

NEW PRINCE SHRI BHAVANI ARTS & SCIENCE COLLEGE

(Co - Educational & Affiliated to University of Madras)
Patel Road, Medavakkam, Chennai-100



ABOUT BIOTECHNOLOGY

Biotechnology is concerned about generating useful products by controlled use of biological agents such as microorganisms and cellular components. Biotechnology is a multidisciplinary field that includes disciplines like microbiology, biochemistry, genetics, cell biology, molecular biology, immunology, cell and tissue culture, and physiology. In the Department of Biotechnology, our aim is to impart quality education to budding biotechnologists and promote strong interdisciplinary research in frontier areas of biotechnology and life sciences.



Dr.N.SANTHI
Greetings from the
Department of Biotechnology

I am very pleased to present the fifth issue of the newsletter "Biotech Occasions" of Biotechnology Department. I hope the newsletter will serve as an interface between the college and outside world. This newsletter provides information about academic and co-curricular activities organized in the Department during the academic year of 2018 – 19. I am happy to note that various initiatives are taken by the department to disseminate knowledge by organized to keep updated with the latest development in the field of Biotechnology. I congratulate all the faculty and students who have contributed to these newsletters and also appreciate all faculty members for motivating their students

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DEPARTMENT OF BIOTECHNOLOGY

Department of Biotechnology was established in 2005. Currently the department offers Undergraduate program with an intake of 55. The department aims to impart quality Training with distinctive proficiency of merging Engineering principles with biological systems. The Department has designed dynamic and focused curriculums to develop a well-trained manpower in biotechnology for academic / industrial / pharmaceutical applications as well as research perspectives. The curriculums also focus on inculcating ethical and moral values in the students. Students are motivated to actively participate in seminars, symposiums, conferences and workshops. The Department has well-equipped laboratories to provide hands-on training and research exposure to the students. The Department has highly qualified faculty with doctoral research experience.

VISION:

Attaining new heights in biotechnology research, shaping biotechnology in to a premier precision tool of the future for creation of wealth and ensuring social justice – Especially for the welfare of the poor and to provide leaders in the field of Biotechnology.

MISSION:

- To raise students with academic excellence, professional competence with good ethics.
- To find solution to human problems in areas relating to water food health care and energy through scientific, social and technological research
- To impart highly innovative and technical knowledge in the field of biotechnology to the urban and rural students folks through “TOTAL QUALITY EDUCATION”.

Our world is built on biology and once we begin to understand it, it then becomes a technology”

— Ryan Bethencourt

STUDENT ACHIEVEMENTS



K. Gomathi
University 12th Rank

K. Pavithra
University 71st Rank



A. Shayeen
University 86th Rank

Add on course/Short term course organized by the department

A short term course (more than 30 hours) conducted on Microbial Screening and Haematological Techniques and for the students of first and second year during the month of June to September, 2018. A short term course conducted on Concept of Clinical Research for third year students by Kavin BioResearch under MOU. Course completion certificates issued at the end of the course.



Extension Activity

Department of Biotechnology conducted an awareness programme in association with “Gem Hospital” Perungudi to the society about “save liver and save life” on 05.10.18. 55 students actively participated & illustrated the importance of liver.



Alumni Activity

An alumni talk was held in the department on 05th October 2018. Two alumni (K.Gomathi & K.Pavitra) interacted with the students about “Higher Studies & Carrier Opportunities in Biotechnology”. The main aim was to provide guidance to the present students in their endeavour for better employment and higher studies & to get the valuable advices of the Alumni in the overall development of the development.



Industrial Visit

A Visit to Parle G Biscuit Production Unit on 29th September 2018. More than forty Students along with staff visited. This visit was aimed to connect the gap between class room teaching and industrial environment.

Intra Departmental Activities

Department of Biotechnology conducted a Quiz competition, Adzap and Agar painting as Intra Departmental activities on 06-08-2018 to improve scientific knowledge & skill development for the students.



Department of Biotechnology conducted many competitions like Agar painting, Fire less Cooking & Wealth out of Waste as Intra Departmental activities on 28-02-2019 to improve creativeness & skill development for the students.

**SCIENCE IS NOTHING, BUT TRAINED AND ORGANIZED
COMMON SCIENCE
THOMAS HUXLEY**

Workshop and Seminar



A seminar on “Current Immunological Tools for Human” presented by Dr B. Deivasigamani Asst.Professor, Dept. of Zoology, Centre for advanced study in Marine Biology, Annamalai University, Parangipettai on 11th August 2018. About 70 students and teaching staff participated in the seminar.

A workshop on Biosynthesis of Metal Nano Particles from Medicinal Plants conducted by Dr.K.Elongovan Quality Associate, Maya clinical Drugs Research, Chennai on 10th September. About 50 students and teaching staffs participated in the workshop.



A workshop on “Training in Medical Coding” trained by Dr.Prabhakaran Medical code trainer, Gyrus Infotech Chennai on 7th February 2019. About 67 students and teaching staff participated in the workshop.



A seminar on “Plant Biotechnology for crop improvement” presented by Dr.B.Sankar Asst. Professor, Poompuhar college, Nagapattinam on 1st March 2019. About 67 students and teaching staff participated in the seminar.

In Plant Training

Five of our students attended an In Plant Training programme conducted by Kavin Bioresearch, Velachery on “Food & Science Technology” during the month of April from 15-04-19 to 25-04-19. Training helps learners to acquire the latest skills, methodologies and build a strong foundation for their growth.



Parent Teacher Meet



Parent Teacher meet was held for all students on 22-09-2018. This meet was aimed to involve parents in student's education.



Parent Teacher meet was held for all students on 23-02-2019. The meet was aimed to bring the parents attention on their ward's studies and behaviour.

Guest Lecture

Guest lecture on “communicable & non Communicable diseases” delivered by Mrs. Dr. S. Bhagavathy, Asst. Professor, Dept. of Biotechnology Mohamad Sathak college of Arts & Science conducted on 06/07/18.



Guest lecture on “Human Genetics” delivered by Mrs. Nasreen Najeeb, Asst. Professor, Mohamed Sathak College of Arts and Science held on 18/08/18.

Guest lecture on “Monoclonal Antibodies production & purification” delivered by Dr. A. Deepa Rani, Asst. Professor, Dept. of Zoology, Ethiraj College for Women held on 27/09/18.



Guest lecture on “Role of Oncogene” delivered by Mrs.S. Kavitha Asst. Professor, Dept. of Biotechnology, Prince Venkateshwara Arts & Science College. held on 14/12/18.



Guest lecture on “Applications of Bioprocess technology” delivered by Dr. R. Rajan, Asst. Professor, Mohamed Sathak College of Arts and Science held on 23/01/19.

Guest lecture on “Transgenic Plants” delivered by Mrs. K.Deepalakshmi, Asst. Professor, Prince Venkateshwara Arts & Science College held on 21/02/19.



Mentor Meet programme

The first mentor session was held on 16-07-18



The Second mentor session was held on 17-09-18.



The third mentor session was held on 04-02-19



The fourth mentor session was held on 04-03-19.



Inter Collegiate Competition



Department of Biotechnology conducted competition such as *Poster Presentation (Drug Discovery)*, *BioCartooning (Genetically Modified Plants)* & *Face Painting (Save Earth)* as Inter Collegiate activities on 06-08-2018 to improve scientific knowledge & skill development for the students. Around 43 students had participated & expressed their talents.



Staff Activity

- Dr.Antony K Teresa Infanta & Dr.N.Senthil Kumar had attended National Workshop on Marine Biotechnology conducted by NIOT on 26.6.2018.
- Dr.N.Santhi M.Sc.,M.Phil.,Ph.D, Asst. Professor, Department of Biotechnology New Prince Shri Bhavani Arts and Science College, Medavakkam, served as Guest Speaker about “Mutation Studies” on 27-06-2018 conducted by the Department of Biotechnology in Prince Shri Venkateshwara Arts & Science College
- Dr N.Santhi & Mrs. S. Usha had attended National Conference on Emerging Trends in Biomaterials and Its Applications For Social Needs conducted by Hindustan College of Arts and Science on 12.09.2018.
- Dr N.Santhi & Mrs. S. Usha had attended National Workshop on “Cryosectioning of tissue from Sentinel Marine Organism” conducted by Centre for advanced study in Marine Biology Annamalai University, Parangipettai on 27th December 2018.
- Mrs.S.Usha M.Sc.,M.Phil.,(Ph.D), Asst. Professor, Department of Biotechnology New Prince Shri Bhavani Arts and Science College, Medavakkam, served as Guest Speaker about “Modern Techniques integrated Biotechnological process” on 04-01-2018 conducted by the Department of Biotechnology in Prince Shri Venkateshwara Arts & Science College.
- Dr N.Santhi & Dr.N.Senthil Kumar had attended National Workshop on “Mol Bio Gizmo” conducted by Kumara Rani Meena Muthaiah College of Arts and Science on 31.01.2019.
- Dr.Antony K Teresa Infanta & Dr.N.Senthil Kumar had attended FDP on Feedback Mechanisms & Their Impact on Quality conducted by Kumara Rani Meena Muthaiah College of Arts and Science on 09.02.2019.

Staff Activity

- Dr N.Santhi & Mrs. S. Usha had attended National Seminar on “Environmental Issues and Impact on Marine Organisms and Strategies” conducted by Centre for advanced study in Marine Biology Annamalai University, Parangipettai on 20.02.2019.
- Dr N.Santhi, Mrs. S. Usha, Dr.N.Senthil Kumar & Antony K. Teresa Infanta S. had attended FDP on “How to write and publish a Research Article in Scopus Indexed Journal” conducted by Dhanaraj Baid Jain College on 02.03.2019.
- Dr.Antony K Teresa Infanta & Mrs. S. Usha had attended workshop on SNP Genotyping using Tetra - ARMS PCR conducted by SRM Institute of Science and Technology on 08.03.2019.
- Mrs.S.Usha, appointed as External Examiner, University Practical Examination of B.Sc Biotechnology conducted by Hindustan College of Arts & Science from 15-03-2019 to 16-03-2019.
- Mrs.S.Usha appointed as External Examiner, University Practical Examination of B.Sc Biotechnology conducted by Prince Shri Venkateshwara Arts & Science College on 18-03-19 to 21-03-2019.
- Dr.N.Santhi, appointed as External Examiner, University Practical Examination of B.Sc Biotechnology conducted by Prince Shri Venkateshwara Arts & Science College on 15-03-19,16-03-19,22-03-19,23-03-2019, 26-03-2019 &28-03-2019.

Publications

- Dr N.Santhi published a paper entitled An App For Smart Irrigation And Soil Nutrient Detection System in Journal Of Critical Reviews on January 2019.
- Dr. S. Usha & Dr.N.Santhi published a paper entitled Optimization of callus biomass production & coumarin compound in the callus culture from the leaves of Eupatorium triplinerve" in Journal of Applied Science & Computations on January 2019.
- Dr.N.Santhi & Dr.N.Senthil Kumar Novel synthesis of *Erythrina indica* leaf extracts conjugated gold nanoparticles with potent antibacterial and antioxidant properties" in Journal of Applied Science & Computations on January 2019.
- Dr N.Santhi, S. Usha & Dr.N.Senthil Kumar Histomorphology of immune organ of spleen in ophiocephalus (*channa punctatus*)" in Journal of Applied Science & Computations on January 2019.

Student Activity

- S.Janani & A.Jayashree of II B.Sc Biotechnology Presented a poster & D. Ruby angel of II B.Sc Biotechnology were participated in an International conference conducted by Alpha Arts and Science College on 7/9/2018.
- A.Jayashree, D.Ruby Angel, S.Janani, A.Akshaya, R.Mahalakshmi, G.Maria Catherine, K.Mahalakshmi, R.Amsaveni, N.Sowndarya, S.Jegadeswari, V.Deepa of II B Sc Biotechnology & R.Anusuya & C.Janani Jermista of III B Sc Biotechnology were Participated on a workshop conducted by Kumararani Meena Muthiah College of Arts & Science on 31/01/19.
- S.Janani & A.Jayashree of II B.Sc Biotechnology participated National conference conducted by Prof. Dhanabalan College of Arts and Science on 28/2/2019.