

## CURRICULUM VITAE

**Snehal B. Gagare** Ph.D.  
Assistant Professor  
Department of Biotechnology  
Modern College of Arts Science and Commerce,  
Ganeshkhind Pune 411016 (India)

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### Professional Recognition, Awards and Highlights:

- a. Filed Indian Patent entitled “Nutraceutical formulation” Application number 201921011127.
- b. CSIR UGC - NET LS Rank 43
- c. SET qualified
- d. GATE 2009: Percentile 87.73 AIR 1598.
- e. PET Mumbai University

### Current Position and Job Profile:

- Faculty at the Department of Biotechnology, Progressive Education Society’s Modern College, Ganeshkhind, Pune- 411 016 since 2014 and teaching subjects including Microbial Biotechnology, Recombinant DNA Technology, and Animal Tissue Culture at Under- and Post- graduate levels.

### Areas of Interest:

Natural Products and Bioprospecting, Nanobiotechnology, Cell culture, Environmental Biotechnology

### Educational Qualifications:

#### Ph.D.(Biochemistry) [2020]

Government Institute of Science ,Mumbai, University of Mumbai, India

Title of Ph.D. Thesis :

“Phytochemical Screening and bioactive potential of *Sesuvium portulacastrum*”

**Work highlights:** The research was directed to isolate and purify phytochemicals using analytical like HPLC, NMR and further screening for hepatoprotection against alcohol induced toxicity in HepG2 cell lines.

#### M.Sc. (Biotechnology) [2009]

Government Institute of Science ,Aurangabad, Dr BAMU, India

Title of M.Sc. Thesis:[Project trainee at NCCS- National Center for Cell Sciences, Pune]

“Screening and Molecular characterization of Indigenous foods for Probiotic attributes”

**Work highlights:** The Indian fermented foods were screened for presence of probiotic bacteria, molecular characterization including PCR and sequencing of isolates was done and cell culture for adherence on Caco2cell lines was done.

#### B.Sc. (Biotechnology) [2007] (College Topper)

New Arts Commerce and Science College Ahmednagar, India

**Career Summary:**

S. No.	Institution/Place	Position	From (Date)	To (Date)
1.	Department of Biotechnology Modern College, Ganeshkhind Pune	Assistant Professor of Biotechnology	03/07/2017	Till date
2.	Department of Biotechnology Modern College, Shivajinagar Pune	Assistant Professor of Biotechnology	22/7/2015	30/4/2016
3	Department of Biotechnology, Modern College, Ganeshkhind Pune	Assistant Professor of Biotechnology	5/7/2014	30/4/2015
3.	Department of Biotechnology, Elphinstone College, Fort Mumbai	Assistant Professor of Biotechnology	1/7/2012	30/4/2014
4.	Department of Forensic Biology Institute of Forensic Science Mumbai	Assistant Professor of Forensic Biology	1/07/2011	30/04/2012
5.	Directorate of Forensic Science Laboratories, KalinaMumbai	Assistant Chemical Analyser	1/2/2010	31/1/2011
6	Department of Biotechnology Ahmednagar College Ahmednagar	Assistant Professor of Biotechnology	1/7/2009	17/12/2010

**Research Publications:**

**No. of Patent filed : 01**  
**No. of Gene Bank Submission : 05**  
**No. of Research papers : 10**  
**Books Published : Text book on Genetics for SYBSc Biotechnology**

- 10 PrateikShinde, **SnehalGagare** Dattaray Late. 2020. TiO<sub>2</sub> nanoflowers based humidity sensors and cytotoxic activity *Royal Society of Chemistry Advances* doi: 10.1039/d0ra05007e **Impact Factor: 3.119**
- 09 **Snehal Gagare, Surekha Chavan** .2021.Effect of *withania somnifera* and *solanum nigrum* on drought induced stress in wheat. *IJBAT* (1) :91-100
- 08 **Snehal Gagare, Surekha Chavan, Sagade** .2021. Antibacterial potential and phytochemical screening of *Physalis angulata* and *Solanum virgianum*. *IJBAT* (1): 36-40
- 07 **Snehal B.Gagare**,Pratima S. Jadhav. 2017.Comparative Phytochemical profiling of various extracts, from different parts of *Sesuviumportulacastrum* using GCMS, FTIR and ICP AES. **International Journal of Engineering, Science and Mathematics**6( 6).
- 06 **Snehal B.Gagare**,Pratima S. Jadhav.2018.Chromatographic separation of phytconstituents from *Sesuviumportulacastrum*. P. **Indian J.Research**.7(4), 462-464.
- 05 **SnehalB.Gagare**,Pratima S. Jadhav.2018 Phytochemical Evaluation of *Sesuviumportulacastrum*Extracts, **Bioinfolet** 15(1)
- 04 **Snehal B.Gagare**, Pratima S. Jadhav. 2017. Molecular phylogeny of *Sesuviumportulacastrum* using 18S nuclear ribosomal gene sequence, **Global journal for research analysis**, 6 (5).
- 03 **Snehal B.Gagare**,Pratima S. Jadhav.2018. Hepatoprotective and antibacterial potential of purified active components from *Sesuvium portulacastrum* extracts, **Journal Of Chemistry And Chemical Sciences** 8(4)
- 02 **Snehal B.Gagare**,S.L.Chavan.2015.Effect of microwave treatment on bioactive compounds of *Spinacia oleracea* and *Anthemum graveolens*. **Journal of Basic Sciences**.
- 01 **Snehal B.Gagare**,S.L.Chavan.2013Effect of irradiation on *Rhizobium* :strain improvement by UV irradiation increases yield of *Triticumaestivum*.**International Journal of biological sciences Floran**

**Sequences submitted to GenBank: 5****KC 146551, MZ066819, MZ066820 MZ066821 MZ066822****E content developed: 10(few quoted below)**

<b>Subject</b>	<b>Class</b>	<b>Topic</b>
<b>Animal cell culture</b>	UG Biotechnology	YouTube video generated on Chick embryo dissection and primary culture. <a href="http://www.youtube.com/channel/UCLOWruRZTwG-ggPPraCE6Ng">www.youtube.com/channel/UCLOWruRZTwG-ggPPraCE6Ng</a>
<b>Pathogenesis</b>	All science students	YouTube video generated on COVID- 19 :Nomenclature, Pathogenesis <a href="http://www.youtube/LzM8FMsh-es">www.youtube/LzM8FMsh-es</a>
<b>Molecular Biology</b>	PG Biotechnology	YouTube video generated on Mechanism of Lactose Operon <a href="https://www.youtube.com/watch?v=89LGLNelrw4">https://www.youtube.com/watch?v=89LGLNelrw4</a>
<b>Immunology</b>	PG Biotechnology	YouTube video generated on Fluorescent Activated Cell Sorting <a href="https://www.youtube.com/watch?v=Kxi54t_Tqfl&amp;t=19s">https://www.youtube.com/watch?v=Kxi54t_Tqfl&amp;t=19s</a>

**Seminar/Conference/Workshop Organised:**

1. Guest speaker for a talk on “Nanotechnology in Agriculture-a step towards green revolution” at the department of Physics Modern College Ganeshkhind, Pune on 12<sup>th</sup> February 2021.
2. Organizing Committee member of International Conference on Biotechnology: Perspective and Challenges under the aegis of DBT, India at the Department of Biotechnology, Modern College of Arts, Science and Commerce, Pune from 14-15 February 2020.
3. Organized workshop (hands-on-training) under aegis of Student welfare SPPU on “Biochemical Separation Techniques” at the Department of Biotechnology, Modern College of Arts, Science and Commerce, Pune on 30<sup>th</sup> January 2020

**University Assignments:**

1. Worked as External Examiner for Practical Examinations
2. Worked as Evaluator for Paper Checking for BSc Biotechnology.
3. Worked in Syllabus construction for MSc Forensic Science(Mumbai University)paper setter(2012-2013).

**Paper presented in International and National Symposia/ Seminars:**

1. **Snehal Gagare Chavan S L (2016).** Sesuvium portulacastrum : A promising halophyte presented at International Conference on “Impact of chemistry on Environment held at NACS Parner. **Best Oral presentation award.**
2. **Snehal Gagare Chavan S L (2016).** Antioxidant potential of Sesuvium portulacastrum presented at International Conference on Herbal and synthetic drugs held at AbedaInamdarCollegePune.
3. **Snehal Gagare Pratima S Jadhav (2013).** Phylogenetic analysis of Sesuvium portulacastrum using 18S gene sequence” presented at National Conference in Botany held at NACS Ahmednagar **Best Oral presentation award.**
4. **Snehal Gagare S G Gupta (2008).** “Technologies to Curtail Global warming.” Selected among the top 8 candidates for State Level Inter University Research Festival "Avishkar 2008" Hosted by SNTD Mumbai'.
5. **Snehal Gagare (2007)** "Biosynthesis of Silver Nanoparticles from fungus *Verticillium*". Second prize at District level Inter University Research Festival 2007

6. **Snehal Gagare S D Kulkarni**(2006)"Antimicrobial & Antioxidant Properties of *Allium sativum*" at the "National Conference on Modern Innovations in Biotechnology and Biodiversity Conservation held at Amravati.

**Technical Expertise:**

1. Molecular biology & Immunology: Nucleic acid isolation and processing, Transformation selection of recombinant, PCR, Immunoblotting Separation of Peripheral blood mononuclear cells
2. Cell Culture: Sub culturing and Maintenance of Cell Lines MTT assay.
3. Protein Biochemistry: Protein isolation and Processing, gel electrophoresis.
4. MS Office, Basic Bioinformatics