

Dr. Hajira Haroon

Email: hajira@uoh.edu.pk/hajira@ciit.net.pk

Tel: 0995-920655

Google scholar: https://scholar.google.com/citations?user=F_cCy5gAAAAJ&hl=en

Research gate: <https://www.researchgate.net/profile/Hajira-Haroon>

Orcid: <https://orcid.org/0000-0002-4790-0685>

Scopus: <https://www.scopus.com/authid/detail.uri?authorId=57211975109>

EDUCATIONAL QUALIFICATION

DEGREE	INSTITUTION	YEAR	DIVISION
Ph.D (Environmental Sciences Dept.)	COMSATS Institute of Information Technology, Abbottabad	2017	1 st
MS/ M.Phil. (Environmental Sciences)	COMSATS Institute of Information Technology, Abbottabad	2010	1 st
MSc (Inorganic/Analytical Chemistry)	Hazara University, Mansehra	2007	1 st
BSc (Botany, Zoology, Chemistry)	Govt. Girl Degree College 1, Abbottabad	2005	1 st
F.Sc (Pre-Medical)	Govt. Girl Degree College NO 1, Abbottabad	2003	1 st
Matric (Science Group)	F G Girls Public High School, Abbottabad	2001	1 st

Scholarship/ DISTINCTIONS AND AWARDS

- Merit based Scholarship in MS from COMSATS Institute of Information and Technology, Pakistan
- Distinction in MSc
- 2nd position in MS
- CIIT Research productivity award, 2013
- CUI Research productivity award, 2017

RESEARCH WORK/PROJECTS:

MS RESEARCH WORK

Completed my MS research project on “Treatment and reuse of caustic rich waste water from bottle washing plant of Shezan Industry Hattar, Haripur, Pakistan”. The major focus of my project was to

devise a method to reduce the fresh water demand in bottle washing plants by removing caustic rich wastes from the used water and enabling it for the reuse in the plant again.

Ph.D. RESEARCH WORK

As a **Ph.D.** scholar at Department of Environmental Sciences, COMSATS Abbottabad, I have completed my research work on “biomass derived adsorbents for Chromium (VI) treatment from Industrial Wastewater.

Major Field of Expertise

Wastewater treatment, Adsorption, Adsorbents, Environmental chemistry, Isotherms and kinetic models

RESEARCH WORK SUPERVISED:

As a lecturer, at University of Haripur, Department of Environmental Sciences, I have supervised almost 30 MSc and BSc students on different areas of environmental sciences. My 2 MPhil students have also completed their research, while 8 M Phil and 1 PhD students are currently working under my supervision.

RESEARCH WORK AND PUBLICATION

(TOTAL IF : 21.336)

1. Jehanzeb Ali Shah, Cyrus Raza Mirza, Tayyab Ashfaq Butt, Walid M.A. Khalifa, Hatem H. Gasmi, **Hajira Haroon**, Muhammad Saqib Khan, Muhammad Arif Ali, Iftikhar Zeb, Sajid Hussain Shah, Bilal Ahmad Zafar Amin, Muhammad Bilal. 2021. Tobacco Stalk Waste Biomass Holds Multilayer and Spontaneous Adsorption Capabilities for Reactive Black 5 Dye: Equilibrium Modelling and Error Function Analysis. Polish Journal of Environmental Studies. 30(3) 1-12. (IF:1.383)
2. **Hajira Haroon**, Jehanzeb Ali Shah, Muhammad Saqib Khan, Tatheer Alam, Romana Khan, Saeed Ahmad Asad, Muhammad Arif Ali, Ghazanfar Farooq, Mazhar Iqbal, Muhammad Bilal. 2020. Activated carbon from a specific plant precursor biomass for hazardous Cr(VI) adsorption and recovery studies in batch and column reactors: Isotherm and kinetic modelling. Journal of Water Process Engineering. 38 (2020) 101577. (IF:3.465)
3. Jehanzeb Ali Shah, Tayyab Ashfaq Butt, Cyrus Raza Mirza, Ahson Jabbar Shaikh, Muhammad Saqib Khan, Muhammad Arshad, Nadia Riaz, **Hajira Haroon**, Syed Mubashar Hussain Gardazi, Khurram Yaqoob, Muhammad Bilal. Phosphoric Acid Activated Carbon from Melia azedarach Waste Sawdust for Adsorptive Removal of Reactive Orange 16: Equilibrium Modelling and Thermodynamic Analysis. Molecules. 2020, 25, 2118. (IF:3.267)
4. **Hajira Haroon**, Syed Mubashar Hussain Gardazi, Tayyab Ashfaq, Arshid pervaz, Qaisar mahmood, Muhammad Bilal. 2017. Novel lignocellulosic wastes for comparative adsorption

of Cr(VI): equilibrium kinetics and thermodynamic studies, Polish Journal of Chemical Technology, 2017/19/2/6-15. (IF:1.193)

5. **Hajira Haroon**, Tayyab Ashfaq, Syed Mubashar Hussain Gardazi, Tauqir Ali Sherazi, Muhammad Ali, Naim Rashid, Muhammad Bilal. 2016. Equilibrium kinetic and thermodynamic studies of Cr(VI) adsorption onto a novel adsorbent of *Eucalyptus camaldulensis* waste: Batch and column reactors, Korean Journal of Chemical Engineering, 2016/33/10/2898-2907. (IF:2.690)
6. Muhammad Bilal, Jehanzeb Ali Shah, Tayyab Ashfaq, Syed Mubahsar Hussain Gardazi, Adnan Ahmad Tahir, Arshid pervaz, **Hajira Haroon**, Mahmood Q. 2013. Waste biomass adsorbents for copper removal from industrial wastewater–A review. Journal of Hazardous Materials. 263 (2013) 322– 333. (IF:9.038)
7. **Hajira Haroon**, Amir Waseem and Qaisar Mahmood. 2013. Treatment and Reuse of Wastewater from Beverage Industry. Journal of Chemical Society of Pakistan, 35(1). (IF:0.300)

Abstract published/Conference presentations

1. Saeed Rehman, Syed Mubahsar Hussain Gardazi, Hafiz Ali Bashir, **Hajira Haroon**, Jehanzeb Ali Shah, Arshid pervaz, Muhammad Bilal. (2017). Development of Thermochemically Functionalized Activated Carbon from Waste Biomass for Efficient Adsorption of Dye in Single and Binary Component System. International Conference On Bioapproaches for Environment and Sustainability. NUST, Islamabad.
2. Syed Mubahsar Hussain Gardazi, Muhammad Bilal, Tayyab Ashfaq, **Hajira Haroon**, Jehanzeb Ali Shah, Maria Siddique, Syed Tatheer Alam Naqvi. (2014). Treatment of Textile Wastewater Using Bioadsorbent. international Conference on Civil, Biological and Environmental Engineering (CBEE-2014) May 27-28, Istanbul (Turkey).
3. **Hajira Haroon**, Qaiser Mahmood, Zulfiqar Ahmad Bhatti. 2011. Treatment and reuse of wastewater from bottle washing plant of soft drink industry ESDev-2011 4th international conference on environmentally sustainable development, July 24-26, 2011 CIIT Abbottabad
4. **Hajira Haroon**, Jehanzeb Ali Shah, Tayyab Ashfaq, Syed Mubahsar Hussain Gardazi, Muhammad Arshad, Romana Khan and Muhammad Bilal, Treatment of Chromium from Synthetic Wastewater Using Tobacco Biomass, ESDEV Abbotabad Aug, 2013
5. Jehanzeb Ali Shah, Tayyab Ashfaq, Syed Mubahsar Hussain Gardazi, **Hajira Haroon** and Muhammad Bilal, Copper Ions Treatment from Synthetic Wastewater Using Bioadsorbents. ESDEV Abbotabad. Aug, 2013
6. Syed Mubahsar Hussain Gardazi, **Hajira Haroon**, Jehanzeb Ali Shah, Tayyab Ashfaq, Maria Siddique and Muhammad Bilal, Textile Wastewater Treatment Using Bioadsorbent. ESDev Abbotabad. Aug, 2013

7. Syed Mubashar H. Gardazi, Muhammad Bilal, Jehanzeb Ali Shah, **Hajira Haroon**, Qaisar Mehmood, Nadeem Iqbal, Effective Adsorption of Basic Dye using Lignocellulosic Wastes: Modelling Studies. ESDEV Abbotabad. April, 2016
8. **Hajira Haroon**, Muhammad Bilal1, Syed Mubashar H. Gardazi, Saeed Rehman, Wajeelha Abbasi, Hafiz Ali Bashir, Batch and Column Studies on Chromium Adsorption by Lignocellulosic Waste. ESDEV Abbotabad. April, 2016
9. Saeed Rehman, Hafiz Ali Bashir, Muhammad Bilal1, Syed Mubashar H. Gardazi, **Hajira Haroon**, Jehanzeb Ali Shah, Exploring the Treatment Potential of Natural Material for Textile Dye. ESDEV Abbotabad. April, 2016
10. Madiha Tariq, Muhammad Bilal1, Syed Mubashar H. Gardazi, **Hajira Haroon**, Jehanzeb Ali Shah, Qaisar Mahmood, Adsorption of Reactive Dye using Hemp Waste as Adsorbent: Kinetic Modelling. ESDEV Abbotabad. April, 2016
11. Aimen Hafeez, Hajira haroon, Abdullah Khan, Assessment of Drinking Water Quality within the University Campus, Haripur .5th international water conference-2019, sustainable water resources management 15-17 january, 2019, university of Haripur.
12. Sumera Bibi, **Hajira Haroon**, Sadia Alam, Alia Naz, Murad Ali, Muhammad Mumtaz Khan Impact of wastewater effluents on the physicochemical and Bio-burden of fresh water 2nd international water conference, water and sustainable development june 5-7, 2015, Islamabad.

Posters

1. Thermochemically Development of Activated Carbon from a Specific Plant Precursor Biomass for Efficient Sequestration of Hazardous Cr(VI): Equilibrium Kinetic and Isotherm Modelling Studies. **Hajira Haroon**, Jehanzeb Ali Shah, Nadeem Iqbal, Romana Khana, Rafiq Ahmad, Saeed Asad, Tatheer Alam, Muhammad Bilal*. 2019. ESCON 2019, Environmental Toxicology and Health. February 25-27, 2019. COMSATS University Islamabad, Vehari Campus.
2. Thermodynamic, Kinetic and Isotherm Studies of Reactive Dye Adsorption onto Hemp Carbon: Linear and Non-linear Modeling. Laiba Javid, Madiha Tariq, Jehanzeb Ali Shaha, Anderson Makinda Ndogero, Muhammad Saqib Khana, Nadia Riaz, Aziz Ullah, **Hajira Haroon**, Muhammad Bilal. ESCON 2019, Environmental Toxicology and Health. February 25-27, 2019. COMSATS University Islamabad, Vehari Campus.
3. Effects of industrial effluents on surface and groundwater quality and its impacts on human health in Dingi village, District Haripur, Zainab Malik, **Hajira Haroon**, Abdullah khan, Ahmad Hussain, Tehseen Zaheer, Aneela Bibi, Khadija Asghar. 1st national conference on prospectus and opportunities for agricultural development in Pakistan, 25-27 june, 2013 Khanaspur Ayubia. (Won 1st prize)

4. Evaluating the effect of industrial effluents on chemical composition of soils in Dingi, District Haripur. Khadija Asghar, Ahmad Hussain, Abdullah khan, **Hajira Haroon**, Zainab malik, Tehseen Zaheer, Aneela Bibi. 1st international conference on agriculture prospectus 25-27 june, 2013 Khanaspur Ayubia.
5. Impact of effluents of sewage treatment plants on physic-chemical qualities of water in PHIUR cannal right bank Tarbella dam. Sumera Bibi, **Hajira Haroon**, Sadia Alam and Alia Naz .10th biennial international conference of Pakistan society for microbiology March 25-28,2015, university of punjab, Lahore. (**Won 2nd prize**)

PROFESSIONAL RESPONSIBILITIES

- Teaching at BS, M.Sc, M.Phil and PhD Level
- Research Supervisor: BS, M.Sc, M.Phil and PhD Level
- Member, Admission Committee, University of Haripur (2013)
- Timetable coordinator, Department of Environmental Sciences, University of Haripur
- Course file coordinator, Department of Environmental Sciences, University of Haripur
- Research cell coordinator, Department of Environmental Sciences, University of Haripur

WORK EXPERIENCE

Lecturer Department of Environmental Sciences:

Working as a lecturer in Department of Environmental Sciences, Hazara university/University of Haripur since 13 January, 2012 till date.

EPA Abbottabad:

Worked in EPA regional office Abbottabad as an NIP Internee from May to December 2010. My major responsibilities as an internee at EPA office included:

- Conduct Environmental Monitoring of Industrial Areas, Poultry Farms and Crush Plants etc that are worse affecting the local environment.
- Conduct awareness campaign among the school and collage children's.

CONFERENCES, TRAININGS, WORKSHOPS AND WEBINARS

- Participation and paper presentation in International Conference on Environmentally Sustainable Development (ESDev), 2011, CIIT Abbottabad
- Participation and paper/poster presentation in International Conference on Environmentally Sustainable Development (ESDev), 2013, CIIT Abbottabad
- Participation and paper/poster presentation in International Conference on Environmentally Sustainable Development (ESDev), 2016, CIIT Abbottabad
- Participation in one-day capacity building training workshop on Climate change in COMSAT, Abbottabad

- Participation in environmental education programmes of WWF
- One-day workshop intellectual property rights, The University of Haripur
- Participation in thalassemia awareness seminar
- International webinar on microbial diversity in changing climate, COMSAT university, Abbottabad campus, March 30, 2021.
- International Webinar on Air pollution, Climate Change and their impacts on Mountainous Water resources, COMSAT university, Abbottabad campus, 21st January 2021.
- Curriculum vitae composition skills workshop, 5th October, 2021, The University of Haripur.
- Research project formulation and national/international research funding opportunities, 21st Sep, 2021, The University of Haripur.

Organizer/Volunteer Work:

- Worked as organizer in 5th international water conference-2019, university of Haripur.
- Worked as organizer of 1st International Conference on Agricultural & Biological Sciences, 2019
- Worked as organizer of world environment day at university of Haripur, 2018
- Worked as a volunteer in the earthquake of Oct, 2005
- Worked as a volunteer in ES-DEV, 2009 (International Conference on Environmentally Sustainable Development)
- Worked as a volunteer in fund raising for Swat victims, 2009
- Worked as organizer of Techno Moot, 2009

SKILLS & EXPERTISE

- I have proven skills to demonstrate and perform indoor and outdoor research experiments related to environmental applications
- I have skills of developing research proposals and implementing research projects.
- I have good skills in MS Office related computer work
- Good communication/presentation skills
- Well organized, dynamic and dedicated with positive attitude
- Capable of managing multiple assignments under high pressure and consistently to meet tight deadlines

REFERENCES

1. Dr. Arshad Pervez

Director/ Professor/Head of Department

Department of Environmental Sciences, COMSATS Abbottabad

2. Dr. Muhamamd Bilal

Associate Professor/Research Supervisor

Department of Environmental Science, COMSATS Abbottabad