

Annual Report 2011-12 for Akanksha Magazine

Microbiology Department

Activities of the Department:

- **Guest Lectures by:**
 - Dr. Yogesh Shouche, Scientist E, NCCS, on 'Molecular Chronometers', on 17/08/11 for M.Sc.I & TYBSc.
 - Dr. Sampada Patwardhan, Deenanath Mangeshkar Hospital and Research Centre on 'Estimation of Antimicrobial activity using standard guidelines (NCCLS/CLSI) on 26/08/11 for MSc II
 - Dr. P. K. Dhakephalkar on Investigation of Microbial Diversity using molecular tools, on 9/09/11 for M.Sc. I.
 - Prof. R. L. Deopurkar, Microbiology Dept., University of Pune, on Mathematical modeling: Growth kinetics- Exponential & logarithmic growth, on 3/10/11, for M.Sc. I and M.Sc. II.
 - Dr. Saroj Ghaskadbi, Head, Dept. of Zoology, University of Pune, on 'C' value Paradox- Cot & Rot curves, on 14/10/11 for MSc. II.
 - Dr. Hemant Kelkar, Director, Bioinformatics Centre, North Carolina University, on 'Next Generation Sequencing', on 9/12/11, for MSc II.
 - Mr. K. B. Satpute, QC Manager, Serum Institute of India, Pvt. Ltd., on 'Skills Required for Employability', for MSc students on 28/01/12, under the aegis of '**Durga Kulkarni Memorial Lecture**'.
 - Dr. Leena Yeolekar, Consultant, Serum Institute of India, Pvt. Ltd., for demonstration of "Egg Inoculation Technique", on 18/02/12.
- **Visits:**
 - To Agharkar Research Institute for MSc-I students on 26/09/11, to learn about 'Anaerobic culture facility'.
 - To Indian Agricultural Research Institute (IARI), Agriculture College Campus, Pune for MSc II students to learn about 'Virus Infectivity Assays'. 16/09/11
 - To Biotechnology Dept., Modern College of Arts, Science & Commerce, Shivajinagar for MSc II students, to see 'Plant Tissue Culture facility'. 08/10/11
 - To Mapro Foods, Wai and Panchgani, for FYBSc students on 10/12/11.

- To Water Purification Plant of PCMC, Pune & to Champagne Indage, Narayangaon, on 9/01/12 for SYBSc & MSc II students.
- To Janakalyan Blood Bank on 13/02/12, for TYBSc students.
- **Financial Aid:**
 - Staff members of the department have given financial support to students for their education:
 - Rs.2,000/- to one FYBSc student;
 - Rs. 2,000/- to one SYBCA student;
 - Rs. 7,500/- to one MSc II student.
- **Placement Cell Activities:**
 - **Campus Interviews** were conducted by:
 - Evolvus Systems, Pune.- 3 students were placed.
 - **Students were also recommended for placement to industries/ institutes:**
 - SIES - Indian Institute of Environment Management.
 - Serum Institute of India Pvt. Ltd.
 - Department of Botany, University of Pune.
 - Agharkar Research Institute, Pune.
 - **Interactions:** of current students with well-placed alumni in order to make students aware of opportunities available and skill-sets required:
 - Amruta Joshi - How to write a scientific review: Her review was published in an international journal.
 - Nikhil Gaitonde – How to prepare for CSIR-UGC NET examination. He has freshly passed the NET examination and qualified for JRF.
 - Pradeep Khalule - Environmental Monitoring in industry.
 - Yogesh Borse – Developing Entrepreneurship attitude.
 - **“UDAAN”** was initiated in the month of August 2010 for giving the students maximum exposure to the vast opportunities available in industries before they take a decision of their future career. Each student of M.Sc. II gathers and displays the complete profile of one of the leading industries in the field of Pharmaceuticals, Food and Dairy, Agriculture, Medical Diagnostics and Research. The details of the industry includes the leading brands of the company, complete product range, various manufacturing and R & D facilities, their contact details, market share and also the current career prospects in various departments.
 - **Soft Skills Workshop:** was conducted for M.Sc. II students on “Towards my Personal Excellence”, which focused on how to develop self confidence, resumé writing, & effective interview techniques. The workshop was conducted by professional trainers, Dr. Mrs. Anita Sathe & Dr. Mr. P. K. Pisal.

- **Water Potability Testing:**
In Aug 2010, we have started a new activity of **testing the Potability of drinking water** available at our college, which is a basic need of everybody in the college. This activity is undertaken by T.Y.BSc. Microbiology students. While participating in this activity the students get exposure to the applied aspects of topics included in their undergraduate syllabus and carry out some of the techniques which are commonly used in many water testing laboratories which are certified under BIS (Bureau of Indian Standards).
- **Food Quality Assurance Cell:** This activity was started in 2010-11 to test the Quality of food from the College Canteen. It aims to monitor & assess the Microbiological quality of canteen food and the general level of hygiene in the canteen. TYBSc students collected samples from various surfaces in the canteen and also of raw and processed food prepared in the canteen. They assessed the general microbial load from these samples by Standard Plate Count Method.

Staff Achievements:

1. Mrs. Sneha Ogale:
 - **Chairperson Reception Committee** for Inauguration of renovated Library & Naming ceremony of AV Hall.
 - **Chairperson of Best Student Trophy Committee.**
 - **Life member** of Association of Microbiologists India.
 - **Life member** of Society of Biological Chemists (India).
 - Participation at **International Conference** on 'Business Opportunities in Life Sciences' organized by Modern College of Arts, Science and Commerce, Shivajinagar, Pune 411005, between 28th -30th January 2012.
 - Participated in **National level Seminar** on "Newer Trends in Chemical Research and Writing of Scientific Research papers" organized by Department of Chemistry, Modern College of Arts, Science and Commerce, Ganeshkhind, Pune-53 held on 2-4 February,2012
 - Participated in **State level Seminar** on "Role of Mathematics in Life Sciences" organized by Department of Mathematics, Modern College of Arts, Science and Commerce, Ganeshkhind, Pune -53 held on 6th-7th February 2012.
 - Participated in **Indo-German Research Dialogue** organized at IISER, Pune on 24/02/12.

- **Co-author** for **poster** presented at **Second National Conference** on 'Biotechnology, Bioinformatics & Bioengineering', organized at Kolhapur by Society for Biotechnology, on 24-25 February 2012. Title: 'Characterization of uropathogens and screening of herbal extracts for their antibacterial activity' by Chitlange Purnima, Kulkarni Mansi, Ogale Sneha

Mrs. Anupama Sonawane:

- **Chairperson** of **Library Committee** of the college.

Dr. Mrs. Neelima Kulkarni:

- Worked as **In charge** of **Examination committee**.
- **Co-author of Poster** presented at **International Conference** on 'Business Opportunities in Life Sciences' organized by Modern College of Arts, Science and Commerce, Shivajinagar, Pune 411005, between 28th -30th January 2012.
- Participated in one day workshop 'Phytochemical analysis of therapeutically active constituents of pharmaceutically important medicinal plants' on 13th January 2012, organized by the department of Botany, University of Pune.
- Participated in **National level seminar** on "Newer Trends in Chemical Research and Writing of Scientific Research papers" organized by Department of Chemistry, Modern College of Arts, Science and Commerce, Ganeshkhind, Pune-53 held on 2-4 February, 2012
- Participated in **State level seminar** on "Role of Mathematics in Life Sciences" organized by Department of Mathematics, Modern College of Arts, Science and Commerce, Ganeshkhind, Pune -53 held on 6th-7th February 2012.
- Attended **two Day Workshop** on 'Methodology and Details of Teaching-Learning in MSc Microbiology' held at Abasaheb Garware College on 17th and 18th February, 2012.
- Worked as **Executive Council member** for Association of Microbiologists India.
- Life member of Association of Microbiologists India.

Mr. Prasad Deshmane:

- **Member of Examination Committee.**
- **Member** of Organizing Committee **Swar Madhuri**, classical and Natyasangeet singing competition.
- **Member** of Organizing Committee '**Modern Shri** 'Competition
- Organized college teams for **Mimamsa** competition conducted by IISER.
- Worked as **Member** for F.Y. B.Sc examination and result generation committee.
- Participated in **State level Seminar** on "Role of Mathematics in Life Sciences" organized by Department of Mathematics, Modern College of Arts, Science and Commerce, Ganeshkhind, Pune -53 held on 6th-7th February 2012.
- Attended **two Day Workshop** on 'Methodology and Details of Teaching-Learning in MSc Microbiology' held at Abasaheb Garware College on 17th and 18th February, 2012.

Ms Vrushali Deshpande:

- **Member** of "**Swar Madhuri**" organizing committee
- Participated in **State level Seminar** on "Role of Mathematics in Life Sciences" organized by Department of Mathematics, Modern College of Arts, Science and Commerce, Ganeshkhind, Pune -53 held on 6th-7th February 2012.

Mrs. Vaidehi Dande:

- **Coordinator** of **Safety Health** and **Environment** committee.
- **Member** of **Placement Cell** of the college.
- **Co-author of Poster** presented at '**International Conference** on Business opportunities in Life Sciences' organized by Modern College of Arts, Science and Commerce, Shivajinagar, Pune 411005, between 28th -30th January 2012.
- Participated in **State level Seminar** on "Role of Mathematics in Life Sciences" organized by Department of Mathematics, Modern College of Arts, Science and Commerce, Ganeshkhind, Pune -53 held on 6th-7th February 2012.

- Participated in **one day Workshop** on 'Phytochemical analysis of therapeutically active constituents of pharmaceutically important medicinal plants on 13th January 2012, organized by the Department of Botany, University of Pune.
- Attended **two Day Workshop** on 'Methodology and Details of Teaching-Learning in MSc Microbiology' held at Abasaheb Garware College on 17th and 18th February, 2012.
- Life member of Association of Microbiologists India.

Mrs. Ashwini Satbhai:

- **Member** of 'Safety health and environment committee'.
- Guide for 'Water Potability Testing' activity in the college.
- **Life member** of **Association of Microbiologists India.**
- Organized college teams for 'Pasteur Contest- a **state level microbiology quiz** contest' conducted by R. C. Patel College, Shirpur, Dhule.
- **Co-author** for the poster presented at **National Conference** on Biodiversity Assessment, Conservation and Utilization on 10 February 2012, organized by Department of Biodiversity, Abasaheb Garware College, Pune and BAIF Development Research Foundation, Pune.
- Participated in one day workshop on 'Phytochemical analysis of therapeutically active constituents of pharmaceutically important medicinal plants on 13th January 2012, organized by the Department of Botany, University of Pune.
- Participated in **State level Seminar** on "Role of Mathematics in Life Sciences" organized by Department of Mathematics, Modern College of Arts, Science and Commerce, Ganeshkhind, Pune -53 held on 6th-7th February 2012.

Mrs Maya Bhanu:

- **Photograph** on Animal Behavior ('Bee-hive') submitted, was **selected for Photography Exhibition**, an event organized at the **National Conference** on

'Biodiversity Assessment, Conservation and Utilization', organized by Department of Biodiversity, Abasaheb Garware College, Pune and BAIF Development Research Foundation, Pune, on 10 February 2012.

- Participated in **State level Seminar** on "Role of Mathematics in Life Sciences" organized by Department of Mathematics, Modern College of Arts, Science and Commerce, Ganeshkhind, Pune -53 held on 6th-7th February 2012.

Dr. Kavita Parekh:

- **Co-author of Poster** presented at **International Conference** on 'Business Opportunities in Life Sciences' organized by Modern College of Arts, Science and Commerce, Shivajinagar, Pune 411005, between 28th -30th January 2012.
- Participated in **State level Seminar** on "Role of Mathematics in Life Sciences" organized by Department of Mathematics, Modern College of Arts, Science and Commerce, Ganeshkhind, Pune -53 held on 6th-7th February 2012.
- Participated in **one day workshop** on 'Phytochemical analysis of therapeutically active constituents of pharmaceutically important medicinal plants on 13th January 2012, organized by the Department of Botany, University of Pune.
- **Think tank member** for BIOCRATS an interdisciplinary scientific forum for discussion of new ideas."
- Attended **two Day Workshop** on 'Methodology and Details of Teaching-Learning in MSc Microbiology' held at Abasaheb Garware College on 17th and 18th February, 2012.

Ms Khushboo Ravalani:

- Participated in **National level Seminar** on "Newer Trends in Chemical Research and Writing of Scientific Research papers" organized by Department of

Chemistry, Modern College of Arts, Science and Commerce, Ganeshkhind, Pune-53 held on 2-4 February,2012.

- Participated in **State level Seminar** on “Role of Mathematics in Life Sciences” organized by Department of Mathematics, Modern College of Arts, Science and Commerce, Ganeshkhind, Pune -53 held on 6th-7th February 2012.

Students' Achievements:

- Amruta Joshi: Review published in reputed international journal 'Critical Reviews in Microbiology', 2011.
- Priyanka Devi: Received Erasmus Mundus scholarship and pursuing PhD at Paris since Sept 2011.
- Chinmay Tikhe: Pursuing PhD at Louisiana University, USA, since Aug 2011.
- Wishwas Abhyankar: Paper accepted for publication in reputed international journal, **Proteomics**, Sept 2011.
- Neha Naik: Paper published in reputed journal, 'Annals of Microbiology', based on her MSc II project.
- Lallianmawii Pachuau (LS), Amol Kasodekar (JRF) & Nikhil Gaitonde (JRF) qualified **CSIR-UGC NET** examination.
- **Participation in International Conference:** 3 posters were presented by MSc II students in the **International Conference: “Business opportunities in Life Sciences”**, from 28-30th January 2012, at Modern College of Arts, Science and Commerce, Shivajinagar, Pune. **List of students** who have presented posters- Bhagyashree Joshi, Dhara Lad, Dhanashree Gawade, Bhagyashree Pawale, Swati Mandal, Ruby Verma and Shraddha Sonawane.
- **Participation in National Conference:** 2 posters were presented by MSc II students in **National Conferences:**
 - ‘Biotechnology, Bioinformatics & Bioengineering’, organized at Kolhapur by Society for Biotechnology, on 24-25 February 2012 (by Purnima Chitalange & Mansi Kulkarni);
 - ‘Biodiversity Assessment, Conservation and Utilization’, on 10 February 2012, organized by Department of Biodiversity, Abasaheb Garware College,Pune and BAIF Development Research Foundation, Pune.
- Vrinda Makhi (MSc I) was selected for IASc-INSA-NASI **Summer Research Fellowship** at Bose Institute, Kolkata in June-July 2012.

- F. Y. B. Sc. Students, Sayali Hanamghar, Rutuja Gumaste and Mamlesh Waghmode won **3rd prize** in **state level quiz competition**, “State level Microbiological contest” held by R. C. Patel Arts, Commerce and Science College, Shirpur.
- M. Sc. Students Dhriti Deka (Part I) and Sophia Maske (Part II) participated and won **third prize** in **Model competition** “ Horizon” conducted by Sinhgad College of Science.
- M. Sc I student Dhriti Deka was awarded **1st prize** in **model competition** in **State level workshop** for ‘Production of good quality cocoons held on 17th and 18th February 2012.
- F. Y. B. Sc. Students Mamlesh Waghmode and Jini Maliyackal participated in Model competition “ **Horizon**” conducted by Sinhgad College of Science.
- M.Sc. II student Sophia Maske participated in poster presentation competition “Chimera” conducted by Fergusson College, Pune.
- **Prizes won** in activities held during **Yuva Saptah**: M. Sc. II student Pooja Pardeshi won 1st prize in mehendi competition.
- Participation in **Science Exhibition**: 6 projects; 10 posters & 7 Models were presented during Science Exhibition. The **project**: Biodigester by Dhriti Deka & Priya Sharma got **1st Prize** at college level; the **poster** – ‘Nanotechnology’ by Hussain Khokhawala, Mrunmayee Gite & Prafull Pawar got **1st Prize** at college level; the **model** – Fermentor by Mamlesh Waghmode, Jini Malliackal & Pooja Pawar got **1st Prize** at college level.
- .The department conducted **Rangoli Competition** and **salad decoration** competition for the students of the department based on Microbiology topics, during the Science Exhibition. 18 groups participated in Rangoli and 8 groups participated in salad decoration competition.
- The **rangoli** on ‘ATP Synthase’ by Laxmi Singh, Sushma Sharma, Ruby Verma, Lallianmawii Pachuau (M.Sc.II) got **1st prize**.
- **The Salad decoration on ‘Mitosis’** by Bhagyashree Pawale, Nikita Bonde, Priya Neurgaonkar, Mrunmayee Gite(M.Sc.) got **1st prize**.

Prof. Mrs. Sneha Ogale,

Head, Department of Microbiology.