Department of Botany-Biotechnology

The Department of Botany, established in 1972, at present offers UG, PG and Ph.D. programs in Botany. The Department has been highly appreciated by NAAC for its achievements. The Department has been identified as one of the highly rated Department under College of Excellence. The Department has been identified as one of the highly rated Departments in the College under CE, UGC 2015. The Department is supported by 'Star Status' scheme of DBT and 'FIST' programme of DST. The Department has well developed laboratories with many advanced research equipments, a Tissue Culture Laboratory and two Polyhouses. We have a botanical garden with many medicinal plants. All the permanent faculty members possess Ph.D. degree in Botany. There are three recognized research guides for M. Sc. (by research) and Ph.D. in Botany as well as for M. Sc. (by research) and Ph. D. in Biotechnology. Two senior faculty members are appointed as Adjunct Professors in the Department. The results of the Department of Botany at B.Sc. and M.Sc. level are consistently excellent and always higher than the average result of the University.

One Major Research project under UGC, One Major Research Project under NMPB, AYUSH, New Delhi and One Industrial Major Research Project have been completed by faculty of Botany. Similarly, two Minor Research Projects have been sanctioned by UGC and Two minor research projects have been sanctioned by the University of Mumbai. 09 students have completed Ph.D. Degree in Botany and 6 are pursuing Ph.D. in Botany while 06 students have completed Ph.D. Degree in Biotechnology and 6 are pursuing Ph.D.in Biotechnology under the guidance of faculty of Botany in the last 5 years. Two National Seminars have been organized by the Department of Botany in the last 5 years. Every year we organize 'Norkett, Chopra, Gangulee and Udar Memorial Lecture' for the students of Botany from different colleges. The Department aims to be a Centre of Excellence.

The Department of Biotechnology established in 2002, at present offers UG, PG and Ph.D. programs in Biotechnology, M.Sc Biotechnology with specialization in Industrial Biotechnology and Five year Integrated M.Sc Biotechnology. There are 4 recognized research guides for Ph.D. in Biotechnology and M.Sc. (by research) in Biotechnology. The Department has a rich and vibrant research culture. There 8 faculty members in the department. There are 10 seats for Ph.D. in Biotechnology. In the past 5 years, 6 students have completed their Ph.D. in Biotechnology and 6 are pursuing their Ph.D. Four Minor Research Projects (University of Mumbai) have been completed.

- Name of the research centre: Botany-Biotechnology
- Year of establishment: Botany (M.Sc.)-1985; Botany (Ph.D.)-1991
  Biotechnology (M.Sc.) 2003-04; Biotechnology (Ph.D.)- 2006-07
- Total Number of Seat - Botany- 20; Biotechnology-10

Research guides in the centre

Director. Dr. Naresh Chandra For M.Sc. and Ph. D (Botany, Biotechnology and Environmental Sciences)
Prin. Dr. Avinash Patil For M.Sc. and Ph. D (Botany and Biotechnology)
Prof. (Mrs.) Meeta Bhot For M.Sc. and Ph. D (Botany and Biotechnology)
Prof. Maninder Kaur Dhaliwal For Ph.D. (Microbiology and Biotechnology)
Dr. (Mrs.) Geeta Unnikrishnan (Retired) For Ph. D (Zoology and Biotechnology)
Dr. (Mrs.) Anita Phatak (Retired) For M.Sc. (Botany and Biotechnology) and Ph. D. (Botany)
Dr. P A Joshi (Retired) For Ph.D. (Biotechnology)
Dr. Sandesh Jaybhaye For Ph.D. (Chemistry and Biotechnology)
Dr. Vinod Narayane (Research Guide for M.Sc. by Research in Biotechnology)
Dr. Kranti Ozarkar (Research Guide for M.Sc. by Research in Biotechnology)

Dr. Naresh Chandra
Director (Education), BKBCK
Former Pro Vice Chancellor,
University of Mumbai

Dr. Naresh Chandra has completed Post graduation and M. Phil in Botany. He has been awarded Ph.D. in 1979 for the thesis titled: "Bio-Chemical changes accompanying seed development and viability in *Mangifera indica L"*. He has rich teaching experience for U.G. Teaching for more than 36 years and P.G. Teaching for more than 21 years (3 years for M. Phil.). He is a recognized Research Guide of University of Mumbai for M.Sc. and Ph.D. (Science) Degree in Botany (since 1991) and Biotechnology (since 2007). He is the Fellow and Life Member, Indian Botanical Society (FBS). He has worked on a major research project sanctioned by UGC and on a major research project sanctioned by NMPB, Department of AYUSH. He has published several research papers in national as well as international journals. He is the Associate Editor (West Zone) of *"Journal of Cell and Tissue Research"*.

He has been the Principal of Birla College of Arts, Science and Commerce, Kalyan since 15th October 1988. He has worked as the Pro-Vice Chancellor, University of Mumbai, twice (from 17th April 1997 to 4th May 2000 and from 12th April 2012 to 11th May 2015) and President, University of Mumbai College Principals' Association (2003 –2012).

He has been Chairman / Member of several Expert Committees of Universities / UGC. As Chairman, Peer Team, NAAC visited many colleges in the country. He has visited several Universities/Institutions in UK, USA, Australia, and China. In 2008 he was invited to attend *International Visitor Leadership Program on "Higher Education – Administration and Curriculum Development: A Project for India",* at Washington and New York from 3rd to 7th November 2008. Recently he has attended a five days' Workshop on *"Multidisciplinary Approach to University Leaders Development"* held at Harvard University, USA from 30th July 2012 to 3rd August 2012.

Research Contribution:

No. of Publications: 76; No. of papers presented: 43; Organized / participated in International / National / State Level Seminars / Conferences / Workshops: 69; Guided Ph. D. Students: 18 (Degree awarded)

Thrust area of research

- Plant Tissue Culture
- Stress Physiology
- Medicinal Plants
- Phytochemistry
- Environmental Biology

Dr. Avinash Patil
Principal, BKBCK

Dr. Avinash Patil has completed Post graduation in Botany with specialization in Taxonomy of Spermatophyta from St. Xavier's College, Mumbai. He has been awarded Ph.D. in 2002 for the thesis titled 'Physiology of Crop Plants: Response of *Vigna unguiculata* L. Var. Konkan Sadabahar to water stress' from University of Mumbai. He has been working as a faculty in the Department of Botany, Birla College since 1990.

He is a member of-

- RRC in Bioanalytical Sciences, University of Mumbai since 24th June 2016.
- Ad-hoc Board of Studies in Bioanalytical Sciences, University of Mumbai since 31st August 2015.
- IQAC since June 2011.
- Editorial Board, International Journal of Life Sciences.
- Tree Authority Committee of Thane Municipal Corporation.
- District Environmental Impact Assessment Committee, Thane Collectorate since September 16, 2016.

He is a life Member of-

- Society of Science and Environment, India.
- Society of Applied Biology and Biotechnology, Mumbai.
- Society of Ethnopharmacology, Kolkata, India.
- The Indian Science Congress Association, Kolkata, India.

He is a Recognized Research guide for the University of Mumbai for, M. Sc. and Ph. D. (Science) Degree in Botany and Biotechnology. He has worked on Major Research Project sanctioned by UGC, NMPB (Dept. of AYUSH) and Pepsico India Holding Pvt. Ltd. He also worked on Minor Research Projects sanctioned by UGC and University of Mumbai. Provided consultancy to Thane Municipal Corporation, Thane for Bioremediation of Lakes. Visited Clayton State University, Atlanta, USA during March 2011 and University of West Georgia, Georgia, USA during March 2015 under faculty exchange programme.

Research Contribution:
No. of Publications: 57; No. of articles published in edited books: 13; No. of papers presented: 60; No. of Books authored: 09; No of talks delivered at Orientation/Refresher/Seminar/Conference: 15; Seminar Conference Attended: 60; Workshops / Training programs Attended: 23; Guided Ph. D. Students: 06 (Degree awarded); Students pursuing Ph. D.: 06; Major Research Projects Completed: 02; Industry Research Project Completed: 01; Consultancy Provided: 02.

Thrust areas of research:

- Plant Tissue Culture,
- Medicinal Plants
- Herbal Medicines,
- Ethnobotany
- Taxonomy

Prof. Maninder kaur Dhaliwal
Professor

She has completed her Post graduation in Microbiology from University of Mumbai. Awarded Ph.D. in 2012 for the thesis titled “Study of production of carotenoids by pigmented yeasts.” She has been working as a faculty in Department of Microbiology, Birla College for the past 31 years. She has experience of several years in Post graduate teaching and research. Guided several PG- research projects.

Currently, she is a Professor in the Department of Microbiology and Vice Principal (Science) . She is involved in organizing various seminars, conferences, and orientation programmes at Birla College in the capacity of Joint Secretary/Treasurer/ member of Local Organizing Committee etc. She is a Recognized Research guide for the University of Mumbai for, M. Sc. and Ph. D. Degree in Microbiology and Biotechnology.

Research Contribution:

No. of Publications: 17; Seminar Conference Attended: 25; Workshops / Training/ Orientation programs Attended: 15; Students pursuing Ph. D.: 03 (Microbiology)

Thrust area of research

- Yeast Biotechnology
- Food Microbiology
- Biochemistry

Prof. Meeta Bhot
Professor

Prof. Meeta Bhot has completed her Post graduation in Botany with specialization in Algae from University of Pune. Awarded Ph.D. in 2008 for the thesis titled "Tissue culture studies of croton varieties." She has been working as a faculty in the Department of Botany, Birla College for the past 27 years. She has experience of several years in Post graduate teaching and research. Guided several PG- research projects.

Currently, she is a Professor in the Department of Botany. She is the Co-ordinator for Art's Circle, B. K. Birla College. She is involved in organizing various seminars, conferences, and orientation programmes at Birla College in the capacity of Joint Secretary/Treasurer/ member of Local Organizing Committee etc. She is a Recognized Research guide for the University of Mumbai for, M. Sc. and Ph. D. Degree in Botany and Biotechnology.

Research Contribution:

No. of Publications: 23; No. of papers presented: 40; Seminar Conference Attended: 24; Workshops / Training/ Orientation programs Attended: 19; Students pursuing Ph. D.: 02 (Botany), 03 (Biotechnology). Guide M.Sc. – II Biotech, Herbal sciences and Botany students for their project work every year

Thrust area of research

- Plant Tissue Culture
- Microbiological Techniques
- Phycology
- Biotechnology

Dr. Sandesh Jaybhaye
Associate Professor in the Department of Chemistry
Incharge of Nanotechnology Research Laboratory.

He has completed his post-graduation in Organic Chemistry with a Medicinal Chemistry Specialization from Marathwada University, Aurangabad. Awarded Ph.D. in 2010 for the thesis titled "Hydrogen Adsorption/Desorption by Carbon Nanomaterials." He has been working as a faculty in the Department of Chemistry, at B.K. Birla College, Kalyan for the past 25 years. He has more than 15 years of experience in Postgraduate teaching and research. He has guided several PG- research projects. He is a recipient of the Indo-Italian Post-Doctoral Fellowship at the University of Genova, Italy from 2008-2009.
Currently, He is an Associate Professor in the Department of Chemistry and incharge of Nanotechnology Research Laboratory. He is the NSS program Officer and Kalyan NSS Area Coordinator, of the University of Mumbai. He is also working as Deputy Controller of Examination for Degree College. He is involved in organizing various seminars, conferences, workshops summer schools, Science Exhibitions and orientation programmes at B.K. Birla College, Kalyan in the capacity of Convener/ Joint Secretary/Treasurer/ member of Local Organizing Committee etc. He is a Recognized Research guide for the University of Mumbai for, M. Sc. and Ph. D. Degree in Chemistry and Biotechnology. He is recognized as a Ph.D. Guide of JJT University Churu, Rajasthan, PACIFIC University, Udaipur, Rajasthan and Jaipur National University, Jaipur. He is a Coordinator of P.G. diploma in Bio-nanotechnology and working as a BOS member in Bio-nanotechnology University of Mumbai. He is appointed as Chairman of the National service scheme in the University of Mumbai for 2023-24.
He is a reviewer and editorial board member of various reputed international journals in international Journal of Applied Science (IJAS), *Int. National Journal of pharmaceuticals, Green Chemistry & Technology Letters, Int. National Journal, Premier publisher,* Int. Journal of Applied Clay Science, Elsevier, International journal of research in chemistry and environment. He has actively associated with scientific association such as Society of Material Sciences, American Nano Society, Indian Carbon Society, National Science Congress and Association of Chemistry Teachers. He has several awards to his credit such as National Level "*Young Scientist Award* –2006", State Level "*Gururbrahama Award -2005*", State Level "*Shivajirao Shendge Award- 2005"*, State Level "*Shikshak Bhushan Award -2003".* He has visited countries abroad i.e. Italy, Monaco, Switzerland, Austria, Slovakia, Germany, and France for research exposures.

Research Contribution:
No. of Publications: 92; No. of papers presented: 120; Seminar/Conference/workshops Attended: 200; Students awarded Ph.D.: 03 (Chemistry), Students pursuing Ph. D.: 03 (Chemistry/Biotechnology). Indian patents granted: 04; Books authored:03; Chapter in Book: 13; Major Research Projects completed (UGC, BRNS, and NRB, DRDO):03; Minor Research Project Completed: 08; Consultancy project completed:03 and ongoing:01.
Guided more than 60 M.Sc. – II Botany, Biotech, Environmental Sciences and Chemistry students.

Thrust area of research

- Organic synthesis
- Bio nanotechnology
- Green Chemistry
- Carbon Nano materials

Dr. Jossy Varghese (Retired)
Sr. Vice Principal (Science) and Head, Department of Botany

Dr. Jossy Varghese completed Post graduation in Botany with specialization in Palynology in 1982 from Institute of Science, Mumbai. Awarded Ph.D. (Science) Degree in Botany in 2008 for the thesis titled "*In vitro* culture studies of *Helicteres isora* L." under the guideship of Dr. Naresh Chandra. He has been working as a faculty in the Department of Botany, Birla College since July 1983.
Currently, he is the Sr. Vice Principal, Science, and Head**,** Dept, of Botany**.** He is also the Chairman, Examination Committee. He is also a member of various committees. He is a Recognized Research guide for the University of Mumbai for, M. Sc. by Research in Botany and Biotechnology and Ph. D. (Science) Degree in Botany. He has completed 2 Minor Research Projects sanctioned by UGC. He has published 25 research papers in National Journals and presented 20 posters at National and International conferences. He has attended 25 Conferences and 18 workshops.
Currently 5 students are working under him for their Ph.D. (Science) Degree in Botany.

Thrust area of research

- Plant Tissue Culture,
- Phytochemistry,
- Herbal Medicines

Prof. Geeta Unnikrishnan (Retired)
Associate professor and Head, Department of Zoology.

Prof. Geeta Unnikrishnan has completed Post graduation in Zoology with specialization in Animal Physiology. Awarded Ph.D. in 2002 for the thesis titled "Effects of Antidepressants in Rats". She has been working as a faculty in Department of Zoology, Birla College for the past 30 years. She has an experience of 20 years in Post graduate teaching and research. She has guided several PG- research projects.
She is currently the Head, Department of Zoology, Birla College. She has worked in capacity of co-ordinaor IQAC, PG Environmental Sciences, UGC Sponsored Addon Course in Bioinformatics and DBT-Star College Scheme. Recognized as a Research guide for M.Sc. (2006) and Ph.D (2009) Zoology and Ph.D. in Biotechnology (2010) (University of Mumbai). O2 Students have completed Ph.D in Biotechnology and 02 are pursuing Ph.D in Biotechnology and 02 in Zoology.

- **Thrust area of research**
  - Animal Tissue Culture
  - Environmental Biotechnology
  - Physiology
  - Molecular Biology
  - Bioinformatics

Ph.D. (Science) Degree in the subject of Botany	
Name of Guide	**Dr. Naresh Chandra**

No.	**Name Of Student**	**Year of Award**	**Photograph**
1.	**Ms. Shubhangi Parulekar** (M.Sc) Salt Tolerance studies in Rice(*oryza Sativa*)	1987	
2.	**Dr. Anita Phatak** Effect of Nacl Salinity on some Aspects of physiology of seed Germination, seedling growth and early Plant growth of *Cajanus cajan (L)Millsp.* Var. Konkan-Tur-1	1996	
3.	**Dr. Darshana Patil** Physiology of crop plants: Response of Dolichos lablab L. Va. Kon Val-2 to different levels of salinity	1997	
4.	**Dr. G.T Paratkar** Physiology of Halophytes: Studies on some aspects of senescence in *Salvadora persica* (L.)	1998	
5.	**Dr. Marie Castello** *Invitro* Culture studies of *Bixa Orellana L.*	2001	
6.	**Ms. Sugandha Godambe** (M.Sc) Effect of Nacl salinity on germination and seedling growth of *Mung (Vigna radiate L. var. TAP -7) and Nagli (Eleusine coracana Gaertn* var. Dapoli, Nagli-2)	2002	
7.	**Dr. Avinash Patil** Physiology of crop plants : Response of *vigna unguiculata (Linn)* Var. Konkan Sadabaharto water stress	2002	
8.	**Dr. Chandrashekhar** Urban ecosystem- A case study of the city of Thane	2002	
9.	**Dr. Sunita Shailajan** Standardization of herbal medicines: *Astracantha longifolia* (Neer)	2002	

10.	**Dr. Moitreyee Saha** *In vitro* culture studies of different varieties of *Carica Papaya L.*	2003	
11.	**Dr. Devaki B.** Differential requirements of *In vitro* culture of varieties of Ashwagandha (*Withania somnifera* L.) and identification of somaclonal variants by DNA fingerprinting	2007	
12.	**Dr. Jossy Varghese** *In vitro* culture studies of *Helicteris isora Linn.*	2008	
13.	**Dr. Meeta Bhot** Tissue culture studies of Croton varieties.	2008	
14.	**Dr. Anju Varshney** Antimicrobial activity of *Bacopa monnerii*	2013	
15.	**Dr. Puja Gupta** Study of Antidiabetic, Antimicrobial and Antioxidant property of plant parts of *Butea monosperma* (Lamk.) Taub.	2013	
16.	**Dr. Abhishek Sharma** Phytochemical and Pharmacological studies on *Bryophyllum pinnatum* (Lam) Kurz.	2014	

Ph.D. (Science) Degree in the subject of Biotechnology	
Name of Guide	**Dr. Naresh Chandra**

No.	**Name Of Student**	**Year of Award**	**Photograph**
1.	**Dr. (Mrs.) Maninder Kaur Dhaliwal** Study of production of carotenoids by pigmented yeasts.	2012	
2.	**Dr. (Ms.) Indu Sanadhya** Comparative study of Effect of Elicitors on production of secondary metabolites in calli derived from *Anthocephalus indicus* A. Rich.	2013	
3.	**Dr. (Ms.) Sayali R. Naphade** Biodegradation of hazardous pesticides using soil microbes.	2013	
4.	**Dr. (Ms.) Annika A. Durve** Bioaccumulation and nanoparticle synthesis of heavy metals using microbial isolates.	2014	
5.	**Mrs. Bharati Devaguptapu** Transgenic approaches for nutritional quality improvement of food crops. **(Synopsis submitted)**	Registered in 2008	
6.	**Dr. (Mrs.). Vandana Gupta** Application of organic wastes for biosorption of heavy metals and nanoparticle synthesis. Registration- 26 aug 2016	June 2019	

Ph.D. (Science) Degree in the subject of Botany	
Name of Guide	Dr. Anita Phatak

No.	**Name Of Student**	**Year of Award**	**Photograph**
1.	**Dr. Vijaya Lobo** Study of antioxidant properties of some Indian medicinal plants.	2011	
2.	**Ms. Radhika B. J** (MSc) Micropropagation studies on selected *Dendrobium* hybrid Hiang Beauty	2011	
3.	**Dr. Shashi Naghare** Phytochemical studies of *Mucuna pruriens* (L.) DC	2013	
4.	**Ms. Geeta Kumary** (MSc) Promising wild ornamental plants of Thirvananthapuram, District (Kerala).	2013	
5.	**Ms. Sulekha Phadke** (MSc) Comparative study of phytochemical constituents of different plant parts and callus of *Baliospermum montanum* (Willd.) Muell.-Arg.	2016	
6.	**Mr. Swapneel Koli** Comparative study of phytochemical constituents and antidiabetic potential of *Lagenaria scceraria* (Molina) Standl. and *Trichosanthes dioica* Roxb. frosts.	2016	

Ph.D. (Science) Degree in the subject of Botany	
Name of Guide	Dr. G. T. Dabhade

No.	**Name Of Student**	**Year of Award**	**Photograph**
1.	**Dr. Vijay Kisan Hile** Studies on mosses of Thal Ghats And Tryambhak in Western Ghats	2007	

Ph.D. (Science) Degree in the subject of Botany	
Name of Guide	Dr. Madhuri Sharon

No.	**Name Of Student**	**Year of Award**	**Photograph**
1.	**Dr. Sejal Shah** In Vitro culture of leaves and Roots of *Curculigo orchiodes* in presence of carbon Nano-particles	2007	
2.	**Dr. Arvind Gupta** Secondary metabolite contents and *in vitro* culture study of *Lasiosiphon eriocephalus*(Syn. *Gnidia glauca*)	2009	
3.	**Dr. Goldie Oza** Biosynthesis of nano-metal and/or its complex by algae and bacteria	2013	
4.	**Dr. Sunil Pandey** Biosynthesis of nano-metal and/or its complex by plants and fungi	2013	

Ph.D. (Science) Degree in the subject of Botany	
Name of Guide	Dr. Jossy Varghese

No.	**Name Of Student**	**Year of Award**	**Photograph**
1.	**Dr. (Mrs.) Hareeshma Shiju** Pharmacological studies on multipurpose tree species – ***Khaya senegalensis* A.Juss**.	Jan 2019	

2.	**Dr. Sachin S. Lad.** Study of Phytoremediation Properties of Some Plants from Industrial Area	Sept 2019	
3.	**Ms. Misbah Hamid Shaikh** Antioxidant and Antimicrobial Studies on ***Gmelina arborea* Roxb.**	Feb 2022	
4.	**Dr. Anita Poonia** "Study of two varieties of *Polyalthia longifolia* with special reference to antimicrobial, antioxidant and anticancer potential".	Oct 2019	
5.	**Dr. Vibha Aggarwal** Study of Bioactive compounds from fruit of two species of *Annonaceae* with reference to Anticancerous activity against human cancer cell lines.	June 2019	

Ph.D. (Science) Degree in the subject of Botany	
Name of Guide	Dr. Meeta Bhot

No.	**Name Of Student**	**Year of Award**	**Photograph**
1.	**Dr. Vishal Rasal** Planktonic Diversity, Biomonitoring and Phytoremediation of selected urban lakes in Mumbai.	Oct 2019	

2.	**Mrs. Ujwala Patil** Bioprospecting of Algae. **(Synopsis submitted)**	Registered in 2013	

Ph.D. (Science) Degree in the subject of Biotechnology	
Name of Guide	Prof. Meeta Bhot

No.	**Name Of Student**	**Year of Award**	**Photograph**
1.	**Dr. Shivani Kakkar** Bioprospecting of few fruit and vegetable peel waste	2017	
2.	**Dr. Meenakshi Barua** Evaluation of anticancer activity of few *Cassia* species	2022 viva on 14th oct 2022	
3.	**Mrs. Varsha Shelke** *In vitro* culture study and evaluation of anticancer activity of *Asclepias curassavica* L. **(Synopsis submitted)**	Registered in 10.8.2015	

Ph.D. (Science) Degree in the subject of Botany	
Name of Guide	Princ. Dr. Avinash Patil

No.	**Name Of Student**	**Year of Award**	**Photograph**
1.	**Dr. Priyanka Sharma** *In vitro* culture study and phytochemical analysis of *Crataeva tapia* Linn. sp. *odora* (Jacob.) Almeida (syn. *C. religiosa* var. *nurvula* Hook. f.)	2015	

2.	**Dr. Aqsa Ansari** Standardization of Unani Polyherbal Formulation for Vitiligo (Bars.)	2016	
3.	**Ms. Anuttara Shah** Evaluation of nutritional content, *in vitro* studies and antioxidant properties of an important medicinal plant, *Moringa pterigosperma* Gaertn.	Dec 2021	
4.	**Ms. Shraddha Vichare** Phytochemical analysis, antioxidant activity and anti-obesity study of *Momordica dioica* Roxb. fruits. **(Ongoing)**	Registered in 2016	
5.	**Mr. Yogesh Salavi** Screening of Mangrove Plants for Medicinal Properties **(Ongoing)**	Registered in 2013	
6.	**Ms. Ria P. Mathew** Phytochemical characterization and evaluation of Indian medicinal plants to study their antioxidant, antibacterial and in vitro anticancer activity.	Registrations 5/ 2022	

Ph.D. (Science) Degree in the subject of Biotechnology	
Name of Guide	Dr. Avinash Patil

No.	**Name Of Student**	**Year of Award**	**Photograph**
1.	**Dr. Khyati Vadera** Screening of some Indian medicinal plants for anticancer activity	2017	

2.	**Mr. Kishore Desai** Characterization of *Mycobacterium tuberculosis* causing MDR-TB and XDR-TB through Genomic Studies. **(Synopsis submitted)**	Registered in 2015	
3.	**Ms. Leena Koshti** *In vitro* culture studies of *Gymnema sylvestre* R. Br. for production of Gymnemic acid.	June 2022	
4.	**Ms. Priyanka Gupta** Phytochemical Characterization and evaluation of *Careyaarborea* Roxb. for its antioxidant, antibacterial and *in vitro* anticancer studies. **(Thesis submitted)**	Registered in 2017	
5.	**Mr. Dinraj Aponkar** Topic selection in process	RRC 2021	

Ph.D. (Science) Degree in the subject of Biotechnology	
Name of Guide	**Dr. (Mrs.) Geetha Unnikrishnan**

No.	**Name Of Student**	**Year of Award**	**Photograph**
1.	**Dr. (Mrs.) Sonali ZankarPatil** Thermophiles And Bioremediation: The New Insights From Hot Water Springs	2016	
2.	**Dr. (Mrs.) Anju R Unnithan** A Phytolarvicide Against Aedesaegypti,an edge over Dengue Fever: An Eco-Friendly Approach	2016	

3	**Dr. Rohan D'douza** Identification, Extraction and Synthesis of Bioplastics from food based waste materials: An Ecofriendly approach.	2023	

Ph.D. (Science) Degree in the subject of Biotechnology	
Name of Guide	**Dr. Sandesh Jaybhaye**

No.	**Name Of Student**	**Year of Award**	**Photograph**
1.	**Ms. Shruti Shah** Green synthesis of metal nanoparticles and to study their antidepressant activity.	Registration in 2022	
2.	**Ms. Roshani Sahini** Nanoliposomes as antifungal drug carrier for superficial fungal infections	Registration in 2023	

List of Major Research Projects

Name of Investigator	Title of project	Amount Sanctioned
PI-Dr. Naresh Chandra Completed	"*In vitro* culture studies of *Lawsonia inermis* L. for generating coloured callus for the mass production of herbal hair dye and coloured streaks."	Sanctioned by UGC **Rs. 8.74 Lac**
PI-Dr. Anita Phatak and Co PI- Dr. Avinash Patil Completed	"Phytochemical analysis and Pharmacological evaluation of *Averrhoa carambola* L., *Lagenaria vulgaris* Ser. and *Curculigo orchiodis* Gaertn. with reference to antidiabetic and antihyperlipaemic properties."	Sanctioned by UGC **Rs. 10.54 Lac**
PI-Dr. Naresh Chandra Co PI- Dr. Anita Phatak, Dr. Avinash Patil, Dr. Darshana Patil)	"Evaluation of some Indian Medicinal Plants for Anticancer properties"	Sanctioned by NMPB, Dept. of AYUSH **Rs. 23.00 Lac in 2012**
PI- Dr. Avinash Patil	Industrial Research Project from Pepsico India Holdings Pvt. Ltd.	Sanctioned amount of **Rs. 9.54 Lac in 2012**
PI-Dr. Meeta Bhot	**"**Comparative study of few Indian *Cassia sp*. For its Anticancer Properties"	Sanctioned by UGC **Rs. 10.20 Lac in 2013**

List of Minor Research Projects

Name of Investigators	Title of project	Amount Sanctioned	Year
PI -Dr. Anita Phatak	Standardization of protocol for Micropropagation of *Gerbera*	Sanctioned by UGC**Rs.90,000/-**	2004-05
PI- Dr. Jossy Varghese	Phytochemical analysis of *Helicteris isora* L.	Sanctioned by UGC **Rs. 45,000/-**	2000-01
PI- Dr. Avinash Patil	*In vitro* studies of *Jasminum sambac* Ait	Sanctioned by UGC **Rs. 45,000/-**	2003-04
PI- Mr. Suhas Karvekar	*Oyster Mushroom Cultivation (Plurotus sajorcaju) as a Waste Management Tool in Urban and Semiurban Cities.*	Sanctioned by UGC **45,000/-**	2003-04
PI- Dr. Darshana Patil	*In vitro* culture studies of *Cardiospermum halicacabum* L.	Sanctioned by UGC **Rs. 1.00 Lac**	2009-10
PI- Dr. Jossy Varghese	"Study of pesticide degrading bacteria from soil"	Sanctioned by UGC **Rs. 1.50 Lac**	2011-12
PI- Dr. Meeta Bhot	Micropropagation of some croton varieties	Sanctioned by UGC **Rs. 45,000/-**	2000-01

PI- Dr. Meeta Bhot	Bioremediation of Heavy Metals"	Sanctioned by University of Mumbai **Rs.27**	2012-13
PI- Dr. Avinash Patil	'Determination of glycoside content in leaves of *Stevia rebaudiana* Bertoni by analytical methods'	Sanctioned by University of Mumbai **Rs. 20,000/-**	2013-14
PI- Dr. Avinash Patil	'*In vitro* studies of *Averrhoa bilimbi* L.'	Sanctioned by UGC. **(Rs. 1,00,000/-)**	
PI- Dr. Annika Gupta	*Effect of heavy metals on microorganisms by FTIR analysis.*	Sanctioned by University of Mumbai **Rs. 45,000/-**	2016-17
PI- Dr. Annika Gupta	Green synthesis and Photocatalytic effect of Silver Nanoparticals on Multidrug resistant Bacteria.	Sanctioned by University of Mumbai **Rs. 40,000/-**	2019-20
Dr. Shivani Kakkar Khanna	Evaluation of anticancer activity of *Glycyrrhiza glabra*	Sanctioned by University of Mumbai **Rs. 40,000/-**	2019-20
Dr. Minal Trivedi	Development of heavy metal toxicity sensing beads with the help of novel bioluminescent strains	Sanctioned by University of Mumbai **Rs. 35,000/-**	2019-20

Citations / H index / i10 index

Name	Citations	H index	i10 index
Dr. Naresh Chandra	9809	32	77
Dr. Avinash Patil	7057	13	16
Dr. Meeta Bhot	247	09	08
Dr. Saheli Pradhan	1518	20	23
Dr. Annika Durve Gupta	436	14	16
Dr. Shivani Kakkar Khanna	58	04	02
Dr. Minal Trivedi	136	04	03
Dr. Pooja Gupta	02	01	00
Dr. Mugdha Pathak	24	03	01
Dr. Sweta Das	228	05	05
Dr. Sneha Dokhale	19	02	00
Dr. Priyanka Jawale	28	02	02

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LIST OF BOOKS PUBLISHED

Sl. No.	Name of the teacher	Title of the book published	Title of the chapters published	ISBN number	Name of the publisher
2022-23					
1	Dr. Naresh Chandra and Dr. Vandana Gupta	Organic waste: Biosorption of Heavy Metals and Nano Particles Synthesis.	-	978-620-6-15846-2	LAP LAMBERT Academic Publishing
2	Dr.Avinash Patil	Research and Development in Pharmaceutical Science Volume IV	Applications Of Carbon Nanomaterial In Antimicrobial Therapy.	978-93-91768-65-2	Bhumi Publishing, Nigave Khalasa, Kolhapur
3	Dr. Avinash Patil	Frontiers in Life Science Volume VIII,	Antimicrobial Activity Of Metal Nanoparticles: Present Situation And Future Prospects.	978-93-91768-15-7	Bhumi Publishing, Nigave Khalasa, Kolhapur,
4	Dr.Avinash Patil	Recent advances in Basic and Applied Research.	Environment and Human Health.	978-620-4-95627-5	Lambert Academic Publication.
5	Dr.Avinash Patil	Book Bioactives and Pharmacology of Legumes,	Phytochemistry and pharmacology of Abrus precatorius L	978-100330455-5	Apple Academic Press
6	Dr. Avinash Patil	Bioactive and Pharmacology of Medical Plants	Biomolecules and bioactivities of Careya arborea Roxb	978-100330455-5	Apple Academic Press
7	Dr.Avinash Patil, Dr. Minal Trivedi	Advance Research in Life Sciences/ Fungal Pigments And Their Applications	Fungal Pigments And Their Applications	978-93-95581-20-2	Mahi Publication Ahmedabad, Gujarat
15	Dr. Annika Durve Gupta	'Information Retrieval in Bioinformatics a Practical Approach'	Bioinformatics and Its Application in Computing Biological Data'	978-981-19-6506-7	Palgrave Macmillan (Springer)
16	Dr. Annika Durve Gupta	Nanochemistry -synthesis, characterization and applications	'Bionanofabrication: A Green Approach towards Nanoparticle Synthesis using Plants and Microbes	978-1003081944	CRC Press
17	Dr. Annika Durve Gupta	'Enzyme Inactivation in Food Processing-Technologies, Materials, and Applications	'Natural Medicinal Products as Potential Enzyme Inhibitors'	978-1774911600	Apple Academic Publications,
66	Dr.Avinash Patil and Dr.Minal Trivedi	Green economy and sustainable development	Biofuels for greener environment	978-81-19492-88-6	Mahi Publications
68	Dr.Annika Gupta, Dr.Pooja Gupta, Dr.Shivani	Recent Trends in Agricultural Extension	Agro-Waste Valorization with Commercial Enterprises in Circular Economy. Do Farmers get an Aid? A Review	9789355709424	Akinik Publications

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71	Dr.Annika Gupta	Nanopriming Approach to Sustainable Agriculture	The potential of nano based seed priming for sustainable agriculture	10: 1668472325	IGI global publications
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73	Dr.Annika Gupta	Sustainable Agriculture: Nanotechnology and Biotechnology for Crop Production and Protection	Nanobiotechnological base genome editing approaches for plant modification	978-10-03333-12-8	De Gruyter
75	Dr.Naresh Chandra, And Dr. Pooja Gupta	Evaluation of Medicinal properties of Butea monosperma (Lamk.) Taub.,	-	978-620-6-84643-7	LAP Lambert academic publishing, Germany
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