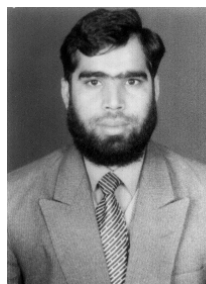


CURRICULUM VITA



Dr. Muhammad Imran Din

***Contact: Institute of Chemistry University of the Punjab
Quaid-i-Azam Campus Lahore 54590
Tel: 92 42 923 0463 (Ext:809)
Mob: +923007818870
Email: imran.chem@pu.edu.pk
imrandin2007@gmail.com***

Professional Summary

- *Qualified researcher with extensive training and experiences in Adsorption of supported transition metal nanomaterials*
- *Possesses understanding of the basic physical and chemical principles of Chemical Kinetics, Surface Chemistry, Thermodynamics and Quantum Mechanics*
- *Ample expertise in working with UV-visible, FT-IR ,X-ray diffractometer, scanning electron microscope, transmission electron microscope, and other high tech. instruments.*
- *Devoted scientist with outstanding organizational, troubleshooting and problem-solving skills.*
- *Computer-proficient in Microsoft Office, Adobe, WordPerfect, Origin, Wavemetrics (IGOR) and Web Browsers.*

Research Interests

- *Synthesis, Characterization and application of Ni-SBA-16 by internal pH-Adjustment method*
- *Preparation and fabrication of supported transition metal nanomaterials.*
- *Inorganic Nanotubes and Nanowires: template assisted growth of iron, nickel and cobalt nanotubes and nanowires.*
- *Development, Functionalization and Characterization of CNTs for delivery of anti-cancer drugs.*
- *Preparation of high surface area mesoporous activated carbons by environmentally and economically feasible by a variety of chemical activators*

Educational Career

- **PhD Physical Chemistry** **December 2013**
The Islamia University of Bahawalpur, Bahawalpur, Pakistan
- **M.Phil Physical Chemistry (1st Division)** **June 2007**
The Islamia University of Bahawalpur, Bahawalpur, Pakistan
- **M.Sc Physical Chemistry (1st Division)** **January 2005**

The Islamia University of Bahawalpur, Bahawalpur, Pakistan

- **B.Sc (1st Division)** **August 2002**
GOVT. S.E college, Bahawalpur, Pakistan
- **F.Sc (Pre-Medical)** **August 1999**
GOVT. S.E college, Bahawalpur, Pakistan
- **Matric (1st Division)** **June 1997**
GOVT. Technical High School, Bahawalpur, Pakistan

International Publications

1. Synthesis, Characterization and Applications of Copper Nanoparticles

Muhammad Imran Din, Rida Rehan

Analytical Letters; Accepted author version posted online: 24 May 2016 **DOI:**

[10.1080/00032719.2016.1172081](https://doi.org/10.1080/00032719.2016.1172081)

2. Recent Advances in the Synthesis and Stabilization of nickel and nickel oxide nanoparticles: A Green Adeptness

Muhammad Imran Din, Aneela Rani

International Journal of Analytical Chemistry; volume 2016 (2016), Article ID 3512145

3. Microwave Treated *Salvadora oleoides* as an Eco-friendly Biosorbent for the Removal of Toxic Methyl Violet Dye from Aqueous Solution -- A Green Approach

Muhammad Imran Din, Zaib Hussain, *, Hifza Munir, Amber Naz, Azeem Intisar, M. Nouman Makshoof, M. Latif Mirza, *International Journal of Phytoremediation*, 2016(**Accepted**)

DOI:10.1080/15226514.2015.1115959, I.F1.739

4. Novel Sonochemical Single Step Fabrication of NiO Nanoparticles

Sadia Ata, Anila Tabassum, **Muhammad Imran Din**, Mahreen Fatima, Samina Ghafoor, Muhammad Arif Bhatti

Digest Journal of Nanomaterials and Biostructures 11(1): 65-80, 2016

5. Dispersion of Iron Nanoparticles by Polymer-Based Hybrid Material for Reduction of Hexavalent Chromium

Syed Wasim Ali, Mumammad Latif Mirza, Tariq Mahmood Bhatti, Kashif Naeem **Muhammad Imran Din**,

Journal of Nanomaterials, Volume (2015), 1-8, 2015.

6. Green Synthesis and Characterization of Silver Nanoparticles using Ferocactus echidne Extract as a Reducing Agent

Asma Tufail Shah, **Muhammad Imran Din**, Abdul Qadir Farzana Rashid

Analytical Letters 48: 1180–1189, 2015

7. Direct synthesis of mesoporous molecular sieves of Ni-SBA-16 by internal pH adjustment method and its performance for adsorption of toxic Brilliant Green dye

Asma Tufail Shah, **Muhammad Imran Din**, Farva Nausheen Kanwal, M. Latif Mirza

Arabian Journal of Chemistry 8,579-586, 2015

8. Critical Study of Multiple Regressions Modelling for Monitoring of Haloacetic Acids in Water Reservoirs

Sadia Ata, Feroza Hamid Wattoo, Muhammad Imran Din

Arabian Journal for Science and Engineering 40:101–108, 2015

9. Bioactivity of medicinal plants Mentha arvensis and Peganum harmala extracts against Heterotermes indicola (Wasmann) (Isoptera)

Ayesha Aihetasham, Maryam Umer, Muhammad Saeed Akhtar, **Muhammad Imran**

Din, Khalid Zamir Rasib International Journal of Biosciences,7(5),116-126, 2015

10. Biosorption studies for removal of Cu (II) ions onto Saccharum bengalense efficient and eco-friendly biosorbent; Muhammad Imran Din, M. Latif Mirza

Turkish Journal of Biochemistry 39(4):455–462, 2014

11. Evaluation of *Acacia nilotica* as a Non-Conventional Low Cost Biosorbent for the elimination of Pb (II) and Cd (II) ions from Aqueous Solutions.

Sadia Ata, **Muhammad Imran Din**, Saira Nasir, Atta Rasool

Arabian Journal of Chemistry 7: 1091–1098, 2014

12. Adsorption Optimization of Lead (II) Using *Saccharum Bengalense* as a Non-Conventional Low Cost Biosorbent: Isotherm and Thermodynamics Modeling

Muhammad Imran Din, Zaib Hussain, M. Latif Mirza, Asma Tufail Shah

International journal of Phytoremediation 16:889–908, 2014

13. Environmentally benevolent urea modified *Saccharum bengalense* as a high capacity biosorbent for removal of Pb (II) ions: metal uptake modeling and adsorption efficiency

Muhammad Imran Din, Umar Farooq, M. Latif Mirza, Makshoof Athar

Desalination and Water Treatment: 52: 5856–5868, 2014

14. FTIR Drug-Polymer Interactions Studies of Perindopril Erbumine

Asadullah Madni, Md Ekwal, Saeed Ahmad, **Muhammad Imran Din**

Journal of the Chemical Society of Pakistan: Vol. 36, No. 6, 2014

15. Biosorption of toxic Congo red dye from aqueous solution by eco-friendly biosorbent *Saccharum bengalense*: kinetics and thermodynamics

Muhammad Imran Din, Zaib Hussain, M. Latif Mirza, Makshoof Athar

Desalination and Water Treatment: 51: 5638-5648, (2013)

16. Evaluation of conductive polymers as an adsorbent for eradication of As (III) from aqueous solution using inductively coupled plasma optical emission spectroscopy (ICP-OES)

Muhammad Imran Din, Sadia Ata, Ijaz Ul Mohsin, Atta Rasool, Andleeb Andleeb Aziz

International Journal of Science and Engineering 6(2) 1-7, 2014.

17. Biosorption potentials of a novel green biosorbent *Saccharum bengalense* containing cellulose as carbohydrate polymer for removal of Ni (II) ions from aqueous solutions

Muhammad Imran Din, M. Latif Mirza

International Journal of Biological Macromolecules, 54 99– 108, (2013)

18. Thermodynamics of Biosorption for removal of Co (II) ions onto an efficient and ecofriendly biosorbent (*Saccharum Bengalense*): Kinetics and Isotherm modeling

Muhammad Imran Din, M. Latif Mirza, Sadia Ata, Ijaz ul Mohsin

Journal of Chemistry (2013) 1-11, 2013

19. Fabrication of Nickel nanoparticles modified electrode by reverse microemulsion method and its application in electrolytic oxidation of Ethanol

AsmaTufail Shah, Muhammad Imran Din, Mira Tul Zubaid Butt, M. Latif Mirza

Colloids and Surfaces A: Physicochemical and Engineering Aspects, 405 (2012) 19-21

20. Optimization of gas chromatographic analysis of halogenated acids in drinking water using full factorial experimental design.

Sadia Ata, Muhammad Imran Din, Ijaz ul Mohsin

Desalination and Water Treatment 49) 34–40 (2012)

21. Stability Kinetics Evaluation of Pharmaceutical Drug Products.

Zaib Hussain, Muhammad Imran Din, Asadullah Madin

Archives Des Sciences. Vol 65, No. 2. 20-3,(2012)

22. Equilibrium, Thermodynamics, and Kinetic Sorption Studies for the Removal of Coomassie Brilliant Blue on Wheat Bran as a Low-Cost Adsorbent.

Sadia Ata, Muhammad Imran Din, Ijaz ul Mohsin

Journal of Analytical Methods in Chemistry. 1-8(2012)

23. Biosorptive removal of lead and cadmium ions from aqueous solution: The use of carrot residues as low cost non-conventional adsorbent

Sadia Ata, **Muhammad Imran Din**, Feroza Hamid Wattoo, Ijaz ul Mohsin

Turkish Journal of Biochemistry; 37 (3) 272–279, (2012)

24. Recovery of Cobalt and Copper from Textile, Electroplating and Tannery Effluents Using Electrocoagulation Method

Zaib Hussain, Muhammad Imran Din, Sana Nayab, Manzar Islam

Hydrology: Current. Research, 1-4, 2012.

25. Adsorption modeling of alizarin yellow on untreated and treated charcoal.

Muhammad Salman, **Muhammad Imran Din**, Makshoof Athar

Turkish Journal of Engineering and Environmental Sciences. 35; 209 – 216, (2011)

26. Simultaneous removal of Pb (II), Cd (II) and Cu (II) from aqueous solutions by adsorption on *Triticum aestivum* – a green approach

Muhammad Salman, **Muhammad Imran Din**, Makshoof Athar

Hydrology: Current. Research, 2-4. (2011)

Conferences & Seminars Attended

1. Poster entitled “Bio-reduction of Nickel Salts for stable Ni and NiO nanoparticles using *Calotropis gigantea* plant extract: Green synthesis and antimicrobial activities” presented in 50th European Symposium on Biological and Organic Chemistry (50thESBOC) held on May 20-22, 2016 in Newtown, Powys, Wales, United Kingdom.
2. Oral talk in International Conference of Biochemical and Chemical Sciences organized by Department of Chemistry & Biochemistry, University of Agriculture, Faisalabad, Pakistan, February 22-24, 2016.

3. Paper entitled “Adsorption Studies of Brilliant Green Dye from Aqueous Solutions on Acid Modified Saccharum bengalense on Lab Scale” presented as Oral presentation in the 26th national and 14th international Chemistry Conference of the Chemical Society of Pakistan organized by The Islamia University of Bahawalpur, held on October 5-8, 2015.
4. Work shop attended “Training workshop on advanced chemical techniques in natural and applied sciences, University of Agriculture, Faisalabad, Pakistan, September, 10-12, 2015.
5. Conference attended “2nd International Conference on Engineering Sciences” organized by Institute of Chemical Engineering and technology, University of the Punjab, Lahore, Pakistan, December 2-3, 2015.
6. Oral talk in 12th International Conference of Pakistan Society for Biochemistry and Molecular Biology (PSBMB) The Era of Omics: Challenges and Solutions in December 4 – 7, 2014 at IUB, Bahawalpur, Pakistan.
7. Organized 14th International and 25th (Silver Jubilee) National Chemistry Conference as Organizer in Institute of Chemistry, University of the Punjab, Lahore, Pakistan in October 22-24, 2014
8. Poster Presented in 5th EuCheMS Chemistry Congress 2014 on August 31 -September 4, 2014 in Istanbul, Turkey
9. Oral talk in International Conference of Biochemical and Chemical Sciences organized by Department of Chemistry & Biochemistry, University of Agriculture, Faisalabad, Pakistan, February 24-26, 2014.
10. Oral presentation in World Mango Conference (WMC-2014) on by University College of Agriculture & Environmental Sciences, IUB, June 24-25, 2014.
11. Poster presented in International Conference of Biochemical and Chemical Sciences organized by Department of Chemistry & Biochemistry, University of Agriculture, Faisalabad, Pakistan, February 24-26, 2014.
12. Oral talk in 12th International and 24th National Chemistry Conference organized by Center of Excellence in Physical Chemistry, University of Peshawar, October 28-30, 2013.
13. Paper presented in 11th International and 23rd National Chemistry Conference organized by Center of Excellence in Physical Chemistry, University of Peshawar, October 15-17, 2012. “Microwave Treated Saccharum Bengalense as an Eco Friendly Biosorbent for the Removal of Toxic Congo Red Dye From Aqueous Solution-A Green approach”
14. Work shop on “Materials Characterization by X-ray Diffraction” at Pakistan Institute of Nuclear Science and Technology (PINSTECH) Nilore, Islamabad, Pakistan from 11-15 June 2012.
15. Paper presented in 10th International and 22nd National Chemistry Conference organized by

Department of Chemistry and Biochemistry, University of Agriculture, Faisalabad, Pakistan
November 21-23, 2011. “Kinetics, Isothermic Heat of Sorption and Thermodynamically Activated Parameters for elimination of Cd (II) ions onto Saccharum Bengalense a low cost biosorbent”

16. Paper presented in 10th International and 22nd National Chemistry Conference organized by Department of Chemistry and Biochemistry, University of Agriculture, Faisalabad, Pakistan
November 21-23, 2011. “Evaluation of Heterophragma Adensonai as a Non Conventional Low Cost Biosorbent for the elimination of Cr (VI) from Aqueous Solutions”

17. One day national meeting on nanotechnology research in Pakistan at center for solid state physics
August 03, 2010.

Research Projects

Year 2015

Source: University of the Punjab, Lahore, Pakistan.

Amount: 0.15 million Rupees

Title: Investigation of Efficient and Eco-Friendly Materials for Adsorptive/Biosorptive Removal of Some Toxic Substances from Aqueous Media

Year 2014

Source: University of the Punjab, Lahore, Pakistan.

Amount: 0.125 million Rupees

Title: Microwave surface modification of low cost biosorbents for removal of toxic substances from aqueous solutions

Year: 2013

Source: University of the Punjab, Lahore, Pakistan.

Amount: 1.2 million Rupees

1.2 million Rupees project on “characterization of high surface area Activated carbon from low cost biosorbents in the presence of Acid /base activators and its utilization for removal of toxic substances.” Form **IFS Sweden international research grant**

Year: 2012

Source: University of the Punjab, Lahore, Pakistan.

Amount: 0.125 million Rupees

Title: Fabrication of Nickel nanoparticles modified electrode by reverse microemulsion method

Year: 2011

Source: University of the Punjab, Lahore, Pakistan.

Amount: 0.125 million Rupees

Title: “Preparation and characterization of M-SBA and their applications”

Year: 2010

Source: University of the Punjab, Lahore, Pakistan.

Amount: 0.125 million Rupees

Title: “Preparation of CNTs by CVD method and Adsorption of Anti-Cancer drugs”

Work Experience

- **February 2014 to-date:** Assistant Professor Physical Chemistry in Institute of Chemistry, University of the Punjab, New Campus, Lahore, Pakistan
- **November 2009 to February 2014:** Lecturer Physical Chemistry in Institute of Chemistry, University of the Punjab, New Campus, Lahore, Pakistan.
- **January 2005 to November 2009:** Lecturer Physical Chemistry in National College of Science and Information Technology Bahawalpur, Pakistan

Instruments/Techniques Used

X-ray diffraction

Scanning Electron Microscope

Transmission Electron Microscope

Fourier Transform Infrared (FT-IR) analysis

Ultraviolet–visible spectroscopy

Nitrogen adsorption–desorption isotherms

X-Ray photoelectron spectroscopy.

Computer Expertise

- *Windows 98-2000/XP*
- *Microsoft office*
- *Adobe Photoshop*
- *Origin*
- *ChemSketch*
- *Wavemaetrics*

Languages

- *English*
- *Urdu*

References

- Prof. Dr. Muhammad Latif Mirza, University of Sargodha, Sargodha, Pakistan
Tel: +923026825055
Email: mlatifmirza@yahoo.com

Prof. Dr. Muhammad Makshoof Athar, **Director**, Institute of Chemistry, University of the Punjab, Lahore, Pakistan

Email: atharmakshoof@gmail.com