

NATIONAL COLLEGE
Manacaud, Trivandrum



**DEPARTMENT OF BIOCHEMISTRY
& INDUSTRIAL MICROBIOLOGY**

ANNUAL REPORT 2022-2023

Message from the HOD

It is with utmost pleasure that we the department present the Annual Report for the academic year 2022-'23. Through an excellent and exemplary journey of providing quality education, we have etched for ourselves a brilliant history, abounding in achievements and expertise.

The Department of Biochemistry and Industrial Microbiology (double main course) was established in the year 2000. The department offers both undergraduate (BC&IMB) and postgraduate (Biochemistry) degrees from University of Kerala.

Apart from providing state-of-the-art amenities that facilitate smooth learning and a brilliant support system consisting of seasoned and eminent teaching faculty and the Principal and other staff, gives our students a unique experience in learning, aimed at not only making them adept at their syllabus but also molding them to be augmented personalities, possessing rich and broad outlook.

Our degree program is a unique and comprehensive program designed to impart theoretical and practical training encompassing all the major areas of Biochemistry & Microbiology.

The department has well qualified faculties dedicated to teaching, follows a well-disciplined teaching – learning process and maintains a good student – teacher relationship in campus. All our faculty members have excellent academic credentials from reputed universities. The students get opportunities to participate in scientific deliberations, presentations, industrial visits and field trips which in turn inculcate a sort of professional training capable of exploring the new horizons in the challenging world of academics.

Regards

RAKHI V R

HOD, Dept of BC & IMB

National College

ABOUT THE DEPARTMENT

The Department of Biochemistry and Industrial Microbiology in National College was established in the year 2000. The Department offers both undergraduate (B.Sc.) and Postgraduate (M.Sc.) degrees from the University of Kerala. M.Sc. Biochemistry course was introduced in the department in 2015. The department of BC & IMB aspires to lead in the areas of Biochemistry & Industrial Microbiology. The main aim of our department is to create opportunities and supporting infrastructure for students to achieve their aspirations.

VISION OF THE DEPARTMENT

- The department envisions providing quality education to students, equipping them with knowledge and skill so as to deal with the realities of society
- The department envisages learning and understanding in the areas of Biochemistry and Industrial Microbiology for promoting employable skills.
- The department is committed to achieving high standards in both teaching and research and to become a sought - after destination for highly motivated students and faculty.

MISSION OF THE DEPARTMENT

- Empowering students through excellence in teaching - learning and other academic processes.
- To create opportunities and a supporting infrastructure for students - through laboratory courses , projects, dissertations etc to achieve their aspirations
- To maintain high standards of teaching and continually upgrading the quality of teaching through periodical review and feed-back mechanisms

STUDENTS DETAILS

Course	Year	Girls	Boys	Total
B.Sc. Biochemistry and Industrial microbiology	I year	16	9	25
	II Year	22	8	30
	III Year	19	13	32
M.Sc. Biochemistry	I Year	10	1	11
	II Year	10	1	11
Total Count		77	32	109

FACULTY DETAILS

Sl.No	Faculty Name	Designation	Qualification
1	Mrs. Rakhi V R	Assistant Professor Head, Dept. of BC&IMB	<ul style="list-style-type: none"> • MSc • PhD(Pursuing)
2	Mrs. Geethu Krishna	Assistant Professor	<ul style="list-style-type: none"> • MSc • ARS-NET • Ph.D. (Pursuing)
3	Mrs. Deepthi R V	Assistant Professor	<ul style="list-style-type: none"> • MSc • B.Ed.
4	Mrs. Shahana Shihab	Assistant Professor	<ul style="list-style-type: none"> • MSc • Resigned on 31stMay 2023
5	Mrs. Akhila B	Assistant Professor	<ul style="list-style-type: none"> • MSc • CSIR-UGC-NET
6	Mrs. Athila	Assistant Professor	<ul style="list-style-type: none"> • MSc
7	Dr. Nisha V R	Assistant Professor	<ul style="list-style-type: none"> • MSc PhD. • CSIR-UGC-JRF-NET
8	Dr.Jasmine	Assistant Professor	<ul style="list-style-type: none"> • MSc, PhD • CSIR-UGC-JRF-NET • Resigned on 22/12/2022
9	Ms. Kalpana V S	Assistant Professor	<ul style="list-style-type: none"> • MSc • PhD Presubmission Seminar completed. • KSCSTE Research fellowship
10	Dr.Vidya P	Assistant Professor	<ul style="list-style-type: none"> • MSc, PhD • ARS-NET • CSIR-UGC-JRF-NET

DEPARTMENT RESULTS

Course Pass Percentage 2022 - 2023

B.Sc. Biochemistry and Industrial microbiology:

Total number of students registered: 32

Total number of students appeared: 29

Total number of students passed: 13

Pass Percentage: 45%

MSc Biochemistry:

Total number of students registered: 16

Total number of Students appeared: 14

Total number of students passed: 6

Pass Percentage: 42.85%

ACHIEVEMENTS OF STUDENTS



RESHMA I R (2014-2017 UG Batch) pursuing an interdisciplinary Ph.D. from IIT Hyderabad in Material Science and Biomedical Departments got **Prime Minister's Research fellowship** worth **50 Lakhs**.



PARVATHI RAJAN got selected for doing **PhD** in **Biochemistry** under **Arizona State University** in the college of Liberal arts and Science,, Tempe, Arizona ,USA.



ANAGHA C (2017-2019 PG Batch) qualified CSIR JRF AIR, 2022 and she joined for **Ph.D. at Central University of Kerala.**



HIBATHUL KAREEM S V (2016-2018 PG Batch) qualified **GATE Examination, 2023**



NIKHIL VENUGOPAL (2020-2023 UG Batch)

- Completed **NPTEL online certification** course Biochemistry IITM during Jan-April 2023
- Secured **9th rank** in BSc Biochemistry and Industrial Microbiology degree examination of the University of Kerala

ACTIVITIES OF STUDENTS



Six UG and 3 PG students participated in the Certificate training program on instrumentation organized by **Bioroot Exploration India Pvt Ltd** during Sep 2022.



Six students from MSc biochemistry attended the workshop and Hands -on training in monoclonal antibodies organized by **Institute of Virology** on Dec 8&9 2022



Five students from Msc biochemistry and one faculty attended the **science day** celebration held at **RGCB** on Feb 28,2023



Six students from MSc Biochemistry attended the open day programme at **CSIR NIIST, Pappanamcode** on March 18, 2023



Fifty two students from our department along with 2 faculties participated in the 2 day workshop organized by **CENTRE FOR GENOMICS, NIMS Hospital, Neyyattinkara** on April 11 and 12, 2023



Kerala University Youth Festival -May 5-9, 2023

The Kerala University Youth Festival was held in Alappuzha. Our department students also participated in various events and showed their talent. **KRISHNA SURESH L and AISHWARYA U V** of S4 B.Sc. was a part of the National College Thiruvathira team



College Union 2022-23

SANJANA ASSIM of S4 BSc was elected as the Lady representative of college union



Interzone Roll Ball Championship 2022-2023

AKSHAY R NAIR AND MUHAMED YASEEN N (S6 B.Sc.) members of National College Roll Ball team were **first runners up in Kerala university** Interzone roll ball championship



Inter College Cricket Match- 2022-2023

GAUTHAM SEKHAR (S4 BSC), participated in Kerala University South zone Intercollegiate cricket Tournament.

PLACEMENT 2022 -2023



NOURIN KHADIJA A (2019-2021 PG Batch) got placed as a **chemist** at Lotus soil and Constructional Materials Inspection Est. Mussafah west4, Abudhabi, UAE



SWETHA B PRADEEP (2020-2022 PG Batch) got placed as **chemist** at Quality Control Laboratory, Muralya Dairy Products Pvt Ltd. Kattakkada.



MADHAVI BAIJU (2018-2020 PG Batch) was appointed as a **Guest lecturer** at Sree Ayyappa College, Eramallikara



ASWATHY of S4 MSC got placed in the MINI JOB FAIR Dec 2022, National Employment Service (Kerala)



ADITHYA ACHARYA S6 BSc, participated and presented a paper presentation in the **Swadeshi Science congress 2023** at NIT, Calicut.



GRESHWIN, S4 MSc, participated and presented a paper in the **National conference, Bioradance 2023** organized by **American society for Microbiology** at Pushapagiri Medical College Thiruvalla.

DEPARTMENTAL ACTIVITIES

‘ SCIENCE CLUB -“SCIENTIA ‘

A Science club was formed during the academic year 2021 and was named “SCIENTIA “. The club’s primary aim was to develop a scientific attitude and develop an interest in scientific activities. The members of the club included both UG and PG students and department teachers. The club meets weekly and many seminars, presentations and workshops were organized by the club and presented by the students. Club has been successful in inspiring students in the field of science.

Food Day Celebration-Oct 16 was celebrated this year by having Food related Talks, Group discussions, Food fun games





G.N Ramachandran Centenary 8th October was celebrated by conducting debates and group discussions



Club organized an online talk on “**NMR SPECTROSCOPY**” by **Dr. ASITHA L R**, Asst Professor, Dept of Physics, and SN College Kollam on Jan 27, 2023.



ORIENTATION CLASSES

- Students' orientation classes were organized by the department teachers for fresher students.



- Daily classes were taken on specific topics like scope and career options in life science stream, Research, CSIR UGC NET Examination,

- A special counseling session was taken by Dr.Muhammed Fasil (HOD, BSW Department, and National College) on how to face examinations and how to manage stress.



- Career development classes were taken for the final year students about the higher studies and career options in our field

CLUB ORGANIZED 2 INDUSTRIAL VISITS

1. CTCRI ,Sreekaryam 8th Feb,2022



2. Jawaharlal Nehru Tropical botanical garden 24th Feb,2023



A new programme named “ **Bio fun** ”was started during 2022, where the students will be conducting quiz programs, fun facts, fun games, and bio news presentation



TOUR 2023

As part of the syllabus curriculum the department organized an Industrial Visit to The Kannan Devan Hill plantation Pvt Ltd, Madupetty, and Munnar on 25th February 2023, along with two faculties. Kodaikanal, Vagamon and Wonderla (Kochi) were other destinations of the trip which started from 23rd Feb 2023 to 27th Feb 2023.



FAREWELL-2023



Group photo with 2020-2023 BSc BCIMB batch students



A memento was presented to **NIKHIL VENUGOPAL** secured **9th rank** in BSc Biochemistry and Industrial Microbiology degree examination of the University of Kerala



A medal was awarded to **ADITYA ACHARYA** secured **11th rank** in BSc Biochemistry and Industrial Microbiology degree examination of the University of Kerala



A medal was awarded to **RESHMA R B** secured '**A**' grade in BSc Biochemistry and Industrial Microbiology degree examination of the University of Kerala



A medal was awarded to **ANAGHA** secured '**A**' grade in BSc Biochemistry and Industrial Microbiology degree examination of the University of Kerala



A medal was awarded to **KARUNA KRISHNAN** secured '**A**' grade in BSc Biochemistry and Industrial Microbiology degree examination of the University of Kerala University of Kerala.



A medal was awarded to **RISHIKESH** secured '**A**' grade in BSc Biochemistry and Industrial Microbiology degree examination of the University of Kerala



A medal was awarded to **NISANA S** secured **4th rank** in first semester BSc Biochemistry and Industrial Microbiology degree examination of the University of Kerala

DEPARTMENTAL CONTRIBUTIONS TO THE COLLEGE

Sl no	Faculty name	NAAC CRITERIA	College committee group	Position	Other duties
1	Mrs. Rakhi VR	NAAC CRITERIA VII	Remedial Coaching Committee	Member	General discipline duty
			Students Handbook Committee	Member	
			College level Monitoring Committee	Member	
			Purchase Committee	Member	
2	Mrs.Akhila.B	NAAC CRITERIA III	Blood Donation Cell	Member	College Staff club committee member , General discipline duty
3	Mrs.Deepthi R V	NAAC CRITERIA II	Literary club	Member	General discipline duty, member of DLMC, staff club
			Canteen committee	Convener	
			Program committee	Member	
4	Dr. Nisha V R	NAAC CRITERIA III	Students Counselling Cell	Member	General Discipline Duty
5	Ms.Kalpana V S	NAAC CRITERIA III		Member	General discipline duty
6	Dr.Vidya P	NAAC CRITERIA III	Research cell	Member	General discipline duty

SEMINAR ATTENDED BY FACULTIES

Sl. No	Faculty Name	Programme/Title	Duration/Date	Organized By
1	Mrs.Rakhi.V.R	National symposium on Molecular diagnostics and genetic counseling	2 weeks(from 2/9/2022	Inter University Centre for Genomics and gene technology, University of Kerala,Kariyavattom
		Class on Advanced Biochemistry	01/04/2023 to 02/04/2023	Dept. of Biochemistry Govt. College for Women, Trivandrum
2	Mrs.Akhila.B	DST-SERB sponsored workshop on "Cherishing Scientific Minds for Nourishing Human Health	20/12/2021to 21/12/2022	ICAR-CTCRI
		National symposium on Molecular diagnostics and genetic counseling	2 weeks(from 2/9/2022	Inter University Centre for Genomics and gene technology, University of Kerala,Kariyavattom
		Class on Advanced Biochemistry	01/04/2023 to 02/04/2023	Dept. of Biochemistry Govt. College for Women, Trivandrum
3	Ms. Kalpana V S	National Science Day	28/02/2023	RGCB, Poojappura
		Class on Advanced Biochemistry	01/04/2023 to 02/04/2023	Dept. of Biochemistry Govt. College for Women, Trivandrum
		DNA Barcoding workshop	11/04/2023 to 12/04/2023	Centre for Genomics, NIMS Hospital, Neyyattinkara
4	Dr. Vidya P	DNA Barcoding workshop	11/04/2023 to12/04/2023	Centre for Genomics, NIMS Hospital, Neyyattinkara

DEPARTMENT PTA MEETINGS

Sl. No	Date	Class	Class in charge	Mode	Agenda
1	09/02/2023	S1 B.Sc.	Mrs.Deepthi R V	Offline	Discussing the first series examination results
2	20/02/2023	S4 BSc	Ms.Kalpana V S	Offline	Discussing the first semester UG examination results
3	20/02/2023	S6 BSc	Mrs. Shahana Shihab	Offline	Discussing the S6 examination and Industrial visit.
4	15/11/2022	S1 MSc	Mrs.Akhila B	Online	An introduction to the parents about the course and College details
5	8/06/2022 9/01/2023	S4 MSc	Dr.Nisha V R	Online	Discussing the series examination results Discussing about the students attendance

DEPARTMENT LEVEL MONITORING COMMITTEE (DLMC)
REPORT 2022-2023

Our department had organized regular DLMC meetings during the year 2022 - 2023 where the members discussed the college council meeting minutes. Based on that, decisions were taken to maintain the departmental discipline and academic excellence.

The discussions were regarding:

- Action plan for the department (Both UG and PG classes)
- Assigning duties to the members
- Discussions of updates regarding syllabus completion
- Conduct of internal examinations
- Remedial classes for slow learners
- Final decision makings
- IV for final year UG students
- Project for the final year students.(Both UG and PG)
- Semester wise result analysis and action planning for improvement
- Scheduling PTA meetings
- Conduct of programmes and extra-curricular activities for students

