



I I Om Shri Manjunathaya Namah I I



Krishnamurthypuram Mysuru -5700 04

(Managed by: S.D.M.E Society (R) Ujire, Karnataka, India)
President: Padma Vibhushan Dr. D. Veerendra Heggede

Accredited by NAAC with B Grade

Vision: "Empowerment of women to face Global challenges"

"BIOPATH – Workshop and Hands on Training on PCR and ELISA" & Poster Expo

Department of Biotechnology & IQAC

On January 30th and 31st 2023

Resource person:
Ms Smitha Grace,
Assistant professor,
Dept of Biotechnology,
Mahajanas PG centre Mysore.

Prepared By:
Dr Shwetha S
HoD & Asst professor
Dept of Biotechnology

Ms Durgashree A J
Asst professor
Dept of Biotechnology

PRINCIPAL

MMK & SDM Mahila Mahavidyalaya
Krishnamurthypuram, Mysore-570 004

DEPARTMENT NAME: BIOTECHNOLOGY

PROGRAM NAME: Workshop and hands on training on PCR and ELISA

DATE: 30th and 31st January 2023

TIME: 10 am – 5pm

ORGANIZER: Dept. of Biotechnology, MMK & SDM MMV College

VENUE: Mahajanas PG Centre, Metagalli, KRS Road, Mysore

TOTAL PARTICIPANTS: III yr B.Sc. Biotechnology students (30)

OBJECTIVE: To make understand theMolecular techniques which have been widely used in Immunology and Medical Biotechnology comprising clinical diagnosis, e.g., diagnosing disease, predicting disease course, and identifying infectious agents.

PROGRAM DETAILS:



MAHAJANA EDUCATION SOCIETY (R)
POOJA BHAGAVAT MEMORIAL MAHAJANA EDUCATION CENTRE
PG wing of SBRR MAHAJANA FIRST GRADE COLLEGE(AUTONOMOUS)
METAGALLI, K.R.S ROAD, MYSURU-16

SCHOOL OF LIFESCIENCES
Department of studies in Biotechnology

And

MMK & SDM MAHILA MAHAVIDYALAYA, MYSURU

Jointly presents

Workshop & Hands on Training on PCR and ELISA"

January 30th and 31st 2023

INTENARY OF THE WORKSHOP

Monday January 30 th 2023	
10.00 – 10.15AM	Registration and check in Biotechnology Lab, Ground floor, Lifescience block
10.15 – 11.00 AM	Theory Session 1 : Basics and components of PCR and its application
11.00- 11.30 AM	Practical session 1: Setting up of PCR reaction mix


PRINCIPAL

MMK & SDM Mahila Mahavidyalaya
Krishnamurthypuram, Mysore-570 004

11.30 -11.40 PM	Tea Break
11.45 – 1.30 PM	Practical session 2: Software programming in Thermocycler
1.30 -2.00 PM	Lunch Break
2.00 – 3.00 PM	Practical session 2: Gel electrophoresis
3.00 -3.30 PM	Practical session 3: Interpretation of results followed by crossword as activity
3.30-4.00 PM	Practical session 4: Day 1 of ELISA (Sandwich) Coating of capture antibody on 96 well plate
Tuesday January 31th 2023	
9.30-10.30 AM	Practical session 4: Blocking of residual sites Followed by incubation
10.30 -11.00AM	Theory Session 2: Basics and types of ELISA and its application
11.00- 11.15 AM	Tea Break
11.15 -1.30 PM	Practical session 5: Preparation of antigen and Addition to wells
1.30 -2.00 PM	Lunch Break
2.00-2.30PM	Practical session 6: Coating of Secondary antibody -HRP conjugate
2.30-3.30 PM	Practical session 7: Addition of Substrate followed by addition of stop solution and measurement Followed by Quiz
3.00 – 4.00	Interpretation of Results and determination of Ag concentration using SEMI-LOG graph sheet


PRINCIPAL

**MMK & SDM Mahila Mahavidyalaya
Krishnamurthypuram, Mysore-570 004**

Sl. No	Student Name	Batch No
1	ANANYA R BHATTA	BATCH 1
2	ANANYA S	
3	BHOOMIK D R	
4	CHAITHANYA A P	
5	CHANDANA S	
6	CHINMAYE BALAKRISHNA	
7	G DEEKSHITHA	
8	HARSHITHA H	
9	JAGRUTHI JAIN B J	BATCH 2
10	KAVITHA N	
11	KUMUDINI H D	
12	KUSUMA S	
13	MANTHRIAMOORTHY SHANMUGA PRIYA	
14	NAYANA J	
15	NISARGA C	
16	NISHAVARSHINI V	
17	PRAMOLIKA M	BATCH 3
18	PRIYANKA PRADHAN KESHAB	
19	R M BHUVANA	
20	RAKSHITHA R	
21	RISHA BOPANNA C	
22	SAHANA G	
23	SAHANA N BHAT	
24	SHREESHA N S	
25	SHRUTHI KUMARI SINGH	BATCH 4
26	SINCHANA S	
27	SNEHA B S	
28	SONA G M	
29	SUPRIYA H P	
30	VAISSHNAVEE P J	
31	ANUSHA S	

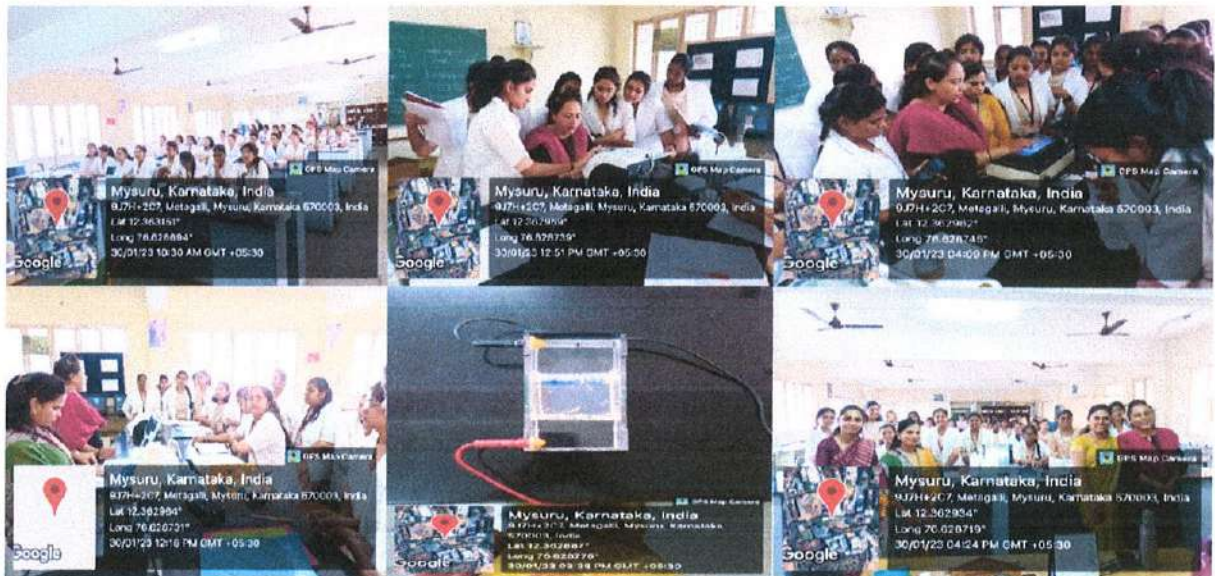

PRINCIPAL

MMK & SDM Mahila Mahavidyalaya
Krishnamurthypuram, Mysore-570 00

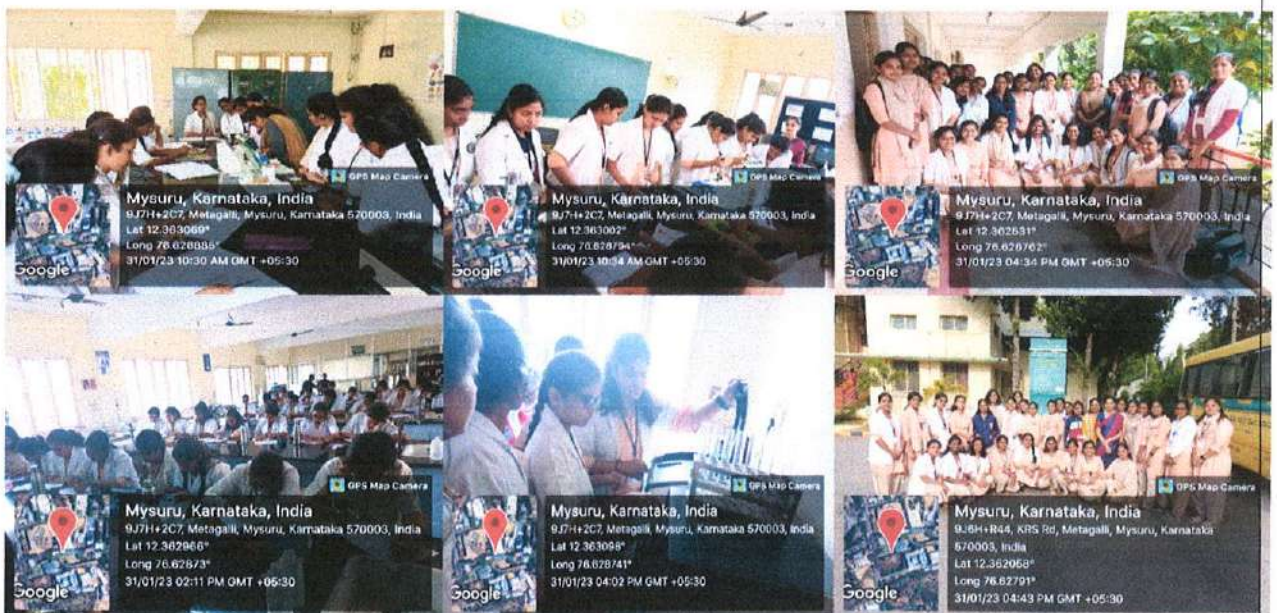
PROGRAM OUTCOME:The students got to explore steps and conduct experiments of PCR and ELISA individually under the guidance of Ms Smitha Grace , Asst Professor, Mahajanas PG centre. Polymerase chain reaction (abbreviated PCR) is a laboratory technique for rapidly producing (amplifying) millions to billions of copies of a specific segment of DNA (DNA of infectious agents like bacteria, virus and fungi). ELISA or Enzyme-Linked Immunosorbent Assay is an immunoassay technique utilized to detect diseases. The principle of ELISA is antigen (infectious agent)-antibody (Immune protein) interaction. Students were

involved in the experiment, graph plotting and use of instruments of both ELISA and PCR. They were also involved in solving puzzles and quiz related to PCR and ELISA.

GEO TAG PHOTOS:



PCR Lecture, set up of PCR reaction mix and Software programming in Thermo cycler, Gel electrophoresis and Gel documentation



ELISA Lecture, Antigen and Antibody coating, Puzzles and Quiz, Spectrophotometric and Semilog graph analysis.

[Handwritten Signature]
PRINCIPAL

**MMK & SDM Mahila Mahavidyalaya
 Krishnamurthypuram, Mysore-570 004**

MMK & SDM MAHILA MAHAVIDYALAYA, MYSURU

Session: 2 days Workshop on "PCR and ELISA" at Pooja Bhagwat Mahajan's Memorial Education Centre [PBMMEC], Mysore

Attendance List

Class: III BtBM (BSc)

Date: 30-01-2023

Time: 10AM

Venue: PBMMEC

Sl. No	Roll number	Student Name	Present / Absent	Signature of the student
1	20400	ANANYA R BHATTA	P	Ananya R Bhatta
2	20401	ANANYA S	P	Ananya S
3	20402	BHOOMIK D R	P	Bhoomika D R
4	20403	CHAITHANYA A P	P	Chaithanya A P
5	20404	CHANDANA S	P	Chandana S
6	20405	CHINMAYE BALAKRISHNA	P	Chinmaye B. K.
7	20407	G DEEKSHITHA	P	G Deekshitha
8	20408	HARSHITHA H	P	Harshitha H
9	20409	JAGRUTHI JAIN B J	P	Jagruthi Jain
10	20410	KAVITHA N	P	Kavitha N
11	20411	KUMUDINI H D	P	Kumudini H D
12	20412	KUSUMA S	P	Kusuma S
13	20413	MANTHRIAMOORTHY SHANMUGA PRIYA	P	Manthriamorthy S.P.
14	20414	NAYANA J	P	Nayana J
15	20415	NISARGA C	P	Nisarga C
16	20416	NISHAVARSHINI V	P	Nisha Varshini V
17	20417	PRAMOLIKA M	P	Pramolika M
18	20418	PRIYANKA PRADHAN KESHAB	P	Priyanka Pradhan
19	20419	R M BHUVANA	P	R M Bhuvana
20	20420	RAKSHITHA R	P	Rakshitha R
21	20421	RISHA BOPANNA C	Ab	ABSENT
22	20422	SAHANA G	P	Sahana G
23	20423	SAHANA N BHAT	P	Sahana N Bhat
24	20424	SHREESHA N S	P	Shreeshan S
25	20425	SHRUTHI KUMARI SINGH	P	Shruthi Kumari S
26	20427	SINCHANA S	P	Sinchana S
27	20428	SNEHA B S	P	Sneha B S
28	20429	SONA G M	P	Sona G M
29	20430	SUPRIYA H P	P	Supriya H P
30	20431	VAISSHNAVEE P J	P	Vaishnavi P J
31	20432	ANUSHA S	P	Anusha S

Faculty In charge

Durgashree A J

Coordinator

Principal

PRINCIPAL

MMK & SDM Mahila Mahavidyalaya
Krishnamurthypuram, Mysore-570 004

MMK & SDM MAHILA MAHAVIDYALAYA, MYSURU

Session: 2 days Workshop on "PCR and ELISA" at Pooja Bhagwat Mahajan's Memorial Education Centre [PBMMEC], Mysore

Attendance List

Class: III BtBM (BSc)

Date: 31-01-2023

Time: 10AM

Venue: PBMMEC

Sl. No	Roll number	Student Name	Present / Absent	Signature of the student
1	20400	ANANYA R BHATTA	P	Ananya R Bhatta
2	20401	ANANYA S	P	Ananyas
3	20402	BHOOMIK D R	P	
4	20403	CHAITHANYA A P	P	Chaithanya A.P
5	20404	CHANDANA S	P	Chandana S
6	20405	CHINMAYE BALAKRISHNA	P	Chinmaye B
7	20407	G DEEKSHITHA	P	G Deekshitha
8	20408	HARSHITHA H	P	Harshitha H
9	20409	JAGRUTHI JAIN B J	P	Jagruthi Jain
10	20410	KAVITHA N	P	Kavitha N
11	20411	KUMUDINI H D	P	Kumudini H D
12	20412	KUSUMA S	P	Kusuma S
13	20413	MANTHRIAMOORTHY SHANMUGA PRIYA	P/AB.	
14	20414	NAYANA J	P	Nayana J
15	20415	NISARGA C	P	Nisarga C
16	20416	NISHAVARSHINI V	P	Nisha Varshini V
17	20417	PRAMOLIKA M	P	Pramolika M
18	20418	PRIYANKA PRADHAN KESHAB	P	Priyanka Pradhan
19	20419	R M BHUVANA	P	R Bhuvana
20	20420	RAKSHITHA R	P	Rakshitha R
21	20421	RISHA BOPANNA C	AB/AB	ABSENT
22	20422	SAHANA G	P	Sahana G
23	20423	SAHANA N BHAT	P	Sahana N
24	20424	SHREESHA N S	P	Shreeshan S
25	20425	SHRUTHI KUMARI SINGH	P	Shruthi K
26	20427	SINCHANA S	P	Sinchana S
27	20428	SNEHA B S	P	Sneha B S
28	20429	SONA G M	P	Sona G.M.
29	20430	SUPRIYA H P	P	Supriya H P
30	20431	VAISSHNAVEE P J	P	Vaishnavi P J
31	20432	ANUSHA S	P	Anusha S

Faculty In charge

1) S. Shweta

2) Durgashree A-J

Coordinator

Principal

PRINCIPAL

MMK & SDM Mahila Mahavidyalaya
Krishnamurthypuram, Mysore-570 004



MAHAJANA EDUCATION SOCIETY (R.)

Pooja Bhagavat Memorial Mahajana Education Centre

SBRR Mahajana First Grade College (Autonomous)

Metagalli, Mysuru-570016

SCHOOL OF LIFESCIENCES

Department of Studies in Biotechnology

and

MMK & SDM MAHILA MAHAVIDYALAYA

Krishnamurthypuram, Mysuru - 570004

Department of Biotechnology

Jointly present

Workshop & Hands on Training on PCR and ELISA”

January 30th and 31st 2023

Certificate

This is to certify that Ms. _____ has successfully participated in “Two days’ Workshop & Hands on Training on PCR and ELISA” organized by the Department of Studies in Biotechnology, School of Life Sciences, Pooja Bhagavat Memorial Mahajana Education Centre, SBRRMFGC (Autonomous), Metagalli, Mysuru on 30th & 31st January 2023.

Ms. Smitha Grace S.R.

Ms. Smitha Grace S.R.

Workshop Convener

Assistant Professor-DOS in Biotechnology
School of Life Sciences, PBMMEC

S. Shwetha

Dr. Shwetha. S

Asst. Prof. and Head
Dept. of Biotechnology
MMK & SDM MMV, Mysuru

Prof. Sainath Malligemadu

Prof. Sainath Malligemadu

Principal
MMK & SDM MMV

MMK & SDM Mahavidyalaya
Krishnamurthypuram, Mysuru-570 004

Dr. S.R. Ramesh

Dr. S.R. Ramesh

Chief Scientist
School of Life Sciences
PBMMEC, Mysuru

Dr. C.K. Renukarya

Dr. C.K. Renukarya

Director
PBMMEC
Mysuru