

# Laminar Thought Flow



The Department of Biochemistry Newsletter

## From the Editor's Desk

The Department of Biochemistry is glad to put forth the second issue of the Laminar Thought Flow and pen down the happenings in the department since post-October 2019. Biochemistry is an emerging field with lot of new research and findings going on everyday and we, in the Department of Biochemistry aim to inculcate the professional etiquettes in our students as well. The current issue of our newsletter includes faculty activities, student activities, department achievements and creative writing by one of our students.

### Inside the issue:

Faculty Activities  
Students Activities  
Achievements  
Creative Writing

- Ms. Bhavya Bhat  
Asst. Prof., Dept. of Biochemistry

## FACULTY & STUDENTS' ACTIVITIES

### 1. Leadership Training Camp



The Leadership Training Camp was conducted for the F.Y. students (B.A. and B.Sc.) of Parvatibai Chowgule College on 28<sup>th</sup> and 29<sup>th</sup> June 2019 by M. R. Pai Foundation and Forum of Free Enterprise, Mumbai. The objective of the program was “building good citizenship”. The resource persons were Mr. Rajiv Luv and Mr. Vivek Patki who are eminent corporate trainers. Various activities like games, lectures, team activities, etc. were carried out for two days after which the students felt truly motivated and confident about themselves. The event was a great success benefiting 80 students, some of which saying that the program helped them to “realize our true potential” and “finding the right direction in life” It was jointly organized by the Department of Biochemistry and Biotechnology. Dr. Aduja Naik and Ms. Madhavi Motankar were the coordinators of this program.

-Contributed by, Dr. Aduja D. Naik, Asst. Prof., Dept. of Biochemistry  
Edited by Ms. Bhavya Bhat

## Students and their memorable moments at the Leadership Training Camp.



## 2. Field Trip to Sewage Treatment Plant



On 18<sup>th</sup> September 2019, Dr. Supriya Prabhu Khorjuvekar, along with the T.Y. students of Biochemistry visited the Sewage treatment plant at Santa Inez, Panjim as a part of their environmental biochemistry course curriculum. The Panjim sewage treatment plant treats sewage water of 14-15 MLD (Millions of Liters per Day) volume into clean water that is safe to be discharged back into the environment. Students were able to observe, grasp the knowledge and learn about different stages of water treatment and the technology of using various filters and chemicals as well in detail.

- Contributed by, Ms. Nandana Harikumar, T.Y.B.Sc., Dept. of Biochemistry

Edited by Ms. Bhavya Bhat

## 3. Workshop on "Membrane Processes for Application in Food, Water and Health Sector"



Ms. Sarah Mesquita and Dr. Aduja Naik from Department of Biochemistry attended a 2-day workshop on "Membrane Processes for Application in Food, Water and Health Sector". The workshop was held on 31st Jan & 1st Feb, 2020 in the BITS BIRAC BioNEST Incubator, BITS, Pilani K.K Birla Goa Campus. The workshop included introduction to the basics of membrane separation, its applications in Food, Water and Health Sector, synthesizing polymer membranes at the laboratory scale as well as at industrial scale, desalination and hemodialysis. The workshop also involved hands on training experiments on treatment of water as well as extending shelf life of coconut water.

- Contributed by Dr. Aduja Naik., Asst. Prof., Dept. of Biochemistry

Edited by Ms. Bhavya Bhat

#### 4. Study tour to Nanu Farms

A study tour was organized to Nanu farms, Sulcorna, Quepem on 15<sup>th</sup> February 2020, as a part of the skill enhancement course- Food and Fermentation Technology (Biochemistry) by Dr. Aduja Naik. A total of 47 students from Departments of Zoology, Chemistry and Botany attended this study tour. Several processes such as Neera collection, vinegar production, coconut sugar production, manufacture of Virgin Coconut Oil and various other processes involved in the production of value-added products from agricultural produce from the farm were explained to the students as they visited the facility. Several students tried their hand at climbing the coconut tree using the climbing machine.



Several students tried their hand at climbing the coconut tree using the climbing machine.

- Contributed by Dr. Aduja Naik., Asst. Prof., Dept. of Biochemistry  
Edited by Ms. Bhavya Bhat

#### 5. Short-term training course on "Entrepreneurial Opportunities in Fermentation Food Technology"

The department of Biochemistry along with Biotechnology of Parvatibai Chowgule college of Arts and Science, Autonomous Margao, Goa organized Directorate of Higher Education, Goa sponsored short-term training course on "Entrepreneurial Opportunities in Fermentation Food Technology" from 24<sup>th</sup> to 29<sup>th</sup> February 2020 in the college premises. A total of 25 undergraduate science students participated in the training course. The objective of the workshop was to develop entrepreneurial spirit among participants for inspiring them to set up their start-up and to take up improved formulations from traditional fermented food products.



Dr. Aduja Naik, Assistant professor, Department of Biochemistry, was the convener of the short-term course and also conducted the session on the topic "Chemistry of bread making".

Dr. Supriya Prabhu Khorjuvankar, Assistant professor, Department of Biochemistry, conducted the session on "production of fermented products from Cashew fruit and Coconut"

- Contributed by Dr. Aduja Naik., Asst. Prof., Dept. of Biochemistry  
Edited by Ms. Bhavya Bhat

### FACULTY ACHIEVEMENTS

#### Research Article by Dr. Aduja Naik

J. Vijayasanthi, Sachin R. Adsare, Archana G. Lamdande, **Aduja Naik**, K. S. M. S. Raghavarao. G. Prabhakar (2019) Recovery of proteins from coconut milk whey employing ultrafiltration and spray drying. Journal of Food Science and Technology 57, 22–31(2020) <https://doi.org/10.1007/s13197-019-04025-9>

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- Publisher: Springer
- Impact factor: 1.85

- Contributed by Dr. Aduja Naik., Asst. Prof., Dept. of Biochemistry

## AN EXOTIC MOMENT!

✚ *The pandemic of 2020 brought out a lot of shades and tints of life that were previously under-appreciated, neglected or ignored. Many things (both, material and immaterial) were taken for granted. The microscopic details in nature, the refuge of a family, the freedom of movement, the grocery store keepers, the electricity department (that power outage day was so annoying), the availability of medical staff, the Parle-G manufacturers, yes, literally everything! Restrictions! Restrictions stood out during this period. The lockdown restricted all the rash human activity. Wars were stopped, transport of all kinds were stopped, work was stopped, exploitation of the earth was stopped, and taking things for granted was stopped. For a brief moment in all of history it might have been, but it felt good for that brief moment; as it reminded me of the poem, 'Keeping Quiet' by Pablo Neruda, where the poet asks everyone in the world to observe twelve seconds of stillness; and he describes to be an 'exotic moment'.*

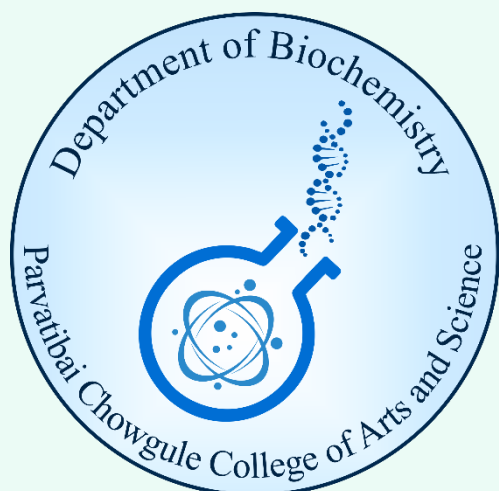
*When I came across this wish of his, in my class 12 English textbook, I thought to myself, "Impossible!"; and read through the poem only because it was in the syllabus. Two years later, I'm satisfied that I ever came across those poetic thoughts.*

*While the moment of inactivity seemed like a serene phenomenon to me, I was aware, that it wasn't the same thought in the minds of poor, the needy and the helpless. People began losing their jobs (from maids to flight-attendants, from daily-wage earners to small-scale entrepreneurs), people started feeling lost and hopeless (if they didn't expect to be stranded away from their family all of a sudden, or if, suddenly, they had to be cooped up all by themselves with nobody to find comfort in), people had to worry about what their family would eat.*

*But all people had this in common, (irrespective of what circumstance they were in) at that moment – Everyone had to take a step back from the routine everyday commotion and re-focus their energy towards this brand new conundrum.*

*- In his poem, Pablo Neruda intended that the stillness should be used for quiet introspection and creating a feeling of mutual understanding among human beings. To be fair, the great lockdown achieved his wish to a great extent!*

*- Written by Ms. Eunice Rodrigues, S.Y.B.Sc., Dept. of Biochemistry*



Editor: Ms. Bhavya G. Bhat  
Reports of activities contributed  
by: Dr. Aduja Naik and the  
students featured in this edition.

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