# Name: Dr. Sonali Nitin Joshi, Ph.D.

### Assistant Professor, Head, Department of Biotechnology

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#### **Work Experience**

• Teaching: 25 years

• Research/Industrial: 8 years

#### **Personal Profile**

- Completed Ph.D. (Microbiology) in the year 1995.
- Worked as CHB faculty in Post Graduate Teaching Department, Microbiology, during Ph.D work
- Joined as fulltime Lecturer in February 1997 at L.A.D. College, Nagpur (Grant In Aid), promoted as senior Lecturer in 2001
- Served as Head, Department of Biotechnology, Sinhgad College of Science, Pune (2004-2008)
- Joined as Assistant Professor at Department of Biotechnology, Pune (2008) and took charge as Head in 2014 till date
- Organized and participated in several conferences, workshops and seminars
- Involved in administrative work of college and SPPU
- Member of selection committees and LIC of SPPU
- Ph. D thesis evaluation for many students
- Completed one BCUD project
- Guided several UG and PG students for their project work

### Course(s) Taught (Only Titles)

- 1. Industrial Biotechnology
- 2. Bacteriology
- 3. Large Scale Manufacturing Processes
- 4. Bioprocess Engineering and Fermentation Technology
- 5. Microbial Biotechnology
- 161 Critical Reading of Primary Scientific Literature

### Field of Specialization/Areas of Interests

- Industrial Biotechnology
- Microbial Biotechnology
- Bacteriology

#### Education

**Ph.D.** – (**Microbiology**): from 1990 to 1995

**Title of the Thesis:** Microbial technology for total biomass production of *Prosopis juliflora* and Leucaena leucocephala trees on wasteland.

Name of University / Institution: Nagpur University, Post Graduate Department of Nagpur University

Year of Award: 1995

Master of Science/Arts- (Microbiology): 1990

University/College: Post Graduate Department of Microbiology, Nagpur University

**Bachelor of Science- (Microbiology): 1988** 

College, University, Place: Shri Shivaji Science College, Nagpur (Nagpur University)

### Fellowship/Awards/ Certifications/Achievements/Recognitions

- 1. Indian Council of Agricultural Research (ICAR) fellowship
- 2. DBT

### Member of College Committees/ Professional Bodies and Others

College Level	<b>Professional Bodies</b>	Others
Internal Quality Assurance     Cell, IQAC (Member)     Library Advisory Committee	Global Biotech Forum	<ul> <li>Chairman, BOS, Fergusson         College (Autonomous)</li> <li>BOS Member Savitribai         Phule University</li> </ul>
M.Sc. / Admission     Committee		

## **Employment History**

1) Organization : Lady Amritbai Daga College, Nagpur

Role : Senior Lecturer (Grant -in-aid)

**Duration** : 1997-2004

Responsibilities	Academic duties	
	<ul> <li>Worked as committee member of Admissions, CAP,</li> </ul>	
	Examination	

2) Organization : Sinhagad College of Science, Pune : Head, Department of Biotechnology

**Duration** : 2004-2008

Responsibilities	Setting up of the Biotechnology Department, Library
	<ul> <li>Administrative responsibilities of Head and Academic -</li> </ul>
	Teaching

3) Organization : Fergusson College (Autonomous), Pune

Role : Head, Department of Biotechnology (Since 2014)

**Duration**: 2008-till date

Responsibilities	Overall administration of the department
	Academic and allied responsibilities
	<ul> <li>Various committees of the College and society</li> </ul>

### **Research Projects**

Title of the Project	Name of Funding Agency	Amount (Rs)	Duration (Year) (From To)	Type (Minor/Major)	Outcome
Development of tyrosinase- based electrochemical biosensor for detection of vitamin E analogue	BCUD	1,60,000	2016-2018		Project completed. Paved way for using this biosensor for cholesterol detection. Process to file patent initiated.

#### **Research Publications in National and International Journals (Recent)**

- 1. Paper presentation 'Development of tyrosinase- based electrochemical biosensor for determination of vitamin E analogue' Innovations, 21st November 2017, C.T. Bora College, Shirur.
- 2. Thombre R and **Joshi S** (2016) Industrial production and applications of yeast and yeast products, in Industrial Biotechnology: Sustainable Production and Bioresource Utilization. (Eds)Thangadurai D, Sangeeta J. Apple Academic Press, New Jersey, USA. ISBN:9781771882699
- 3. Nayak C and **Joshi S**, (2014) Isolation of Oil Degrading Bacteria from Soil and Bioremediation Under In-situ Conditions. International Journal of Environment and Natural Sciences, 3, 123-129. ISSN: 2349-3763
- 4. Dhaneshwar S, Tewari K, **Sonali Joshi**, Godbole D and Ghosh P (2011) Diglyceride prodrug strategy for enhancing the bioavailability of norfloxacin. Chemistry and Physics of Lipids (2011)164, 307–313. Elsevier, Impact Factor:2.14

## Participation in Conferences/Seminars/Symposia/Workshop:

- 1. Hands on training workshop on 'Bioinformatics for faculty of life sciences', 21<sup>st</sup> June to 25<sup>th</sup> June 2021 organized by Department of Biotechnology, Fergusson College (Autonomous), under DBT STAR College Status.
- 2. On Line course on 'Microbial Process for energy recovery from organic waste', 15<sup>th</sup> February to 21<sup>st</sup> February 2021, Organized by Pune Knowledge Centre and Agharkar Research Institute (ARI), Pune.
- **3.** Participation in International Conference on 'Infectious Diseases and Immunopathology' April 21-24,2021, organized by Department of Biotechnology, Savitribai Phule Pune University, Pune
- **4. Joshi Sonali and Tembe Sanket,** 'Development of tyrosinase- based electrochemical biosensor for determination of vitamin E analogue' Innovations, 21st November 2017, C.T. Bora College, Shirur
- **5. Joshi Sonali and Amol Diwakaran** `Bioconversion of sugarcane bagasse into second generation bioethanol using yeast sugarcane immobilized biocatalyst system` at 3rd Global Sustainable Biotech Congress, An International conference held at NMU, Jalgaon from December 1-5, 2014.

## **Events Organized/Coordinated:**

Sr.No	Name of the Event	Name of organizing Institute/ College/ University	Nature of contribution	Dates
1.	Under DBT STAR, UGC – CE (College with excellence), UGC- STRIDE scheme- several workshops, talks, projects	Fergusson College (Autonomous)	Organizer	Throug hout the year
2.	State Level Seminar on Recent Advances in 'Stem Cell Biology and Regenerative Medicine'	Department of Biotechnology, Fergusson College (Autonomous), Pune under the Faculty development programme of Savitribai Phule Pune University	Coordinator	23 <sup>rd</sup> Februar y, 2018
3	National Conference on "Modern Analytical techniques in Microbiology" (DBT sponsored)	Department of Microbiology, Fergusson College	Organizing member	17 <sup>th</sup> and 18 <sup>th</sup> January 2014.
4	3 <sup>rd</sup> Global Sustainable Biotech Congress (International)	North Maharashtra University, Jalgaon	Organizing member	Decemb er 1-5, 2014

# **Course Content Developed (e-content)**

Course content developed for subjects Large Scale Manufacturing Processes, Bacteriology, Bioprocess Engineering and Industrial Biotechnology (Both UG and PG)

# **Consultancy Services**

Sr.No	Name of Teacher	Area of Consultancy	Name of Institute/ Industry/ others	Revenue Generated (Rs.)
1	Dr. Sanket	Soil Analysis	Client: Mr. Pranav Tembe	23,600/-
	Tembe			
	Dr. Sonali Joshi			