JSS MAHAVIDYAPEETHA
J S S COLLEGE FOR WOMEN (AUTONOMOUS)
(An Autonomous College of University of Mysore: Re-Accredited by NAAC with 'A' Grade (CGPA: 3.07)
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DEPARTMENT OF MICROBIOLOGY

SKILL ENHANCEMENT PROGRAM

BIOMEDICAL APPLICATIONS OF SILK PROTEIN

Date : 21 February 2026

Place : JSS College for Women (Autonomous), Saraswathipuram, Mysuru

Number of Beneficiaries: 141

Objective:

The objective of the Skill Enhancement Program was to provide students with in-depth knowledge about the biomedical applications of silk protein. The session aimed to enhance understanding of silk fibroin and sericin, their structural properties, extraction methods, and their potential applications in tissue engineering, drug delivery, wound healing, and regenerative medicine. The program also intended to bridge the gap between traditional sericulture and advanced biomedical research.

Brief Write-up of the Program

The Department of Microbiology organized a Skill Enhancement Program on Biomedical Applications of Silk Protein on 21 February 2026 at JSS College for Women (Autonomous), Mysuru. The session was delivered by Dr. Madhusudhan K.N., who provided detailed insights into the structure and properties of silk proteins, including fibroin and sericin.

The resource person explained the life cycle of silkworms, extraction methods of silk proteins, and the structural composition of silk fibers. Emphasis was given to biomedical applications such as wound dressings, biodegradable implants, drug delivery systems, tissue engineering scaffolds, hydrogels, and 3D bioprinting. The session also highlighted the role of sericin in antimicrobial and antioxidant activities and the potential of silk-based biomaterials in regenerative medicine.

The presentation included schematic diagrams, application models, and recent advancements in silk protein research. The session was interactive, and students actively participated by clarifying their doubts and engaging in discussions.

Brochure/Invitation

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Re-Accredited by NAAC at 'A' Grade,
Saraswathipuram, Mysuru-570009

An Initiative of IQAC in Association with
Department of Microbiology

Skill Enhancement Program

"Biomedical Applications of Silk Protein"

21st February 2026 ✧ Saturday ✧ 12:00 Noon

Venue: Navajyothi Auditorium

Divine Blessings
His Holiness
Jagadguru Sri Shivaratri Deshikendra Mahaswamiji
Jagadguru Sri Veerasimhasana Mahasamsthana Math
Sutturu Srikshethra

Chief Guest and Resource Person:
Dr. Madhusudhan K N
Scientist 'D'
Silkworm Molecular Biology Laboratory
Central Sericultural and Research and Training Institute
Mysuru

Presence
Dr. Rechanna
Principal

You are cordially invited

HoD, Staff and Students
Department of Microbiology

PHOTOS:

GEO TAGGED PHOTOS:

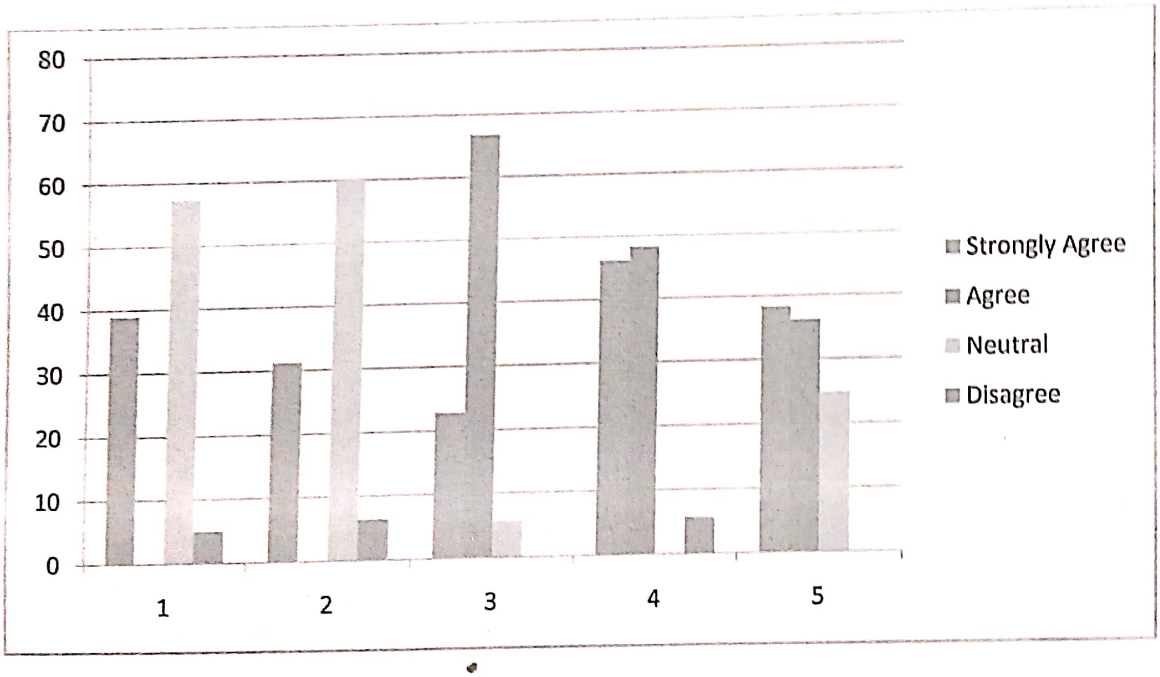




Feedback Analysis

Number of responses in Google form – 141

Sl no	Questions	Responses				
		Excellent /Strongly Agree	Very Good /Agree	Good /Neutral	Average/ Disagree	Poor/Strongly Disagree
1	The topic was relevant and informative.	39%		57.4%	5%	
2	The resource person explained the concepts clearly	31.2%		60.3%	6.4%	2.1%
3	The session improved my understanding of biomedical applications of silk protein.	22.7%	66.7%	5.7%		
4	The program was well organized.	46.1%	48.2%		5.7%	
5	Overall rating of the program	38.3%	36.2%	24.8%		



Impact:

The Skill Enhancement Program had a significant academic and professional impact on the participants. Students developed a deeper understanding of silk protein as an innovative and eco-friendly biomaterial used in biomedical applications. The session strengthened their conceptual knowledge in emerging research areas such as tissue engineering, drug delivery systems, regenerative medicine, wound healing, and scaffold fabrication.

The program enhanced analytical thinking and research orientation among students by introducing them to current advancements and real-time applications of silk-based biomaterials. Participants were exposed to interdisciplinary integration between biotechnology, material science, and medical sciences, which broadened their academic perspective.

The interaction with the resource person motivated students to explore higher studies and research careers in biomedical biotechnology and biomaterials science. The session also improved their awareness of industry-relevant applications

Signature of HoD

Signature of Principal

PRINCIPAL
JSS COLLEGE FOR WOMEN
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Saraswathipuram, Mysore-570009