

Dr. Shahnaz Choudhry

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FIELD OF SPECIALIZATION

Molecular Biology, Ph.D. thesis titled "Search for new type II restriction endonucleases from local bacteria".

TECHNIQUES

Microbiological techniques, culturing bacteria through fermentation, preservation of microbial cultures, DNA isolation and purification, centrifugation and ultra-centrifugation, ultra-sonication, enzyme purification by column chromatography, characterization of enzymes, agarose and polyacrylamide gel electrophoresis, pulsed-field gel electrophoresis, sequencing of restriction enzymes by Sanger's di-deoxy chain termination method, recombinant DNA techniques, specifically cloning of a restriction enzyme in *E.coli*, phase contrast microscopy and spectrophotometry.

RESEARCH PUBLICATIONS

1. **Choudhry, S.**, Halos, S., Krischenowski, D., and Hirschmann, G. S. (1993). Two new 17 α -hydroxyprogesterone transformation products from *Nocardia* DSM 43298. *World J. Microbiol. Biotech.* 9 (1): 56-58. **(International)**. Cited by 2. <https://doi.org/10.1007/BF00656517>. **IF. 2.652.**
2. **Choudhry, S.** and Riazuddin, S. (1995). Study of type II restriction and modification enzymes. **In proceedings** of the fourth International symposium workshop on the applications of Molecular Biology Research in agriculture, health and environment (S. Riazuddin Ed.), pp: 69-75. Centre of Excellence in Molecular Biology, Lahore.
3. **Choudhry, S.** (1999). Purification and characterization of new type II restriction endonucleases. *Pak. J. Biol. Sci.* 2(4): 1299-1304. **(ISSN 1028-8880). Thomson Reuters (X-category).**
4. **Choudhry, S.** (1999). Characterization of new type II restriction endonucleases from bacteria. *Proc. Pak. Acad. Sci.* 36(2): 165-171. **(HEC recognized, X-category).**
5. **Choudhry, S.** (2000). BscAI, isolated from *Bacillus schlegelii* is an isoschizomer of *Sfa*NI with different cleavage position. *Proc. Pak. Acad. Sci.* 37(2): 179-184. **(HEC recognized, X-category).**
6. Sajjad, M. and **Choudhry, S.** (2012). Effect of starch containing organic substrates on alpha amylase production in *Bacillus* strains. *African J. Microbiol. Res.* 6(45): 7285-7291 (ISI indexed Journal, **IF 0.564**. Available online at <http://www.academicjournals.org/AJMR>. Doi: 10.5897/AJMR. **(International). (JCR list, W-category).**
7. Noreen S., Khan S. J., **Choudhry S.**, Fatima A. and Ejaz N. (2012). Evaluation of *Aloe vera barbadensis* for its antimicrobial, phytochemical and ethanobotanical status. *J. Med. plants Res.* 6(49): 5876-5880. Doi: 10.5897/JMPR. **(International). W-category.**
8. Waseem I., Gulsher M., and **Choudhry S.** (2014). Cellulase production from newly isolated bacterial strains from local habitat. *Int. J. recent. Sci. Res.* 2014. 5(8): 1454- 1459. Available online at <http://www.recentscientific.com>. **(International). ISSN 0976- 3031. (HEC, Y-category).**
9. Shahzad T., Ahmad I., **Choudhry S.**, Saeed M. K. and Khan M. N. (2014). DPPH free radical scavenging activity of tomato, cherry tomato and water melon: lycopene extraction, purification and quantification. *Int. J. Pharm. Pharm. Sci.* 6(2): 223-228. **(International). ISSN- 0975-1491. (Peer reviewed, open access). (HEC, Y-category). Cited by 9.**

10. Mohsin S., Salariya A. M.*, Rashid A. A* and **Choudhry S.** (2015). Nutritional evaluation of different cheddar cheese varieties made from buffalo and cow milk. *Pak. J. Sci.* 67(3): 230-234. **(HEC, X-category).**
11. Saif R, Khan E, Azhar A, **Choudhary S**, Hussain T, Babar ME, Awan AR, Tayyab M, Zia S, Wasim M. (2016). Insight of Tp53 Mutations and their effect on Protein in Different Feline and Canine Neoplasms. *Adv. Life Sci.* 3(2): 42-50. **(Recognized by Thomson Reuters), HEC, X-category.**
12. Saif R, Azhar A, Khan E, **Choudhry S**, Hussain T, Babar M. E, Awan A. R. Tayyab M and Wasim M. (2016). In silico characterization of *Hspb1* mutant protein in canine and feline cancers. *Pak. J. Biochem. Mol. Biol.* 49(1): 18-28. (ISSN 1681-4525), **HEC, Z- category).**
13. Abbas N, Safdar W, Ali S, **Choudhry S**, Elahi S. (2016). Citric acid production from *Aspergillus niger* using mango (*Mangifera indica* L.) and sweet orange (*Citrus sinensis*) peels as substrate. *Int. J. Sci. Eng. Res.* 7(2): 868-872. (ISSN 2229-5518). **(HEC, Y- category).**
14. Abbas N, Safdar W, Ali S, **Choudhry S**, Elahi S. (2016). Citric acid production from *Aspergillus niger* using banana peel. *Int. J. Sci. Eng. Res.* 7(1): 1580-1583. (ISSN 2229- 5518). **(HEC, Y-category).**
15. Choudhry F, **Choudhry S**, Huma R, Ashraf M, Al-Rashida M, Munir R, Sohail R, Jahan B, Munawar MA, Khan MA. (2017). Hetrylcoumarins: Synthesis and biological evaluation as potent α -glucosidase inhibitors. *Bioorg. Chem.* 73: 1-9. <https://doi.org/10.1016/j.bioorg.2017.05.009> **(JCR list & Thomson Reuters), W-category. IF 3.926.**
16. Tahir W, **Choudhry S.** (2017). Production of activated carbon from tea waste and its application in water treatment. *J. Biodiv. Environ. Sci.* 11(1): 37-44. (ISSN 2220-6663 Print, ISSN 2222-3045). **Thomson Reuters list (HEC, X-category).**
17. Abbas N, Javed J, Abbas Z, **Choudhry S**, Ali S. (2017). Lipase production from *Bacillus subtilis* using various agricultural wastes. *Int. J. Adv. Eng. Managmnt. Sci.* 3(5): 405-409. (ISSN 2454-1311). <https://dx.doi.org/10.24001/ijaems.3.5.1>. **HEC, Y-category.**
18. Chaudhry F, Naureen S, **Choudhry S**, Huma R, Ashraf M, Al-Rashida M, Jahan, B, Khan MH, Iqbal F, Munawar MA, Khan MA. (2018). Evaluation of α -glucosidase inhibiting potentials with docking calculations of synthesized arylidene-pyrazolones. *Bioorg. Chem.* 77: 507-514. DOI: 10.1016/j.bioorg.2018.02.002. **IF 3.926.**
19. Khawaja, S., Mubashir, S., **Choudhry, S.** Utilization of inulin-rich plant extracts in probiotic bacterial culture for lactase production. *J. Natural. App. Sci. Pak.* 2019; 1(1): 8-17. ISSN: 2663-6328. Print and Online.
20. Akhtar, R., Azhar, D., Mubashir, S., **Choudhry, S.** Evaluation of lactase activity in probiotic cultures containing inulin rich plant extracts as prebiotic sources.” *Malays. J. Microbiol.* 2020; 16(1): 73-78. Published online as short communication. **(X-Category), Recognized by Thomson Reuters.** DOI: <http://dx.doi.org/10.21161/mjm.190377>.
21. **Published a self - help book as Co Author:**
Amir and **Shahnaz Choudhry** (2019). 150 Tips on Fighting Sexual Harassment of Women in the Workplace. Ukiyoto Publishing, Toronto, Canada; ASIN: B081FSXDV2. **ISBN10: 1708092692, ISBN-13: 978-1708092696.**
https://www.amazon.com/dp/1708092692/ref=rd_r_ext_tmb
22. Azhar, A, **Choudhry, S.** Production of activated carbon from spent tea and its application in the treatment of textile dyes. *J. Bio. Env. Sci.* 17(3), 50-63, 2020. <https://innspub.net/jbes/production-activated-carbon-spent-tea-application-treatment-textile-dyes/>
23. Ejaz, R., Malik, S., Ahmad, M., Ali, H., & **Choudhry, S.** Antibiofilm potential of menthol purified from *Mentha piperita* L. (Mint). *Biological and Clinical Sciences Research Journal*, 2020(1), e037. Retrieved from <https://bcsrj.com/ojs/index.php/bcsrj/article/view/37>.
DOI: <https://doi.org/10.47264/bcsrj0101037>
24. Nida Habib and **Shahnaz Choudhry.** HPLC Quantification of Thymoquinone Extracted

from *Nigella sativa* L. (Ranunculaceae) Seeds and Antibacterial Activity of Its Extracts against *Bacillus* Species. Hindawi, Evidence-Based Complementary and Alternative Medicine. Volume 2021. 1-11. (W-category). <https://doi.org/10.1155/2021/6645680>. DOI:10.1155/2021/6645680

25. Sara Zahid and **Shahnaz Choudhry**. Sand quality improvement using watermelon (*Citrullus lanatus*) seeds–derived urease-induced calcium carbonate precipitation. International Journal of Economic and Environmental Geology. Vol. 14(4) 20-27, 2023. www.econ-environ-geol.org **Published in 2024.**
(Y- Category)
26. Fatima Saeed. Fatima Jawed, **Shahnaz Choudhry**. Extraction of pyrethrins from *Chrysanthemum cinerariifolium* petals, its application as a bioinsecticide and study of its effects on rice weevil *Sitophilus oryzae*. Sindh University Research Journal. Vol. 54:01, 18-26, (2024). **Doi:** <https://doi.org/10.26692/surj-ss.v56i1.6773>. **(Y- Category)**

RESEARCH PROJECT

Co-Principal Investigator with Dr Faryal Choudhry (IPFP), the Principal Investigator of the HEC project under Start-up Research Grant Program (SRGP) titled “Synthesis and Biological Studies of Azolic Compounds”. Project duration: 2016-2017 (9 months), **(Completed)**.

INTERESTS

Research interests are in Microbiology, Food, Industrial and Environmental Biotechnology.
Keeping updated with developments in my discipline.
Other interests are travelling, good music, social work.