



# Dr. M.G.R. EDUCATIONAL AND RESEARCH INSTITUTE

(Deemed to be University with Special Autonomy Status)  
Maduravoyal, Chennai - 600 095, Tamilnadu, India.  
(An ISO 9001-2015 Certified Institution)



## DEPARTMENT OF BIOTECHNOLOGY PRESENTS

# BIOBYTES NEWSLETTER

BT 26 AUG 2023 - 30 NOV 2023

# NEWS

# H1

A  
Newsletter  
for the  
Year 2023

# BT





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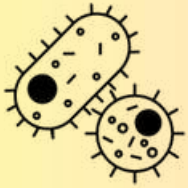
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## DEPARTMENT VISION & MISSION

### VISION

To strive towards the innovative knowledge in the domains of biotechnology for the development of new processes and product useful to the society and enrich economy.

### MISSION



To impart knowledge and skills in the biological sciences to improve human health, protect environment and to enrich economy. To provide an outstanding environment to learn for facing the global need in the fields of Biotechnology. We focus on excellence in teaching and research as well as to promote entrepreneurship





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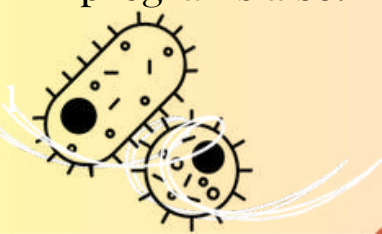


### DESK MESSAGE



### Dr. Rajeswary Hari HOD of Biotechnology Department

The Department of Biotechnology was started in the year 2003 with an objective of generating trained manpower in Biotechnology with disciplinary skills from Chemical engineering, Computer Science and Management Skills. Biotechnology is the application of Biology for industrial purposes such as development of vaccines, biomaterials reducing toxic waste by using microbial or enzyme based processes, development of new drugs for treating emerging and reemerging diseases, development of newer diagnostic methods for diagnosis of human diseases, development of crops with additional productivity or added advantages etc. The Research focus in our Department Involves methods to reduce environmental pollution by using micro organisms, identifying the plant products which can be used to treat diabetes, fasten the wound healing processes; understanding the role of SNP in critical gene in the development of cancer; and monitoring and understanding the mechanisms of antibiotic resistance in bacteria. The Dept. is supported by grants from the SERB, DST, DBT & CSIR .The department is motivating the students and faculties to actively involve in research programme and also to publishish articles in national and international journals & Conference The Department offers B.Tech and M.Tech Programs in Biotechnology, M.Tech in Medical Biotechnology and Ph.D. programs also.



*Rajeswary Hari*  
HOD Sign



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**ACHIEVERS**

**FUND PROJECT OF AKC**



**MEENAKSHI**

**KEERTHANA**

**MAHALAKSHMI**

Accolades to the team for developing a smart IoT device that analyzes soil nutrients, helping farmers optimize fertilization and prevent soil degradation. With ₹2,50,000 in funding, this project is a valuable addition to the 5th cohort at AKC. Well done!



**SEMESTER TOPPERS**

**Saisri G K** from B.Tech Biotechnology [2022-2026] has secured the top rank in odd semester III with an impressive GPA of 9.14. Her dedication and hard work are truly inspiring



Heartiest congratulations to **Suresh S** from B.Tech Biotechnology [2021-2025] for securing the top rank in odd semester V with an exceptional GPA of 9.85! His hard work and commitment to excellence are truly commendable.





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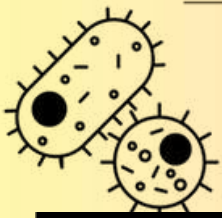
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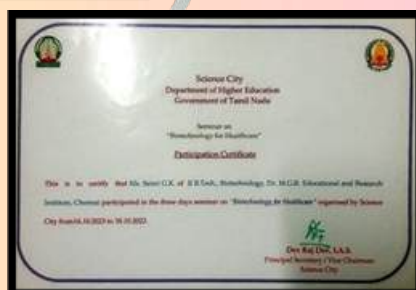
## STUDENT CORNER



Congrats to **D.K. Malarvizhi, Amirthavarshini, and Aditi S** for winning 3rd prize in the Pot Pourri event at Spectra'23 at Dwaraka Doss Goverdhan Vaishnav College! Well done!



Kudos to **Malarvizhi D K, Varshini M, Athiti S, and Prakavi K** for securing 3rd place in the Forensic event at Techastra'23. Their teamwork truly paid off!



**Saisri G K** participated in a 3-day seminar on "Biotechnology in Healthcare," held at Birla Planetarium from October 16-18, 2023. Organized by Science City and the Department of Higher Education, Tamil Nadu, this event is one of many she has attended to deepen her expertise in the field.



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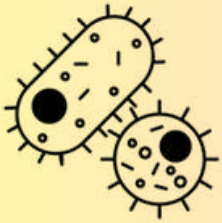


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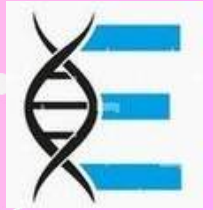
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### EVENT CORNER



## A NATIONAL LEVEL SYMPOSIUM "BIOZONE 2K23"

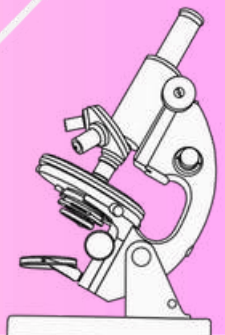


The Department of Biotechnology organized "**Biozone 2K23**" on August 9, 2023, themed "Harvesting Nature's Potential for a Greener Tomorrow."

Dr. Rajeswary Hari welcomed the gathering, Dr. S. Geethalakshmi, Vice Chancellor, gave the presidential address, and Dr. K. Gomathi introduced chief guest Dr. J.

Balamurugan, who spoke on clean energy and biofuels. The event ended with a valedictory address by Dr. G.

Gopalakrishnan and prize distribution. Gratitude was expressed to the Hon. Founder Chancellor and President for their support.





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## ALUMINI

The Alumni Interaction Series XII, titled  
"Beyond the Petridish: Biotechnology in  
the Real World,"



The Alumni Interaction Series XII, titled "**Beyond the Petridish: Biotechnology in the Real World,**" featured Nithish Raj, a Research Scholar from the University of Illinois, as the keynote speaker. He explored biotechnology's practical applications in healthcare, agriculture, environment, and industry, using real-world case studies. The event also offered networking opportunities for attendees to connect and collaborate.



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### STAR OF H2 (STUDENT)



**Sallakolusu Venkata Swathi** excelled at the National Level Technical Symposium held at Dr. M.G.R Educational and Research Institute on 11th and 12th September 2023, securing the 2nd prize. Great job!



### STAR OF H2 (STAFF)



**Dr. Thirunavukkarasu Palaniyandi** is a distinguished scientist and a true pioneer in his field. As the ACS AMRI Research Coordinator and a recipient of the prestigious Star Author Award, his contributions to scientific research are remarkable. With numerous published papers to his name, his work continues to inspire and elevate the scientific community. Congratulations, Dr. Thirunavukkarasu on Your truly these well-deserved achievements! dedication and excellence are exemplary.



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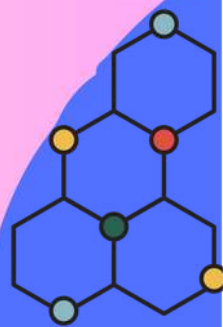
## RESEARCH & INNOVATIONS



**Avanthika S**  
**B. Tech**  
**Biotechnology**  
**2020 – 2024**



Congratulations to Avanthika S, a final-year B. Tech Biotechnology student, on the publication of her insightful review article, "Microfluidics as Diagnostic Tools", in Clinica Chimica Acta (Elsevier, I.F. 5.0). Supervised by Dr. Thirunavukkarasu Palaniyandi, the article presents groundbreaking research on microfluidic chip technologies for diagnosing a range of medical conditions, from autoimmune disorders to neurodegenerative diseases. With a total impact factor of 15.2 across three publications, Avanthika's exceptional work demonstrates her dedication and excellence in scientific research. Well done on this remarkable achievement!





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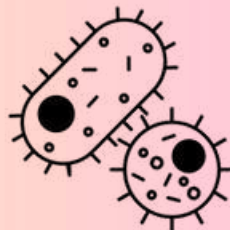
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