CURRICULUM VITAE

Pankaj Chowdhary, Ph.D.
Post-doctoral Scientist

Department of Postharvest Science,
Agricultural Research Organization (ARO), Volcani Center,
P.O.B 15159, HaMaccabim Road 68, Rishon LeZion 7505101, Israel

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ACADEMIC QUALIFICATION:

Ph.D. (Environ. Microbiology) (2018)	: Babasaheb Bhimrao Ambedkar University (A Central University), Vidya Vihar, Raebareli Road, (U.P), India
M. Sc. (Biotechnology) (2011)	: D.D.U Gorakhpur University Gorakhpur (U.P), India
B. Sc. (Zoology & Chemistry) (2009)	:D.D.U Gorakhpur University Gorakhpur (U.P), India

OTHER QUALIFICATION:

- Diploma in **Data Base Managements (2007):** St. Andrew's College Gorakhpur **(UGC Sponsored)**
- Diploma in **Biotechnology (2008):** St. Andrew's College Gorakhpur **(UGC Sponsored)**
- Diploma in **Industrial Chemistry (2009):** St. Andrew's College Gorakhpur **(UGC Sponsored)**

AREAS OF RESEARCH:

- ***Environmental Microbiology& Biotechnology***
- ***Ligninolytic Enzyme***
- ***Bioremediation & Metagenomics***
- ***Treatment of industrial pollutants***
- ***Bio-waste Valorization***

RESEARCH EXPERIENCES:

1. **Post-doctoral Fellow: Department of Postharvest Science,** Agricultural Research Organization (ARO), Volcani Center, Israel; From June, 2023 to till date
2. **CSIR- Research Associate:** Environmental Microbiology Laboratory, Council of Scientific and Industrial Research-Indian Institute of Toxicology Research (CSIR-IITR), Vishvigyan Bhawan, 31, Mahatma Gandhi Marg, Lucknow, Uttar Pradesh, India-226001; From 24 June, 2021 to Marh 2023
3. **Research Associate:** Aquatic Toxicology Laboratory, Environmental Toxicology Group, Council of Scientific and Industrial Research-Indian Institute of Toxicology Research (CSIR-IITR), Vishvigyan Bhawan, 31, Mahatma Gandhi Marg, Lucknow, Uttar Pradesh, India-226001; From 24 June, 2020 to 23 June, 2021
4. **Ph. D. Scholar:** Babasaheb Bhimrao Ambedkar University (A Central University), Vidya Vihar, Raebareli Road, Lucknow, India, From October 2012 to November 2018

   Research topic: Study on the bacterial degradation and detoxification of distillery wastewater pollutants for environmental safety

   Work profile: Development of potential bacterial consortium for degradation and decolorization of distillery wastewater pollutants. Various sophisticated instruments were used such as GC-MS, LC-MS, SEM, AAS, etc. and identification of ligninolytic enzyme-producing bacterial strains and their role in pollutants degradation. Toxicity of industrial pollutants were asses in wheat and mustard crops, based on biochemical analysis i.e., non-enzymatic and enzymatic antioxidant activities. Currently, I am working on synthesis of biochar using various type of lignocellulosic waste.

PROFESSIONAL ACHIEVEMENTS BRIEFLY:

- **Total publications:** Seventy Three (73)
- **Total Citation:** 3403 (H-index: 29; i-index: 42)
- **Journal's Reviewer:** Working as active reviewer with many publishers like, Elsevier, Springer, Frontier, Taylor & Francis also in other various reputed National & International

PUBLICATIONS:

A: Books (10)

1. Bharagava, R.N., **Chowdhary, P.** (2018) Emerging and Eco-friendly Approached for Waste Management, Springer, Singapore, ISBN: 978-981-10-8669-4
2. **Chowdhary, P.,** Raj, A. (2020) Contaminants and Clean Technologies, CRC Press | Taylor & Francis Group, USA, ISBN: 9780429275852.
3. **Chowdhary, P.,** Raj, A., Verma, D., Akhter, Y. (2020) Microorganisms for Sustainable Environment and Health, Elsevier Science, ISBN: 978-012-81-9004-3.
4. **Chowdhary, P.,** Mani, S. **(2020)** New Technologies for Reclamation of Industrial Wastewater, **CRC Press |** Taylor & Francis Group, USA, ISBN: 9780367434182.
5. Kumar, V., **Chowdhary, P. (2021)** Recent Advances in Distillery Waste Management for Environmental Safety, CRC Press | Taylor & Francis Group, USA, SBN 9780367466015.
6. **Chowdhary, P., et al. (2022)** Bio-Clean Energy Technologies (Vol-I), Springer
7. **Chowdhary, P., et al. (2022)** Bio-Clean Energy Technologies (Vol-II), Springer
8. **Chowdhary, P., et al. (2022)** Microbial biotechnology: Role in Ecological sustainability and Research, **Wiley**
9. **Chowdhary, P., et al. (2022)** Environmental Management Technologies: Challenges and Opportunities CRC Press | Taylor & Francis Group, USA**.**
10. **Chowdhary, P.,** Raj, A. (2023) Agri-food waste Valorisation, Royal Society of Chemistry (RSC) **(In Press).**

B: Research & Review articles

1. Othman, A. M., Mechichi, T., **Chowdhary, P.,** & Suleiman, W. B. (2023). Ligninolytic enzymes and their potential applications. Frontiers in Microbiology, 14, 1235206. **Impact factor: 5.2**
2. Singh, A., Kumar, R., Maurya, A., **Chowdhary, P.,** & Raj, A. (2022). Isolation of functional ligninolytic *Bacillus aryabhattai* from paper mill sludge and its lignin degradation potential. *Biotechnology Reports*, *35*, e00755.
3. Maurya A, Kumar R, Yadav P, Singh A, Yadav A, **Chowdhary P**, Raj A. (2022). Biofilm formation and extracellular polymeric substance (EPS) production by *Bacillus haynesii* and influence of hexavalent chromium, Bioresource Technology, 352, 127109 **Impact factor: 11.4**
4. Kumar R, Singh A, Maurya A, Yadav P, Yadav A, **Chowdhary P**, Raj A. (2022) Effective bioremediation of pulp and paper mill wastewater using *Bacillus cereus* as a possible kraft lignin-degrading bacterium. Bioresource Technology, 352, 127076 **Impact factor: 11.4**
5. **Chowdhary, P.,** Singh A., R., Chandra., Kumar P. S., Raj A., Bharagava R.N. (2022). Detection and identification of hazardous organic pollutants from distillery wastewater by GC-MS analysis and its phytotoxicity and genotoxicity evaluation by using *Allium cepa* and *Cicer arietinum* L. Chemosphere, 134123, **Impact factor: 8.8**
6. Ahmad, A., **Chowdhary, P.,** Khan, N., Chaurasia, D., S., Varjani, S., Pandey, A., & Chaturvedi, P. (2022). Effect of sewage sludge biochar on the soil nutrient, microbial abundance, and plant biomass: A sustainable approach towards mitigation of solid waste. Chemosphere 287, 132112, **Impact factor: 8.8**
7. Ahmad, A., Singh, A. P., Khan, N., **Chowdhary, P.,** Giri, B. S., Varjani, S., & Chaturvedi, P. (2021). Bio-composite of Fe-sludge biochar immobilized with Bacillus Sp. in packed column for bio-adsorption of Methylene blue in a hybrid treatment system: Isotherm and kinetic evaluation. Environmental Technology & Innovation, 23, 101734. **Impact factor: 7.1**

8. [#]Ilyas, T., [#]**Chowdhary, P.,** Gnansounou, E., Chaturvedi, P., Sustainable green processing of grape pomace for the production of value-added products: An overview, Environmental Technology & Innovation. **Impact factor: 7.1 ([#]equal contribution)**
9. Khan, N., [#]**Chowdhary, P.,** et al. (2021) Biochar and environmental sustainability: Emerging trends and techno-economic perspectives., Bioresource Technology, https://doi.org/10.1016/j.biortech.2021.125102. **Impact factor: 11.4 ([#]equal contribution)**

10. **Chowdhary, P.,** Gupta, A., Gnansounou, E., Pandey, A., Chaturvedi, P., (2021) Current trends and possibilities for exploitation of Grape pomace as a potential source for value addition, Environmental Pollution, 278, 116796 Impact **factor: 8.9**

11. Chaturvedi, P., **Chowdhary, P.,** Singh A., Pandey, A., Gupta, P. (2021) Dissemination of antibiotic resistance genes, mobile genetic elements, and efflux genes in anthropogenically impacted riverine environments, Chemosphere, https://doi.org/10.1016/j.chemosphere.2021.129693. **Impact factor: 8.8**
12. Chaturvedi, P., Shukla, P., Giri, B. S., **Chowdhary, P.,** Pandey, A., Gupta, P. (2021) Prevalence and hazardous impact of pharmaceutical and personal care products and antibiotics in environment: A review on emerging contaminants, Environmental Research https://doi.org/10.1016/j.envres.2020.110664 **Impact factor: 8.3**

13. Chaturvedi, P. Singh A., **Chowdhary, P.,** Pandey, A., Gupta, P. (2020) Occurrence of emerging sulfonamide resistance (sul1 and sul2) associated with mobile integrons-integrase (intI1 and intI2) in riverine systems, Science of The Total Environment, https://doi.org/10.1016/j.scitotenv.2020.142217. **Impact factor: 9.8**

14. **Chowdhary, P.,** Sammi, S. R., Pandey, R., Kaitwas G., Raj, A., Singh J., (2020) Bharagava R. N. Bacterial degradation of distillery wastewater pollutants and their metabolites characterization and its toxicity evaluation by using Caenorhabditis elegans as terrestrial test models, Chemosphere https://doi.org/10.1016/j.chemosphere.2020.127689. **Impact factor: 8.8**

15. #Khan, N., **#Chowdhary, P.,** Chaturvedi, P. (2020). Hydrothermal liquefaction of rice husk and cow dung in Mixed-Bed-Rotating Pyrolyzer and application of biochar for dye removal, Bioresource Technologyhttps://doi.org/10.1016/j.biortech.2020.123294 **Impact factor: 11.4 (#equal contribution)**

16. Ahmad, A., Khan, N., Giri, B.S., **Chowdhary, P.,** Chaturvedi, P. (2020). Removal of methylene blue dye using rice husk, cow dung and sludge biochar: characterization, application, and kinetic studies. Bioresource Technology, https://doi.org/10.1016/j.biortech.2020.123202, **Impact factor: 11.4**

17. Hare, V., **Chowdhary, P.** (2019), Changes in growth responses in rice plants grown in arsenic affected area: Implication of As resistant microbes in mineral content and translocation, SN Aplied Science doi:10.1007/s42452-019-0945-y.

18. Chowdhary, P., Shukla, G., Raj, G., Bharagava R. N. (2019) Microbial manganese peroxidase: A ligninolytic enzyme and its ample opportunities for research, SN Appl. Sci. 1: 45. https://doi.org/10.1007/s42452-018-0046-3.

19. Chowdhary, P., Bharagava R. N. (2019) Green Technology and Environmental Sustainability, Environ Dev Sustain, https://doi.org/10.1007/s10668-018-00304-1. **Impact factor: 4.9**

20. Boudh, S., **Chowdhary, P.,** Hare, V. Singh JS, Seneviratne G (eds): Agro-Environmental Sustainability, Volume 1: Managing Crop Environ Earth Sci (2019) 78: 655. https://doi.org/10.1007/s12665-019-8663-8.**Impact factor: 2.8**

21. Chowdhary, P., Yadav A., R., Chandra., Singh, R., Singh, D.P., Raj A., Bharagava R.N. (2018) Stress response of *Triticumaestivum* L. and *Brassicajuncea* L. against heavy metals growing at distillery and tannery wastewater contaminated site, Chemosphere 206, 122-131. https://doi.org/10.1016/j.chemosphere.2018.04.156.**Impact factor: 8.8**

22. Chowdhary, P., Hare, V., Raj, A. (2018) Book Review: Environmental Pollutants and Their Bioremediation Approaches. Front. Bioeng. Biotechnol. 6:193. doi: 10.3389/fbioe.2018.00193. **Impact factor: 5.7**

23. **Chowdhary, P.,** Bharagava R. N. (2018) Degradation and detoxification of distillery wastewater pollutants by *bacillus megaterium* sp. for environmental safety, International Journal of Applied and Advanced Scientific Research: 3, 238-243. doi. 10.5281/zenodo.1218085.

24. **Chowdhary, P.,** Abhay Raj., Bharagava R. N. (2018) Environmental pollution and health hazards from distillery wastewater and treatment approaches to combat the environmental threats: A review, Chemosphere. 194, 229-246. https://doi.org/10.1016/j. chemosphere.2017.11.163. **Impact factor: 8.8**

25. **Chowdhary, P.,** Khan, N., Bharagava R. N. (2018) Distillery wastewater: Its impact on environment and remedies, Environ Anal Eco stud. 1(2). EAES.000507. 2018. doi: 10.31031/EAES.2018.01.000507.

26. Hare, V., **Chowdhary, P.,** Baghel VS. (2017) Influence of bacterial strains on *Oryza sativa* grown under arsenic tainted soil: Accumulation and detoxification response, Plant Physiol Biochem. 119:93-102. https://doi.org/10.1016/j.plaphy.2017.08.021. **Impact factor: 6.5**

27. **Chowdhary, P**., More, N. K. S., A, Raj., Bharagava, R N. (2017) Characterization and identification of bacterial pathogens from treated tannery wastewater, Microbiology Research International 5(3), 30-36. **Impact factor: 0.61**

28. Hare, V., **Chowdhary, P.,** Baghel VS. (2016) Antibiotic resistance among enteric bacteria and their health implication, Int J. of App and Pure Sci and Agri. 58-73.

29. Singh, C., **Chowdhary, P.,** Singh, J S., Chandra R. (2016) Pulp and paper mill wastewater and coliform as health hazards: A review, Microbiology Research International 4(3), 28-39. **Impact factor: 0.61**

30. Chandra, R., **Chowdhary P.** (2015) Properties of bacterial laccases and their application in bioremediation of industrial wastes, Environ Sci Process Impacts. 17(2), 326-42. doi: 10.1039/c4em00627e. **Impact factor: 5.5**

C. Book chapters

31. Gupta, A., Singh, A., Ilyas, T., **Chowdhary, P.,** & Chaturvedi, P. (2022). Production and environmental applications of activated sludge biochar. In Biomass, Biofuels, Biochemicals (pp. 387-406). Elsevier.

32. Morya, S., Awuchi, C. G., **Chowdhary, P.,** Goyal, S. K., & Menaa, F. (2022). Ohmic Heating as an Advantageous Technology for the Food Industry: Prospects and Applications. In Environmental Management Technologies (pp. 307-327). CRC Press.

33. **Chowdhary, P.,** Mani, S., Shukla, P., & Raj, A. (2022). Microbes and Environment: Recent Advancement in Environmental Biotechnology. Microbial Biotechnology: Role in Ecological Sustainability and Research, 1-28.

34. **Chowdhary, P.,** Hare, V., Mani, S., Singh AK., et al., (2020) Recent advancement in the biotechnological application of lignin Peroxidase and its future prospects, In Chowdhary, P., Raj, A., Verma, D., Akhter, Y., Microorganisms for Sustainable Environment and Health Elsevier; https://doi.org/10.1016/B978-0-12-819001-2.00001-2

35. Mani, S., **Chowdhary, P.,** Zainith S., (2020) Microbes mediated approaches for environmental waste management, In Chowdhary, P., Raj, A., Verma, D., Akhter, Y., Microorganisms for Sustainable Environment and Health Elsevier; https://doi.org/10.1016/B978-0-12-819001-2.00002-4

36. Hare, V., **Chowdhary, P.,** Singh AK., (2020) Arsenic toxicity: Adverse effect and recent advance in microbes mediated bioremediation, In Chowdhary, P., Raj, A., Verma, D., Akhter, Y., Microorganisms for Sustainable Environment and Health Elsevier; https://doi.org/10.1016/B978-0-12-819001-2.00004-8

37. Zainith S., **Chowdhary, P.,** Mani, S., Mishra, S. (2020) Microbial ligninolytic enzymes and their role in bioremediation, In Chowdhary, P., Raj, A., Verma, D., Akhter, Y., Microorganisms for Sustainable Environment and Health Elsevier; https://doi.org/10.1016/B978-0-12-819001-2.00009-7

38. Singh, AK., **Chowdhary, P.,** Raj, A. (2020) In Silico bioremediation strategies for

removal of environmental pollutants released from paper mills using bacterial ligninolytic enzymes, In Chowdhary, P., Raj, A., Verma, D., Akhter, Y., Microorganisms for Sustainable Environment and Health Elsevier; https://doi.org/10.1016/B978-0-12-819001-2.00013-9

39. Savla, N., Shinde, A., Sonawane, K., Mekuto, L., **Chowdhary, P.,** Pandit, S. (2020) Microbial hydrogen production: fundamentals to application, In Chowdhary, P., Raj, A., Verma, D., Akhter, Y., Microorganisms for Sustainable Environment and Health Elsevier; https://doi.org/10.1016/B978-0-12-819001-2.00017-6

40. **Chowdhary, P.,** Hare, V., Singh AK., Pandit S., Chaturvedi, P. (2020). Emerging Environmental Contaminants: Sources, Consequences, and Future Challenges. In **Chowdhary, P.,** Raj A (eds) Contaminants and Clean technologies, CRC Press, Taylor & Francis Group, USA

41. Boudh S., Zainith S., **Chowdhary, P.,** Mishra S. (2020). Biodiesel as a Renewable Energy Source: An Alternative to Conventional Fuel, In Chowdhary**, P.,** Raj A (eds) Contaminants and Clean technologies, CRC Press, Taylor & Francis Group, USA

42. Babu RP., Pandit S., Khanna N., **Chowdhary, P.,** Mathuriya A S. *(*2020). Importance of Bacterial Biofilm in Bioremediation. In Chowdhary**, P.,** Raj A (eds) Contaminants and Clean technologies, CRC Press, Taylor & Francis Group, USA

43. Mani, S., **Chowdhary, P.** (2020) Dyes: Industrial Applications and Toxicity Profile. In Chowdhary**, P.,** Raj A (eds) Contaminants and Clean technologies, CRC Press, Taylor & Francis Group, USA

44. Hare, V., **Chowdhary, P.,** Boudh, S., Singh AK., Mani, S., Kumar, A. (2020). Effect of Arsenic on Human Health and Its Removal through Physiochemical Techniques. In Chowdhary**, P.,** Raj A (eds) Contaminants and Clean technologies, CRC Press, Taylor & Francis Group, USA

45. Singh AK., **Chowdhary, P.,** Raj A. (2020). Toxicity Evaluation of Paper Mill Pollutants Using *In Silico* Toxicology Approach for Environment Safety. In Chowdhary**, P.,** Raj A

(eds) Contaminants and Clean technologies, CRC Press, Taylor & Francis Group, USA

46. Mani, S., **Chowdhary, P.,** Hare, V. (2019). Industrial effluents: Impact on agricultural soils and microbial diversity. In Verma, A., Prasad, R., Tripathi, S. (eds) Plant Biotic Interactions. Springer, Cham. doi.org/10.1007/978-3-030-26657-8_4

47. Chowdhary, P., Bharagava, R. N., Mishra, S., and Khan, N. (2019) Role of industries in water scarcity and its adverse effects on environment and human health. In: Shukla, V., Kumar, N. (eds) Environmental Concerns and Sustainable Development. Springer Singapore, pp 235-256.doi.org/10.1007/978-981-13-5889-0_12

48. Chowdhary P., Bharagava R.N. (2018) Toxicity, beneficial aspect and treatment of alcohol industry wastewater. In: Bharagava R., Chowdhary P. (eds) Emerging and Eco-Friendly Approaches for Waste Management. Springer, Singapore,pp 83-97https://doi.org/10.1007/978-981-10-8669-4_5.

49. Chowdhary, P., Mani, S., Ileana Pereda Reyes., Bharagava, R.N. (2018) Effects of industrial wastewaters on soil sustainability and environment. In: Rakshit A, Sarkar B, Abhilash P. (eds) Soil Amendments for Sustainability: Challenges and Perspectives. CRC Press, Taylor & Francis Group, USA, pp 14 (ISBN: 0815370776).

50. Chowdhary, P., More, N., Yadav, A., Bharagava, R.N. (2018) Ligninolytic Enzymes: An Introduction and Applications in the Food Industry. In: Kuddus M (ed) Enzymes in Food Biotechnology, Academic Press, pp 181-195(ISBN 9780128132814), https://doi.org/10.1016/B978-0-12-813280-7.00012-8.

51. Mani S, **Chowdhary, P.**, Bharagava, R.N. (2018) Textile Wastewater Dyes: Toxicity Profile and Treatment Approaches. In: Bharagava R., Chowdhary P. (eds) Emerging and Eco-Friendly Approaches for Waste Management. Springer, Singapore. pp 219-244(ISBN 978-981-10-8669-4), https://doi.org/10.1007/978-981-10-8669-4_11.

52. Zainith S, **Chowdhary, P.**, Bharagava, R.N. (2018) Recent Advances in Physico-chemical and Biological Techniques for the Management of Pulp and Paper Mill Waste. In: Bharagava R., Chowdhary P. (eds) Emerging and Eco-Friendly Approaches for Waste

Management. Springer, Singapore. pp 271-297(ISBN 978-981-10-8669-4), https://doi.org/10.1007/978-981-10-8669-4_13.

53. Mishra, S., **Chowdhary, P.,** Bharagava, R.N. (2018) Conventional Methods for the Removal of Industrial Pollutants, Their Merits and Demerits. In: Bharagava R., Chowdhary P. (eds) Emerging and Eco-Friendly Approaches for Waste Management. Springer, Singapore.pp1-31(ISBN 978-981-10-8669-4), https://doi.org/10.1007/978-981-10-8669-4_1.

54. Hare, V., **Chowdhary P.,** Kumar B., Sharma D.C., Baghel V.S. (2018) Arsenic Toxicity and Its Remediation Strategies for Fighting the Environmental Threat. In: Bharagava R., Chowdhary P. (eds) Emerging and Eco-Friendly Approaches for Waste Management. Springer, Singapore, pp 143-170(ISBN 978-981-10-8669-4),https://doi.org/10.1007/978-981-10-8669-4_8.

55. Mishra, S., More, N., Yadav, A., Zainith, S., Mani, S., **Chowdhary, P.,** Bharagava, R. N. (2018) Heavy Metal Contamination: An Alarming Threat to Environment and Human Health, In: Sobti, R. C., Kumar**, A.**, N., Kothari, R. (eds)Environmental Biotechnology: For Sustainable Future . Springer, Singapore. pp 103-125 (ISBN 978-981-10-7284-0).

56. Bharagava, R.N., **Chowdhary, P.,** Saxena, G. (2017) Bioremediation: An eco-sustainable green technology, it's applications and limitations. In: Bharagava, R.N. (Ed.), Environmental Pollutants and their Bioremediation Approaches. CRC Press, Taylor & Francis Group, USA, pp. 703–711 (ISBN 9781138628892).

57. Bharagava, R.N., Saxena, G., **Chowdhary, P.** (2017) Constructed wetlands: An emerging phytotechnology for degradation and detoxification of industrial wastewaters. In: Bharagava, R.N. (Ed.), Environmental Pollutants and Their Bioremediation Approaches. CRC Press, Taylor & Francis Group, USA, pp. 395–425 (ISBN 9781138628892).

58. Chowdhary, P., Yadav, A., Kaithwas, G., Bharagava, R.N. (2017) Distillery wastewater: A major source of environmental pollution and it's biological treatment for environmental safety. In: Singh, R., and Kumar, S. (Eds.), Green Technology and Environmental Sustainability. Springer International, Cham, Switzerland, pp. 409–435

(ISBN 978-3-319-50653-1).

59. Yadav, A., **Chowdhary, P.,** Kaithwas, G., and Bharagava, R.N. (2017) Toxic metals in the environment, their threats on ecosystem and bioremediation approaches. In: Das, S., and Singh, H.R. (Eds.), Handbook of Metal-Microbe interaction and Bioremediation. CRC Press, Taylor & Francis Group, USA, pp. 128–141.

60. Chowdhary P., Saxena, G., Bharagava, R.N. (2016) Role of laccase enzyme in bioremediation of industrial wastes and its biotechnological application. In: RN Bharagava & G Saxena), Bioremediation of Industrial Pollutants. (eds): Write and Print Publication. Delhi. 307-331, (ISBN: 978-93-84649-60-9).

61. Saxena, G., **Chowdhary P.,** Bharagava, R.N. (2016) Xenobiotics: environmental pollution and health hazards, its biodegradation and future challenges, In: RN Bharagava & G Saxena), Bioremediation of Industrial Pollutants. (eds): Write and Print Publication. Delhi. 307-331, (ISBN: 978-93-84649-60-9).

D. Magazine article:

62. Chowdhary P, Saxena G, Bharagava R. N. (2015) Applications of laccase enzyme in biodegradation and bioremediation of industrial wastes, Microbiology World. doi 10.13140/RG.2.1.4719.5281.

63. Saxena, G., **Chowdhary, P.,** Bharagava, R N. (2015) Bioremediation approaches for industrial wastes containing organic and inorganic pollutants for environmental safety, Microbiology World. doi 10.13140/RG.2.1.1311.6564.

Workshops/ Conferences/ Training Programmes

1. National Symposium on, **"IPR in Agriculture Research"** jointly organized by at Babasaheb Bhimrao Ambedkar University, Lucknow (U. P.) & U. P. Council of Agriculture Research, Lucknow (U. P.) August 30-31, 2017

2. Participated in, International Symposium on, **"Microbes for Sustainable Development: Scope & Applications (MSDSA-2017)",** Association of Microbiologist of India (AMI)-2017) at Babasaheb Bhimrao Ambedkar University (A Central University), Vidya Vihar, Raebareli Road, Lucknow- 226 025 (U.P)

3. National Symposium on,**"Buildings an Ecologically Sustainable Society",** organized by at Babasaheb Bhimrao Ambedkar University (A Central University), Vidya Vihar, Raebareli Road, Lucknow- 226 025 (U.P)

4. Participated in, workshop on **"Placement and Employment Prospects in Indian Patents offices and Hands on Training for Patenting the research work",** jointly organized by University Bureau at Babasaheb Bhimrao Ambedkar University (A Central University), Vidya Vihar, Raebareli Road, Lucknow- 226 025 (U.P) – March 18th 2013

5. Participated in, seven days workshop on **"Gene Cloning & its Expression, to produce Genetically Modified Organism",** organized by School of Science, Maharshi University of Information technology (Lucknow) in association with CytoGene Research & Development, Lucknow (U. P.)

6. Seminar on, **"Environment, Education & Society",** organized by Babasaheb Bhimrao Ambedkar University, Lucknow (U. P.) 5th June, 2013

7. Participated in, The Indian Science Congress Association, organized by S. V. University, Tirupati, 3-7 January, 2017

8. International workshop, **"Bridge Development Divide for Inclusive Growth through Science, Technology and Innovation",** at Babasaheb Bhimrao Ambedkar University (A Central University), Vidya Vihar, Raebareli Road, Lucknow- 226 025 (U.P)

9. National workshop on Innovation and Technology Transfer to Industries: Role of Universities (ITTI-2014) at B. B. Ambedkar University(A Central University), Vidya Vihar, Raebareli Road, Lucknow- 226 025 (U.P)

10. Patent workshop -2013 at B. B. Ambedkar University (A Central University), Vidya Vihar, Raebareli Road, Lucknow- 226 025 (U.P)

MEMBER OF SCIENTIFIC SOCIETY:

1. Ex. President, **Society for Green Environment (SGE),** India

2. Life member of **The Biotech Research Society, India (BRSI)**

3. Life member of **Indian Science Congress Association (ISCA)**, India

4. Life member of **Association Microbiologist of India (AMI),** India

I, the undersigned, hereby state that the above-mentioned information is true and correct to the best of my knowledge.

Place: Israel

Date: September, 2023 **[PANKAJ CHOWDHARY]**