

23.05.2024

CIRCULAR

The Department of Biotechnology is pleased to announce a Value-added Program (VAP) titled "Elevating Science: Unleashing the Potential of Animal Cell Culture," exclusively designed for IV semester MSc Biotechnology students. This program aims to provide an in-depth understanding and practical insights into the advanced techniques and applications of animal cell culture, equipping students with the knowledge and skills essential for cutting-edge research and industry practices. We encourage all eligible students to participate and take advantage of this unique learning opportunity to enhance their academic and professional competencies.

Details of the Program are as follows:

- **Dates:** May 27th to June 1st
- **Venue:** Sir M Visveswaraya Seminar Hall/ Animal Cell culture lab/ MSc Biotechnology Lab

NOTE: Kindly wear neat washed aprons for the lab sessions.


Mukesh H
Conveners


Dr. Jayashree
Department Head
M.S. Ramaiah College of
Arts, Science & Commerce


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Value Added Program Report: Elevating Science - Unleashing the Potential of Science

Introduction: The Value Added Program titled "Elevating Science: Unleashing the Potential of Science" commenced on May 27th, 2024, marking the inauguration of an enriching journey for M.Sc students specializing in Animal Cell Culture. Hosted at the prestigious Sir M Visvesvaraya Seminar Hall, the program aimed to delve into the intricacies of animal cell culture, viability assays, antioxidant assays, and practical applications thereof. The program concluded with a valedictory session on June 1st, 2024, where the accomplishments and experiences were celebrated.

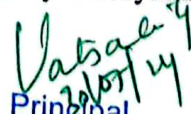
Inauguration (May 27th, 2024): The inaugural ceremony witnessed the presence of esteemed individuals from academia. Dr. Abhijith S R, Assistant Professor in the Department of Biotechnology at MSRIT, served as the first resource person, elucidating the fundamentals of animal cell culture. Dr. Vinay Hegde, Asst. Professor, efficiently managed the event as the Master of Ceremonies (MC), while Dr. Lakshmikanth RN, HoD of Biotechnology department, extended a warm welcome to the gathering.

Exploration Phase: Continuing the journey, Dr. Uma S from Bangalore University, specialized in Forensic Science, enlightened the participants about viability assays and antioxidant assays on May 29th and 30th, highlighting their significance in clinical research. Dr. Anupama S K from Bangalore University, an expert in Microbiology and Biotechnology, led hands-on practical sessions on May 31st and June 1st, focusing on subculturing of cells and the MTT assay, thereby equipping participants with essential laboratory skills.

Participant Engagement: Throughout the program, participants actively engaged in discussions, practical demonstrations, and knowledge-sharing sessions. The enthusiastic participation and keen interest exhibited by each participant contributed significantly to the success of the program. The interactive sessions facilitated a deeper understanding of the subject matter and fostered a conducive learning environment.

Acknowledgments: The organizing committee extends sincere gratitude to Dr. Abhijith S R, Dr. Uma S, and Dr. Anupama S K for their invaluable contributions as resource persons. Their expertise, dedication, and passion for teaching greatly enriched the learning experience of the students. Additionally, appreciation is extended to all participants for their active involvement and enthusiasm, which contributed to the overall success of the program.

Valedictory Session (June 1st, 2024): The valedictory session served as a platform to reflect on the achievements and experiences gained throughout the program. Dr. M Vinay Hegde, Assistant Professor, led the session as the MC, while Dr. Lakshmikanth RN, HoD, delivered the welcome address. Dr. Muktha H, Assistant Professor, presented a comprehensive report summarizing the program's highlights. The resource persons, Dr. Abhijith, Dr. Uma S, and Dr. Anupama S K, shared their insights and reflections on the program. Dr. Pushpa H, Vice-Principal of MSRCASC, delivered an address, followed by presidential remarks from Dr. Vatsala G, Principal of MSRCASC. The session concluded with a vote of thanks delivered by Dr. Jayashree D R, Professor.


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Conclusion: The Value Added Program on "Elevating Science: Unleashing the Potential of Science" proved to be a remarkable journey of knowledge and exploration for the M.Sc students specializing in Animal Cell Culture. Through the expertise of resource persons, active participation of students, and dedicated efforts of the organizing committee, the program successfully achieved its objectives, leaving a lasting impact on the academic and professional growth of the participants.



Glimpses of Animal Cell Culture Value added Programme

Vatsali
3/5/24
Principal
M.S.Ramaiah College of Arts, Science &
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MSRIT POST, MSR Nagar



Department of Biotechnology

Organises

Value Added Programme
On

Elevating Science :
Unleashing the potential
of Animal Cell Culture

27 May - 1 June 2024
(For MSc Biotechnology Students)



Convenors
Dr. Sowbhagya R
Dr. Muktha H

ABOUT US

To let Ramiah's legacy through the Society Education Foundation (SEF) has left an indelible mark on education and healthcare. Established in 1992, the institution's commitment to the betterment of mankind led to the establishment of Sri's Devaraja College of Arts, Science and Commerce (SDSC) in 1994. SDSC boasts an impressive array of accolades. It holds accreditation with an 'A' Grade by the National Assessment and Accreditation Council (NAAC), ensuring quality standards. Furthermore, approval by DST and Bangalore City University, the college maintains its commitment to academic excellence and relevance. Moreover, recognition under section 20B of the 1980 Act and 100B further solidifies its standing in the academic sphere. The college's impact is evident through the accomplishments of its alumni, who hold positions in distinguished institutions worldwide and include several merit holders. The institution has been selected under the DST STAR College scheme in 2011 by DST, Ministry of Science and Technology. Beyond academic achievements, MSRCASC has fostered a culture of intellectual engagement and innovation. Its legacy includes organizing workshops, international and national conferences across various disciplines of Science, Commerce, and Management. These initiatives not only enrich the academic environment but also contribute to the advancement of knowledge in these fields.

About the Department

The Department of Biotechnology and Genetics at MS Ramaiah College of Arts, Science and Commerce was established in 2005, offering both undergraduate (UG) and postgraduate (PG) programs. These programs are designed with a primary objective to create a conducive learning environment for students while addressing the shortage of biotechnologists in critical sectors such as food, agriculture, medicine, and environmental management. The department boasts a team of highly qualified and experienced faculty members who deliver lectures and conduct practical sessions in various subjects, adhering to the curriculum developed by Bangalore City University. The emphasis lies on teaching the fundamentals, applications, and hands-on training, ensuring students are well-equipped with both theoretical knowledge and practical skills. State-of-the-art classrooms and laboratory facilities provide an ideal environment for learning and experimentation. This infrastructure allows students to gain practical experience and exposure to modern techniques and technologies in biotechnology and genetics. The Department has been recognized as the research centre by BCU in 2022.

Beyond academics, the department is committed to facilitating holistic development among students. Various curricular and extracurricular activities are organized to broaden their knowledge base and enhance their skill set. These activities not only supplement their academic learning but also present them for multiskilling opportunities in the dynamic field of biotechnology and genetics.

About the Value added Course

The Value-added course on Animal Cell Culture offers students a comprehensive understanding and practical experience in a fundamental biotechnological technique. Here are some key points about the course:

- 1. Introduction to Animal Cell Culture:** Students will learn about the principles and techniques involved in growing animal cells in a controlled environment.
- 2. Isolation and Culture of Cells:** The course covers the process of isolating cells from animal tissues and culturing them under artificial conditions, providing insights into cell behaviour and growth dynamics.
- 3. Historical Perspective:** Students will explore the evolution of animal cell culture from its origins as a laboratory technique to its current applications in various fields.
- 4. Media Development:** The development of basic tissue culture media is discussed, highlighting its crucial role in enabling the growth of a wide range of cells under different conditions.
- 5. Functional Studies:** Through in vitro culture of isolated cells from different animals, students gain insights into the functions and mechanisms of operation of various cell types, contributing to the advancement of biological knowledge.
- 6. Applications:** The course delves into the diverse applications of animal cell culture, including its role in cancer research, vaccine production, and gene therapy. Students understand how this technique is pivotal in these areas and its contribution to scientific and medical advancements.
- 7. Practical Training:** Hands-on training in laboratory settings allows students to gain practical experience in handling cell cultures, performing experiments, and analyzing results, preparing them for future research or professional endeavours in biotechnology.

PATRONS

- Dr. M.R. Jayaram, Chairman, GEF
- Sri M.R. Janakiram, Director, GEF
- Sri M.R. Kondandaram, Director, GEF
- Sri B.S. Ramaprasad, Chief Executive, GEF
- Sri G. Ramachandra, Chief of Finance, GEF
- Dr. Vatsala G. Principal, MSRCASC
- Dr. Anandappa I. Registrar Academics,
- Prof. Suresh J. Deputy Registrar Admin.
- Dr. Pushpa H. Vice Principal & DST Star College Co-Ordinator

RESOURCE PERSONS

- Dr. Abhijith S R, Assistant Professor, Dept of Biotechnology, MSRT
- Dr. Uma. S, Assistant Professor, Dept. of Forensic Science, Bangalore University
- Dr. Anupama S K, Assistant Professor, Dept. of Microbiology & Biotechnology, Bangalore University

ORGANIZING COMMITTEE

- Dr. Lakshmikanth R N, HoD, Dept. of Biotechnology
- Dr. Channarayana, R&D Head
- Dr. Jayashree D R, Professor
- Dr. Sowbhagya R, Asst Professor
- Dr. Muktha H, Asst Professor
- Dr. Ramesha N, Professor
- Dr. Vinay Hegde, Asst Professor

Course Modules

- **Fundamentals of Animal Cell Culture:** Understanding the basic principles and techniques involved in animal cell culture.
- **Cell Subculturing and Maintenance Protocols:** Practical guidance on subculturing techniques and maintaining cell lines for sustained growth and viability.
- **Drug Efficacy Testing using Cell Lines:** Exploring methods and protocols for assessing the effectiveness of drug samples on cultured cell lines.
- **Cell Viability Assessment Techniques:** Hands-on training in various assays and methods used to evaluate cell viability and cell counting techniques.
- **Exploring Applications in Biotechnology and Medicine:** Examining real-world applications of cell culture techniques in biotechnology, cancer research, vaccine development, and regenerative medicine.



Course Duration : 30 Hours
Time: 11.00 am - 4.30 pm
Scan for Registration



Last date for registration:
20 May 2024
Certificate will be provided upon
successful completion
of the course.

Course outcome

On successful completion of the course Students will be able to:

- Gain a comprehensive understanding of the fundamental principles underlying cell culture techniques
- Develop proficiency in utilizing animal cell culture systems to investigate cellular metabolism, unravel the intricacies of cellular function in health and disease.
- Acquire practical skills in manipulating the microenvironment of cultured cells, and optimizing cell-substrate attachment, thereby facilitating experimental design and data interpretation.
- Explore the diverse applications of animal cell culture in biomedical research and biotechnology, recognizing its pivotal role in advancing scientific knowledge and therapeutic innovations



Value Added Program
“Elevating Science: Unleashing the Potential of Animal Cell Culture”

Date: 27th May to 1st June 2024

Participants: IV Sem MSc Biotechnology students

Time: 11.00 a.m. to 4.30 p.m.

Venue: Sir M Viveswaraya Seminar Hall, Animal Cell Culture lab and MSc lab

Programme Schedule

Day	Date	Resource persons	Modules
1	27/05/24	Dr Abhijith K R	Fundamentals of Animal Cell Culture
2	28/05/24	Dr Abhijith K R	Cell subculture, maintenance and drug efficacy testing
3	29/05/24	Dr Uma S	Cell viability assessment techniques
4	30/05/24	Dr Uma S	Exploring applications in biotechnology and medicine
5	31/05/24	Dr Anupama S K	Hands on session of cell viability assessment
6	01/05/24	Dr Anupama S K	Hands on session of cell viability assessment

Vatsal
30/05/24

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Value Added Programme on

**“ELEVATING SCIENCE: UNLEASHING THE
POTENTIAL OF ANIMAL CELL CULTURE”**

Organized by the Dept. of Biotechnology from 27th May to 1st June 2024

VALEDICTORY SESSION - 1st June 2024

Venue: Sir M Visweswaraya Seminar Hall

Time: 11.30 a.m. to 12.00 noon

Programme schedule

MC	Dr. Vinay Hegde, Assistant Professor
Welcome address	Dr. Lakshmikanth RN, HoD
Comprehensive Report	Dr. Muktha H, Assistant Professor
Address by Resource Persons	Dr. Abhijith, Dept. of Biotechnology, MSRIT Dr. Uma S, Dept. of Forensic Science, Bangalore University Dr. Anupama S K, Dept. of Microbiology & Biotechnology, Bangalore University
Address by Vice-Principal	Dr. Pushpa H, MSRCASC
Presidential Remarks	Dr. Vatsala G, Principal, MSRCASC
Vote of Thanks	Dr. Jayashree D R, Professor

Vatsala G
30/05/24

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Value Added Program - "Elevating Science: Unleashing the Potential of Animal Cell Cultures"

Date: 27th May to 1st June 2024

Participants: III Sem MSc students

Time: 11.00 a.m. to 4.30 p.m.

Venue: Sir M Vishweshwaraya Seminar hall, Animal Cell Culture lab and MSc lab

Attendance Sheet

Sl. No	Reg. no.	Name of the Student	27.05.24	28.05.24	29.05.24	30.05.24	31.05.24	01.06.24
1	P18EV22S027001	H V Vijayalakshmi	Vijayalakshmi	Vijayalakshmi	Vijayalakshmi	Vijayalakshmi	Vijayalakshmi	Vijayalakshmi
2	P18EV22S027002	Anusha kumari R	Anusha	Anusha	Anusha	Anusha	Anusha	Anusha
3	P18EV22S027003	MONISHA C	Monisha	Monisha	Monisha	Monisha	Monisha	Monisha
4	P18EV22S027004	SOWMYA C	Sowmya	Sowmya	Sowmya	Sowmya	Sowmya	Sowmya
5	P18EV22S027005	Varsha V	Varsha	Varsha	Varsha	Varsha	Varsha	Varsha
6	P18EV22S027006	BHUVANA PRASHANTH	Bhuvana Prashanth	Bhuvana Prashanth	Bhuvana Prashanth	Bhuvana Prashanth	Bhuvana Prashanth	Bhuvana Prashanth
7	P18EV22S027007	Vaishnavi S P	Vaishnavi	Vaishnavi	Vaishnavi	Vaishnavi	Vaishnavi	Vaishnavi
8	P18EV22S027008	Viharika . S	Viharika	Viharika	Viharika	Viharika	Viharika	Viharika
9	P18EV22S027009	Chandana T J	Chandana	Chandana	Chandana	Chandana	Chandana	Chandana
10	P18EV22S027010	DEEPA M	Deepa	Deepa	Deepa	Deepa	Deepa	Deepa
11	P18EV22S027011	THARADEVI T S	Thara	Thara	Thara	Thara	Thara	Thara
12	P18EV22S027012	Supriya R	Supriya	Supriya	Supriya	Supriya	Supriya	Supriya
13	P18EV22S027013	Reshma S	Reshma	Reshma	Reshma	Reshma	Reshma	Reshma
14	P18EV22S027014	Ramya Shree H Y	Ramya	Ramya	Ramya	Ramya	Ramya	Ramya
15	P18EV22S027015	Madhura M R	Madhura	Madhura	Madhura	Madhura	Madhura	Madhura
16	P18EV22S027016	VARSHITA U	Varshita	Varshita	Varshita	Varshita	Varshita	Varshita
17	P18EV22S027017	Keerthana G	Keerthana	Keerthana	Keerthana	Keerthana	Keerthana	Keerthana
18	P18EV22S027018	SOWMYA S	Sowmya	Sowmya	Sowmya	Sowmya	Sowmya	Sowmya
19	P18EV22S027019	Anusree S	Anusree	Anusree	Anusree	Anusree	Anusree	Anusree
20	P18EV22S027020	Prawalika S	Prawalika	Prawalika	Prawalika	Prawalika	Prawalika	Prawalika

Vasanthi
30/05/24
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		Koudli	Koudli	Koudli	Koudli	Koudli	Koudli
	P18EV22S027021	KRUTHI K M	Pooja	Pooja	Pooja	Pooja	Pooja
22	P18EV22S027022	R.PADMASHREE	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT
23	P18EV22S027023	RAJAT BISWAS	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT
24	P18EV22S027024	NIDHI PANDEY	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT
25	P18EV22S027025	MEGHA PARASURAM GHATNATTI	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT
26	P18EV22S027026	SAKSHI MATHPATI	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT
27	P18EV22S027027	SHUBHASHREE P M	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT
28	P18EV22S027028	LEKHANA V	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT
29	P18EV22S027029	JANANI V	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT
30	P18EV22S027030	ASHWINI N	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT
	P18EV22S027031	SYED ISSAM AZAM	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT
32	P18EV22S027032	P VISHNU	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT
33	P18EV22S027033	PRASHANT GANIGER	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT
34	P18EV22S027035	SHAH PANKTI KETAN	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT
35	P18EV22S027036	FEBE FRANCIS	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT
36	P18EV22S027037	ANEESA MOL C	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT
37	P18EV22S027038	HARSHA C	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT
38	P18EV22S027039	NARA BHANU PRAKASH	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT
39	P18EV22S027041	DEVANSH SINGH	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT
40	P18EV22S027042	BHAVANA Y M	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT
41	P18EV22S027043	FAISAL KHAN M	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT
42	P18EV22S027044	NAIK SAISHA RAJESH	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT
43	P18EV22S027045	PUNEETH S M	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT
44	P18EV22S020007	VAISHNAVI. N	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT
45	P18EV22S020011	YASHASWINI.K.S	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT
	P18EV22S020013	PAYAL.V	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT
x-47	P18EV22S132019	ASWANTH N.V	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT
x-48	P18EV22S132007	B.SANGIEETHA	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT
x-49	P18EV22S132006	TANUSRI.K.H	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT

- Resource (1) Abhijith KR
 Person (2) Abhijith KR
 (3) Uma S
 (4) Uma S
 (5) Anupama SK
 (6) Anupama SK

Vasanthi
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FEEDBACK RESPONSES ON VAP - Elevating Science: Unleashing the potential of Animal Cell Culture

Sl. No	Name	Email	Class	How would you rate the relevance of the VAP?	How would you rate the effectiveness of the VAP?	How would you rate the satisfaction of the VAP?	What did you like about the VAP?	Any additional comments/suggestions	
01/06/2024 16:24	Rajat Biswas	rajatbiswas583@gmail.com	MSc Biotechnology	Good	High	Good	Very effective	Very satisfy	Practical session
02/06/2024 16:33	Sowmya C	sowmyac0908@gmail.com	MSc Biotechnology	Good	High	Good	Very effective	Very satisfy	Practical session
02/06/2024 16:36	ANEESA MOL C	aneesamolc@gmail.com	MSc BIOTECHNOL	Excellent	High	Excellent	Very effective	Very satisfy	Both the theory and practical
03/06/2024 17:07	Reshma S	reshmagowda123@gmail.com	Msc BT (IV Sem)	Excellent	High	Good	Very effective	Very satisfy	Well organised and very informative. The programme provided us with specific hands-on skills.
01/06/2024 17:31	Kruthi	kruthigowdek20@gmail.com	Msc bt 4th sem	Good	High	Excellent	Very effective	Moderately satisfy	The way our lecturers organize another value added like this it will be really helpful for us
01/06/2024 17:36	Varsha V	varshavish09@gmail.com	Msc	Good	High	Good	Very effective	Very satisfy	
01/06/2024 18:01	Anushakumari R	ram.anusha2002@gmail.com	M.Sc Biotechnology	Excellent	Moderate	Good	Moderately effective	Moderately satisfy	The topic animal cell culture
01/06/2024 19:30	Monisha C	monisharekha02@gmail.com	Msc biotechnology	Good	Moderate	Good	Very effective	Very satisfy	Theory and practical session
02/06/2024 00:23	Syed Issam Azam	syedissam21@gmail.com	Msc BT	Excellent	High	Good	Very effective	Very satisfy	The content
02/06/2024 09:46	Vihanika S	vihanka27@gmail.com	MSc Biotechnology	Good	High	Good	Very effective	Very satisfy	PRACTICAL SESSION
03/06/2024 10:24	JANANI V	jananijana327@gmail.com	MSc BIOTECHNOL	Excellent	High	Excellent	Very effective	Very satisfy	The information provided
03/06/2024 10:24	Tharadevi T.S	tharasadashivaiah@gmail.com	MSc Biotechnology	Good	High	Excellent	Very effective	Very satisfy	The value added course was informative
03/06/2024 10:26	Anusree S	anusrees254@gmail.com	Msc Biotechnology	Good	Moderate	Good	Very effective	Very satisfy	Informative
04/07/2024 15:51	Devansh Singh	devanshs457@gmail.com	MSc BT (4th sem)	Good	High	Good	Moderately effective	Moderately satisfy	
04/07/2024 15:58	P Vishnu	vishnukrishna597@gmail.com	MSc biotechnology	Good	Moderate	Good	Moderately effective	Moderately satisfy	Their works
04/07/2024 16:28	Madhura M R	mmadhura24@gmail.com	MSc	Good	Moderate	Good	Moderately effective	Moderately satisfy	Theory part

Vatsalya
25/06/24

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