

CURRICULUM VITAE

Dr.R.Brindha

Assistant Professor (Sr.Gr)

Department of Biotechnology

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Research Area:

- 1.Design and development of integrated Bio-chemo reactor system.
- 2.Advanced Oxidative Process.
- 3.Chemical reaction kinetics.
- 4.Toxicity studies in different models.

Educational Qualifications:

Qualification	College/University	Year of completion
Ph.D. (Biotechnology)	Anna University, Chennai	2018
PG (Industrial Biotechnology)	SASTRA University, Thanjavur	2008
UG (Industrial Biotechnology)	Government College of Technology (GCT), Coimbatore	2006

Experience:

Name of Company / Institutions	Designation of Post	From	To	Experience in Year
Operon Biotech, Tichel Biopark, Chennai	BCIL Trainee	01.11.2008	30.04.2009	0.5
University college of engineering, BIT-Campus	Assistant professor	24.08.2009	23.08.2014	5

University college of engineering, BIT-Campus	Assistant Professor (Senior grade)	24.08.2014	Till Date	9

Awards / Honours Received:

1. Won third prize in Environ Solver Hackathon conducted by Tamilnadu Pollution Control Board at 2023.
2. Selected for Young Faculty Research Support Scheme by TEQIP II at 2015.
3. Selected as sponsored trainee by Biotech Consortium of India Ltd, DBT, New Delhi from Nov 2008 to May 2009
4. Central Institute for research on cotton technology has appreciated the M.Tech project.
5. Various Merit scholarships at M.Tech level.
6. Qualified in **GATE-‘10** with **91.02** percentile score (National Level Exam)
7. Awarded Chief Minister Merit scholarship by Government of Tamil Nadu in the year of 2000-2001.

Additional / Academic Responsibilities at University:

S.No.	Name of the Post	From	To
1.	Cultural Coordinator	2022	Till date
2	Department NBA co-coordinator	2019	2021
3.	Department instrumental maintenance in-charge	2010	2019
4.	Department coordinator for Manam club	2011	2015
5.	Department coordinator for women cell	2011	2015

Membership of Scientific and Professional Societies:

- Indian Society of Technical Education

Completed PG/UG Projects:

- a. Number of PG Projects Completed: 10 Nos
- b. Number of UG Project Completed: 48 batches

➤ Research Guidance (M.S/Ph.D.) (Ongoing):

Sl. No	Name of the scholar	Tentative Title of the thesis	Year of registration	Status
1.	Jennet Debora J	Bio-Chemo degradation of pharmaceutical wastewater	2021	ongoing

➤ Publications:

a. Books / book chapters:

S.No	Authors	Title of the Book chapter	Publisher and ISBN No
1.	K. Ravi Shankar, V. Theresa, R. Brindha, S. Renganathan	“Bioprocessing for Enhanced Biological Textile Wastewater Treatment” Bioprocess Engineering for a Green Environment (2018), PP 99-130	Taylor & Francis, CRC press 9781315232379
2.	K. Ravi Shankar, R. Brindha	“Fed-batch fermentation of <i>Bacillus subtilis</i> AKRS3 for efficient production of alkaline protease using different feeding strategies” in Hand book on Molecular and analytical techniques in Biotechnology, (2016)	SELP Publication, Tiruchirappalli. 978-93-80509-82-2

b. International Journals:

1. **Brindha R***, Rajeswari S, Jennet Debora J, Rajaguru P. 2022. Evaluation of global research trends in photocatalytic degradation of dye effluents using scientometrics analysis. *Journal of Environmental Management*, 318:115600. DOI: 10.1016/j.jenvman.2022.115600. **Impact factor: 8.91**

2. **Brindha R**, Jennet Debora J Rajaguru P. 2023. Analysis of batch kinetic data of

biodecolorization reaction: a theoretical approach for the design of packed bed reactor. *Journal of Environmental Engineering*, **149**, **10**. DOI: 10.1061/JOEEDU.EEENG-7269
Impact factor: 2.479

3. Anuja E., Pramothkumar A., **Brindha R.**, Vetha Potheher I. 2022. Pure and Al-Bi Co-doped SnO₂ Nanoparticles as Bacterial Growth Inhibitors. *Toxicological & Environmental Chemistry*, DOI: [10.1080/02772248.2022.2117361](https://doi.org/10.1080/02772248.2022.2117361)

Impact factor: 1.56

4. **Brindha, R.**, Santhosh, S. and Rajaguru, P., 2019. Integrated bio-chemo degradation of Mordant Yellow 10 using upflow anaerobic packed bed reactor (UAPBR) and tray type photo-Fenton reactor (TPFR). *Journal of Cleaner Production*, **208**, pp.602-611. DOI: [10.1016/j.jclepro.2018.10.158](https://doi.org/10.1016/j.jclepro.2018.10.158)

Impact factor: 11.07

5. **Brindha, R***, Narayana, C. K., Vijayalakshmi, V., and Nachane, R. P. 2019. Effect of different retting processes on yield and quality of banana pseudostem fiber. *Journal of Natural Fibers*, **16**(1), pp.58-67. DOI:[10.1080/15440478.2017.1401505](https://doi.org/10.1080/15440478.2017.1401505)

Impact factor: 3.5

6. **Brindha, R.**, Muthuselvam, P., Senthilkumar, S. and Rajaguru, P., 2018. Fe₀ catalyzed photo-Fenton process to detoxify the biodegraded products of azo dye Mordant Yellow 10. *Chemosphere*, **201**, pp.77-95. DOI: [10.1016/j.chemosphere.2018.02.151](https://doi.org/10.1016/j.chemosphere.2018.02.151)

Impact factor: 8.94

7. Dino, A. A., **Brindha, R.**, Jayamuthunagai, J., and Bharathiraja, B. 2019. Biodegradation of aniline from textile industry waste using salt tolerant *Bacillus firmus* BA01. *Engineering in Agriculture, Environment and Food*, **12**(3), pp.360-366. [10.1016/j.eaef.2019.04.003](https://doi.org/10.1016/j.eaef.2019.04.003)

➤ **Sponsored Research Projects:**

Sl.No	Name of the project	Funding agency	Project value (Rs.)	Duration	Status
1.	Utilization of iron ore mine tailings and soil scape biofilters for the abatement of antibiotics in pharmaceutical	DST-SERB-CRG	34,20,318	3 Years	Ongoing

	wastewater (PI)				
2.	Sequential anaerobic solar photo-Fenton process for effective treatment of textile effluents (Co-PI)	DBT – River cleaning project	31,17,200	3 Years	Completed

Funded student projects:

- Insitu generation of hydrogen peroxide by *Lactobacillus acidophilus* for photo fenton degradation of aromatic amines - Students projects scheme from TEQIP -II during 2015-2016.
- Fabrication of microbial fuel cell for azo dye treatment and electricity production- Students projects scheme from TEQIP -II during 2014-2015.

➤ **List of Seminar / Short Term Course /FDP/ Workshop organized:**

- Organized TEQIP II sponsored Hands on training programme “Molecular and analytical techniques in Biotechnology” at Department of Biotechnology, Bharathidasan Institute of Technology, Anna University, Tiruchirappalli from February 27 – March 3, 2017.
- Organized TEQIP II sponsored National Level Symposium on BIORITZ'16 at Department of Biotechnology, Bharathidasan Institute of Technology, Anna University, Tiruchirappalli from February 22 - 23, 2016.
- Organized TEQIP II sponsored National Level Symposium on BIORITZ'14 at Department of Biotechnology, Bharathidasan Institute of Technology, Anna University, Tiruchirappalli from October 30 - 31, 2014. Nov 5 and 6
- Organized TEQIP II sponsored Two days Seminar on “Biotechnology – The Wave of Future” at Department of Biotechnology, Bharathidasan Institute of Technology, Anna University, Tiruchirappalli from October 30 - 31, 2013.

➤ **List of Seminar / Short Term Course /FDP/ Workshop attended:**

1. Participated in Two weeks Online Industrial training programme on “Plastics processing and testing” organized by Central Institute of Petrochemicals Engineering and Technology (CIPET), Madurai held from 10-06-2021 to 22-06-2021.
2. Participated in Two week Online Faculty Development Programme on “ICT Tools for Teaching Learning Process and Institute” jointly organized by Electronics and ICT Academies supported by Ministry of Electronics and Information Technology (MeitY), Government of India held from August 10 -21, 2020.

3. Participated in One week Online - International Faculty Development Programme on “Recent Advances in Next Generation Sequencing” jointly organized by Ministry of Earth Sciences – Earth Science Technology Cell and Centre for Ocean Research, Sathyabama Institute of Science and Technology, Chennai held from July 27 – August 2, 2020.
4. Participated in Webinar on “Chiral chromatography” conducted by Interdisciplinary Institute of Indian System of Medicine (IISM), SRM Institute of Science and Technology, Kattankulathur, Chennai on July 15, 2020.
5. Participated in Webinar on “Funding Opportunities in Biotechnology” conducted by PG and Research Department of Biotechnology and Bioinformatics, Holy Cross College, Tiruchirappalli on June 27, 2020.
6. Participated in Webinar on “Introduction to 3D Bioprinting and the role of Biotechnologists” conducted by Department of Biotechnology, Karpagam Academy of Higher Education, Coimbatore on June 26, 2020.
7. Participated in International Online Five Days Faculty Development Programme on “ICT Tools for Effective Teaching” organized by Department of Visual Communication, Sathyabama Institute of Science and Technology, Chennai held from June 22 – 26, 2020.
8. Presented a paper in the International conference on “Bioprocessing India 2017” during December 9 – 11, 2017, at IIT Guwahati, Assam.
9. Participated in Faculty Development Programme (FDP) on “Learning Improvement Techniques” organized by IIT Madras, Teaching Learning Centre from January 28 - 30, 2016.
10. Participated TEQIP II sponsored Faculty Development Programme (FDP) on “Principles of Bioreactor Engineering” organized by Department of Biotechnology, Bharathidasan Institute of Technology, Anna University, Tiruchirappalli from December 16 - 22, 2013.
11. Presented a paper in the Eighth National Conference on “Optimization Techniques in Engineering Sciences and Technologies” during April 19 – 20, 2013, at Bannari Amman Institute of Technology, Erode.
12. Attended UGC sponsored 78th Orientation Programme organized by Academic staff college, Bharathidasan University, Tiruchirappalli held on February 1 - 28, 2013.
13. Participated a national conference on “Environment Biodiversity and Bioethics – Current trends and future perspective 2012” held on March 23 - 24 at Annamalai University, Chidambaram.
14. Participated an International Conference on Biotechnology & Global warming (ICBGW) 2011 held on March 10 - 12, at Vivekanandha College for Women.
15. Participated UGC sponsored seminar on “Bioprocess Modeling Optimization and Simulation– 2011” held on February 18-19, 2011 at Annamalai University, Chidambaram.
16. Attended ” International Workshop on Micronucleus Assays with Buccal cells for Human and Environmental Monitoring” held on February 9 - 13, 2011 at Anna University of Technology, Tiruchirappalli - 620024
17. Participated in All India Chemical Congress “CHEMCON’10” at Annamalai University, Chidambaram on December 2010.

18. Participated an AICTE sponsored Staff Development Programme (SDP) on “Fabrication of sub – 100 nm patterning of Biochip for Next Generation Healthcare” organized by NanoBiotechnology lab, Department of Biotechnology from May 3 - 14, 2010 at Periyar Maniammai University, Thanjavur.
19. Participated a National Symposium on “Recent Advances in Biotechnology” on January 23 and 24 , 2010 at Anna University Tiruchirappalli.

S. No.	Name of the course	Duration	Grade
1.	Principles of Downstream Processing	29 Jul – 18 Oct 2019 - 12 weeks	Elite
2.	Cell Culture Technologies	24 Feb-17 April 2020 - 8 weeks	Elite with Silver
3.	Nanotechnology in Agriculture	14 Sep- 6 Nov, 2020 - 8 weeks	Elite with Silver
4.	Wildlife Ecology	14 Sep- 4 Dec, 2020 - 12 weeks Exam : Dec 20	Elite with Gold
5.	Environmental Biotechnology	26 July-15 Oct, 2021 - 12 weeks Exam :oct 24	Elite with Silver (Topper 2%)
6.	Aspects of Biochemical Engineering	24 Jan- 15 April 2022 - 12 weeks Exam april 23 FN	Elite with Silver (Topper)
7.	Forests and their management	24 Jan- 15 April 2022 - 12 weeks Exam april 23 AN	Elite with Gold

➤ **National / International Conferences organized / Participated:**

International Conferences Participated:

1. Presented a paper in the International conference on “Bioprocessing India 2017” during December 9 – 11, 2017, at IIT Guwahati, Assam.
2. Participated an International Conference on Biotechnology & Global warming (ICBGW) 2011 held on March 10-12, at Vivekanandha College for Women.

National Conferences Participated:

1. Presented a paper in the Eighth National Conference on “Optimization Techniques in Engineering Sciences and Technologies” during April 19 – 20, 2013, at Bannari Amman Institute of Technology, Erode.
2. Participated a national conference on “Environment Biodiversity and Bioethics – Current trends and future perspective 2012” held on 23th and 24th of March at Annamalai University, Chidambaram.

Professional recognitions: (details like chairperson/member of a committee, reviewer, editor ...etc)

Reviewer in International Journals:

1. Fibers and Polymers.
2. Springer Proceedings (CHEMCON)

(A) Chairperson for conferences / Seminar / Technical symposia:

1. Served as resource person for TEQIP-II sponsored hands-on training program on “Molecular and Analytical Techniques in Biotechnology-2015 held during 7th to 11th September 2015.
2. Served as resource person in TEQIP-II sponsored two-day international conference on “Modern Progress in Biotechnology” held during 9th and 10th October 2014

(B) Guest lectures delivered:

1. Invited guest lecture for UG Biotechnology students of department of biotechnology Karpagam Academy of Higher Education, Coimbatore on Bioprocessing in heterogenous systems and downstream processing on 06.10.2016.

DECLARATION:

I certify that the information furnished above is correct and true to the best of my knowledge and belief.

Signature of the staff member

Head of the Department

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