



LUQMAN RIAZ

Personal Information

Date of Birth

21st September 1985

Citizenship

Pakistan

Current Address

Department of Environmental Sciences,
University of Narowal, Narowal 51750,
Punjab, Pakistan

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CURRENT POSITION

- Assistant Professor/Head of Department
Department of Environmental Sciences
University of Narowal, Narowal 51750, Punjab Pakistan
- Environmental Expert for District Environmental Approval Committee

EDUCATION

- Research Associate (March 2018 to October 2021)
College of Life Sciences, Henan Normal University, Xinxiang, 453007, Henan, China
- Ph.D in Environmental Sciences (2017)
Pir Mehr Ali Shah Arid Agriculture University Rawalpindi, Punjab, Pakistan

GENERAL AREAS OF RESEARCH

- Ecotoxicology, Environmental Microbiology, Waste Treatment, Plant Physiology and Biochemistry

AWARDS AND HONORS

- 9000 USD Fellowship Award (Higher Education Commission of Pakistan) in 2015
- Visiting scholar in Department of Plant and Soil Sciences, College of Agriculture, University of Kentucky, USA in 2015-16

RESEARCH PROJECT

- Impact of antibiotics and antibiotic resistant genes on microbial functions and nutrient balance in agricultural soil through biosolids application. (**Research Grant No: 201903039 approved by China Postdoctoral Science Foundation**)

PROFESSIONAL SOCIETIES

- Soil Science Society of Pakistan
- Member of Environmental Society of Pakistan

RESEARCH PUBLICATIONS (Total Impact Factor = 154.49; Total Citations = 497; h-index = 9; i10index = 9)

1. Abida Noreen, Shahid Mahmood, Azeem Khalid, Irfan Aziz, Muzammil Anjum, **Luqman Riaz**, Allah Ditta, Tariq Mahmood. 2022. Synthesis and characterization of bio-based UV curable polyurethane coatings from algal biomass residue. *Biomass Conversion and Biorefinery*. **(Impact Factor = 4.99)**
2. Ghulam Yasin, Shafeeq Ur Rahman, Muhammad Farrakh Nawaz, Hefa Cheng, Muhammad Farooq Azhar, **Luqman Riaz**, Atif Javed, Babar Hussain. 2021. Evaluation of trace elements phytoremediation potential of six tree species of Faisalabad city of Pakistan during two growing seasons. *Journal of Environmental Management*. **(Impact Factor = 6.78)**
3. Peiyuan Deng, Wenxia Wan, Muhammad Azeem, Luqman Riaz, Wei Zhang, Yingying Yang, Changkan Li, Wei Yuan. 2022. Characterization of biochar derived from bamboo and its application to modulate the toxic effects of chromium on wheat plant. *Biomass Conversion and Biorefinery*. **(Impact Factor = 4.99)**
4. Aniq Ashraf, Guijian Liu, Muhammad Arif, Md Manik Mian, Audil Rashid, Balal Yousaf, Muhammad Irfan Khawar, **Luqman Riaz**, Rabia Safeer. 2022. Insights into the synthesis and application of biochar assisted graphene-based materials in antibiotic remediation. *Journal of Cleaner Production*. **(Impact Factor = 9.29)**
5. Audil Rashid, Rafay Ahmed, Muhammad Saqib Rashid, **Luqman Riaz**, Guijian Liu, Aniq Ashraf, Muhammad Arif, Balal Yousaf. 2022. Phyto-mediated photocatalysis: A critical review of in-depth base to reactive radical generation for erythromycin degradation. *Environmental Science and Pollution Research*. **(Impact Factor = 4.22)**

6. Anis Ali Shah, **Luqman Riaz**, Manzer H. Siddiqui, Hayssam M. Ali. 2021. Spermine-mediated polyamine metabolism enhances arsenic-stress tolerance in *Phaseolus vulgaris* by expression of zinc-finger proteins related genes and modulation of mineral nutrient homeostasis and antioxidative system. *Environmental Pollution*. (**Impact Factor = 8.07**)
7. Qingwei Lin, Shishi Wang, Yingchen Li, **Luqman Riaz**, Fei Yu, Qingxiang Yang, Shijie Han, Jianmin Ma. 2021. Effects and mechanisms of land-types conversion on greenhouse gas emissions in the Yellow River tidal flat. *Science of the Total Environment*. (**Impact Factor = 7.96**)
8. Lyubka koleva, Adnan Noor Shah, Aisha Umar, Anis Ali Shah, Saud Alamri, Manzer H. Siddiqui, **Luqman Riaz**, Ali Raza, Talha Javed and Sami Ullah. Iron oxide and silicon nanoparticles modulate mineral nutrient homeostasis and metabolism in cadmium-stressed *Phaseolus vulgaris*. *Frontiers in Plant Science*. (**Impact Factor = 5.75**)
9. Wei Yuan, Xiangpeng Zeng, Yu Cao, Qingxiang Yang, **Luqman Riaz**, Qiang Wang. 2021. Distribution of antibiotic resistance from human and animal origins to their receiving environments: A regional scale survey of urban settings. *Environmental Pollution*. (**Impact Factor = 8.07**)
10. Habib Ullah, Lu Lun, **Luqman Riaz**, Faiza Naseem, Asfandyar Shahab, Audil Rashid. 2021. Physicochemical characteristics and thermal degradation behavior of dry and wet torrefied orange peel obtained by dry/wet torrefaction. *Biomass Conversion and Biorefinery*. (**Impact Factor = 4.98**)
11. Shafeeq Ur Rahman, Qi Xuebin, **Luqman Riaz**, Ghulam Yasin, Adnan Noor Shah, Umbreen Shahzad, Muhammad Shah Jahan, Allah Ditta, Muhammad Amjad Bashir, Abdur Rehman, Zhenjie Du. 2021. The interactive effect of pH variation and cadmium stress on wheat

(*Triticum aestivum* L.) growth, physiological and biochemical parameters. PLOS ONE.

(Impact Factor = 3.24)

12. Samia Faiz, Nasim Ahmad Yasin, Waheed Ullah Khan, Anis Ali Shah, Waheed Akram, Aqeel Ahmad, Aamir Ali, Naima Huma Naveed and **Luqman Riaz**. 2021. Role of magnesium oxide nanoparticles in the mitigation of lead induced stress in *Daucus carota*: modulation in polyamines and antioxidant enzymes. International Journal of Phytoremediation. **(Impact Factor = 2.94)**
13. Shafeeq Ur Rahman, Qi Xuebin, Muhammad Kamran, Ghulam Yasin, Hefa Cheng, Abdur Rehman, **Luqman Riaz**, Muhammad Rizwan, Shafaqat Ali, Abdulaziz Abdullah Alsahli, Mohammed Nasser Alyemeni. 2021. Silicon elevated cadmium tolerance in wheat (*Triticum aestivum* L.) by endorsing nutrients uptake and antioxidative defense mechanisms in the leaves. Plant Physiology and Biochemistry. **(Impact Factor = 4.27)**
14. Muhammad Wahab Yasir, Zunera Shabbir, Muhammad Bashir Ahmed Siddique, Habib Ullah, **Luqman Riaz**, Waqar Un Nisa, Shafeeq-ur-rahman, and Anis Ali Shah. 2021. Biotreatment Potential of Co-contaminants Hexavalent Chromium and Polychlorinated Biphenyls in industrial wastewater: Individual and simultaneous prospects. Science of the Total Environment. **(Impact Factor = 7.96)**
15. Talat Ara, MS; Waqar Un Nisa, Muzammil Anjum, **Luqman Riaz**, Aansa Rukya Saleem, Malik Tahir Hayat. 2021. Hexachlorocyclohexane toxicity in water bodies of Pakistan: Challenges and Reclamation opportunities. Water Science and Technology. **(Impact Factor = 1.91)**
16. Shafeeq-ur-rahman, Qi Xuebin, Ghulam Yasin, Hefa Cheng, Faisal Mehmood, Muhammad Zain, Muhammad Shehzad, Muhammad Irfan Ahmad, **Luqman Riaz**, Abdur

- Rahim, Saeed Ur Rahman. 2021. Role of silicon on root morphological characters of wheat (*Triticum aestivum* L.) plants grown under Cd-contaminated nutrient solution. *Acta Physiologiae Plantarum*. **(Impact Factor = 2.35)**
17. Wei Yuan, Yixuan Wei, Yongli Zhang, **Luqman Riaz**, Qingxiang Yang, Qiang Wang, Ruifei Wang. 2021. Resistance of multidrug resistant *Escherichia coli* to environmental nanoscale TiO₂ and ZnO. *Science of the Total Environment*. **(Impact Factor = 7.96)**
18. Wei Yuan, Yongli Zhang, **Luqman Riaz**, Qingxiang Yang, Bingbing Du, Ruifei Wang. 2021. Multiple antibiotic resistance and DNA methylation in Enterobacteriaceae isolates from different environments. *Journal of Hazardous Materials*. **(Impact Factor = 10.58)**
19. **Luqman Riaz**, Qianqian Wang, Qingxiang Yang, Xu Nan Li, and Wei Yuan. 2020. Potential of industrial composting and anaerobic digestion for the removal of antibiotics, antibiotic resistance genes and heavy metals from chicken manure. *Science of Total Environment*. 137414. **(Impact Factor = 7.96)**
20. Wei Yuan, Tiantian Tian, Qingxiang Yang, and **Luqman Riaz**. 2019. Transfer potentials of antibiotic resistance genes in *Escherichia* spp. strains from different sources. *Chemosphere*. 125736. **(Impact Factor = 7.08)**
21. Qingwei Lin, Mingjun Fan, Ping Jin, **Luqman Riaz**, Zhenbin Wu, Feng He, Biyun Liu, Jianmin Ma. 2019. Sediment type and the clonal size greatly affect the asexual reproduction, productivity and nutrient absorption of *Vallisneria spiralis*. *Restoration Ecology*. (28): 408-417. **(Impact Factor = 2.72)**
22. **Luqman Riaz**, Tariq Mahmood, Qingxiang Yang, Muhammad Wahab Yasir, Audil Rashid, Mark S. Coyne and E. D'Angelo. 2019. Sorption and desorption behavior of fluoroquinolones in an agricultural soil. *Pedosphere*. 29(5): 676-680. **(Impact Factor = 3.91)**

23. **Luqman Riaz**, Tariq Mahmood, Qingxiang Yang, Mark S. Coyne and E. D'Angelo. 2019. Bacteria assisted removal of fluoroquinolones from wheat rhizosphere in an agricultural soil. *Chemosphere*. 226: 8-16. **(Impact Factor = 7.08)**
24. **Luqman Riaz**, Tariq Mahmood, Azeem Khalid, Audil Rashid, Muhammad Bashir Ahmed Siddique, Atif Kamal and Mark S. Coyne. 2018. Fluoroquinolones (FQs) in the Environment: A Review on their Abundance, Sorption and Toxicity in soil. *Chemosphere*, 191: 704-720. **(Impact Factor = 7.08)**
25. **Luqman Riaz**, Tariq Mahmood, Mark S. Coyne, Azeem Khalid, Audil Rahsid, Malik Tahir Hayat, Asim Gulzar, Muhammad Amjad. 2017. Physiological and antioxidant responses of wheat seedlings (*Triticum aestivum*) seedlings to fluoroquinolone antibiotics. *Chemosphere*, 177: 250-257. **(Impact Factor = 7.08)**
26. **Luqman Riaz**, Tariq Mahmood, Audil Rashid, Atif Kamal and Mateen Shafqat. 2017. Industrial release of Fluoroquinolones (FQs) in the waste water bodies with their associated ecological risk in Pakistan. *Environmental Toxicology and Pharmacology*, 52: 14-20. **(Impact Factor = 3.29)**
27. Usman Ali, Nida Sajid, Azeem Khalid, **Luqman Riaz**, Muhammad Muaz Rabbani, Jabbar Hussain Syed and Riffat Malik. 2015. A review on vermicomposting of organic wastes. *Environmental Progress & Sustainable Energy*, 34(4): 1050-1062. **(Impact Factor = 1.98)**

PUBLICATIONS UNDER REVIEW IN JOURNALS

1. **Luqman Riaz**, Qianqian Wanga, Qingxiang Yang, Wei Yuan, Xinlei Li, Ruifei Wang and Xunan Li. 2021. Dynamics and succession of antibiotic resistance and nitrogen processing genes in bulk and rhizospheric soils through application of composted chicken manure. *Journal of Environmental Management*. **(Impact Factor = 6.78)**

2. **Luqman Riaz**, Naeem Abbas Malik, Shafeeq Ur Rahman, Qingxiang Yang, Habib Ullah, Asfandyar Shahab, Anis Ali Shah. 2021. Recent advancement on behavior of antibiotics resistance genes during composting of livestock manure: Challenges and future perspective. *Science of the Total Environment*. (**Impact Factor = 7.96**)
3. Zufishan Anjum, Aansa Rukya Saleem, Waqar-un-Nisa, Fiza Sarwar, Aniq Batool, **Luqman Riaz**. 2021. Utilization of *Cannabis Sativa* Biochar to improve Soil Nutrient Pool and Heavy Metal (Pb & Cd) Immobilization. *Biomass Conversion and Biorefinery*. (**Impact Factor = 4.98**).

PUBLISHED BOOK CHAPTERS

1. Babar Hussain, **Luqman Riaz**, Khadija Javed, Muhammad Jawad Umer, Aqleem Abbas, Umar Rao, Sher Wali Khan, Qamar Abbas, Saif ud Din, and Raufa Batool. 2022 *Plant Glutathione Transferases and Their Role in the Mitigation of Abiotic Stresses*.
2. Waqar-Un-Nisa, **Luqman Riaz**, Aansa Rukya Saleem, Samia Qadeer, Tahir Hayat Malik, Audil Rashid, Nazneen Bangash, Talat Ara. 2021. Life cycle assessment of emerging water pollutants in “Emerging Water Pollutants: Concerns and Remediation Technologies”. (Accepted)
3. **Luqman Riaz**, Muzammil Anjum, Qingxiang Yang, Rabia Safeer, Anila Sikandar, Habib Ullah, Asfandyar Shahab, Wei Yuan, Qianqian Wang. 2019. Treatment technologies and management options of antibiotics and AMR/ARG in “Antibiotics and Antimicrobial Resistance Genes in the Environment”. (Published by Elsevier).
4. **Luqman Riaz**, Qingxiang Yang, Anila Sikandar, Rabia Safeer, Muzammil Anjum, Tariq Mahmood, Muhammad Saif Ur Rehman, Audil Rashid, and Wei Yuan. 2020. Antibiotics use

in hospitals and their presence in the associated waste in “Antibiotics and Antimicrobial Resistance Genes”. (Publisher Springer)

ARTICLES IN NEWSPAPER

1. **Luqman Riaz**. Media imperatives in varsities of Pakistan for environmental awareness. Pakistan observer (17th April 2018) (<https://epaper.pakobserver.net/2018/04/17?page=14>)

ORAL/POSTER PRESENTATIONS

1. **Luqman Riaz**, Tariq Mahmood, Audil Rashid and Anila Sikandar. 2018. A review on the assessment of water management for sustainable agriculture in Rainfed region. Oral presentation in International conference on training and capacity building in sustainable agricultural water management to address food security and social instability in Pakistan organized by Department of Environmental Sciences (PMAS AAUR) 27th – 29th June 2018.
2. **Luqman Riaz**, Shahid Mahmood, Muhammad Wahab Yasir, Ansa Rukayya Saleem and Tariq Mahmood. 2018. Plant Uptake and Degradation of Antibiotic in an Agricultural Soil. Oral presentation in 17th Congress of Soil Science 13th March-15th March 2018 in Serena Hotel Faisalabad, Pakistan.
3. **Luqman Riaz** and Tariq Mahmood. Antibiotic and Antibiotic Resistant Bacteria in the Environment. Poster presentation in 17th Congress of Soil Science from 13th March-15th 2018 in Serena Hotel Faisalabad, Pakistan.
4. Wahab Yasir, Birthe Kjellerup, Shahid Mehmood, Azeem Khalid and **Luqman Riaz**. 2017. Potential of bacteria for simultaneous treatment pf polychlorinated biphenyls (PCBs) and chromium in tannery waste water. 254th American Chemical Society National Meeting and Exposition, Washington DC, US.

WORKSHOPS AND SEMINARS

1. The 2018 annual conference and international symposium on microbial ecology. Guangzhou, China. November 9-12, 2018.
2. International Training Workshop on Soil and Water Management Techniques for Arid and Semi-Arid Regions organized by Department of Environmental Sciences (PMAS AAUR).
3. Three days' workshop entitled "1st Pakistan-Turkey Bilateral Workshop on Municipal Services Management" organized by Centre of Waste Management.
4. Three days' Workshop on Composting Technology organized by Centre of waste Management.
5. 12th National and 3rd International Conference of Botany at Quaid-e-Azam University.
6. 15th International conference on soil management in changing climate.
7. International training on sustainable agriculture water management in a changing environment:
A special focus on Olive tree

TRAININGS

1. **English Proficiency Certificate (EPC)**, Department of Environmental Sciences, PMAS- Arid Agriculture University Rawalpindi, Pakistan
2. **Hands on Training on Liquid Chromatography**, University of Kentucky, Lexington, USA
3. **Laboratory Safety Orientation 2013**, University of Kentucky Lexington USA (EH&S Department)
4. **Hazardous Waste Management** University of Kentucky, Lexington, USA (EH&S Department)
5. **Personal Protective Equipment (PPE)**, University of Kentucky, Lexington, USA (EH&S Department)

SERVICE TO PROFESSION

1. External Examiner for Dissertation Evaluation
2. Reviewer in Science of Total Environment
3. Reviewer in Chemosphere
4. Reviewer in Biomass Conversion and Biorefinery
5. Reviewer in Journal of Environmental Science and Health, Part A
6. Reviewer in Global Ecology and Conservation
6. Reviewer in Annual Research & Review in Biology