



**DEPARTMENT OF AQUACULTURE
M.E.S ASMABI COLLEGE, P. VEMBALLUR**

**REPORT ON THE INVITED TALK: "BIOINFORMATICS AND ITS
APPLICATIONS IN AQUACULTURE"**

Date: 4th March 2025

Venue: Conference Room, M.E.S Asmabi College

Time: 9:30 AM to 1:00 PM

Context of the Talk

In recent years, the field of aquaculture has been significantly influenced by advancements in bioinformatics, especially in areas like genomics, proteomics, and biological data management. Recognizing the growing importance of bioinformatics in aquaculture research and industry, the Department of Aquaculture, M.E.S Asmabi College, P. Vemballur, organized an invited talk on the topic "*Bioinformatics and its Applications in Aquaculture*" on 4th March 2025. The programme was designed to introduce students to the fundamentals of bioinformatics and highlight its diverse applications in aquaculture, marine sciences, taxonomy, and fisheries.

Programme Highlights

- **Participants:** 33 Final Year B.Sc. Aquaculture students
- **Resource Person:** Dr. Mujeeb Rahiman K M, Associate Professor, Department of Industrial Fisheries, Cochin University of Science and Technology (CUSAT)

The event began with a welcome address and introduction of the resource person by Dr. K Kesavan. He emphasized the significance of interdisciplinary knowledge, especially in integrating computational tools in biological sciences.

Content of the Talk

Dr. Mujeeb Rahiman delivered an insightful presentation covering the following key areas:

1. **Introduction to Bioinformatics:**
 - Definition, scope, and importance of bioinformatics in modern biological sciences.
 - Overview of major bioinformatics tools and techniques.
2. **Fundamentals of Genomics and Proteomics:**
 - Basics of DNA, RNA, and protein structures and functions.
 - Introduction to genomics and proteomics and their relevance in aquaculture.
3. **Biological Databases:**
 - Overview of major biological databases such as GenBank, UniProt, and PDB.
 - Importance of data collection, curation, and analysis in aquaculture research.

4. Applications in Aquatic Sciences:

- Use of bioinformatics in fish genetics, breeding, and disease management.
- Role of molecular markers and genome sequencing in aquaculture.
- Applications in taxonomy and species identification using molecular tools.
- Case studies on fisheries research supported by bioinformatics approaches.

The talk was supplemented by a multimedia presentation, making complex topics engaging and easier for the students to grasp.

Student Feedback

The session was well-received by the students, who appreciated the depth of knowledge and the clarity with which the resource person explained complex topics. Some highlights from the feedback collected:

- Students found the talk highly informative and relevant to their field of study.
- The examples and case studies discussed helped in better understanding the practical applications of bioinformatics in aquaculture.
- Many students expressed a newfound interest in exploring bioinformatics tools and techniques for their future studies and research projects.
- The interactive nature of the session, with a dedicated Q&A segment, allowed students to clarify their doubts and engage actively.

Outcome of the Programme

The invited talk successfully met its objective of introducing the students to the vast field of bioinformatics and its applications in aquaculture and allied sciences. Key outcomes include:

- Students gained a foundational understanding of bioinformatics and its interdisciplinary nature.
- Awareness of the role of bioinformatics in modern aquaculture practices, particularly in fish genetics, disease diagnosis, and species identification, was enhanced.
- The session inspired several students to consider bioinformatics as a potential area for higher studies or research.
- The programme contributed to broadening the academic horizon of the final-year students, preparing them for the application of computational tools in their future careers.
- **Conclusion**

The Department of Aquaculture expresses sincere gratitude to Dr. Mujeeb Rahiman K M for delivering such a comprehensive and enlightening session. The department also acknowledges the enthusiastic participation of the students, which made the programme highly interactive and successful. Further sessions on specialized topics in bioinformatics are being considered to continue this knowledge enrichment initiative.

Sd/ Head of the Department

SIGNED LIST OF PARTICIPANTS

Expert Lecture on 'Bioinformatics & Genomics'		
for III yr. B.Sc. AQUACULTURE		
48	March 4, 2025	10 AM PF 04
Sl. No	Name of the Student	Signature
1)	Abdu Rahman E	
2)	Al Anzees N	
3)	Harazatob E	
4)	K.S. Krishnapsiya	
5)	Lenitha Binu	
6)	Alwin Rison	
7)	Sneha Wadga PM	
8)	Krishnapriya . P J	
9)	Rajesh Shanave	
10)	Melavika Pooleep	
11)	Athulkrishna J P	
12)	Pooja K P	
13)	Mohamed Shuaib	
14)	Harsha K Hasi	
15)	Muhsina Musthafa	
16)	Ashitha Sivadassh	
17)	Ridha Sherin A	
18)	Gokul K S	
19)	Vihmeshkumar K A	
20)	Shahenaz NA	
21)	Vignitha V	
22)	Adithyan Anilkumar	
23)	PB Arisam Baby	
24)	Vijun M	
25)	Adithyan A S	
26)	Pahul P S	
27)	Akhil Krishna P A	
28)	Hridya Sarthash	
29)	Ananthapriyasha K P	
30)	Mohd. Sahib P V	
31)	Arsaf VA	
32)	Arijun Prithas K M	
33)	Devaganga AS.	

LIST OF PARTICIPANTS

SL. NO.	UTY REG NO.	NAME
1.	AIAWSAQ001	HANAZAINAB E
2.	AIAWSAQ002	ABDU RAHMAN ELLATH
3.	AIAWSAQ003	AL AMEEN N
4.	AIAWSAQ004	V M MUHAMMED SHUAIB
5.	AIAWSAQ005	KRISHNAPRIYA K S
6.	AIAWSAQ006	MUHSINA MUSTHAFA
7.	AIAWSAQ007	ALWIN RISON
8.	AIAWSAQ008	ATHULKRISHNA I P
9.	AIAWSAQ009	P M SIVA NANDAN
10.	AIAWSAQ010	PRINCE K P
11.	AIAWSAQ011	ASHITHA SIVADASAN
12.	AIAWSAQ012	DEVAGANGA A S
13.	AIAWSAQ013	HARSHA K HARI
14.	AIAWSAQ014	HRIDYA SANTHOSH
15.	AIAWSAQ015	LENITHA BINU
16.	AIAWSAQ016	MALAVIKA PRADEEP
17.	AIAWSAQ017	P J KRISHNAPRIYA
18.	AIAWSAQ018	RAFAH SHANAVAS
19.	AIAWSAQ019	RIDHA SHERIN A
20.	AIAWSAQ020	SHAHANAS N A
21.	AIAWSAQ021	VIGITHA V
22.	AIAWSAQ022	ADITHYAN ANILKUMAR
23.	AIAWSAQ023	ADITHYAN A S
24.	AIAWSAQ025	AKHILKRISHNA P H
25.	AIAWSAQ026	ANANTHAKRISHNAN K P
26.	AIAWSAQ027	ANSAF V A
27.	AIAWSAQ028	ARJUNKRISHNA K M
28.	AIAWSAQ029	GOKUL K S
29.	AIAWSAQ030	MOHAMMED SALIH P Y
30.	AIAWSAQ034	P B NISSIN BABU
31.	AIAWSAQ035	RAHUL P S
32.	AIAWSAQ037	VIJUN M
33.	AIAWSAQ038	VINMESH KUMAR K A

FEEDBACK

The following feedback (see next page) form was supplied and responses were collected after the programme. The summary result of feedback is added.

EXPERT LECTURE - EVALUATION FORM

DEPARTMENT OF AQUACULTURE
M E S ASMABI COLLEGE
*EXPERT (Invited) TALK FOR FINAL Yr. B.Sc. AQUACULTURE
(2022 ADMISSION BATCH)*

Please respond to the following items by using the scale below:

5=Excellent 4=Very Good 3=Good 2=Fair 1=Poor

1. The speaker presented materials clearly and concisely.

5 4 3 2 1

2. The speaker covered the material sufficiently.

5 4 3 2 1

3. The information presented was relevant to your needs and expectations.

5 4 3 2 1

4. Sufficient opportunity was provided for questions and interactions.

5 4 3 2 1

5. I am benefitted by the session.

5 4 3 2 1

Special comments/suggestions if any: *(please give in two or three sentences)*

Name:

Signature:

Date: 04/03/2025



**MES ASMABI COLLEGE,
P. VEMBALLUR**

DEPARTMENT OF AQUACULTURE

INVITED TALK

**BIOINFORMATICS:
APPLICATION IN
AQUACULTURE**

04-MARCH-2025

10:00 AM

VENUE: CONFERENCE HALL



**DR. MUJEB RAHIMAN K M
ASSOCIATE PROFESSOR
SCHOOL OF INDUSTRIAL FISHERIES
COCHIN JUNIVERISTY OF SCIENCE
AND TECHNOLOGY (CUSAT)**

**DR. K. KESVAN
HOD**

**DR. REENA MOHAMMED P. M.
PRINCIPAL**



INVITED TALK ON 'BIOINFORMATICS' FOR FINAL YEAR B.Sc. AQUACULTURE STUDENTS – DR. MUJEEB RAHIMAN, CUSAT, 04/03/2025

