

Department of Marine Biotechnology

Bharathidasan University

Tiruchirappalli-620024

INDUSTRIAL AND INSTITUTE VISIT REPORT

(12.09.2023 TO 16.09.2023)

INTRODUCTIONS

Industrial visit is considered as one of the tactical methods of teaching. The main reason behind this - it lets student to know things practically through interaction, working methods and employment practices. Moreover, it gives much exposure from academic point of view. Main exposure or aim of industrial visit is to provide an exposure to students to recollect or visualized directly about practical working environment.

They also provide students a good opportunity to gain full awareness about industrial practices and its significance. Through industrial visit students get awareness about new technologies, how it is possible in the field level. Technology development is a main factor, about which a student should have good knowledge.

The visit aimed to bridge the gap between theoretical knowledge acquired in the class and real world application with the institutes. During this trip, students visited several institutes and gained knowledge on the various experiments and the project going on in that respective institutes and their hopes.

It was a 5 days trip to the various Institute in Kochin, Kerala. Followed by a refreshing trip to Munnar and Wagamon. In these 5 days we experienced a lot of good things as well as created many memories. The trip started 12th September, 2023 and on 16th September, 2023 [12/9/23-16/9/23] ended.

DEPARTURE:

The trip started from Department of Marine Biotechnology, Bharathidasan University, Trichy at around 9:00 pm. A total of 20 members gathered and a bus was booked for the entire trip.

DAY 1

We reached the residency at Kochin by 4:00am on 12/9/23.

INSTITUTE 1:

We visited **ICAR-Central Institute of Fisheries Technology**, by 10:00 am on 12.09.2023. There we were provided with a video presentation, which gave us insight about the workings of that institution.

Later we visited various departments of the Institute - like Department of Microbiology,



Department of Biotechnology and fermentation lab, where the staffs explained us about the different working going on there.

These labs are mainly focusing in the analysis of pathogens in the fish samples and value food-added products from shell fish and fin-fish. After, we visited Food Processing division, where we learned about the production of value-added products and their stability over time. There we saw nearly 20 different value-added products like Fish Samosa, Fish fingers, Fish momos, Seaweed cookies, Prawn papads etc.



INSTITUTE 2:

Cochin University of Science and Technology, Lakeside Campus, Kochi.

CUSAT, Lakeside Campus, Kochi was a wonderful campus with a majestic view. The coordinator of School of Marine Science, Professor and Head of the Department of Marine Biology, **Dr. Mohamed Hatha Abdulla** gave us an enlightening speech. He enlightened us about the opportunities in the field of Marine Biology. He also shared about the experiences he gained during his academic stages of life.

We also visited the different departments in the Campus, where we saw the Next Generation Sequencer [NGS].



INSTITUTE 3:

CSIR- National Institute of Oceanography, Kochi

Around 2:30 pm, we visited the regional centre of CSIR-NIO at Kochi, where we visited various divisions of the institute.

At first, we visited the Marine Ecology Department, where the staff explained about Marine Diversity in Arabian Sea and Bay of Bengal, and why there is a difference in diversity among them.

Then the staff explained us about various instruments like, Vertical Point Water Sampler and Grab for collection of water at various depths and sediment Samples respectively.

By the end of the Day we were tired and we look a peaceful coach by the shore of Marine Drive and witnessed the beautiful sunset. We travelled in Kochi Water Metro and it was a beautiful riding experience for us.



DAY 2

INSTITUTE 4

MPEDA and RGCA Multi-Species. Aquaculture Centre [MAC], Kochi

RGCA is an Aquaculture institute which is working constantly to overcome the food scarcity and provide nutritious sea foods to all section of the society. They are culturing different species of finfish and Shell-fish

Fin Fish

- 1) Tilapia [*Oreochromis niloticus*]
- 2) Pear spot [*Etroplus suratensis*]

Shell Fish

- 1) Tiger Shrimp [*Penaeus monodon*]

There we visited the Hatchery and Nursery unit of Tilapia fish. The staff explained is about the Various parameters to maintain aquaculture pond, both indoor and outdoor aquaculture system. They taught about the various factors to be maintained for feed formulations.

We witnessed different aquaculture practices like - **Flocculation aquaculture [Biofloc culture], Aquaponics System and Re-circulatory Aquaculture unit.** We also visited the seed Fish packaging division, where a demonstration of proper packaging methods was shown to us by an expert.





INSTITUTE 5

ICAR-Central Marine Fisheries Research Institute, Kochi.

We visited CMFRI around 2.00 pm at 13/9/23. We visited the museum in CMFRI and it had a huge collection aquaculture related books and journal, in the museum has huge of various specimens collected from the surround water bodies, belonging to different taxonomic groups.



We saw the aquarium section of CMFRI. Later that day, we visited Fort Kochi. In Fort Kochi, we refracted our self by the sea side admiring the beautiful architecture of Dutch Style buildings.



DAY 3 AND 4

Munnar and Wagamon

We started to travel for Wagamon at 4:00 am at 14/9/23. There we visited waterfalls and Sunset points. We started our trail by 7:00 in morning and completed by 12:00 clock. We reached Munnar on the same day by 8:00 pm.

In Munnar we visited many places like dam and Echo point. On our way, we saw wild elephants and stopped our bus to visualize them and admire their beauty.





DAY 5

On the last day we visited, **Chinnar wild life Sanctuary** and then we went to Thirumurthy falls. We concluded the day by visiting **Palani Temple** and by the visit our trip was ended.

We reached our University by 12:30pm at 17/9/23 and the Industrial visit was a knowledgeable experience for us. We came to know various opportunities in the field of Marine Biotechnology and learnt various techniques in the visit

CONCLUSION

The industrial visit was a profound learning experience for all the students of the Marine Biotechnology department. The visit has enriched our academic Journey and also has inspired us, the students, to Contribute to the responsible growth of the aquaculture industry, to conserve the oceans. The visit fostered Connections and networking opportunities with experts in the fields of marine fisheries research, technology and aquaculture. The connections can lead to potential, collaborations, internships and research Opportunities, ensuring the academic and professional journey of the students.



