

## BIO-DATA

1. Name and full correspondence address: **DR. DEEPAK UTTAMRAO BHUSARE**  
Address: Majula Nagar, Bhokar Dist Nanded. (MS) India
2. Email(s) and contact number(s): bhusaredu@gmail.com 09823752512.
3. Institution: **Digambarrao Bindu ACS College, Bhokar Dist. Nanded**
4. Date of Birth: **14/06/1984**
5. Gender (M/F/T): **Male**
6. Category Gen/SC/ST/OBC: **OBC**
7. Whether differently abled (Yes/No): **No**
8. Academic Qualification (Undergraduate Onwards)

Sr. No	Qualification	Year	University/Board	Status/Class
1.	<b>NET (II)</b>	2019	ASRB, New Delhi	<b>Passed</b>
2.	<b>Ph.D. (Micro)</b>	Dec. 2013	SRTMU, Nanded	<b>Award</b>
3.	<b>MBA (HR)</b>	May 2011	YCMOU, Nasik	Pass
4.	<b>M. Phil</b>	June 2009	GOU, Nagaland	Award
5.	<b>M.Sc.(Micro)</b>	M/A 2007	SRTMU, Nanded	II <sup>nd</sup>
6.	<b>B. Sc</b>	M/A 2005	SRTMU, Nanded	I <sup>st</sup> Class with Distinction

9. Ph.D thesis title, Guide's Name, Institute/Organization/University, Year of Award.

- **Ph. D** : Optimization and Characterization of Protease By *Bacillus* sp. Isolated From Hot Sulphur Spring of Unkeshwar under the guidance of Dr. P. S. Wakte, DSM College, Parbhani. SRTMU Nanded. December 2013.
- **M. Phil:** Evaluation of an antimicrobial potentials of some indigenous plants extracts against pathogenic organisms. Under the guidance of Dr. Garude A. M, Shri Shivaji College, Chikhali. June 2009.

10. **Work experience (in chronological order).**

1. Joined as a Lecturer at DB College, Bhokar from August 2014 to till date.
2. **Working as PG Teacher**, since June 2007 (7 year's experience) in Department of Microbiology, **Shri Shivaji College**, Parbhani. 431401.
3. **One year Experience** from June 2012 – May 2013, as a **PG lecturer** in Department of Microbiology, **Dnyanopasak College**, Parbhani. 431401.
4. **Two Months Experience** in Navketan Research Laboratory as a **“Microbiologist”** in Quality Control Department, Waluj MIDC, Aurangabad.
5. Have completed contributed workload in the **School of Life Science, SRTMU, Nanded**.
6. Worked as a **teaching associate** at New Model Degree College, Hingoli, from **15/01/2014 to 13/05/2014**.

11. Professional Recognition/ Award/ Prize/ Certificate, Fellowship received by the applicant. **NA**

12. Publications (*List of papers published in SCI Journals, in year wise descending order*).

#### **PUBLICATIONS:**

1. **Bhusare, D.U.**, Wakte, P.S., Kulkarni S. S. & Bhate M.A, (2020) Cell immobilization by Agar-Agar & Agarose for protease production by thermotolerant *Bacillus licheniformis* JX849145, International Research Journal of Science and Engineering ISSN: 2322-0015, Vol. 9 Issue: 3 2020
2. **Bhusare Deepak U.**, (2019). Isolation and Characterization of Aliphatic Hydrocarbon degrading bacteria from Godavari River. *An International Multidisciplinary Quarterly Research Journal*, ISSN: 2277-5730, Vol-VIII, pp-40-46.
3. **Bhusare Deepak U.**, (2019). Biodiesel production from Cyanobacterial species Isolated from Bhokar Dam. *An International Multidisciplinary Quarterly Research Journal*, ISSN: 2277-5730, Vol-VIII, pp-1-5.
4. **Bhusare Deepak U.**, (2016). Evaluation of an Antimicrobial potential of Indigenous Plant Extracts against pathogenic organisms. *International journal of Science and Research (IJSR)*, ISSN: 2319-7064, pp-2409-2412.
5. **Bhusare D.U.** & Kadam Omprakash A, (2015). Production and identification of poly –  $\beta$  – hydroxyl butyrate by microorganisms. *Int. Res. J. of Science & Engineering*, Vol. 3 (2): 51-55.
6. Shirsat S. D, **Bhusare D. U.**, Kadam A. S, 2015. Bactericidal Activity of Bioactive Compounds Extracted from Bryophyte *Barbula vinilis*. *IJSR* , Volume 4 Issue 3.

7. Kadam Omprakash A & **Bhusare D.U.** (2015). Purification of extracellular protease by *Bacillus* sp. Isolated from Lonar meteoritic crater. *Int. Res. J. of Science & Engineering*, 2015; Vol. 3 (2): 47-50.
8. **Bhusare D.U** & Wakte P.S. (2014). Influence Of Enzyme Activators On Alkaline Protease From Thermo-Tolerant *Bacillus Licheniformis* Jx849145. *International Journal of Science and Research (IJSR)*, Page: 1044-1048. Volume 3 Issue 12.
9. **D. U. Bhusare** & P. S. Wakte, (2013), Statistical Optimization of Alkaline Protease Production by Immobilized Thermo tolerant *B. licheniformis* BWU-1 using response surface methodology. ISBN: 978-93-5030-154-8
10. P.S. Wakte, **D.U. Bhusare**, S.S. Kulkarni and V.L. Deshmukh, 2011. Assessment of physico-chemical parameters on synthesis of protease by *Bacillus licheniformis* BWU-1 isolated from hot sulphur spring of Unkeshwar. *Recent research in science and technology 2011*, 3(5): 42-49.
11. Wakte P.S & **Bhusare D.U**, 2011. Statistical assessment of stability and compatibility of protease extracted from thermo tolerant *Bacillus licheniformis* BWU-1. *Journal of current botany*.
12. **D.U Bhusare** and P.S Wakte 2011. Microbiological and physiochemical attributes of hot water sulphur spring of Unkeshwar. *Journal of Experimental Sciences* Vol. 2, Issue 4, Pages 04-06.
13. P.S. Wakte, Y.S. Mohite and **D.U. Bhusare** 2011. Influence of metal ions on growth and C-Phycocyanin production in *Arthrospira (Spirulina) platensis*. *Recent research in science and technology*, 3(5): 104-108.
14. Sunil D. Ahirrao, Sudarshan S. Pedge, **Deepak U. Bhusare**, Sanjay S. Kulkarni and Rajendra P. Mali. 2011. Studies on Haloalkaliphilic Bacteria Isolated from Lonar Meteorite Crater in India. *Journal of Ecobiotechnology*, 3(6): 05-08
15. **Bhusare D. U.** & Wakte P. S. 2012, Purification of alkaline protease from thermotolerant *Bacillus licheniformis* JX849145. *Agro-Biotechnology for Sustainable Development*, Oxford Book Company. ISBN-978-93-5030-154-8. Pp-21-29.
16. Wakte P. S. & **Bhusare D. U.** 2012. Micro-ecological and biochemical aspects of thermal spring. *Advances in Environmental Sciences*, Oxford Book Company. ISBN-978-93-5030-155-5. Pp-247-253.
17. **D.U. Bhusare** & P.S.Wakte. 2012. Scale up of Alkaline Protease by the Thermotolerant *B. licheniformis* JX849145 using Laboratory Bioreactor and its Application. Recent trends and Future prospects in Life Sciences. ISBN 978-81-924894-3-8, Jyotichandra Publication. Pp-128-133.

## **RESEARCH ACTIVITIES:**

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1. Oral presentation entitled **Statistical optimization of alkaline protease production by immobilized thermo tolerant *B. licheniformis* BWU-1 using Response Surface Methodology** at International conference on Agro-Biotechnology for sustainable development held during march 12-13, 2012 at **Colombo, Sri Lanka**.
2. Oral presentation entitled **Scale up production of alkaline protease by thermotolerant *B. licheniformis* BWU-1 using pilot plant bioreactor GBJ5-5** at International conference on Microbial World: recent Innovations and future trends held during November 22-25, 2012 at KIIT University, Bhubaneswar-24, **Odisha, India**.
3. Poster presentation entitled **“Integrated effect of divalent metal ions on production and activity of alkaline protease from thermotolerant *B. licheniformis* BWU-1”** at International conference on Microbial Biotechnology for sustainable development held during November 3-6, 2011 at **Punjab University, Chandigarh, India**.
4. Oral presentation entitled **Purification and Molecular characterization of alkaline protease from thermotolerant *Bacillus licheniformis* BWU-1** at International conference on “Biotechnology for Better Tomorrow” held during 06-09 February 2011 at **Aurangabad**.
5. Poster presentation entitled **“Optimization of various Physico-Chemical parameters for Protease synthesis by thermotolerant *Bacillus licheniformis* BWU-1 isolate from hot sulphur spring** at International conference on Third Golden Era of Microbiology organized by Association of Microbiologist of India, 15-18 December 2009, held at **National Chemical laboratory, Pune**.
6. Oral presentation entitled **Studies on Compatibility and Stability of Alkaline Protease by *Bacillus licheniformis* BWU-1 from Hot Sulphur Spring of Unkeshwar** at National conference on innovations in Bio-Science 2011 held during Oct. 21-22, 2011 at **Washim, Maharashtra, India**.
7. Paper presentation entitled **“Effect of various metal ions on thermotolerant alkaline protease activity by *Bacillus licheniformis* BWU-1 Isolate** at Regional Conference on Microbial technology for Sustainable Environment, 2-3 March 2009 held at University of Sciences, Gujarat University, **Ahmadabad 380 009, Gujarat**.
8. One day Regional Workshop on “Research Paper Writing and Presentation skill” held on September 17, 2014 at Science College, Nanded.
9. National Conference on **“A review on Indian Biodiversity and Conservation”**, 16-17 Dec. 2011. Shri Shivaji College, Parbhani.
10. National level seminar on **“Post-Colonial Perspectives in Indian English Literature”**, 22-23 January 2010. Shri Shivaji College, **Parbhani**.
11. National Conference on **Environmental pollution, Disaster Management and Mitigation**, 15-16 September. 2006. Dnyanopasak College **Parbhani**.

12. **I<sup>st</sup> State** level poster competition on Biological colours, 26<sup>th</sup> January 2013, Dnyanopasak College, Parbhani.
13. **One day seminar** and state level poster competition, 27<sup>th</sup> January 2014, organized by DSM College, Parbhani.

#### **HANDS OF SKILL:**

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1. Isolation and Preservation of pure microbial cultures.
2. Screening of microorganisms for antibiotic, Organic acid, amino acid, enzymes etc.
3. Cultivation/Enrichment of microbial cultures.
4. Extraction of microbial enzymes.
5. Use and calibration of Autoclave, Hot air oven, Incubator, Shaker incubator, Micropipettes, Ultrasonicator, UV transilluminator, UV-Vis spectrophotometer, Laminar air flow, Magnetic stirrer, Vortex mixture.
6. GBS-5 Glass bioreactor (Fermenter) for luxuriant growth of microbial cultures and metabolite production.
7. Desktop, High speed and Ultracentrifuge.
8. Paper chromatography & TLC.
9. Column chromatography: Gel chromatography, Ion exchange chromatography & Affinity chromatography.
10. Extraction of DNA, RNA & Plasmids from Bacteria.
11. Computer handling for phylogenetic tree diagram by using gene database.
12. Gel electrophoresis.
13. PAGE
14. Qualitative & Quantitative estimation of proteins & amino acids.

#### **AREA OF INTEREST:**

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- Extremophiles
- Enzyme purification
- Proteomic and Genomic structure analysis.
- Statistical analysis by Software.

### Department Staff Information

Name of the Faculty :	Microbiology
Designation	Assistant professor
Date of Birth	14/06/1984
Date of Joining	18/04/2015
Contact No.	09823752512
Email	bhusaredu@gmail.com
Educational Qualification	M.Sc. M.Phil, PhD., MBA
Teaching Experience	Year 04      Month 02
Major/ Minor Project Submitted	NA
Major/ Minor Project Sanctioned	NA
Papers teaching UG/PG	
UG	1. Microbiological Techniques (PII)
	2. Microbial Physiology (PIV)
	3. Applied Microbiology (P-VI)
	4. Food, Soil Microbiology and Microbial Ecology(P-VIII)
	5. Microbial Metabolism (P-XIII)
	6. Industrial Microbiology (PXV)
PG	7. Bioinstrumentation
	8. Extremophiles
	9. Environmental Microbiology
	10. Enzyme Technology
	11. Bioinformatics
Area of Interest	Extremophiles, Instrumentation
Research publication in Journals (Nos.)	15

*Dr. Deepak U. Bhusare*