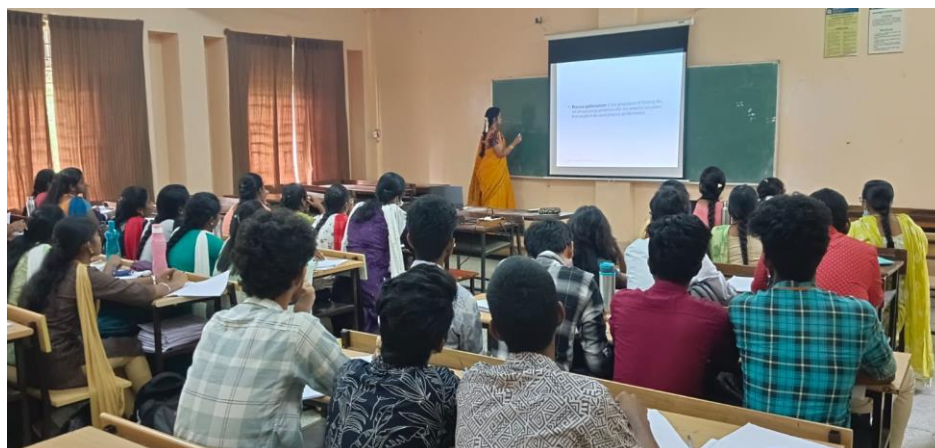


5.5. INNOVATIONS BY THE FACULTY IN TEACHING AND LEARNING

The following are the innovative practices applied in regular Teaching:

1. USE OF ICT TOOLS:

- ❖ Teachers use ICT enabled tools to build dynamic classrooms and make lessons more understandable.
- ❖ ICT in education promotes student engagement and knowledge retention.
- ❖ Use of online Videos, Pictorial Presentations during regular teaching helps the faculties to deliver the content in a more demonstrative manner.



Faculty use ICT tools for regular teaching

2.USE OF PRACTICAL DEMONSTRATION:

- ❖ Faculties are also being engrossed in teaching the students via practical demonstration through laboratory experiments.
- ❖ Such learning helps the student see the process live and understand how to apply theoretical knowledge practically.
- ❖ Use of experimental knowledge accounts for the principles of reflective thinking.



Faculty provide practical demonstration

ACADEMIC INNOVATION AND ENTREPRENEURSHIP

DEVELOPMENT PROGRAM – EDII - AIEDP:

Innovation is the starting point for entrepreneurship, as it involves the creation of new and valuable ideas, also it is often regarded as a greatest national advantage in an increasingly competitive world. The Entrepreneurship Development and Innovation Institute, has launched a comprehensive program i.e. Academic Innovation and Entrepreneurship Development Program (IEDP or AIEDP). One such IEDP hub for Trichy is present in our campus. The Entrepreneurship Educator Training for Faculty is offered by AIEDP. The trained faculty will provide training and guidance to about 100 students. Successful implementation of the program is based on structured set of activities on campus, ideation, opportunity evaluation and selection. It has a wide clientele ranging from students, existing and aspiring entrepreneurs and clusters. EDII-AIEDP provides all possible assistance to promote creative thinking and an entrepreneurial mind set among the students so as to help convert socially relevant

innovative ideas into products. EDII offers training solutions from mind to market. It also organizes various competitions throughout the year to encourage students. In addition to facilitating entrepreneurship development, EDII also support research and innovation promotion in MSME and public sector.

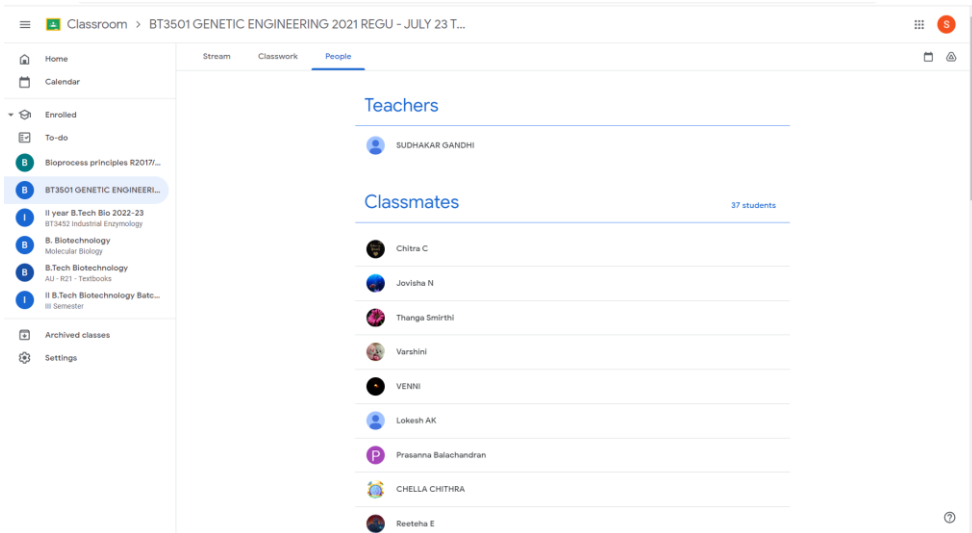
TRAINING PROGRAMS THROUGH PLACEMENT CELL:

The placement and training cell offers due training to the students for securing a job. The student coordinators are elected from each department during their pre-final year and the Placement and Training Cell are taken care of by them. The students are given training in their Aptitude, Technical, Communication, Logical and Verbal Reasoning and Soft skills from the third year of the bachelor's degree. A number of wel-reputed companies are invited for the On-Campus Recruitment.



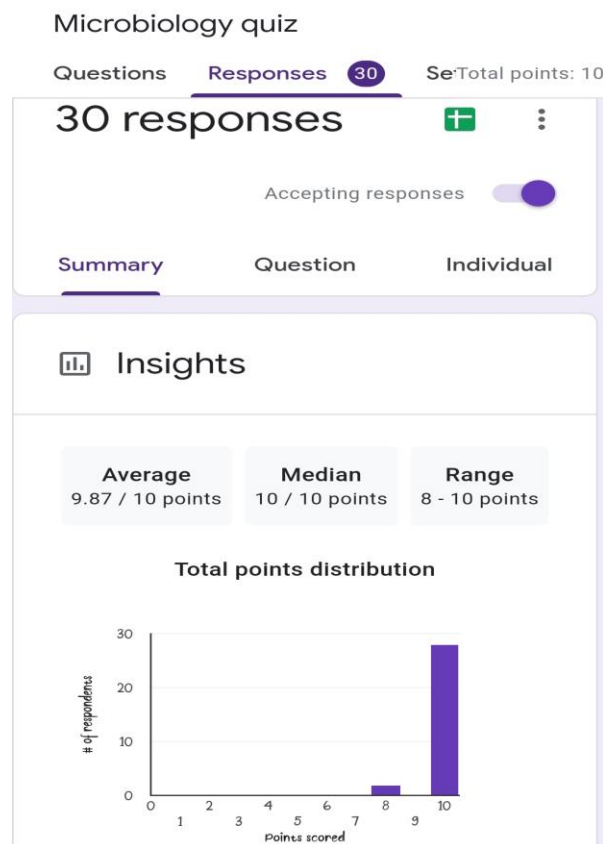
GOOGLE CLASSROOM:

Teachers have prepared their Google classroom and enrolled students in the same. This method has facilitated teacher student interaction along with online distribution of notes and communication of assignments. This method allows students to streamline assignments, boost collaboration, foster communication, and engaging students in learning online or remotely.



DEVELOPMENT OF E-CONTENT:

Teachers have generated Google forms and other evaluation methods for online assessment of student's knowledge. This also encourages students to actively participate in the assessment such as quiz.



Faculty regularly assess students through online quiz

ATTENDED E-COURSES ORGANIZED BY NPTEL – SWAYAM:

Faculty members have attended various online courses such as courses organized by NPTEL under SWAYAM platform by Ministry of Human Resources Development, Government of India.



NPTEL-AICTE Faculty Development Programme

(Funded by the Ministry of HRD, Govt. of India)



This certificate is awarded to

P.S. SUDHAKAR GANDHI

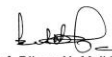
for successfully completing the course

Genetic Engineering: Theory and Application

with a consolidated score of **77 %**


Prof. Andrew Thangaraj
NPTEL Coordinator
IIT Madras

(Jul-Oct 2019)


Prof. Dileep N. Malkhede
Advisor-I (Research, Institute & Faculty Development)
All India Council for Technical Education

Roll No: NPTEL19BT15S32240399

To validate and check scores: <http://nptel.ac.in/noc>

The candidate has studied the above course through MOOCs mode, has submitted online assignments and passed proctored exams.
This certificate is therefore acceptable for promotions under CAS as per AICTE notifications dated 24th July 2018, similar to other refresher / orientation courses.
F.No. AICTE / RIFD / FDP through MOOCs / 2017-18



NPTEL-AICTE Faculty Development Programme

(Funded by the Ministry of HRD, Govt. of India)



This certificate is awarded to

A.SIVAKUMAR PONNAMBALAM

for successfully completing the course

Nanotechnology in Agriculture

with a consolidated score of **85 %**


Prof. Andrew Thangaraj
NPTEL Coordinator
IIT Madras

(Aug-Oct 2018)


Prof. Dileep N. Malkhede
Advisor-I (Research, Institute & Faculty Development)
All India Council for Technical Education

Roll No: NPTEL18BT05S1207012

To validate and check scores: <http://nptel.ac.in/noc>

The candidate has studied the above course through MOOCs mode, has submitted online assignments and passed proctored exams.
This certificate is therefore acceptable for promotions under CAS as per AICTE notifications dated 24th July 2018, similar to other refresher / orientation courses.
F.No. AICTE / RIFD / FDP through MOOCs / 2017-18



Faculty members who have completed NPTEL online courses

Student centric methods, such as experiential learning, participative learning and problem solving methodologies are used for enhancing learning experiences

EXPERIENTIAL LEARNING:

- ❖ The students learn theoretical topics by performing theory-based experiments.
- ❖ To enhance creativity in students they are engaged with assignments, mini projects, discussion session and seminars.
- ❖ Industrial visits are arranged.



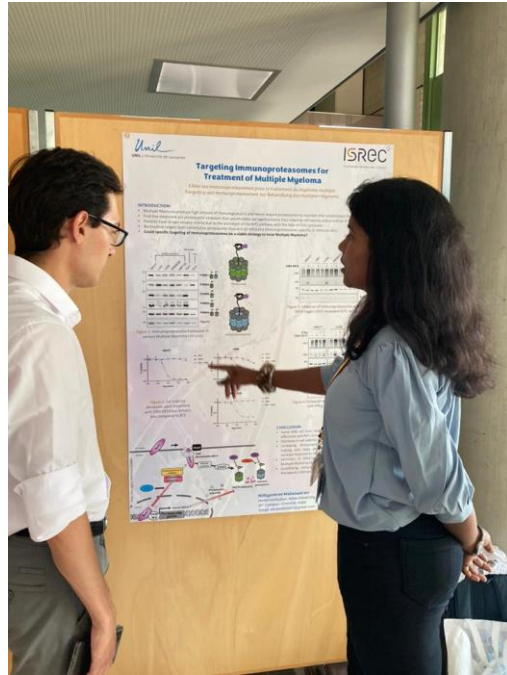
Experimental teaching provided by faculty



Industrial visits are arranged in our department

PARTICIPATIVE LEARNING:

- ❖ The students are motivated to participate in co-curricular activities in the department such as subject based quiz competition and poster presentation.
- ❖ Friendly atmosphere is created for the students as they could feel free to ask questions amidst the lecture.
- ❖ Department encourages students to participate in the oral and poster presentation competitions.
- ❖ Students of UG are sent for oral and poster presentation competitions in National seminars/ conferences/ workshops/ symposiums.
- ❖ Demonstrations on sophisticated instruments and software are organized by the department.
- ❖ Department organizes guest lectures from industries or professional organizations for the students.
- ❖ Students are also sent for a minimum duration of industrial training or internship as they gain more exposure to the department of biotechnology.



Participation in Poster Presentation of our student



Rajiv Gandhi Centre for Biotechnology, Thiruvananthapuram 695 014, Kerala State, India. **രാജീവ് ഗാന്ധി കേന്ദ്രം ജീവശാസ്ത്ര പഠനം, തിരുവനന്തപുരം 695 014, കേരളം, ഇന്ത്യ.**
 An Autonomous National Institute for Discovery Innovation & Translation in Biotechnology and Disease Biology. **അന്താരാഷ്ട്രികമായി ഉയർന്നുവരുന്ന കണ്ടുപിടിത്തം, രോഗങ്ങൾക്കെതിരെ സഹായം നൽകുന്ന ജീവശാസ്ത്ര പഠനം, രോഗങ്ങൾക്കെതിരെ സഹായം നൽകുന്ന ജീവശാസ്ത്ര പഠനം.**
 Government of India, Ministry of Science & Technology, Department of Biotechnology.

RGCB-2022:training/S085

CERTIFICATE

This is to certify that **Ms. Saayaa N** has successfully completed a one-month internship project entitled **"Virtual screening of FDA approved molecules from drug bank library against SARS-CoV-2 omicron variant (XBB) spike protein"** under the guidance of **Dr. Shijulal Nelson-Sathi (Scientist-C)** at the Bioinformatics laboratory, Rajiv Gandhi Centre for Biotechnology during the period of 26th June 2023 to 26th July 2023.

Dr. Shijulal Nelson-Sathi
 Scientist-C & Coordinator
 Bioinformatics Facility, RGCB




RGCB-2022:training/S085
 Thiruvananthapuram: 695 014, Kerala, India. Phone: (0471) 2529460 (30 Lines), 2347975, 2348104, 2348753, 2345899
 Fax: (0471) 2348096, E-mail: director@rgcb.res.in, info@rgcb.res.in, Web: www.rgcb.res.in

Students are encouraged to undergo short-term internships



SELF-LEARNING:

Students are also motivated to follow the lectures uploaded by experts from academia on the web platforms like NPTEL



Elite NPTEL Online Certification


(Funded by the MoE, Govt. of India)



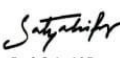
This certificate is awarded to
VINITHA N
for successfully completing the course
Human Molecular Genetics
with a consolidated score of **77** %

Online Assignments	17.5/25	Proctored Exam	59.69/75
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Total number of candidates certified in this course: **992**


Prof. B. V. Ratish Kumar
Chairman, Centre for Continuing Education
IIT Kanpur

Jan-Feb 2022
(4 week course)


Prof. Satyaki Roy
NPTEL Coordinator
IIT Kanpur

 Indian Institute of Technology Kanpur



Roll No: NPTEL22BT07S34361375

To validate and check scores: <https://nptel.ac.in/noc>



Elite NPTEL Online Certification

(Funded by the MoE, Govt. of India)



This certificate is awarded to
A A AADHITHYA
for successfully completing the course
Bioelectrochemistry
with a consolidated score of **83** %

Online Assignments	18.33/25	Proctored Exam	64.5/75
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Total number of candidates certified in this course: **83**


Prof. B. V. Ratish Kumar
Chairman, Centre for Continuing Education
IIT Kanpur

Jan-Feb 2023
(4 week course)


Prof. Satyaki Roy
NPTEL Coordinator
IIT Kanpur

 Indian Institute of Technology Kanpur



Roll No: NPTEL23BT31S45730918

To validate the certificate 

No. of credits recommended: 1 or 2

DISCUSSION CLASSES AND QUIZ:

The students are allowed to talk on any topic they are interested in. This discussion class will motivate the students to speak in spite of their stage fear. The other students of the class will involve in the topic as a discussion. They also conduct quiz competition among themselves based on current ideologies of the lessons being taught and the answers are given according to the discussion.



PROBLEM BASED LEARNING/ PROJECT BASED LEARNING:

To inculcate the critical thinking ability among the students the following problem based learning activities are carried out by faculty.

- ❖ Problem solving during classroom teaching and lab hours.
- ❖ Project work (Research work) is assigned to final year UG students.