

Department of Microbiology



Highlights of The Department

- Established in the year 1992.
- **Courses offered:**

B.Sc.

M.Sc.

Ph.D.

****SNIP : Source Normalized Impact per Paper**

Salient Features:

- UGC funded Major and Minor research projects of academic and social relevance.
- Creation of knowledge resources through 32 DATABASE publications.
- Policy documents (5-agreements) with Central Government Authority-“National Biodiversity Authority”, with 1-NBA approval for patent.
- Association with different institutes of national and international repute
- High research impact on the National and International health regulations.
- Faculty as Paper Setter for the State level competitive examinations.
- Faculty as Executive Council member of All India Association of Microbiology (AMI)
- Faculty as Editor for reputed scientific journals of international reputes.
- Faculty as Invited Speaker at national and international level platforms
- Alumni in different fields and important positions in India and Abroad.
- 70% students opt for higher studies.
- 20-students registered for Ph.D. at overseas Universities

(USA, Sweden, South Korea, Switzerland etc).

- Regular updating of UG and PG syllabi.
- Well-equipped laboratories, Access to reference books, e-books and e-journals.
- Probably the only College in Pune which follows PMC biomedical disposal

rules for Lab. Waste .

Faculty Profile:

Name	Qualification	Designation	Specialization	Teaching Experience (Years)
Dr. V. R. Sapre	M. Sc.; Ph. D.	Associate Professor & Head	Industrial Microbiology, Genetics	28
Dr. M. G. Bodhankar	M. Sc.; Ph. D., DCA	Associate Professor	Applied Microbiology Biotechnology	40
Dr. B. B. Ballal	M. Sc., SET, PGDHE, DIPR	Associate Professor	Immunology, Medical Microbiology	24
Dr. A. A. Jape	M. Sc.; DIPR, Ph. D.	Assistant Professor	Biochemistry, Plant Biotechnology and Marine Yeast Biotechnology	16
Dr. S. V. Gaikwad	M. Sc.; Ph. D.	Assistant Professor	Environmental Microbiology	11

KNOWLEDGE EVENTS ORGANIZED: (SEMINARS/CONFERENCES/WORKSHOPS)

S.No.	Level	Event Title	Funding Agency
1	National	Entrepreneurship ; A gateway for Biologists, 2015	UGC
2	National	Workshop on Molecular Biology, 2015	UGC
3	National	National Conference on Modern Methods in Detection Identification and Quantification of Microorganisms, 2014	UGC
4	National	National Seminar on Techniques and Applications in Forensic Science-Microbiology, 2012	UGC
5	National	National Workshop on Bioassays and Their Applications, 2012	UGC
6	National	Emerging Infectious Diseases, 2011	UGC
7	National	Diagnostic Techniques, 2010	UGC
8	National	Biodiversity perspectives and Challenges ,2006	UGC
9	National	Recent experimental techniques in Science ,2005	UGC
10	National	Recent trends in Bioinformatics,2002	BVDU
11	National	Emerging technologies in Life Sciences, 2002	BVDU
12	National	Impact of Pollution on Biosphere , 2000	BVDU

UGC- National Workshop on Bioassays and Their Applications-2012



UGC-National Seminar on Techniques and Applications in Forensic Science-Microbiology-2012



UGC- National Conference on Modern Methods in Detection Identification and Quantification of Microorganisms-2014



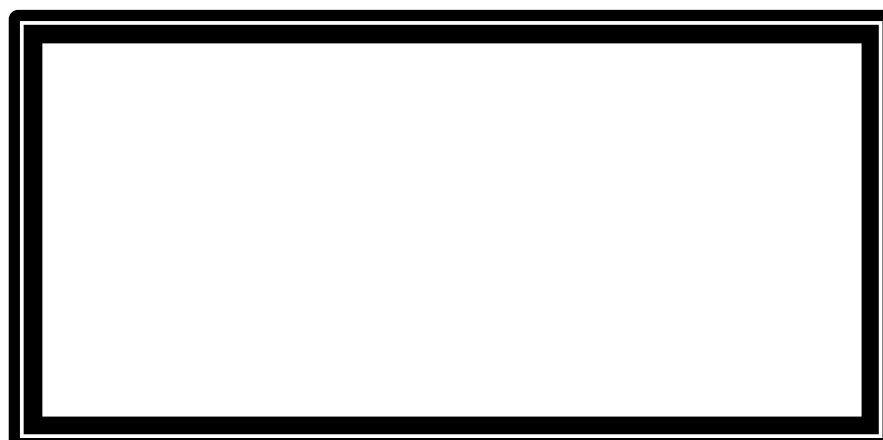
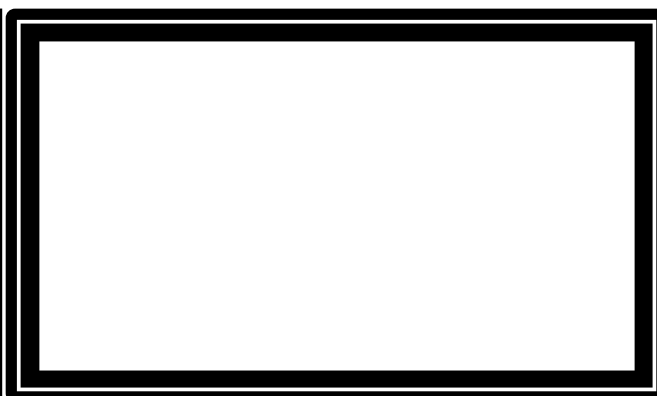
UGC- National Conference on Modern Methods in Detection Identification and Quantification of Microorganisms-2014



UGC- National Conference on Entrepreneurship: A gateway for Biologists -2015



Celebration of Science Day @ 28th February ...



- **Thrust areas:**

Probiotics, Poly Unsaturated Fatty Acids, Immunomodulators, HIV, Drug resistance in Tuberculosis, Endophytes, Rhizobiology, Bioremediation and Biosurfactants.

- Research Profile at Glance:

Publications		Patents	Conference presentations	Books	*SJR range	** SNIP range	Impact Factor range	H index Range	h-index Range (Scopus)
Journal	Databases	10	158	04	0.16 to 0.288	0.295 to 0.77	0.636 to 6.42	1 To 24	1 To 4
106	32								

*SJR: SCImago Journal Rank

Research Projects:

Sr.	Principal investigator	Title	Funding Agency	Period	Amount Mobilized (Rs)
1	Dr. Mrs. V. R. Sapre	Screening and Evaluation of Intestinal Microbiota in Breastfed Neonates as Potential Probiotics	UGC Delhi	April 2011- Ongoing	8,99,800/-
2	Mr. B. B. Ballal	Study of Immunomodulating and antiviral properties of plants	UGC Delhi	March 2011-March 2013	1,35,000/-
3	Dr. Mrs. A. A. Jape	i) Isolation, identification and characterization of Marine Oleagenous yeasts for PUFA production of low cost media.	UGC Delhi	Feb 2013- Feb 2015	1,45,000/-
		ii) A study to check the efficiency of the selected mushroom strains to convert flax ALA into PUFA	Bharati Vidyapeeth Deemed University, Pune	Sept 2013	38,000/-

Patents :

S.No.	Academic Year	Title of the patent	Type of the patent (National/ International)	Patent Application Number	Date of Filing	Date of Publication	Status (Registered / Granted)
1	2005-06	Invention of herbal drug against HIV infection/ AIDS	National	1512/MUM/2005	07/12/2005	13/01.2006	Objections Recorded Under Examination
2	2009-10	Invention of Immunomodulating Agent Against HIV infection/AIDS	National	2326/MUM/2009	07/10/2009	18/11/2011, Issue No. 46/2011,page no 19980,The Patent Office Journal,	First Examination Report filed.
3	2012-13	‘Invention of improved process for obtaining <i>Piper longum</i> derived product having distinct properties with respect to enhancement of spermatogenesis process.	National	1632/MUM/2013	06/05/2013	13/03/2015, ISSUE NO.11/2015,PG. No.28440	Registered and Under Examination
4	2012-13	‘Invention of <i>Picrorrhiza kurroa</i> derived product having distinct properties with respect to augmentation of spermatogenesis process’	National	1633/MUM/2013	06/05/2013	13/03/2015, ISSUE NO.11/2015,PG. No.28443	Registered and Under Examination
5	2012-13	‘Novel product obtained from <i>Chlorophytum borivilianum</i> , <i>Piper longum</i> , <i>Picrorrhiza kurroa</i> , by using innovative steps and the unique blending process for enhancement of spermatogenesis process’	National	1634/MUM/2013	06/05/2013	13/03/2015, ISSUE NO.11/2015,PG. No.28444	Registered and Under Examination
6	2012-13	‘Invention of <i>Chlorophytum borivilianum</i> derived product having distinct properties with respect to enhancement of spermatogenesis process.	National	1635/MUM/2013 A	06/05/2013	08/05/2015, ISSUE NO.19/2015,PG. No.33581	Registered and Under Examination

7	2014-15	Invention of mast stabilizing properties of <i>Piper longum</i> , <i>Aloe vera</i> , <i>Cynodon dactylon</i> and <i>Cymbopogon citratus</i>	National	1803/MUM/2015 6/5/2015A	06/05/2015	22/05/2015, ISSUE NO.21/2015, pg.No. 35070	Registered and Under Examination
8	2017-18	Column chromatography	National	296390, CBR No 15996	03/08/2017	Design Patent	Registered and First Examination report is issued.
9	2017-18	Cylindrical Sanitary Pad Incinerator	National	298132 CBR No. 19257	05/10/2017	Design Patent	Registered and First Examination report is issued.
10	2017-18	Multiunit aseptic Chamber	National	CBR No.	22/11/2017	Design Patent	Registered.

Sophisticated Research Facilities:



Major Extension Activities

SAFE SEX IS AT HIGH RISK

Research finds cheaper condoms available in the market can result in skin infections, bloody diarrhoea and haemorrhagic penumonia

Researcher
Few people are aware of the fact that condoms are not foolproof. A study conducted by researchers from Yashwantrao Chavan College and Bharati Vidyapeeth, Mumbai, has found that cheaper condoms available in the market can result in skin infections, bloody diarrhoea and haemorrhagic penumonia.

The researchers have found an Indian patent application for their discovery. "Work, standard, and stress often results in decline in sperm count, which negatively leads to fertility," said the lead author of the study, Dr. Anil K. Bhat.

Herbal solution to raise sperm count

Herbal drugs can be developed to increase count by 60 pc, without ill-effects.

HIGHLIGHTS OF THE STUDY

- Three groups of 'Santosha' were selected.
- Group I was a control group without any medication.
- Group II was a standard group treated with drugs.
- Group III was a test group given herbal medical agents.
- The test group showed 60% rise in sperm count against the control group.
- 10% growth in sperm count over the standard group.
- No toxicity in the herbal composition.

Pune: Researchers from Yashwantrao Chavan College and Bharati Vidyapeeth, Mumbai, have in a study extracted certain medicinal properties out of herbs, which can be used to develop herbal drugs to increase sperm count by 60 per cent, without any ill-effects.

The researchers have filed an Indian patent application for their discovery. "Work, standard, and stress often results in decline in sperm count, which negatively leads to fertility," said the lead author of the study, Dr. Anil K. Bhat.

New WHO guidelines may necessitate hike in HIV drug supply

New WHO guidelines encourage countries to treat HIV-positive adults at higher rates, India reports are studying global

New Delhi: The World Health Organization (WHO) has issued new guidelines for the treatment of HIV/AIDS, which may necessitate a significant increase in the supply of antiretroviral drugs in India. The guidelines recommend that countries should aim to treat 90% of HIV-positive adults, up from 80% previously. India is currently studying the impact of these guidelines on its national HIV/AIDS response.

Pilot study finds pathogens inside State Transport buses

Study conducted by third-year BSc students from Yashwantrao Chavan College

Pune: A pilot study conducted by third-year BSc students from Yashwantrao Chavan College has found that State Transport buses are a major source of infection. The study found that the buses are contaminated with various pathogens, including bacteria and viruses, which can spread to passengers and drivers.

BACTERIA NAMES

Pathogen	Location
Staphylococcus aureus	Seating area
Escherichia coli	Restroom
Salmonella typhi	Food and water
Shigella flexneri	Restroom
Legionella pneumophila	Water supply
Acinetobacter baumannii	Restroom
Pseudomonas aeruginosa	Restroom
Streptococcus pneumoniae	Restroom

FILES OF ICU PATIENTS A MAJOR SOURCE OF INFECTION

New Delhi: A study conducted by researchers from the Indian Institute of Technology (IIT) has found that the files of ICU patients are a major source of infection. The study found that the files contain a large amount of bacteria, which can spread to other patients and staff.

ICU PATIENT FILES

The study found that the files of ICU patients contain a large amount of bacteria, which can spread to other patients and staff. The researchers found that the files are contaminated with various pathogens, including bacteria and viruses, which can spread to other patients and staff.

Red signals danger for lipstick lovers: study

City doctors find bacteria in most lipstick samples from fresh packs

New Delhi: A study conducted by city doctors has found that most lipstick samples from fresh packs contain bacteria. The study found that the bacteria can spread to the lips and cause infection. The researchers found that the lipstick is contaminated with various pathogens, including bacteria and viruses, which can spread to the lips and cause infection.

COLLABORATIVE EXTENSION ACTIVITIES



Visits of Dignitaries:

Name	Designation
Dr. RenuBatra	Joint Secretary, University Grants Commission, Western Regional Office, Pune
Dr. B. A. Chopade	Vice Chancellor, Dr. BabasahebAmbedkarMarathwada University, Aurangabad.
Dr. SudhirMeshram	Vice-Chancellor, North MaharashtraUniveristy, Jalgoan
Dr. G. P. Meshram,	Joint Director, DRDE, Nagpur
Dr. S.G .Gupta	Director, Government Institute of Forensic Sciences, Aurangabad
Dr. D. R. Ranade	Director, Agharkar Research Institute, Pune
Dr. A. Dayanand	Registrar, Gulbarga University, Gulbarga.
Dr. YogeshShouche	In-charge, Microbial Culture Collection Centre, Pune
Dr. Smita Kulkarni	Assistant Director, NARI, Pune.
Dr. Tanzima Yasmin	Head and Professor, Department of Biochemistry and Molecular biology, Rajshahi University, Bangladesh
Dr. Bhogale G. M.	Ex. M.D. Microbax India Ltd. Hydrabad and Biotech consultant.
Mr. PramodPhatak	Dairy Microbiologist
Mr. Sham Deshpande	Additional Commissioner