# KONGU ARTS AND SCIENCE COLLEGE (AUTONOMOUS), ERODE. DEPARTMENT OF BIOTECHNOLOGY

## ANNUAL REPORT FOR THE ACADEMIC YEAR 2024-2025

The Department of Biotechnology was recognized and funded under **DBT STAR COLLEGE SCHEME** and all the activities of the Department were carried out under DBT fund.

- 1. The **DEPARTMENT ASSOCIATION INAUGURATION** (Creauctus'2024-25) and **SPECIAL PLENARY SESSION on "Modern Approaches to Address Microbes"** was held on 26.07.2024. Resource Person: Dr. S.R. Prabagaran, Professor of Biotechnology, Bharathiar University, Coimbatore. Dr. Prabagaran's talk focused on innovative microbial research techniques, including genomic and metagenomic approaches, bioinformatics tools, and interdisciplinary collaboration. He emphasized the importance of microbial research in health, agriculture, and sustainability, inspiring students and faculty to pursue impactful research.
- 2. An AWARENESS PROGRAMME on "The Journey to Mental Wellness: A Personal Reflection" was held on 27.08.2024 for I-B.Sc. Biotechnology students. Resource Person: Mrs. Krithik G.S., Clinical Psychologist and Correspondent, Vaikai Academy Nursery and Primary School, Kokkarayanpettai, Namakkal. Mrs. Krithik discussed core aspects of mental wellness, including emotional resilience, social connections, and effective communication. She highlighted practical strategies for mental well-being and addressed common mental health issues, encouraging empathy and seeking help. Participants engaged in interactive activities to assess personal wellness and gained valuable insights into mental health.
- 3. A WORKSHOP on "Mastering Aptitude Skills" was organized on 28.08.2024 by the Department of Biotechnology under the DBT Star College Scheme. Resource Person: Dr. K. Mangaiyarkarasi, Director of RVS Training Academy, RVS College of Arts and Science, Coimbatore. The workshop focused on essential aptitude skills for placement preparation, covering problem-solving strategies and practical exercises. Students engaged in interactive activities, gaining confidence and proficiency in aptitude assessments, which enhanced their readiness for career opportunities.

- 4. A Faculty Development Programme titled "Unlocking Success: SET and NET Exam Workshop Overview" was held on August 29, 2024 by the Department of Biotechnology. Resource Person: Dr. K. Mangayarkarasi from RVS Training Academy, RVS College of Arts and Science, Coimbatore. The FDP provided insights into preparation strategies for the SET (State Eligibility Test) and NET (National Eligibility Test) exams, crucial for candidates aiming for lectureship or research positions in India.
- 5. An INNOVATIVE HANDS-ON TRAINING WORKSHOP titled "Hands-on Training & Innovations in PCR and Fermentation" was held on September 20-21, 2024organized by the Department of Biotechnology at Kongu Arts and Science College. Resource Person: Dr. C. Kanagaraj, Director, Methion Biotech Zone Pvt Ltd. The workshop aimed to enhance participants' proficiency in advanced biotechnology techniques.
- 6. A one-day **EDUCATIONAL VISIT** to **Banana Forest** was conducted for the UG students of the Department of Biotechnology on 21.09.2024. The visit was guided by Mr. Shanmugam Sundaram, the founder of Banana Forest, who explained the innovative techniques used in the forest's development. Students learned about the Integrated Farming System, sustainable crop selections, and modern agricultural practices, gaining valuable insights into innovative farming methods.
- 7. An **ANTI-DRUG AWARENESS PROGRAMME** was held at Kongu Arts and ScienceCollege (Autonomous), Erode, on September 2, 2024. Organized by the Department of Biotechnology and NSS, the event featured Dr. K. Kalaiselvi, District Tobacco Control Consultant, and D. Sangeetha, MSW, District Tobacco Social Worker, who highlighted therisks of drug and tobacco use. The program, themed " Choose Life, Say No to Drugs, and quot; aimed to promote a drug-free lifestyle, offering students valuable insights into the importance of making healthy choices.
- 8. An ANTI-DRUG AWARENESS PROGRAMME was successfully organized at Kongu Arts and Science College (Autonomous), Erode, on September 24, 2024. This initiative was a collaborative effort involving the Anti-Drug Committee, National Cadet Corps (NCC), Youth Red Cross (YRC), National Service Scheme (NSS), Red Ribbon Club (RRC), and the Department of Biotechnology. The program aimed to raise awareness about the harmful effects of drug use and the importance of a drug-free lifestyle. Approximately 1,024 students gained a deeper understanding of the risks associated with drug use.

- 9. A One-Day Educational Visit to the Salim Ali Centre for Ornithology and Natural History (SACON) was conducted for the M.Sc. Biotechnology students of Kongu Arts and Science College, Erode, on September 24, 2024. The visit was guided by Dr. Aditi Mukherjee, a scientist at SACON, who introduced students to the institute's work in bird conservation and ecosystem research, highlighting the importance of wildlife protection and biodiversity conservation.
- 10. Eco club in association with Department of Biotechnology, Kongu Arts and Science College (Autonomous), Erode organized an **Orientation Programme** on "Single Use Plastic(SUP's) Reduction" on 9<sup>th</sup> January 2025 for UG and PG Biotechnology students to impart awareness of plastics in environment. Dr.P.Leena Justin, Training Coordinator, READ (Rights Education And Development Centre), Sathyamangalam, Erode highlighted the environmental impacts of SUP's and their indirect link to cancer due to toxic plastic additives.
- 11. Science Model Exhibition on "Sustainable Energy for Greener Tomorrow-Renewable alternatives to Fossil Fuels" (National Science Day Celebration) was organized by Department of Biotechnology for Students of DBT Star College Scheme Departments on 20<sup>th</sup> February, 2025. The students exhibited their models with innovated ideas and the best performed students had won the prizes.
- 12. The Department of Biotechnology under DBT Star College Scheme conducted "Biotech Byte Busters" on 27<sup>th</sup> February, 2025, an Intradepartmental Competition for the students of Biotechnology Department. Dr.K.Abdhul, Associate Professor and Head, Nandha Arts and Science College acted as the jury for the Biotech Byte Busters. Competitions like Paper Presentation, Poster Presentation, Bioquiz, Bioriddles, Rangoli and Bio reels were conducted to provide an impetus to the students inquisitiveness in exploring the innovative techniques of learning and researching the field of Biotechnology.. The most remarkable students in their presentations were rewarded with opulent prizes.
- 13. The Department of Biotechnology under DBT Star College Scheme organized a **Guest Lecture on "Glimpses on Biotechnology and Phytochemicals"** on 28<sup>th</sup> February, 2025. Resource Person: Dr.K.Preethi, Assistant Professor, Department of Microbial Biotechnology, Bharathiar University, Coimbatore. The enlightening observations and stimulating concepts of the Resource Person have genuinely deepened our comprehension of phytochemicals.

14. The Department of Biotechnology under the DBT Star College Scheme organized a **Guest Lecture entitled**, "Strategy for Development of Epitope Based Vaccines for Infectious Diseases" on 3<sup>rd</sup> March, 2025. Resource Person: Dr. Manikandan Mohan, Director, Vaxigen International Research Center Private Limited, Coimbatore. He explained the principle to enhance the aspects by focusing on well-defined conformational epitopes for vaccine design of infectious diseases.

15. The Anti-Drug Committee of Kongu Arts and Science College (Autonomous), Erode, in association with the Department of Biotechnology, organized a webinar titled "Say No to Drugs – Yes to Life: Empowering Students for a Healthy Life" on March 4, 2025. Resource Person: Dr. M. Jayanthi, Assistant Professor, Department of Biotechnology, Vels Institute of Science Technology and Advanced Studies, Pallavaram, Chennai. The webinar aimed to raise awareness among students about the dangers of drug abuse and encourage them to lead a healthy and drugfree life.

16. The Department of Biotechnology in association with the Eco Club of our college conducted a Debate Competition for the students of Biotechnology on 21<sup>st</sup> March, 2025. The topic of the Debate was "Should SUP's be completely Banned – Sustainable Alternatives – Does it start from Home or Institution?". Two teams comprising of 10 students (5 Participants on each side) debated in an enthusiastic manner. Our students discussed their views for moving away from SUP's lies in viable alternatives such as reusable materials, biodegradable plastics, compostable materials and reducing consumption.

## **Participation by students:**

# 1. Curricular Activities:

The Department students actively participated in various National and State level Seminars, Conferences, Entrepreneurship Awareness Camp, Youth Leadership Summit and Workshops organized by different Universities and Institutions in and around TamilNadu.

#### 2. Co-Curricular Activities:

To upgrade the practical competency, the students enthusiastically participated and won many prizes in different competitions conducted inside and outside the campus.

Active involvement was also found in **Technical Event, Quiz, Paper and Poster Presentation** organized by various Institutions in and around Erode.

# 3. Extra- Curricular Activities:

Students of our department are serving as Executive members, Office bearers and also as active participants of various clubs and forums of KASC.

# **Participation by Faculty Members:**

- 1. Dr.D.Saravanan, Mr.K.Vivekanandhan, Mrs.G.Jayanthi, Mrs.S.Vijaya, Ms.R.Divya Dharshini, Ms.K.Nandhini, Ms.V.Deepiga and Ms.K.Sawunthariya had actively participated in the Seven Days International Faculty Development Programme on "Journey to Research Excellence from Concepts to Publication" organized by the Department of Biotechnology, Hindusthan College of Arts and Science (Autonomous), Coimbatore from 19.08.2024 to 24.08.2024 and completed the evaluation conducted as a part of the programme.
- 2. Mr.K.Vivekanandhan, Assistant Professor, Department of Biotechnology, Kongu Arts and Science College, Erode had actively participated in the Hands on Training Programme on "Pre-Clinical Development of Medicinal and Aromatic Plant-based Leads" organized by Bio-prospection and Product Development Department CSIR-CIMAP, Lucknow from 23<sup>rd</sup> September, 2024 to 27<sup>th</sup> September, 2024 to generate a passion among the researchers to pursue science as a career and do the excellence.
- 3. Mr.K.Vivekanandhan, Mrs.G.Jayanthi, Mrs.S.Vijaya, Ms.R.Divya Dharshini, Ms.K.Nandhini, Ms.V.Deepiga and Ms.K.Sawunthariya had actively participated in National Level Faculty Development Programme on "empowering educators for a VISKIT BHARAT: Transformative Teaching and Research Strategies from 27.01.2025 to 31.01.2025 organized by IQAC, Kongu Arts and Science College (Autonomous), Erode in association with ProMind Learning Academy, Erode.

# **Student Achievements:**

1. **Thanu Sriee R.S.**, from II-B.Sc, secured the **Runner-Up** Position in the Tamil Nadu  $32^{nd}$  Senior State Throwball Championship organized by the Tamil Nadu Throwball Association on  $2^{nd}$ - 4th August 2024.

- 2. **Jyothsna A.** from III-B.Sc achieved the **Runner-Up** Position in the Erode District Table Tennis Tournament organized by the Erode District Table Tennis Development Association on 10<sup>th</sup> and 11<sup>th</sup> August 2024.
- 3. **Hari Prasath S. and Thanu Sriee R.S.**, from II-B.Sc, earned the **Second** Position in the Startup TN, Green Initiative program organized by VET College of Arts and Science on 16<sup>th</sup> and 17<sup>th</sup> August 2024.
- 4. **Nikitha Dharshini S.** from I-B.Sc. secured the **Third**Position in the HYPE-24 Quiz Competition hosted by Hindustan College of Arts and Science on 11th September 2024.
- Nandika M. and Dharshini B. from I-B.Sc. secured the SecondPosition in the HYPE-24 Quiz Competition hosted by Hindustan College of Arts and Science on 11th September 2024.
- 6. **Harthika S.** from III-B.Sc won the **First** Position in the **HYPE-24 Quiz Competition** organized by Hindustan College of Arts and Science on 11th September 2024.
- 7. **Vijayananth L.B.** from III-B.Sc. secured the **Second** Position in the "**Just a Minute**" competition at **HYPE-24**, organized by Hindustan College of Arts and Science on 11<sup>th</sup> September 2024.
- 8. **Sangeetha K.**, from III B.Sc, won the **Third** Position in the **"Just a Minute"** competition at HYPE-24, organized by Hindustan College of Arts and Science on 11<sup>th</sup> September 2024.
- Sangeetha K., Mohanapriya R, Rishika R.B. from III-B.Sc secured the Best Paper Presentation Award at "ICRTMRI-24" at AVP College of Arts and Science on 13<sup>th</sup> September 2024.
- 10. Jyothsna A., from III-B.Sc, secured the First Position for Oral Presentation at the MicroNutriX' 2024, held by Theeran Chinnamalai College of Arts & Science for Women on 5<sup>th</sup> October 2024.
- 11. **Aswin.S. and Harini.T.T.** from III- B.Sc., has actively participated and won First Prize in "KSR-SPARK TANK" (STARTUP IDEATHON) organized by The School of Management Studies, K.S.Rangasamy College of Arts and Science (Autonomous), Tiruchengode, Erode on 30<sup>th</sup> January, 2025.

12. **Aswin.S. and Harini.T.T.** from III- B.Sc., has actively participated and won Runner up in **THIRAN '2025 (CONFLUENCE OF TALENTS)** organized by **Sri Eshwar College of Engineering and STARTUP TN** on 21<sup>st</sup> February, 2025.



Department Association Inauguration cum Guest Lecture on "Modern Approaches to Address Microbes" was held on 26.07.2024



Awareness Programme on "The Journey to Mental Wellness: A Personal Reflection" was held on 27.08.2024 for I-B.Sc. Biotechnology students.



Workshop on "Mastering Aptitude Skills" was organized on 28.08.2024



FDP entitled "Unlocking Success: SET and NET Exam Workshop Overview" organized by Department of Biotechnology was held on 29.08.2024.



Hands-on Training on Innovations in PCR and Fermentation organized by Department of Biotechnology was held on 20.09.2024and 21.09.2024



Educational Visit to Banana Forest was Organized for the UG students of Department of Biotechnology on 21.09.2024



Anti-Drug Awareness Programme was organized at Kongu Arts and Science College (Autonomous), Erodeon 24.09.2024.



Educational Visit to Salim Ali Centre for Ornithology and Natural History (SACON) was organized for the II M.Sc. Biotechnology students on 24.09.2024.



Hands on Training Programme on "Pre-Clinical Development of Medicinal and Aromatic Plant-based Leads" organized by Bio-prospection and Product Development Department CSIR-CIMAP, Lucknow from 23<sup>rd</sup> September, 2024 to 27<sup>th</sup> September, 2024.



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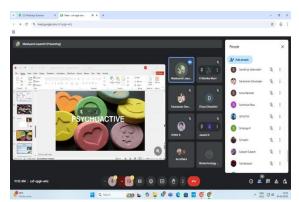
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S. Hariprasath and B. Gowtham, students of II B.Sc. Biotechnology at Kongu Arts and Science College (Autonomous), Erode, have bagged a cash award of Rs. 25,000 as a seed fund for their innovative eco-friendly startup idea, held at Kumaraguru College of Technology, Coimbatore. The event conducted on March 5, 2025, was jointly organized by Startup TN, Rotaract Club Circlex, and Siruthuli.