Desulphurization of Crude Oil Feed Stocks.
- ΔΔ. Use of Various Anthropometric Techniques (BMI, Calculation of Energy Requirements) to find correlation between Metal Intake and Daily Food Intake.

### *Selected Publications*

1. **Fazal Akbar Jan**, Muhammad Aamir, Naimat Ullah, Hussain Gulab, Complete characterization of XRD of synthesized SnO<sub>2</sub> nanoparticles and its application for the photo catalytic degradation of Eosin Y dye in aqueous solution Journal of the Chemical society of Pakistan Volume 43, No.1 2021(**IF = 0.300**).
2. **F. Akbar Jan**, Umar Shah, Muhammad Saleem , Rahat Ullah, Naimat Ullah, Muhammad Usman, Shahzad Hameed, Photo catalytic degradation of Xylene Cyanol FF dye using synthesized bismuth doped zinc oxide nanocatalyst accepted in Bulgarian Chemical Communications, Vol 53,2021(**IF=0.630**).
3. **Fazal Akbar Jan**, Rahat Ullah, Umar Shah, Muhammad Saleem, Naimat Ullah, Band gap tuning of zinc oxide nanoparticles by the addition of (1-4%) of strontium, synthesis, characterization of the catalyst and its use for the photo catalytic degradation of acid violet-17 dye in aqueous solution. Environmental Engineering and Management Journal, November 2020, Vol. 19, No. 11, 2039-2048(**IF = 1.186**).

4. Muhammad Idrees, **Fazal Akbar Jan**, Shah Hussain, Abdul Salam, Heavy Metals Level, Health Risk Assessment Associated with Contamination of Black Tea; A Case Study from Khyber Pakhtunkhwa (KPK), Pakistan, Biological Trace Element Research 2020(**IF = 2.639**).
5. Naimat Ullah, Anwar -Ul-Haq Ali Shah, **Fazal Akbar Jan**, Rotaba Ansir, Wali Muhammad, Application of Modified PANI-ZnO Composites for NH<sub>3</sub>Gas Sensor at Ambient Temperature, Journal of the Chemical Society of Pakistan Vol. 42, No. 03, 2020, 390-398(**IF = 0.300**).
6. F. Akbar Jan, Naimat Ullah, Shahzad Hameed, Modification of Lakra (Pakistani) coal by chemicals washing and heat treatment and its application for removal of organic acids (Prop ionic acid and Chloroacetic acid) from aqueous solution, Chiang Mai University Journal of Natural Science,2019, vol.18(3),328-344(**IF = 0.250**).
7. Muhammad Idrees, Shazia Rafiq, Sami Ullah, F. Akbar Jan, M.Naeem Khan, Fazal Mabood, heavy metals level of medicinal plants collected from selected district in khyber-pakhtunkhwa, Pakistan, Farmacia 2018, Vol. 66, 5,861-865 (**IF= 1.326**)
8. M. Ishaq, **F. Akbar Jan**, Murad Ali Khan I. Ihsanullah,I. Ahmad,M. Shakirullah,Roohullah, Effect of mercury and arsenic from industrial effluents on the drinking water and comparison of the water quality of polluted and non polluted areas: a case study of Peshawar and Lower Dir, Environmental Monitoring and Assessment (2013) 185:1483–1494. (**IF = 1.687**)
9. **F.AkbarJan**,M.Ishaq,S.Khan,M.Shakirullah,S.M.Asim,I.Ahmad,Bioaccumulation of heavy metals in human’s blood in industrially contaminated area, Journal of Environmental Sciences 2011, 23(12) 2069–2077. (**IF = 2.937**)
- 10.**F. Akbar Jan**, M. Ishaq, I. Ihsanullah, S.M. Asim,Multivariate statistical analysis of heavy metals pollution in industrial area and its comparison with relatively less polluted area: A case study from the city of Peshawar and district Dir lower, Journal of Hazardous Materials 176 (2010) 609–616. (**IF = 6.065**)
- 11.**F. Akbar Jan**, M. Ishaq, S. Khan, I. Ihsanullah, I. Ahmad, M. Shakirullah, A comparative study of human health risk via consumption of food crops grown on wastewater irrigated soil (Peshawar) and relatively clean water irrigated soil (district Dir-lower), Journal of Hazardous Materials 179 (2010) 612–621. (**IF = 6.065**).



- \* . Adsorption study of prop ionic acid and chloroacetic acid on Lakra coal
- \* . Analysis of polycyclic aromatic hydrocarbons (PAHs) and heavy metals in Plant and soil samples in the surrounding of selected Brick Kiln in Peshawar

- \* . Assessment of selected toxic heavy metals in industrial effluents and drinking water and their effects on the vegetation and nutritional status of Peshawar

### *M.Phil Thesis supervised*

1. Comparative compositional analysis of crude oils processed by Attock Refinery Limited, Pakistan
2. Synthesis and characterization of SnO<sub>2</sub> nanoparticles and its application as photo catalyst for the degradation of selected dyes
3. Band Tuning of synthesized TiO<sub>2</sub> catalyst by doping with metal and its application for the removal of organic dyes from water

### *BS/ M.Sc Thesis supervised*

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Removal of methyl blue from aqueous solution using charcoal, evaluation of the effect of concentration, time and temperature

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Removal of methyl red from aqueous solution using charcoal, evaluation of the effect of concentration, time and temperature

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Determination of selected heavy metals in edible green vegetables and Plants in district Charsadda, Khyber Pakhtoonkhwa, Pakistan

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Synthesis of Zinc oxide and Sr-Doped ZnO nanoparticles and comparative study of their application for the photo catalytic degradation of Acid Violet 17 dye in aqueous solution

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Bismuth doped Zinc oxide nanoparticles for the photo catalytic degradation of Xylene Cyanol FF dye and characterization of the catalyst and optimization of different reaction parameters

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Characterization of crude oil sample provided by Attock Refinery Limited, Pakistan

### *M.Phil Thesis evaluated*

1. Synthesis, Characterization and Antibacterial study of Manganese (IV), Chromium(III) and Copper (II) of O/N and N/N Donor Schiff bases Complexes (**Department of Chemistry Islamia College University**)
2. Synthesis, Characterization and Antifungal studies on Nickel(II) and Iron (III) Schiff base Complexes (**Department of Chemistry Islamia College University**)
3. Beneficiation of Pakistan Coals (**Institute of Chemical Sciences University of Peshawar**)

**Research Projects submitted/ Grants received**

N.No.	Project title	Funding Agency	Status	Amount (Million)
1	Assessment of polycyclic aromatic hydrocarbons(PAHs) and heavy metals in sludge amended soils and their uptake by the vegetables in District Mardan	Higher Education Commission Pakistan	Approved	0.5
2	Assessment of polycyclic aromatic hydrocarbons(PAHs) and heavy metals in sludge amended soils and their uptake by the vegetables in District Mardan	Higher Education Commission Pakistan	Approved	1.6
3	Seasonal variation of atmospheric polycyclic aromatic hydrocarbons (PAHs), determination of concentrations, gas-particle partitioning, sources and health risk assessment; bio monitoring of trace elements in various age- and gender-groups exposed to road dust in habitable rural and urban-industrial areas in Khyber Pakhtunkhwa	<b>Pakistan Science Foundation</b>	Submitted	

### *Administrative Experience*

Worked as **Deputy Registrar Academics (DRA)** Bacha Khan University Charsadda for one year.

**Member of Senate Constituency** Bacha Khan University Charsadda since July 03,2019.

Worked as a member of Departmental Admissions Committee, Lab Supervision Committee, Spot Purchase Committee, Review Committee, Program Organizing Committee, Food Committee and as M.Phil/PhD Coordinator/Focal Person

### *Teaching experience*

1. Currently serving as Assistant Professor of Environmental Chemistry in the Department of Chemistry Bacha Khan University Charsadda since February 27, 2013.
2. Served as Assistant Professor of Environmental Chemistry in the Department of Chemistry Abdul Wali Khan University Mardan under Interim Placement of Fresh PhD Program (IPFP) from February 12, 2012 to February 13, 2013.
3. Served as Research and Teaching Assistant in the Institute of Chemical Sciences University of Peshawar for 1 year under National Internship Program (NIP) from 6 Aug 2007 to 5 Aug 2008
4. Served as Lecturer in Chemistry in Oriental Degree College Peshawar from September 2008 to March, 2009
5. Served as a Trained Graduate Teacher in Frontier Children Academy (Peshawar) from September, 2005 to March 2006.

### *Courses Thought*

S.No.	Title	Level
1	Environmental Chemistry Courses	BS/PhD/Phil.M/.Sc.M
2	Coal Liquefaction	PhD/Phil.M
2	Fuel Chemistry	BS
3	Industrial Chemistry	BS

### *Certificates received*

§ Certificate for participation/contribution to one day seminar on Semester Rules & Regulations and Self Assessment Report organized by Quality Enhancement Cell BKUC.

§. Experience Certificate for six months PhD Research at the University of Aberdeen Scotland UK under International Research Support Initiative Program (IRSIP)

§. Honor Certificate from University of Peshawar for active participation in Independence Day celebrations.

- §. Course Certificates: Introduction to Bio-Inorganic Chemistry of metals from the Institute of Chemical Sciences University of Peshawar
- §. Certificate for participation in Nanotechnology Workshop organized by Pakistan Atomic Energy Commission and Centralized Resource Laboratory University of Peshawar
- §. Course Certificate: Use of Nuclear Techniques in Agriculture, Food and Medicines. Organized by Nuclear Institute for Food and Agriculture (NIFA) Peshawar
- §. Paper presented at Bara Gali Summer Campus in a Symposium Organized by Institute of Chemical Sciences University of Peshawar
- §. Certificate for participation in First Post Graduate Research Poster Presentation Spring 2010 organized by Institute of Chemical Sciences University of Peshawar
- §. Certificate for participation in Post Graduate Research Poster Symposium Organized by National Centre of Excellence in Physical Chemistry University of Peshawar
- §. Basic First Aid organized by Pakistan Red Crescent Society Khyber Pakhtunkhwa, Branch

### *Scholarships*

- ö. Scholarship for M.Phil study from Pakistan Science Foundation (PSF) Ministry of Education, Islamabad
- ö. Scholarship for PhD under Indigenous 5000 PhD Fellowship Scheme Batch IV by Higher Education Commission (HEC) Pakistan
- ö. Scholarship for six months PhD Research at University of Aberdeen Scotland UK under International Research Support Initiative Program (IRSIP) by HEC Pakistan

### *Countries visited*

((KSA)Saudi Arabia ,Scotland,dnglanE,mUnited Kingdo

### *Books Written*

⊙ .The Brilliant Guide to Objective Chemistry for the students of F.Sc part I & II.

### *Hobbies*

- ⊙ .Games: Cricket, Foot Ball and Badminton.
- ⊙ .Listening of Tilawat and Reading Newspapers.
- ⊙ .Net Surfing
- ⊙ .Study

### *Languages can speak and write*

⊙ .Urdu.

◊ .Pashto .  
◊ .English.

**References**

<b>Prof.Dr.Muhammad Ishaq</b> <b>Institute of Chemical Sciences,</b> <b>University of Peshawar, Peshawar,</b> <b>KPK Pakistan</b> <b>Cell Ph. 0300-5974255</b> <b>E-mail: mishaq481@yahoo.com</b>	<b>Dr.Murad Ali Khan</b> <b>Department of Chemistry ,</b> <b>Kohat, University of Science and</b> <b>Technology(KUST),KPK Pakistan</b> <b>Cell Ph.0300-9039153</b> <b>E-mail:drmalikhan@yahoo.com</b>
<b>Dr.Ihsanullah</b> <b>Deputy Chief Scientist</b> <b>Nuclear Institute for Food and</b> <b>Agriculture (NIFA) Tarnab Peshawar,</b> <b>KPK Pakistan</b> <b>Cell Ph. 0301-858002955</b> <b>E-mail: ishanullahdr@yahoo.com</b>	<b>Dr. Sardar khan</b> <b>Associate professor</b> <b>Department of Environmental</b> <b>Sciences, University of Peshawar,</b> <b>KPK Pakistan</b> <b>Cell Ph. 0300-9116256</b> <b>E-mail:</b> <b><a href="mailto:sardar.khan2008@yahoo.com">sardar.khan2008@yahoo.com</a></b>