



VIVEKANANDHA

ARTS AND SCIENCE COLLEGE FOR WOMEN

An ISO 9001:2015 Certified Institution | Affiliated to Periyar University, Salem
Recognised under section 2(f) and 12(B) of the UGC Act, 1956

Sankarqiri, Salem, Tamilnadu, India

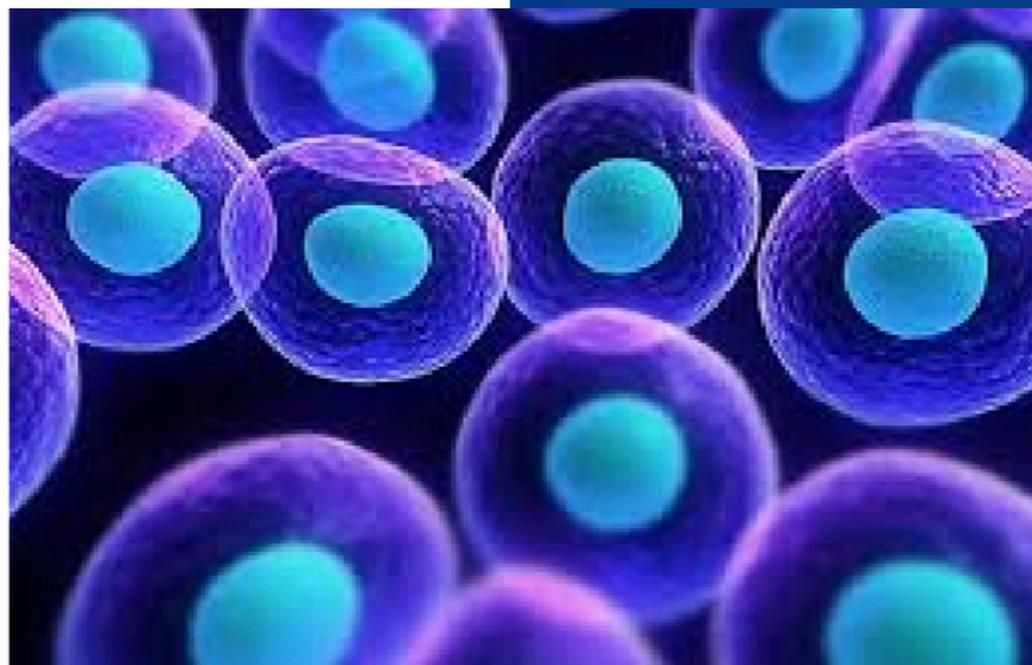


Prof. Dr. M. Karunanidhi
Chairman & Secretary

DEPARTMENT OF BIOTECHNOLOGY

NEWS LETTER

Volume 2
August 2025



Courses Offered

B. Sc., Biotechnology - 3 Years

M. Sc Biotechnology - 2 Years

Ph. D Biotechnology (FT/PT)

Vision

The vision of our Department of Biotechnology is to be a center of excellence in Biotechnology education, research, and innovation, fostering scientific knowledge and technological advancements for societal and industrial benefit

Mission

The mission of our Department of Biotechnology is to bridge the gap between academia and industry through quality education, cutting-edge research, and entrepreneurship; to nurture innovation and transform ideas into patentable products; and to empower students with skills and opportunities for successful careers in the Biotechnology sector

About the Department

The Department of Biotechnology is well established with the state-of-art laboratory facilities, excellent teaching & learning infrastructure, research & innovation ecosystem intended to create a job oriented professional training, entrepreneurship aptitude and impart research skills to the prospective students and attain a successful outcome based higher education in the field of life sciences with professional excellence in biotechnology.

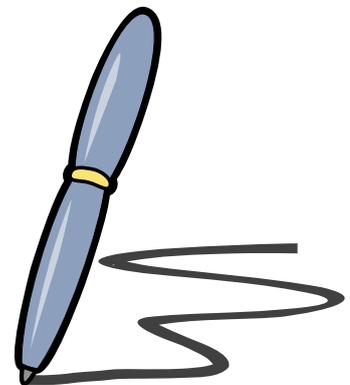
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Editorial Desk

**Dr. S. G. Prabhakaran, Asst. Prof. & Head
Faculty members & Students
Department of Biotechnology**



**The woods are lovely, dark and deep, But I have promises to keep,
And miles to go before I sleep, And miles to go before I sleep
- Robert Frost**

Plant Tissue Culture Facility



PCR & Gel Documentation



Refrigeration Centrifuge



Tissue culture



Expert Lecture



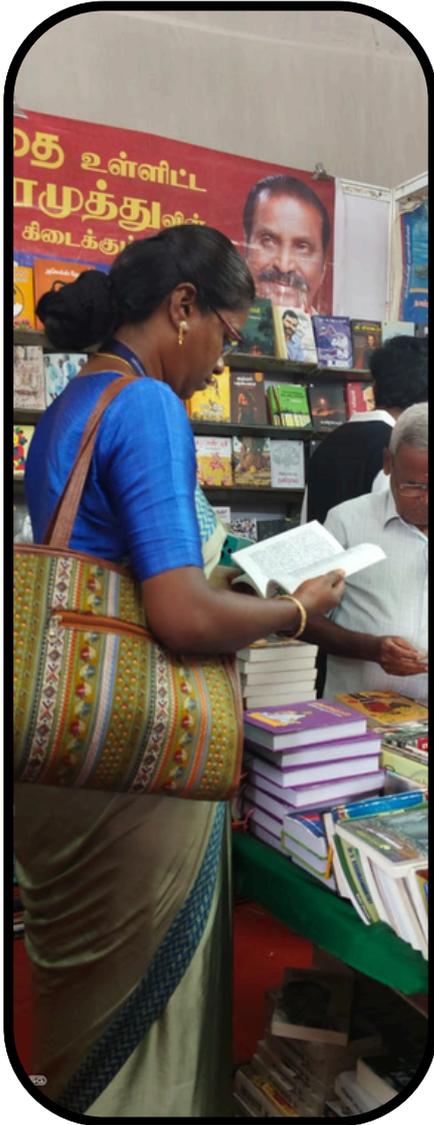
Dr. Arun Radhakrishnan

Head of R&D at O2A Private Limited, Cochin

“Recent trends in industrial applications in Science”

Date: 05.08.2025, Seminar Hall, VIAAS

Visit to Erode Book Festival



Visit to Erode Book Festival on 08.08.2025 by our I B. Sc Biotechnology students

I PG Inauguration & Welcoming Seniors to the Department



All UG students welcoming I year PG students to the Department of Biotechnology
on 13.08.2025



Start Up Challenge

An Intra departmental technical meet was organized for the Yukthi Innovation Challengers of the Department of Biotechnology on 01.08.2025 in which 19 students presented their Start - Up Ideas.



Fresher's Day

Fresher's Day was celebrated on 04.08.2025 for the I UG students of our college. Our Honourable Chairman & Secretary Sir presided over the ceremony.



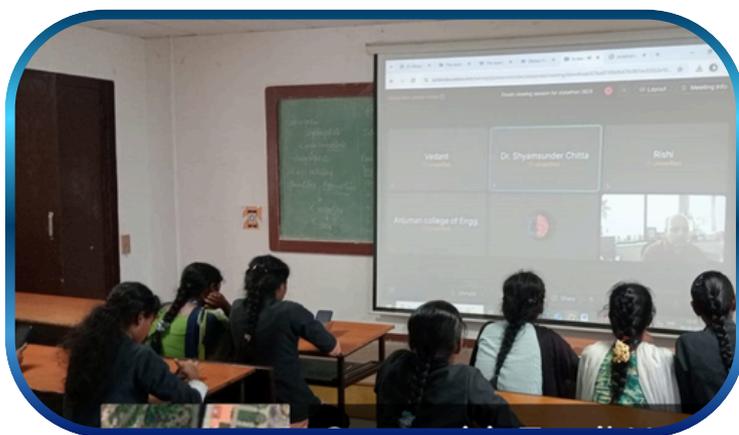
Skill Development Activity

The student skill development activity has been initiated on 06.08.2025 to provide students with knowledge of mushroom cultivation and equip students for entrepreneurship & self-reliance, in which 50 students I & II B. Sc Biotechnology actively participated in the training.



Webinar

A Webinar was hosted for the UG students on 07.08.2025 delivered by Dr. S. Bhagavathy, R & D Grants Manager, Boltzmann Lab, Hyderabad, on the topic "The role of AI in Drug Discovery"



Stratethon 2025

Stratethon 2025 – A Date Journey to Viksit Bharat – A National Level Innovation Challenge jointly organized by the Ministry of Statistics and Programme Implementation (MoSPI), AICTE & Ministry of Education's Innovation (MIC) was organized on 08.08.2025



Parent's Teacher's Meeting

Parent's – Teacher's meeting was held for the Final year UG students of Biotechnology on 09.08.2025. The event was addressed by our Principal Dr V. Padmanabhan.



Talk Show

A Talk show was organized by the students of I B. Sc Biotechnology on 11.08.2025 on the topic, "Impact of Junk food – Good or Bad".



Cancer Awareness Program

A cancer awareness program was organized by the students of I B. Sc Biotechnology on 12.08.2025 to educate the role of Biotechnologist in cancer prevention & treatment.



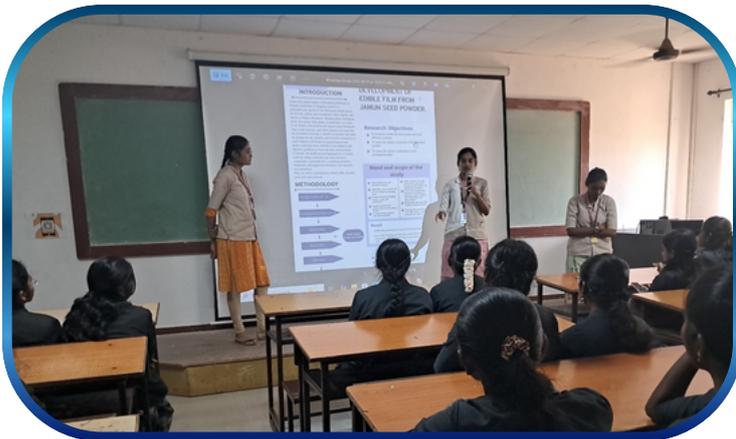
World Organ Donation Day

World Organ Donation Day is observed on 13.08.2025 to raise awareness about the importance of organ donation and to motivate people to pledge to become donors.



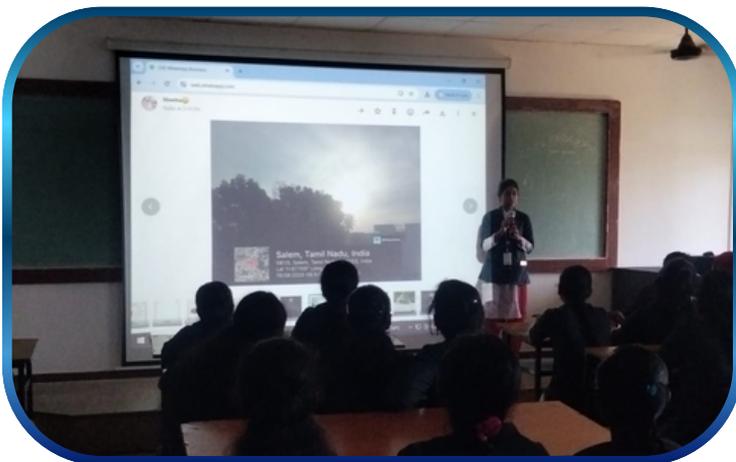
Elephantiasis Awareness Day

The 10th August is considered as an Awareness day for Lymphatic filariasis (Elephantiasis) and our students organized a forum discussion to raise awareness about the disease and methods to combat and eliminate the disease



Inter Department Technical meet

An Inter-Department Technical meet – Presentation of Start – Up ideas was organized by the students of Biotechnology (IIC) at college level on 14.08.2025



International Photography Day

The International Photography Day was celebrated on 19.08.2025 to honor the Impact of photography in the field of Arts, Science, Technology, Social Science & Humanities. An Inter – departmental Photography contest was organized under the themes like – Nature, Scientific Photography, Culture & Heritage and Environmental awareness.



Mosquito Awareness Program

A mosquito awareness program was organized on 20.08.2025 to initiate an education on mosquito-borne diseases, prevention methods, and control strategies



Association Inauguration

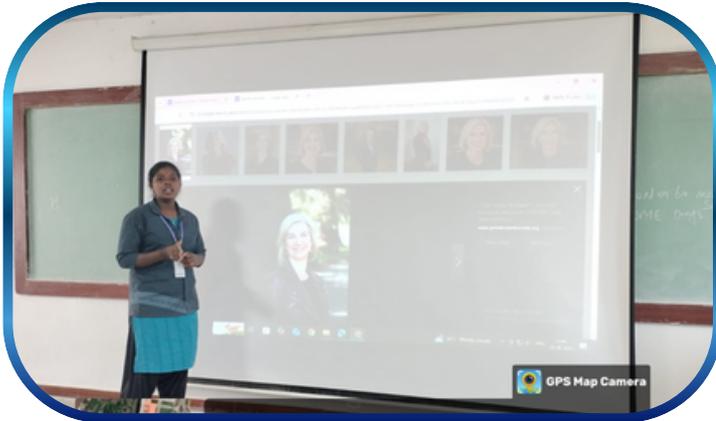
Association Inauguration and swearing-in ceremony was organized on 21.08.2025, Ms. S. Shubha Karini, I M. Sc Biotechnology has been elected as President and Ms. V. Vishnu Priya, II B. Sc Biotechnology was elected as Secretary of the Biotechnology Department Association 2025-2026. Our student Ms. S. Devadharshini was elected as the Secretary for NSS of our College.

Biotech Food Festival

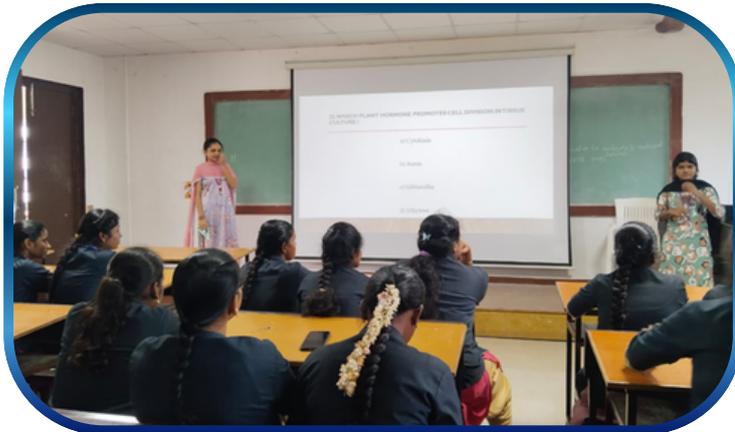


A Food Festival was organized in the Department of Biotechnology on 22.08.2025. The event included showcasing and selling of healthy diet foods, delicacies and culinary traditions

International Women's Equality Day



An International Women's Equality Day was organized by the students on 26.08.2025. A pledge was taken for the social contribution to Women's Equality & the students presented the motivational biographies of empowered women across the globe



Brainwave Challenge

A Brainwave Challenges 2025 - A Quiz competition was organized by PG students on 28.08.2025 for the UG students.



World Turner's Syndrome Day

World Turner's Syndrome Day was organized on 29.08.2025 to create an awareness to provide social, moral and scientific support to the individuals affected with Turner's Syndrome. Events like Logo formation, Skit play and Poster Presentation on Turner's Syndrome were organized

Library Day - Biotech Achievers



Library Day was celebrated on 12.08.2025. Various event conducted between 07.08.2025 to 11.08.2025. Our Students of Biotechnology participated and won prizes in quiz and Drawing competitions.

Institution Innovation Council (IIC) – Intercollegiate Biotech Achievers

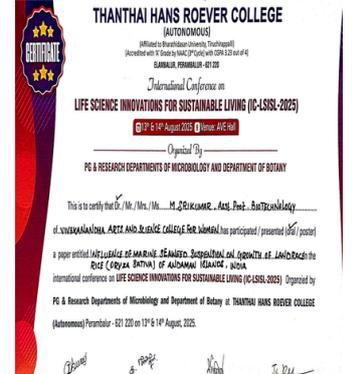


Institution's Innovation Council (IIC) organized an Exhibition and Poster Presentation for Innovation and Start - Ups on 26.08.2025 at Excel Engineering College (Autonomous). Ten students from II B. Sc Biotechnology has participated in the event.



Dr. M. Srikumar
Asst. Prof./ Biotech

Dr. M. Srikumar has presented a paper on "Influence of marine seaweed on growth of Land race Rice (*Oryza sativa*) of Andaman islands, India" in the International Conference on Life Science Innovations for Sustainable Living organized by PG & Research Departments of Microbiology and Department of Botany at Thanthai Hans Roever College (Autonomous), Perambalur on 13.08.2025 & 14.08.2025



Ms. S. Anandhi
Asst. Prof./ Biotech

- Ms. S. Anandhi has participated in the Five days Online Faculty Development Programme series on "Empowering Educators in Next Gen Computing: Trends & Technologies" held between 04-08-2025 and 08-08-2025, organized by the Department of Computer Science and Applications in association with IQAC, Vivekanandha College of Arts and Science for Women (Autonomous)
- She also has successfully participated the Workshop on Matlab held on Aug 15, 2025 Conducted by Indian Info Tech, Research & Training Center, New Delhi.
- She has published a paper in the International Journal – Food Hydrocolloids for Health under the title, "Structural Characterization and bioactivity of sulfated Galactan GSSG – 2 from *Gracilaria salicornia*: Antioxidant and anticancer potential

VIVEKANANDHA
COLLEGE OF ARTS AND SCIENCES FOR WOMEN
(Autonomous | NAAC 'A+' | ISO 9001 : 2015 | 2(F) & 12(B) | AICTE | Periyar University)
Tiruchengode, Namakkal (Dt) - 637205.

Department of Computer Science and Applications
Association with
Internal Quality Assurance Cell (IQAC)

Online Faculty Development Programme Series
on
"Empowering Educators in Next Gen Computing: Trends & Technologies"

Certificate of Participation

This is to certify that Mr. / Mrs. / Dr. **S. ANANDHI**
Assistant Professor, Department of Biotechnology
Vivekanandha Arts and Sciences college for Women, Sankar.

has participated in the Five Days Online Faculty Development Programme Series on "Empowering Educators in Next Gen Computing: Trends & Technologies" held between 04-08-2025 and 08-08-2025, organized by the Department of Computer Science and Applications in association with IQAC.

Dr. K. RAMESH
HoD/CS & CA

Dr. P. BABY SHAKILA
Principal

Indian Info Tech
Research & Training Center
(Affiliated to NIELIT (2015), Gov of India, Delhi)

CERTIFICATE OF PARTICIPATION

This Certificate is Proudly Presented To

ANANDHIS IIT46172025

has successfully participated the Workshop on **Matlab** held on Aug 15, 2025 Conducted by **Indian Info Tech, Research & Training Center.**

VASIKA M
AI Developer
Indian Info Tech

DR. V. THIYAGU
Director
Indian Info Tech

Food Hydrocolloids for Health
Journal homepage: www.elsevier.com/locate/ffh

Structural characterization and bioactivity of sulfated Galactan GSSG-2 from *Gracilaria salicornia*: Antioxidant and anticancer potential

Mythileevarvi Lakshminathan^{a,*}, Sakthivel Muthu^{b,c}, Peer Mohamed Deen Mohamed^d, Kathiravan Krishnan^e, Nagaraj Karuppiyah^f, Ramamoorthy Karuppan^g, Shenbhagaraman Ramalingam^h, Anandhi Gubramanianⁱ, Bharathi Venkatchalam^j, Gholamreza Abdi^k

ARTICLE INFO

ABSTRACT

The sulfated galactan GSSG-2, isolated from *Gracilaria salicornia*, was investigated for its antioxidant cancer properties. Polysaccharide derived from marine sources are well known for their distinctive bioactive properties providing candidates for pharmaceutical applications. Purification of GSSG-2 was through a two-step procedure consisting of anion-exchange chromatography utilizing a DEAE-Sepharose followed by size-based separation via Sephadex G-100 gel filtration chromatography. Its structural features characterized using elemental analysis, high-performance gel permeation chromatography (GPC) performance liquid chromatography (HPLC), Fourier transform infrared spectroscopy (FT-IR), and magnetic resonance (NMR) spectroscopy. The antioxidant capacity of GSSG-2 was measured at concentrations 25 to 150 µg/ml using assays such as DPPH radical scavenging, inhibition of superoxide anion-reducing antioxidant power (FRAP), and total reducing power. In all assays, GSSG-2 showed a dose-dependent standard. Cytotoxic effects and induction of apoptosis in A549 human lung carcinoma cells assessed employing MTT assays and western orange/red-stained bromide (AO) (Bio) fluorescence staining demonstrated a molecular weight of 70.61 kDa, with galactose identified as the dominant monosaccharide (28.52 mg/g). Its antioxidant activity showed a dose-dependent increase, ranging from 19.84% to 88.8% value determined by the MTT assay was 100 µg/ml, and cell viability dropped drastically to 16.4% µg/ml. Results from AO/Bio staining further corroborated the dose-dependent enhancement of apoptosis. The strong antioxidant and anticancer effects of GSSG-2 are attributed to its structural complexity, the sulfated galactan moiety and 4-(1→3)-linked D-galactopyranose units. These results underpin the potential of this compound as a therapeutic agent targeting oxidative stress and cancer.

VIVEKANANDHA EDUCATIONAL INSTITUTIONS

TIRUCHENGODE CAMPUS

Swamy Vivekanandha Medical College Hospital and Research Institute
Vivekanandha Dental College for Women
Swamy Vivekanandha College of Pharmacy
Vivekanandha College of Nursing
Vivekanandha School of ANM
Swamy Vivekanandha Physiotherapy College
Vivekanandha Allied Health Science (Co- Ed)
Krishna Institute of Optometry & Research
Vivekanandha Institute of Health Science & Research (Boys)
Krishna Institute of Health Science (Boys)
Vivekanandha College of Engineering for Women (Autonomous)
Vivekanandha College of Technology for Women
Vivekanandha Institute of Information and Management Studies
Vivekanandha College of Arts & Sciences for Women (Autonomous)
Vivekanandha College for Women
Vivekanandha College of Education for Women
Krishna College of Education For Women
Krishnasree College of Education For Women
Vivekanandha Vidhya Bhavan Matric Higher Secondary School
Vivekanandha Medical Care Hospital (VMCH)

SANKARI CAMPUS

Swamy Vivekanandha Naturopathy and Yoga Medical College
Vivekanandha Pharmacy College for Women
Vivekanandha Nursing College for Women
Vivekanandha Arts & Science College for Women
Vivekanandha ANM School
Rabindranath Tagore College of Education for Women
Viswabharathi College of Education for Women

Insta ID: [Vias_biotech](#)

Website: www.vivekanandha.ac.in