

**ACHIEVEMENTS OF
DEPT. OF BIOTECHNOLOGY ENGINEERING
(2018-19)**

Students Achievements

1. Annapurna Pai of VI semester was selected for B4 Synthetic Biology Workshop hosted by the Lakshmi Mittal South Asia Institute, Harvard University (LMSAI), Cambridge, Institute of Bioinformatics and Applied Biotechnology (IBAB), Bengaluru and Indian Institute of Science Education and Research (IISER), Pune, under the B4 program funded by Department of Biotechnology (Government of India). The workshop was scheduled between January 20- February 2, 2019.

Five final year students (Mr. Nakul Pai, Mr. Sarvesh Prabhu, Ms. Anushri, U, Ms. Kerthana, Ms. Manasa Deepika) have qualified in GATE.

Students Presentation of Research papers

1. A paper titled **“Hydrophobins from *Aspergillus flavus* as surface active performance proteins”** was presented by **Ms. Harshitha Kamath Miyar, Ms. Anusha, Mr. Manish Baddakatte, Ms. Shwetha Rao**, (V Sem) in 3rd International Conference on Recent Advances in Engineering Sciences Theme: Advanced Materials and Smart Technologies, Jointly Organized by Departments of Biotechnology, Civil Engineering, Mechanical Engineering, Chemical Engineering, Industrial Engineering and Management, **M. S. Ramaiah Institute of Technology, Bengaluru on September 26th-27th 2018**. This work was carried out under the guidance of **Mrs Louella Goveas** Asst. Professor and **Dr. Shyam Prasad Sajankila**, Assoc Professor, Dept. of Biotechnology Engineering.
2. A paper titled **“Optimization of fermentation condition for the production of polysaccharides from *Lactobacillus rhamnosus* RVP1 and evaluation of its radioprotection”** was presented by **Ms. Anushree M, Ms. Anushri U, Ms. Chitralekha, Ms. Manasadeepika**, (VII Sem) in International Conference on Radiation Biology (ICRB), organized by K S Hegde Medical Academy, Deralakatte, Mangalore on **4th – 6th October 2018**. This work was carried out under the guidance of **Dr. Vidya S. M**, Professor, Dept. of Biotechnology Engineering.
3. A paper titled **“Hydrophobins from Fungal Contaminant - Unique Proteins with Potential Applications”** was presented by **Ms. Harshitha Kamath Miyar, Ms. Anusha** (V Sem) at Symbiot-2018 National Symposium on Recent Advances in Biotechnology Organized by IEBT, Department of Biotechnology, Manipal Institute of Technology, Manipal **on October 19th-20th 2018**. **Second prize** was awarded for the presentation. This work was carried out under the guidance of **Mrs Louella Goveas** Asst. Professor and **Dr. Shyam Prasad Sajankila**, Assoc Professor, Dept. of Biotechnology Engineering.
4. A paper titled **“Bacteria from motor garage soil utilises petroleum crude oil and motor oil as sole carbon source”** was presented by **Ms. Amrutha, Ms. Alava Melita** (VII Sem) at Symbiot-2018 National Symposium on Recent Advances in Biotechnology Organized by IEBT, Department of Biotechnology, Manipal Institute of Technology, Manipal **on October 19th-20th 2018**. This work was carried out under

the guidance of **Mrs Louella Goveas** Asst. Professor and **Dr. Shyam Prasad Sajankila**, Assoc Professor, Dept. of Biotechnology Engineering.

5. A paper titled **“Waste silkworm cocoon-mediated synthesis of copper nanoparticles and evaluation of their antibacterial activity”** was presented by Nakhul Pai ,Dhruval S. R, Shilpa Sanajay Dhanwant, Bathish Hussein of VIII sem at Second International conference on frontiers in analytical and clinical techniques (INFACT -2019) organized by Islam Centre for Higher Education, Kumarcoil, Kanyakumari, Tamil Nadu, Department of Nanotechnology, Noorul. This work was carried out under the guidance of **Ms. SnehaNayak** Asst. Professor and **Dr. C Vaman Rao**, Professor and Head.
6. A paper titled **“Preparation of biodegradable smart packaging for sea foods”** was presented by Dhanush S. Kumar, Hannath Raseena, Kunal Sagar, Kusuma, L. K., (VIII Sem) in International Conference on Innovative Techniques and Nutritional Demands in Food Security –Trends, Challenges and Perspectives, organized by Alvas College, Mudabidri on **8th – 9th Feb 2019**. **Second prize** was awarded for the presentation. This work was carried out under the guidance of **Dr. Anilkumar H. S**, Assoc. Professor, Dept. of Biotechnology Engineering.
7. A paper titled **“Immunomodulatory effects of polysaccharides from *Lactobacillus plantarum* ”** was presented by Ms. Anushree M, Ms. Anushri U, Ms. Chitrlekha, Ms. Manasadeepika, (VIII Sem) in Alumni sponsored National Conference on Secondary metabolites and Health care, organized by Dept. of Biotechnology, Alvas College, Mudabidri on **23rd Feb 2019**. Third Prize was awarded for the presentation. This work was carried out under the guidance of **Dr. Vidya S. M**, Professor, Dept. of Biotechnology Engineering.
8. Poster titled **“Isolation and Characterization of petroleum crude oil and used engine oil degrading bacteria from motor garage soil”** was presented by Ms. Amrutha K, Ms. Ananya, Ms. Melita Alva, Ms. Jenishia Menezes of 8th semester B.E. Biotechnology and co-authored by Dr Shyama Prasad Sajankila and Mrs Louella Concepta Goveas at **National Conference on Recent Advances in Biochemistry (RAB-2019)** organised by Department of PG Studies and Research in Biochemistry, St Aloysius College Mangalore on **23rd Feb 2019**. This poster was **awarded First Prize as the Best Poster** in the conference. This presentation was part of their final year project carried out under the guidance of **Mrs. Louella Concepta Goveas**
9. A paper titled **“Development of chitosan based food packaging with adulterant detection and removal system”** was presented by Ms. Kusuma K, Mr. Kunal Sagar, Ms. Hannath Raseena, Mr. Dhanush S. Kumar, (VIII Sem) in National Seminar on Innovation in Science and Engineering, jointly organized by Sir M. Vishvesvaraya Institute of Technology and National Academy of Science, Bengaluru Chapter on **25th Feb 2019 - 1st March 2019**. **Second Prize** was awarded for the oral presentation. This work was carried out under the guidance of **Dr. Anilkumar H. S**, Associate Professor, Dept. of Biotechnology Engineering.
10. Poster titled **“Fabrication of Moving Bed Bioreactor for Consolidated Bioprocessing of Lignocellulosic Biomass”** was presented by Inchara Crasta, Udbhavi K B, Ashwini G Shenoy, Soumya M Rao (VIII Sem) in **National Level Student’s symposium Chemexcel 2019** organized by Department of Chemical Engineering, Bapuji Institute of Engineering & Technology, Davanagere on **22nd March 2019**. **Awarded Best Poster award**. This work was carried out under the guidance of Mr. Vankatesh Kamath, Asst. Professor and **Dr. C. Vaman Rao**, Professor and Head.

11. A paper titled “Production of Bio-surfactant from Bacterial Strains isolated from Industrial Waste Water” was presented by Ms. Devika Bhat, Ms. Roopakshi, Ms. Dikshitha Adyanthaya, Saniha Khathija of VIII semester in **National Level Student’s symposium Chemexcel 2019 organized** by Department of Chemical Engineering, Bapuji Institute of Engineering & Technology, Davanagere on 22nd March 2019. **Awarded Second prize.** This work was carried out under the guidance of Dr. Chetan D. M., Associate Professor.
12. A paper titled “Extraction, identification, isolation, characterization of Microorganism extracted from Cashew Nut Shell oil(CSNL) enriched soil & their Biological applications” was presented by Apeksha Nayak, Kartik Gevandalkar, Vishnu Jayaraj of VIII semester in **National Level Student’s symposium Chemexcel 2019 organized** by Department of Chemical Engineering, Bapuji Institute of Engineering & Technology, Davanagere on 22nd March 2019. **Awarded Second prize.** This work was carried out under the guidance of Dr. ShyamPrasad Sajankila, Associate Professor.
13. A paper titled “Consolidated Bioprocessing of Lignocellulosic Biomass to Produce Bioethanol using *Bacillus* Strain” was presented by Ashwini G Shenoy, Soumya M Rao, Inchara Crasta, Udbhavi K B, (VIII Sem) in **National Level Student’s symposium Chemexcel 2019 organized** by Department of Chemical Engineering, Bapuji Institute of Engineering & Technology, Davanagere on 22nd March 2019. This work was carried out under the guidance of Mr. Vankatesh Kamath, Asst. Professor and Dr. C. Vaman Rao, Professor and Head.
14. A paper titled “Optimization of Pre-treatment Step to Enhance the Fermentable Sugars in Lignocellulosic Biomass for Bioethanol Production” was presented by Rakshita Shetty, Sangam G Shetty, Anjuna Pramod, Keerthana Vinod Kumar of VIII semester in **National Level Student’s symposium Chemexcel 2019 organized** by Department of Chemical Engineering, Bapuji Institute of Engineering & Technology, Davanagere on 22nd March 2019. This work was carried out under the guidance of Dr. Ujwal P, Professor.
15. A paper titled “Assessment of physico-chemical and bacteriological quality of water” was presented by Ms. Ankitha D Rao and Ripika Rai of VI semester semester in **National Level Student’s symposium Chemexcel 2019 organized** by Department of Chemical Engineering, Bapuji Institute of Engineering & Technology, Davanagere on 22nd March 2019. This work was carried out under the guidance of Dr. Chetan D. M., Associate Professor.
16. Udbhavi K. B of VIII semester won a **First prize** in Chem Quiz – A technical quiz competition organized in **National Level Student’s symposium Chemexcel 2019 organized** by Department of Chemical Engineering, Bapuji Institute of Engineering & Technology, Davanagere on 22nd March 2019.
17. Anushree M, Anushri U, Chithralekha, Manasadeepika presented a paper titled “Production of polysaccharides from *Lactobacillus plantarum* and *Lactobacillus acidophilus* and their immunomodulatory studies” at **National symposium and workshop on "Emerging perspectives preclinical and clinical research" organized by Nitte Institute of Pharmaceutical sciences, Deralakatte**, The conference was Sponsored by: Indian Pharmacological Society, held on 28.3.2019. **Awarded 2nd prize.** The project was carried out under the guidance of Dr. Vidya S. M, Professor.

18. Devika Bhat , Dikshita Adyanthaya, Saniha Khathija , Roopakshi S. of VIII semester presented a paper titled "Production of biosurfactants from bacterial strains isolated from industrial wastewater" at **National symposium and workshop on "Emerging perspectives preclinical and clinical research" organized by Nitte Institute of Pharmaceutical sciences, Deralakatte**, The conference was Sponsored by: Indian Pharmacological Society, held on 28.3.2019. Awarded **2nd prize**. The project was carried out under the guidance of Dr. Chetan D M.

Staff Achievements

1. Ms. Sneha Nayak received RGSF Grant of Rs. **5, 00, 000** from **VGST GoK** for the year 2017-2018 for the project entitled **"Biosynthesis of nanoparticles and its application in detection of heavy metals and effluents**.
2. Dr. Vidya S. M. received **"Best Research Paper Award"** a cash award of **Rs. 25,000** and a citation from VGST-GOK.
3. Dr. C. Vaman Rao, Professor and Head, has received a grant of **Rs. 48.97 lakhs** from **BIRAC-PACE- DBT** for the project Title **"To develop adjunct anti-venom therapy for snake venom from the pharmaceuticals obtained from *Coix lacrymajobi* root extract"**.
4. **Ms. Louella Concepta Goveas** presented a paper titled **"Bacteria from motor garage soil degrade hydrocarbons in petroleum crude oil"** at Lake 2018: Conference on Conservation and Sustainable Management of Riverine Ecosystems [THE 11TH BIENNIAL LAKE CONFERENCE] organized by Energy and Wetlands Research Group [<http://ces.iisc.ernet.in/energy>], Centre for Ecological Sciences, Indian Institute of Science, Bangalore 560012. The paper was awarded **Second Prize** for the best paper. The conference was held at Alva's College Moodbidri & Alva's Institute of Engineering and Technology, Mijar, Moodbidri, Dakshina on 22nd – 25th November 2018.
 1. **Ms. Harshitha J** presented a paper titled **"Production of pullulan from de-oiled Pongamia seed cake by using *Aureobasidium pullulans*"** at 2nd International Conference on Emerging Trends in Science, Engineering and Management (ICETSEM-2018) organized by Conference Info in association with Academic Science at Mahratta Chamber of Commerce Industries & Agriculture, Senapati Bapat Road, Pune, Maharashtra, India on 25th Nov 2018.
 2. Sneha Nayak presented a paper on **"Biogenic Synthesis of Silver Nanoparticles Using Jatropha Seed Cake Extract and Characterization: Evaluation of its Antibacterial Activity"** at International conference on advances and challenges for sustainable ecosystem - ICACSE 2018, organized by NIT, Trichy on 6th to 8th Dec 2018.

Publications

1. Harshitha M Jathanna and C. Vaman Rao. Production of pullulan from de-oiled *Pongamia* seed cake by using *Aureobasidium pullulans*. *International Journal of Management, Technology and Engineering*, November 2018, 8 (11): 2085-2090. ISSN: 2249-7455.

KSCST funding of student projects

For this academic year, three projects under general category and three projects under biofuel category have been selected for KSCST funding of Rs.48,000/-