## Dr. Ahmad Raza Ashraf

Personal Profile

CV

s/o Muhammad Ashraf

| Date of birth  | January 03, 1985   |                   |                    |  |  |
|----------------|--|-------------------|--------------------|--|--|
| Telephone      | +92 0345 7113251   |                   |                    |  |  |
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| Address        | House No. 42, Main Millat Road, Near Faisal Street,<br>Ittehad Colony, Samanabad, Lahore   |                   |                    |  |  |
| Marital Status | Married  |                   |                    |  |  |
| Qualification  | Degree   | Year              | Division           | Institute  |  |
|                | PhD<br>Chemistry<br>(Inorganic/Analytical)   | 2019              | 1 <sup>st</sup>    | Quaid-i-Azam University<br>Islamabad, Pakistan /<br>University of Waterloo, Canada |  |
|                | <b>MPhil</b><br>Chemistry<br>(Inorganic/Analytical)  | 2011              | 1 <sup>st</sup>    | Quaid-i-Azam University<br>Islamabad, Pakistan                                     |  |
|                | MSc<br>Chemistry   | 2008              | 1 <sup>st</sup>    | Bahauddin Zakariya University<br>Multan, Pakistan                                  |  |
|                | <b>BSc</b><br>Bot., Zol., Chem.  | 2005              | $1^{st}$           | Bahauddin Zakariya University<br>Multan, Pakistan                                  |  |
|                | <b>FSc</b><br>Pre-Medical  | 2002              | 1 <sup>st</sup>    | BISE Multan  |  |
|                | SSC<br>Science   | 2000              | 1 <sup>st</sup>    | BISE Multan  |  |
| Professional   | Assistant Professor (Jan 2023 – Present)   |                   |                    |  |  |
| Experience     | Department of Chemistry, University of Education, Lahore (Multan Campus)   |                   |                    |  |  |
|                | Assistant Professor (Feb 2022 – December 22)   |                   |                    |  |  |
|                | <ul> <li>Department of Chemistry, The University of Lahore, Lahore</li> <li>IPFP Fellow (Sep 2020 – Sep 2021)         <ul> <li>Department of Chemistry, University of Education, Lahore (Faisalabad Campus)</li> </ul> </li> <li>Visiting Faculty Member (Sep 2019 – Mar 2020)         <ul> <li>Department of Chemistry, University of Sahiwal, Sahiwal</li> </ul> </li> </ul> |                   |                    |  |  |
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|                | <ul> <li>Lecturer in Chemistry (Sep 2018 – Sep 2020)</li> <li>Department of Chemistry, Heritage International College, Arifwala</li> </ul>   |                   |                    |  |  |
|                |  |                   |                    |  |  |
|                | (Affilia   | ted with GCUF     | , Teaching to BS/I | MSc classes)   |  |
|                | • Research Associate (Oct 2012 – Dec 2012)   |                   |                    |  |  |
|                | HEC Pakistan Research Project No. 20-2154/NRPU/R&D/HEC/12-   |                   |                    |  |  |
|                | Islamab  | ad                |                    |  |  |
| Awards /       | • HEC Pakistan 5000 Indigenous Ph.D. Fellowship Program (Phase II).  |                   |                    |  |  |
| Scholarships   | • International Research Support Initiative Program (IRSIP) of HEC Pakistan for foreign  |                   |                    |  |  |
|                | research visit to University of Waterloo, Canada.  |                   |                    |  |  |
|                | • Financial support  | by Professor      | Leonardo C. Sim    | on for the extended period beyond six  |  |
|                | months, during res   | search visit to U | University of Wate | rloo Canada under IRSIP.   |  |

|                       | University merit scholarship during all the four semesters of MPhil at QAU Islamabad.   |  |  |  |
|-----------------------|---|--|--|--|
| Achievements          | <ul> <li>University merit scholarship during all the four semesters of MPhil at QAU Islamabad.</li> <li>Secured 2<sup>nd</sup> position in "Microteaching Competition" in National Faculty Development</li> </ul> |  |  |  |
| Treme venicites       | Program (NFDP) 2020 of National Academy of Higher Education (NAHE) Pakistan.  |  |  |  |
|                       |   |  |  |  |
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| <b>.</b> .            | <ul> <li>First division throughout the academic career.</li> <li>Synthesis, cahracterization and properties evaluation of:</li> </ul>   |  |  |  |
| Research              | Synthesis, cahracterization and properties evaluation of:   |  |  |  |
| Interests             | New monomers for polymerization (diamines)  |  |  |  |
|                       | High performence polymers (polyimides) and copolymers   |  |  |  |
|                       | Polyimide/nanocomposites  |  |  |  |
|                       | > Synthesis and characterization of Schiff base ligands and transition metal complexes  |  |  |  |
| International         | Joined Professor Leonardo C. Simon's research group at University of Waterloo Canada  |  |  |  |
| <b>Research Visit</b> | for one year from October 2015 to September 2016 under the International Research   |  |  |  |
|                       | Support Initiative Program (IRSIP) of HEC Pakistan.   |  |  |  |
|                       | The HEC award was for six months however, Professor Simon facilitated the extension of  |  |  |  |
|                       | visit by providing funding for the extended period.   |  |  |  |
| Journal               | 1. Sheza Muqaddas, Mohsin Javed, Sohail Nadeem, Muhammad Adeel Asghar, Ali Haider,  |  |  |  |
| Publications          | Muhammad Ahmad, Ahmad Raza Ashraf, Arif Nazir, Munawar Iqbal, Abid Ali., Carbon   |  |  |  |
|                       | Nanotube Fiber-based Flexible Microelectrode for Electrochemical Glucose Sensors, ACS   |  |  |  |
|                       | Omega, Accepted (19-12-22).   |  |  |  |
|                       | 2. Arif Nazir, Shafiq ur Rehman, Mazhar Abbas, Dure Najaf Iqbal, Ahmad Raza Ashraf and  |  |  |  |
|                       | Munawar Iqbal., Green synthesis and characterization of copper nanoparticles using  |  |  |  |
|                       | Parthenium hysterophorus extract: Antibacterial and antioxidant activities evaluation.  |  |  |  |
|                       | Chemistry International Volume, 8 (2022), 68-76.  |  |  |  |
|                       | 3. Wazirzada Aslam Farooq, Muhammad Sajjad Hasan, Muhammad Iftikhar Khan, Ahmad   |  |  |  |
|                       | Raza Ashraf, Muhammad Abdul Qayyum, Nafeesah Yaqub, Mona A. Almutairi,  |  |  |  |
|                       | Muhammad Atif and Atif Hanif, Structural, Optical and Electrical Properties of  |  |  |  |
|                       | $Cu_{0.6}Co_xZn_{0.4-x}Fe_2O_4$ (x = 0.0, 0.1, 0.2, 0.3, 0.4) Soft Ferrites, Molecules, Volume 26   |  |  |  |
|                       | ( <b>2021</b> ): 1399.  |  |  |  |
|                       | DOI: 10.3390/molecules26051399  |  |  |  |
|                       | 4. Sohail Abbas, Tariq Javed, Shagufta Zafar, Muhammad Babar Taj, Ahmad Raza Ashraf,  |  |  |  |
|                       | Muhammad Imran Din, Adsorption of crystal violet dye by using low cost adsorbent  |  |  |  |
|                       | peanut husk, Desalination and Water Treatment, Volume 233 (2021) 387–398.   |  |  |  |
|                       | 5. Khalid Mahmood, Zareen Akhter, Muhammad Adeel Asghar, Bushra Mirza, Hammad   |  |  |  |
|                       | Ismail, Faroha Liaqat, Saima Kalsoom, Ahmad Raza Ashraf, Muhammad Shabbir,  |  |  |  |
|                       | Muhammad Abdul Qayyum & Vickie McKee., Synthesis, characterization and biological   |  |  |  |
|                       | evaluation of novel benzimidazole derivatives, Journal of Biomolecular Structure and  |  |  |  |
|                       | Dynamics, Volume 38, ( <b>2020</b> ) Pages 1670-1682.   |  |  |  |
|                       | DOI: 10.1080/07391102.2019.1617783  |  |  |  |
|                       | 6. Khalid Mahmood, Zareen Akhter, Bushra Mirza, Hammad Ismail, Faroha Liaqat, Saima   |  |  |  |
|                       | Kalanan Abar I Dana Ashar 6 M harmad Abbi 1 Osana (1941) DNA D' 1'  |  |  |  |

 Khalid Mahmood, Zareen Akhter, Bushra Mirza, Hammad Ismail, Faroha Liaqat, Saima Kalsoom, Ahmad Raza Ashraf, Muhammad Abdul Qayyum., Synthesis, DNA Binding Affinity, Molecular Docking Study and Antitumor Activity of Cu(II), Pd(II) and Zn(II) Metal Complexes of Benzimidazole Schiff Base Ligand, Journal of the Chemical Society of Pakistan, Volume 41 (**2019**) Pages 903-916.

- Ahmad Raza Ashraf, Zareen Akhter, Leonardo C. Simon, Charles Dal Castel, Abdeljalil Assoud, Polyimide derivatives of 4,4'-bis((4-aminophenoxy)methyl)-1,1'-biphenyl: Synthesis, spectroscopic characterization, single crystal XRD and thermal studies, Journal of Molecular Structure, Volume 1169 (2018) Pages 46-58. DOI: 10.1016/j.molstruc.2018.05.051
- Ahmad Raza Ashraf, Zareen Akhter, Leonardo C. Simon, Vickie McKee, Charles Dal Castel, Synthesis of polyimides from α,α'-bis(3-aminophenoxy)-p-xylene: Spectroscopic, single crystal XRD and thermal studies, Journal of Molecular Structure, Volume 1160 (2018) Pages 177-188.

DOI: 10.1016/j.molstruc.2018.01.098

- Muhammad Shabbir, Zareen Akhter, Ahmad Raza Ashraf, Hammad Ismail, Anum Habib, Bushra Mirza., Nickel(II) and palladium(II) triphenylphosphine complexes incorporating tridentate Schiff base ligands: Synthesis, characterization and biocidal activities, Journal of Molecular Structure, Volume 1149 (2017) Pages 720-726. DOI: 10.1016/j.molstruc.2017.08.050
- Muhammad Shabbir, Zareen Akhter, Ahmad Raza Ashraf, Michael Bolte, Sumbal Wahid, Bushra Mirza., Pharmacological evaluation of ONNO donor quadridentate Schiff bases, European Journal of Chemistry, Volume 8 (2017) Pages 46-51.
   DOI: 10.5155/eurjchem.8.1.46-51.1535
- Muhammad Shabbir, Zareen Akhter, Iqbal Ahmad, Safeer Ahmed, Maryam Shafiq, Bushra Mirza, Vickie McKee, Khurram Shahzad Munawar, Ahmad Raza Ashraf, Schiff base triphenylphosphine palladium (II) complexes: Synthesis, structural elucidation, electrochemical and biological evaluation, Journal of Molecular Structure, Volume 1118 (2016) Pages 250-258.

DOI: 10.1016/j.molstruc.2016.04.003

Ahmad Raza Ashraf, Zareen Akhter, Vickie McKee, Muhammad Siddiq., Effect of polydimethylsiloxane incorporation on the properties of polyimides synthesized from newly designed α,α'-bis(2-aminophenoxy)-p-xylene. Express Polymer Letters, Volume 9 (2015) Pages 1001-1014.

DOI: 10.3144/expresspolymlett.2015.90

13. Ahmad Raza Ashraf, Zareen Akhter, Michael Bolte., (3-benzoylphenyl) (phenyl)methanone, Acta Crystallographica Section E: Structure Reports Online, Volume 67 (2011) Page 02432.

DOI: 10.1107/S1600536811033344

International1.Ahmad Raza Ashraf, Zareen Akhter, Muhammad Abdul Qayyum, Diamine ArchitectureConferenceEffects on Thermal Stability of Polyimides, International Conference On BiologicalPresentationsResearch & Applied Sciences (IBRAS), January 20-21, 2021, Jinnah University For<br/>Women, Karachi, Pakistan.

- 2. Ahmad Raza Ashraf, Zareen Akhter, Muhammad Abid Rashid, Mian Habib Ur Rahman Mahmood, Improved Thermal Performance of Polyimides by Incorporation of Cardo and Trifluoromethyl Moieties, 1<sup>st</sup> International Industrial Chemistry Conference (IICC), Feb 26-28, 2021, NED University of Engineering & Technology, Karachi, Pakistan.
- Muhammad Abdul Qayyum, Ahmad Raza Ashraf, Danish Riaz, Multivariate Investigation of Toxic and Essential Metals in The Serum of Colorectal Cancer Patients (With Types and Stages) in Comparison with Controls, 1<sup>st</sup> International Industrial Chemistry Conference (IICC), Feb 26-28, 2021, NED University of Engineering & Technology, Karachi, Pakistan.
- M. Waseem Shahzad, Aftab Kareem, Zaman Ashraf, Ahmad Raza Ashraf, Synthesis of Biodegradable Plastics from Wheat Husk, 1<sup>st</sup> International Industrial Chemistry Conference (IICC), Feb 26-28, 2021, NED University of Engineering & Technology, Karachi, Pakistan.
- Ahmad Raza Ashraf, Zareen Akhter, Charles Dal Castel, Leonardo C. Simon, Dianhydride architecture effects on thermal and mechanical properties of polyimides, 37<sup>th</sup> Canadian High Polymer Forum, August 9-11, 2016, Glen House Resort, Gananoque, ON, Canada.
- Ahmad Raza Ashraf, Zareen Akhter, Charles Dal Castel, Leonardo C. Simon, Improvement of thermal and mechanical properties of polyimide using metal oxide nanoparticles, 16<sup>th</sup> Society of Plastics Engineers (SPE) Automotive Composite Conference and Exhibition (ACCE), September 7-9, 2016, Michigan, USA.
- Professional• Participated in National Faculty Development Program (NFDP) July-August 2020 ofTrainingsNational Academy of Higher Education (NAHE) under the umbrella of HEC Pakistan.
  - Completed the "Fundamentals of Project Management" course with 100% score offered by NAHE, HEC in collaboration with Oxon Global from 27 March 2021 to 03 April 2021.
- Courses Taught Inorganic Chemistry-I

(BS / M.Phil)

- Inorganic Chemistry-II
  - Inorganic Chemistry-III
  - Organo-Transition Metal Compounds
  - Homogeneous Catalysis
  - Radio Nuclear Chemistry
  - Inorganic Chemistry Laboratory
  - Environmental Chemistry
  - Organic Polymers

- Advanced Coordination Chemistry
- Chemistry of Transition Elements
- Inorganic Material Chemistry
- Analytical Chemistry-I
- Organic Chemistry-I
- Reactive Intermediates and Photochemistry
- Biochemistry-1 (Structure and Functions of Macromolecules)