

# Aamnah Firdous

## Personal Details

Full name Aamnah Firdous  
Gender Female  
Email Address [aamnah.firdous@gmail.com](mailto:aamnah.firdous@gmail.com)  
Nationality Pakistani  
City of residence Rawalpindi  
Contact No: +923495691121  
Age 28  
Languages \* English \* Urdu  
CNIC 37405-3768276-2

More About me A smart working reliable, enthusiastic researcher with 18 years of education, I welcome opportunities that allow personal and professional growth while advancing research abilities in inorganic/analytical chemistry.

## Academics

Title of degree Doctor of Philosophy / 2023-in progress/ Merit Scholarship  
University Quaid-i-Azam University, Islamabad, Pakistan.  
Academic Field **Inorganic/Analytical Chemistry**

Title of degree Master of Philosophy / 2021-2023/ Merit Scholarship  
University Quaid-e-Azam University, Islamabad, Pakistan.  
Academic Field **Inorganic/Analytical Chemistry**

Research and Thesis  
**CGPA-3.8/4.00**  
Percentage: **79.4%**

Title of degree Bachelor of Science / 2016-2020/ Merit Scholarship  
University Quaid-i-Azam University, Islamabad, Pakistan  
Academic Field **Chemistry**  
\* Inorganic Chemistry \*Physical Chemistry \*Organic Chemistry  
\*Analytical Chemistry \*Environmental Chemistry  
**CGPA- 3.33/4.00**  
Percentage: **71.9%**

Title of degree Higher Secondary School Certificate  
Institute Aslam Foundation Model College, 70 Main Harley Street,  
Rawalpindi, Pakistan.  
Academic Field Pre-medical  
\*Chemistry \*Biology \*Physics  
**912/1100**  
Percentage: **82.9%**

Title of degree Army Public School and College, Qasim Base, Dhamial Road,  
Institute Rawalpindi, Pakistan  
Secondary School Certificate

Academic Field

Science

969/1050

Percentage: 92.2%

## Research Interest

**Trace Metals and Health:** Role of trace metals in health & disease; Multivariate statistical analyses of trace metals in diseased persons in comparison with the healthy counterparts; the Antioxidant potential of food products in relation to phytochemicals and trace metals.

**Atmospheric Pollution:** Measurement and monitoring of atmospheric pollutants, particularly trace metals, their spatial and temporal variations, and source apportionment.

**Hydrogeochemistry:** Assessment of water, soil, and sediment quality; Physicochemical and trace metals analyses; Receptor modeling; Anthropogenic contamination of natural ecosystem; Ecological/health risk assessment; Pollution indicators; Characterization of industrial effluents and their effects on other environmental segments.

## Research Experience

### MPhil Thesis Title (2020-2022)

“Assessment of Trace Metal Pollution and associated Health Risks in the Superficial Soil of Urban Parks of Rawalpindi, Pakistan.”

### Research Activities

My research project includes:

- Quantification of trace metals in urban soil
- Evaluation of relative distribution of selected trace metals
- Identification of major pollution resources in urban soil
- Assessment of human health risks associated with trace metals in soil

### Conferences attended

1. International Conference on Research Advancements in Chemistry 2024 (ICRA-C 2024) is Scheduled on 21<sup>st</sup> – 23<sup>rd</sup> Aug 2024, Department of Chemistry, School of Natural Sciences (SNS), National University of Sciences and Technology (NUST) Islamabad.
2. Online conference on SARS-CoV-2, vaccines and variants: glimpse of post-pandemic futures in 2021, held on 18<sup>th</sup> May 2021, organized by Kirby Institute.
3. 11<sup>th</sup> International conference on NanoMedicine, 28<sup>th</sup> May 2021, organized by UNSW Australian Centre for NanoMedicine.
4. 5<sup>th</sup> Photodynamic Day, held on 18<sup>th</sup> May 2021 (Istanbul Turkey), organized by Acibadem University.
5. Inventing for Life with Merck Chemistry: Many Cultures Innovating Together, held online on 17<sup>th</sup> June 2021, organized by MERCK & CCHF.
6. International conference on Asian Network for Natural and Unnatural Materials ( ANNUM 8th), 16<sup>th</sup> July 2021.

7. 14<sup>th</sup> Korean Speech Contest organized by Department of Korean Language & Culture Islamabad King Sejong Institute (IKSI), 4<sup>th</sup> May 2023.
8. 2023 BK21 Research Symposium
9. KOMETS (2024) Regular Conference and 12<sup>th</sup> Annual General Meeting conducted by Korea Metabolomics Society Held in Daegu EXCO South Korea.
10. KNU 6<sup>th</sup> MSCRC symposium (Advancements in Bio & Environmental Analysis using Mass Spectrometry 2024

### **Poster Presentation**

1. **Plant Metabolomics Poster presentation in KOMETS Conference 2024.**
2. **KNU MSCRC symposium (Advancements in Bio & Environmental Analysis using Mass Spectrometry 2024**

### **Conference Presentation**

1. **KNU MSCRC symposium (Advancements in Bio & Environmental Analysis using Mass Spectrometry 2024**

### **Workshops attended**

1. Virtual XFM & IRM Microscopy Workshop on sample preparation and Nanoscale IR technique held on 20<sup>th</sup> May 2021- 21<sup>st</sup> May 2021.
2. Mendeley: Reference data management for research (online event), 24<sup>th</sup> May 2021, organized by Pastic Karachi Pakistan.
3. Training seminar on Language and Sustainable development goals UN 2030 agenda, 24<sup>th</sup> February 2023, organized by NUML Islamabad.
4. 2024 EEMS workshop

### **Training Attended**

3. Compound discoverer software using for data analysis by thermos scientific
4. Progenesis software usage
5. Orbitrap instrument operating

### **YouTube channel**

Operating videos uploaded to YouTube channel “ChroMasspia”

### **Membership**

Lifetime member of “The Chemical Society of Pakistan”

### **Skills**

- Atomic Absorption Spectrophotometer handling
- UV-visible Spectrophotometer handling
- Fluorescence spectrophotometer handling
- TLC
- GC-MS interpretation
- NMR analysis/interpretation
- NMR instrument handling

- FTIR interpretation
- Chem draw
- MS-Office
- TopSpin
- Master Nova
- Origin

## References

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| <ul style="list-style-type: none"> <li>• <b>Prof. Dr. Munir Hussain Shah</b></li> <li>• Professor</li> <li>• Head of Section, Department of Chemistry</li> <li>• Quaid-i-Azam University, Islamabad-45320, Pakistan</li> <li>• <a href="mailto:mhshahg@qau.edu.pk">mhshahg@qau.edu.pk</a>   <a href="mailto:munir_qau@yahoo.com">munir_qau@yahoo.com</a></li> </ul> | <ul style="list-style-type: none"> <li>• <b>Prof. Dr. Azhar Iqbal</b></li> <li>• Professor</li> <li>• Department of Chemistry</li> <li>• Quaid-i-Azam University, Islamabad-45320, Pakistan</li> <li>• <a href="mailto:aiqbal@qau.edu.pk">aiqbal@qau.edu.pk</a></li> </ul> |
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