

Curriculum Vitae



Name: Dr. Shubhra Tiwari
Husband's Name: Mr. Amit Kumar Tiwari
Date of birth: 23/08/1982
Current Position: Research Assistant
S.o.S. in Biotechnology, Pt. Ravishankar Shukla, Raipur (Chhattisgarh)
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Education:

1. Ph.D. Biotechnology (2013) Thesis title: Production of bioethanol from rice bran
2. M.Phil Biotechnology (2009) Secured Ist Rank in Merit
3. M.Sc. Biotechnology (2006) Secured Ist Rank in Merit
4. B.Sc. CBZ (2004) Secured Ist Rank in Merit

Awards:

1. Recipient of Pt. Ravishankar Shukla University Gold Medal in M.Sc. Biotechnology-2006
2. Recipient of 8th Chhattisgarh Young Scientist Award (Biotechnology) 2010
Organized by Chhattisgarh Council of Science and Technology

Member:

1. Joint Secretary of Alumni Association of Biotechnology, Amanaka Raipur (Reg. No.29709)
2. Life member of Alumni Association of Biotechnology, Amanaka Raipur (Reg. No.29709)
3. Life member of SHAKTI: A National Movement for Women (Reg.No. ER-294/04)
4. Life Member (MS/LM/711) of Microbiologist Society of India (Reg. No. MAHA/4814/SAT)

Research Guidance: M.Sc. (Dissertation)

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|---------------------|------|---|
| 1. Mr. Khumendra | 2024 | Selection and screening of indigenous yeast for bioethanol production from waste paper. |
| 2. Mr. Swaraj | 2024 | Exploring indigenous <i>Sphingopyxis soli</i> for bioethanol production from waste paper and study of pretreatment strategies for improved yield. |
| 3. Ms. Purnima Soni | 2024 | Bioethanol production from rice husk via <i>Zymomonas mobilis</i> immobilization and nanoparticle synergy. |

4.	Ms. Aasiya Bano	2023	Exploring the potency of green synthesized zinc oxide nanoparticle for antibacterial, antioxidant and photocatalytic applications.
5.	Mr. Aman Mishra	2023	Comparative biochemical analysis of Gram positive and Gram negative bacteria: unveiling the microbial characteristics.
6.	Ms. Smriti Sonkar	2023	Biovalorization of rice husk for cellulase enzyme production and its applications.
7.	Ms. Sapna Sarkar	2023	Bioethanol generation from vegetable waste: exploring nanoparticles and pretreatment strategies.
8.	Ms. Pooja Sahu	2023	Bioconversion of vegetable waste into single cell protein production by Yeast.
9.	Ms. Diya Patel	2022	Hands on training on various experimental and analytical of Biotechnology.
10.	Ms. Bharti Ramteke	2022	Evaluation of antimicrobial properties of some medicinal plants.
11.	Ms. Sakshi Verma	2022	Formulation of herbal soap by Giloy (<i>Tinospora cordifolia</i>) extract and its antibacterial activity.
12.	Ms. Soumya Pituri	2022	Antimicrobial activity of <i>Azadirachta indica</i> (Neem) leaf extract.
13.	Ms. Tanushri Mukharjee	2022	Comparative analysis of immobilized yeast on different matrices for bioethanol production.
14.	Ms. Apurva Singh	2021	Antimicrobial activity of <i>Azadirachta indica</i> (Neem) leaf extract on gram positive and gram-negative bacteria.
15.	Ms. Suraksha Thorani	2021	Bioethanol production from rice straw with <i>S. cerevisiae</i> .
16.	Ms. Durga Verma	2020	Comparative analysis for bio ethanol production from different rice residues.
17.	Ms. Lipkia Verma	2020	Bioethanol production from rice straw.

List of Published Research Papers

1. Tiwari, K.L., Jadhav, S.K. and **Tiwari, S.** (2010) The effects of temperature variation in the bioethanol production process. *Bioprocessing Journal*. 9(1): 18-20.
2. Tiwari, K.L., Jadhav, S.K. and **Tiwari, S.** (2011) Antibacterial studies of cave water. *Deccan Current Science* 4: 237-240.
3. K.L.Tiwari, S.K. Jadhav and **S. Tiwari** (2011) Studies of bioethanol from some carbohydrate sources by Gram Positive Bacteria. *Journal of Sustainable Energy and Environment* 2: 141-145.
4. **Shubhra Tiwari**, S.K. Jadhav and K.L. Tiwari (2012) Production of Bioethanol from “Jatropha oil cake”. *Researcher* 4(7):7-10.
5. Anshika Pandey, **Shubhra Tiwari**, K.L. Tiwari and S.K. Jadhav (2013)

- Bioconversion of lignocellulosic *Azolla* into bioethanol. *J. of applied Phytotechnology in Environmental Sanitation*. 2:59-64.
6. Esmil Beliya, **Shubhra Tiwari**, Shailesh Kumar Jadhav and Kishan Lal Tiwari (2013) De-oiled rice bran as a source of bioethanol. *Energy Exploration & Exploitation*. 31(5):771–782. **(SCIE, IF 0.9)**
 7. **Shubhra Tiwari**, S.K. Jadhav, K. L. Tiwari and Esmil (2013) Comparative study of bioethanol production from deoiled and oiled rice bran. *Research Journal of Biotechnology*. 8(9): 10-12. **(SCIE IF 0.29)**
 8. **Shubhra Tiwari**, S. K. Jadhav and K.L. Tiwari (2013) Comparative study of bioethanol production from different carbohydrate sources. *Researcher*. 5 (12) 219-221.
 9. **Shubhra Tiwari**, S. K. Jadhav, Mayuri Sharma and K.L. Tiwari (2014) Fermentation of waste fruits for bioethanol production. *Asian Journal of Biological Sciences*. 7(1): 30-34. DOI: 10.3923/ajbs.3034. **(Thomson ISI)**
 10. Anshika Pandey, **Shubhra Tiwari**, S. K. Jadhav and K.L. Tiwari (2014) Efficient microorganism for bioethanol production from lignocellulosic *Azolla*. *Research Journal of Environmental Sciences*. 8(6): 350-355. DOI:10.3923/rjes.2014.350.355.
 11. **Tiwari S.**, Jadhav S.K., and Tiwari K.L. (2015) Bioethanol production from rice bran with optimization of parameters by *Bacillus cereus* strain McR -3. *Int. J. Environ. Sci. Technol.* 12, 3819–3826. DOI 10.1007/s13762-014-0746-1 **(SCI IF 3)**
 12. Pandey Anshika, **Tiwari Shubhra**, Tiwari K.L. and Jadhav S.K. (2016) Relation between sugar consumption and bioethanol production potential in lignocellulosic biomass. *Research Journal of Biotechnology*. 11(1): 52-57. **(SCI Expanded, IF 0.29)**
 13. Chhaya Malagar, **Shubhra Tiwari**, S.K. Jadhav and K.L. Tiwari (2016) Comparative studies of *Saccharomyces cerevisiae* MTCC 4780 and *Pichia kudriavzevii* for bioethanol production using Sal (*Shorea robusta*) seeds. *Journal of Biofuels*. 7(1): 9-13 **(NAAS rating 3.73)**
 14. Choudhary Ankita, **Tiwari Shubhra**, Jadhav S.K. and Tiwari K.L. (2016) Bioethanol production from *Shorea robusta* (Sal) seeds using *Zymomonas mobilis* MTCC92. *Silpakorn University Science and Technology Journal*. 10(3):1-6.

15. **Tiwari S.**, Jadhav S.K., and Tiwari K.L. (2016) Effect of physical parameters on production of bioethanol by *Bacillus cereus* strain McR -3. *Research Journal of Chemistry and Environment*.20 (11):15-20. **(SCOPUS IF 0.2).**
16. G. Sinha, **Tiwari S.** and Jadhav S.K. (2019) Simultaneous Saccharification and fermentation of rice residues and its comparative analysis for bioethanol production. *Defence Life Science Journal*. 4(3):158-162. **(SCOPUS IF 0.4)**
17. JS Paul, Esmil Beliya, **ShubhraTiwari**, Karishma Patel, Nisha Gupta, S.K.Jadhav (2020) Production of biocatalyst alpha amylase from agro-waste rice bran by using *Bacillus tequilensis* TB5 and standardizing its production process. *Biocatalysis and Agricultural Biotechnology*. 26:101648. **(SCI IF 3.2)**
18. Gupta, N., Beliya, E., Paul, J.S., **Tiwari S.**, Kunjam, R. and Jadhav S.K. (2021) Molecular strategies to enhance stability and catalysis of extremophile-derived α -amylase using computational biology. *Extremophiles*. 25, 221–233. **(SCI IF 2.4)**
19. Paul, J.S., Gupta, N., Beliya, E., **Tiwari S.**, and Jadhav S.K. (2021) Aspects and Recent Trends in Microbial α -Amylase: a Review. *Appl Biochem Biotechnol*. **193**, 2649–2698 **(SCI IF 2.9)**
20. Ankita Rathi, Nisha Gupta, Vani Dhruw, Esmil Beliya, Shubhra Tiwari, Jai Shankar Paul, S.K.Jadhav (2022) Valorization of rice milled by-products (rice husk and de-oiled rice bran) into α - amylase with its process optimization, partial purification and kinetic study. *Process Biochemistry* 120: 101-113. **(SCI IF 3.7)**
21. **Shubhra Tiwari**, Esmil Beliya, Monika Waswani, Khushbu Khawase, Dristi Verma, Nisha Gupta, Jai Shankar Paul and Shailesh Kumar Jadhav (2022) Rice Husk: A Potent Lignocellulosic Biomass for Second Generation Bioethanol Production from *Klebsiella oxytoca* ATCC 13182. *Waste and Biomass Valorization*. <https://doi.org/10.1007/s12649-022-01681-5>. **(SCI IF: 3.702)**
22. Dristi Verma, Jai Shankar Paul, **Shubhra Tiwari** and S.K. Jadhav (2022) A Review on Role of Nanomaterials in Bioconversion of Sustainable Fuel Bioethanol. *Waste and Biomass Valorization*. <https://doi.org/10.1007/s12649-022-01843-5>.**(SCI IF: 3.702).**
23. Dristi Verma, **Shubhra Tiwari** and S.K. Jadhav (2024) Bioethanol production by immobilized *Enterobacter cloacae* using different matrices. *International Journal of Multidisciplinary Research*. 6(3), 1-6.

Chapters in Book:

1. **Shubhra Tiwari**, S.K.Jadhav and Ankita Choudhary Bioethanol production from Sal (*Shorea robusta*) seeds (2015) p. 161 Chapter 21 Biotechnology and Traditional Knowledge 2015. ISBN: 978- 81-7622-330-0.
2. **Shubhra Tiwari**, SKJadhav, Esmil Beliya, Jaishankar Paul and GD Sharma (2020) Ethnic Fermented Beverages and Foods of Chhattisgarh In Ethnic Fermented Foods and Beverages of India: Science History and Culture. ISBN 978-981-15-1485-2. Springer Nature, Singapore.
3. **Shubhra Tiwari**, SK Jadhav, Esmil Beliya and GD Sharma (2020) Fungal Bioengineering in Biodiesel Production. In Fungal Biotechnology and Bioengineering. Springer Nature, Singapore
4. **Shubhra Tiwari**, Jai Shankar Paul, Nisha Gupta, Dristi Verma and S.K. Jadhav (2023) Ethnic fermented beverages of India. Natural Products in Beverages, Reference series in Phytochemistry. Springer Nature Switzerland. http://doi.org/10.1007/978-3-031-04195-2_191-1.
5. Gupta, N., Verma, D., **Tiwari**, S., Paul, J.S., Jadhav, S.K. (2024) Tools and techniques related to the monitoring and assessment of biosorbents. Biosorbents Diversity, Bioprocessing and Applications. Chap 11; 165-179. CRC Press, Taylor & Francis Group. ISBN 9781003366058.
6. **Shubhra Tiwari**, Jai Shankar Paul, Nisha Gupta, Dristi Verma, G.D. Sharma and S.K. Jadhav (2025) Downstream processing applications on waste valorization for value added biomolecule generation. Oleaginous microbes for waste biomass valorization. Chapter 14; 364-382. CRC Press. ISBN: 9781003538790.

Declaration: I hereby declare that all the information is correct and true best of my knowledge.

(Shubhra Tiwari)
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