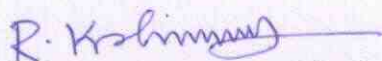


GUJARAT STATE BIOTECHNOLOGY MISSION
Dept. of Science and Technology, Govt. of Gujarat
Contents for the Submitting the Programme Report

1. Title of the Programme: Hands on Training on Molecular Biology Techniques.
2. Category: Training/Workshop
3. Date/s and Duration: 22nd – 23rd October 2021.
4. Venue: C. G. Bhakta Institute of Biotechnology, Uka Tarsadia University, Maliba Campus, Gopal Vidyanagar, Bardoli-Mahuva Road, Tarsadi – 394350, Surat, Gujarat – India.
5. Dignitary/ies present at inaugural function:
(i) Name: Dr. Shailesh Shah
(ii) Designation: Dean Research
(iii) Name of institute: Maliba Pharmacy College
(iv) Contact details: Dr. Shailesh Shah, Maliba Pharmacy College, Maliba Campus, Gopal Vidyanagar, Bardoli-Mahuva Road, Tarsadi – 394350, Surat, Gujarat – India. Email: shailesh.shah@utu.ac.in Mob: +91 9099063130
6. Invited speaker(s)/ Expert(s): Dr. Abhishek Sharma & Dr. Gopal Jee Gopal (Pls See Annexure I)
7. Total no. of participants: 30 (Pls See Annexure II)
8. A. Programme summary: Pls See Annexure III
B. Details of the Programme with Printed material - Brochure / leaflet: Pls See Annexure IV
9. Final Statement of Income and Expenditure:
Pls See Statement of Expenditure Attached (Annexure V)
10. Utilization Certificate under signature and Seal of the Head of the Institute & Accounts Head:
Pls See Utilization Certificate Attached Annexure (VI)
11. Copy of Bills and vouchers duly signed by the coordinator: (Pls See Annexure VII)
12. Photographs (Pl. select six best pictures with appropriate captions)
(i) Photograph of the dias with banner
(ii) Inaugural function
(iii) Expert(s) delivering lecture(s)
(iv) Programme in session with Audience (Pls See Annexure VIII)
13. Press Release / Media Report, if any: Pl. attach: NA
14. e-Presentations/ Videography: Pl. attach: NA

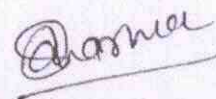


Signature of the Head of the Institute

with seal

Director

C. G. Bhakta Institute Of Biotechnology
UKA TARSADIA UNIVERSITY
Bardoli-Mahuva Road, Tarsadi-394350
Dist. Surat (Gujarat) INDIA



Signature of Programme Coordinator

(Dr. Abhishek Sharma)

Annexure I

1. Invited speaker(s)/ Expert(s)

- (i) Name : Dr. Abhishek Sharma
(ii) Designation : Assistant Professor
(iii) Name of institute : C. G. Bhakta Institute of Biotechnology, Uka Tarsadia University, Maliba Campus, Gopal Vidyanagar, Bardoli-Mahuva Road, Tarsadi – 394350, Surat, Gujarat – India.
(iv) Contact details : Email: abhishek.sharma@utu.ac.in Mob: +91 8188814000
(v) Topic of lecture : RNA isolation, cDNA synthesis, Real Time PCR, Gene expression Analysis
(vi) Lecture / presentation notes: **STUDY MATERIAL ATTACHED SEPERATELY**

2. Invited speaker(s)/ Expert(s)

- (i) Name : Dr. Gopal Jee Gopal
(ii) Designation : Assistant Professor
(iii) Name of institute : C. G. Bhakta Institute of Biotechnology, Uka Tarsadia University, Maliba Campus, Gopal Vidyanagar, Bardoli-Mahuva Road, Tarsadi – 394350, Surat, Gujarat – India.
(iv) Contact details : Email: gopal.jee@utu.ac.in Mob: +91 9558880617
(v) Topic of lecture : Nucleic Acid Isolation and Polymerase Chain Reaction.
(vi) Lecture / presentation notes: **STUDY MATERIAL ATTACHED SEPERATELY**

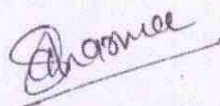
Annexure II Total no. of participants

Sr. No	Candidate Name	Designation	Institute	Email ID/contact No.
1	Ms. HinalKishorbhaiBaroliya	Research Scholar	Sir P. P. Institute of Science, M. K. Bhavnagar University	hinalbaroliya25@gmail.com 08469517970
2	Ms. HimaRajeshbhaiVadera	Research Scholar	Sir P. P. Institute of Science, M. K. Bhavnagar University	himavadera@outlook.com 9408786265
3	Mr. Rajesh BhagubhaiRabari	Post Graduate	Department of Bioscience, Saurashtra University	rajurabarib@gmail.com 9898950079
4	Mr. Priyesh Kumar Chaudhary	Research Scholar	Zoology Department, Gujarat University	priyeshkumar789@gmail.com 8320928257
5	Ms. RuchitaBarot	Post Graduates	Nirma University	ruchita22barot@gmail.com 9512799928
6	Ms. Khushbu Sureshkumar Verma	Faculty	Bhagwan Mahavir University	khushbuverma2096@gmail.com 9712140957
7	Ms. Heena Mohamad Taufik Khan	Graduate	Bhagwan Mahavir College of Science and Technology	heenakhan8128827586@gmail.com 7622051944
8	Ms. Bhavya Dilipkumar Kiri	Research Scholar	Sri A.N. Patel P.G. Institute of Science and Research	kiribhavya96@gmail.com 9909640883
9	Mr. Jaimil Kumar Sondaliya	Post Graduate	Shree Ramkrishna Institute of Computer Education and Applied Sciences	jaimilsondalia777@gmail.com 9624849854
10	Dr. Maitrylimesh Prajapati	Research Scholar	P.G. Department of Biosciences, Sardar Patel University	maitryprj@gmail.com 97243047214
11	Ms. GopaMehulbhaiBoliya	Post Graduate	M. S. University	gopaboliya468@gmail.com 9106921567
12	Mr. Manish Prajapati	Post Graduate	Department of Biotechnology, VNSGU	pmanish97378@gmail.com 9737833957
13	Mr. KrutikRudani	Post Graduate	Department of Biotechnology, VNSGU	krutikr90@gmail.com 09712022945
14	Ms. Riddhi Jain	Post Graduate	Department of Biotechnology, VNSGU	riddhijain.232000@gmail.com 7069471049

16	Ms. Disha Rajendrakumar Patel	Post Graduate	VNSGU Department of Biotechnology, VNSGU	9016826278 16patel.disha9@gmail.com 9737613632
17	Ms. Nilima Kumari Patel	Faculty	The Patidar Gin Science College	nilimapatel.6892@gmail.com 7359556931
18	Dr. Jeni Patel	Faculty	The Patidar Gin Science College	jenirpatel@yahoo.co.in 9427126456
19	Mrs. Divya Patel	Research Scholar	C.G. Bhakta Institute of Biotechnology	divya.npatel@utu.ac.in 9099459499
20	Mr. Kishan Patel	Post Graduate	C.G. Bhakta Institute of Biotechnology	kishanpatelind@gmail.com 7778036929
21	Mr. Rudrank Moharana	Post Graduate	C.G. Bhakta Institute of Biotechnology	rudrank1999@gmail.com 7894212556
22	Mr. Lakum Jashvin Bhaskar	Post Graduate	C.G. Bhakta Institute of Biotechnology	lakumiasvin99@gmail.com 7600123363
23	Mr. Pallav Banerjee	Post Graduate	C.G. Bhakta Institute of Biotechnology	preambanerjee0001@gmail.com 9106645749
24	Ms. Shivani Rajput	Post Graduate	C.G. Bhakta Institute of Biotechnology	shivanirajput170399@gmail.com 9662135800
25	Mr. Ashray Nasit	Post Graduate	C.G. Bhakta Institute of Biotechnology	ashray84252@gmail.com 7043457059
26	Ms. Hinal Chaudhary	Research Scholar	C.G. Bhakta Institute of Biotechnology	chaudharhinal222@gmail.com 9408991163
27	Ms. Trupti Patil	Research Scholar	C.G. Bhakta Institute of Biotechnology	patiltrupti2002@gmail.com 9712753837
28	Dr. Urjita Sheth	Faculty	C.G. Bhakta Institute of Biotechnology	urjita.sheth@utu.ac.in 9825333721
29	Ms. Aarti Gayakwad	Research Scholar	C.G. Bhakta Institute of Biotechnology	agagkwad128@gmail.com 9662532768
30	Ms. Zinal Kumari Pravinbhai Mistry	Research Scholar	C.G. Bhakta Institute of Biotechnology	zinalmistry24@gmail.com 8469269589

Annexure III (Programme summary)

C. G. Bhakta Institute of Biotechnology successfully organized two days hands on workshop on "Hands on Training on Molecular Biology Techniques" on 22& 23 October, 2021, under the sponsorship of Gujarat State Biotechnology Mission (GSBTM), Department of Science & Technology (DST) Government of Gujarat. Total 30 participants from 12 different institutes benefited from this workshop with systematic hands-on-training on extraction and purification of Genomic DNA and total RNA from Bacteria and Plant tissues. The isolated DNA and RNA was used for hands on practice of Gel Electrophoresis. Isolated RNA was used for cDNA synthesis, in which students converted RNA into cDNA using Polymerase Chain Reaction. The amplified cDNA was again used for RNA Gel Electrophoresis hands on training. The results of gel electrophoresis were used for hands on training on Gel Documentation System to visualize DNA and RNA bands on gel. Finally, the synthesized cDNA was used to amplify the *Catharanthus roseus* plants genes to learn gene expression analysis. All students completed hands on training on Real Time PCR for gene expression analysis using cDNA and gene specific primers. The mathematic calculations of the real time PCR results were finally explained to students. After calculations, students were given the task to solve gene expression analysis of real time PCR results, that they successfully completed. Thus, the work shop ended with complete hands-on training session.



Signature Coordinator
Dr. Abhishek Sharma



Director
C. G. Bhakta Institute Of Biotechnology
UKA TARSADIA UNIVERSITY
Bardoli- Mahuva Road, Tarsadi-394350
Dist. Surat (Gujarat) INDIA

Annexure VIII - Photographs of Workshop



Figure 1. Photograph of the dais with banner



Figure 2: Photograph of the dais with banner "After registration process, we started Inaugural function at 9.30 AM. Dr. Shailish Shah, Dean Research, Maliba Pharmacy College, UTU was a Guest of honour in inaugural function. He inaugurated workshop with lamp lightning and welcomed all the participants. He also motivated students to take benefits of this workshop.



Figure 3. Dr. Gopal Jee Gopal Explaining the Molecular Mechanism and Biochemistry of Nucleic Acid Isolation and Various PCR Preparation.



Figure 4. Dr. Abhishek Sharma Explaining the Molecular Mechanism and Biochemistry of cDNA Synthesis and PCR Instrument Setup.

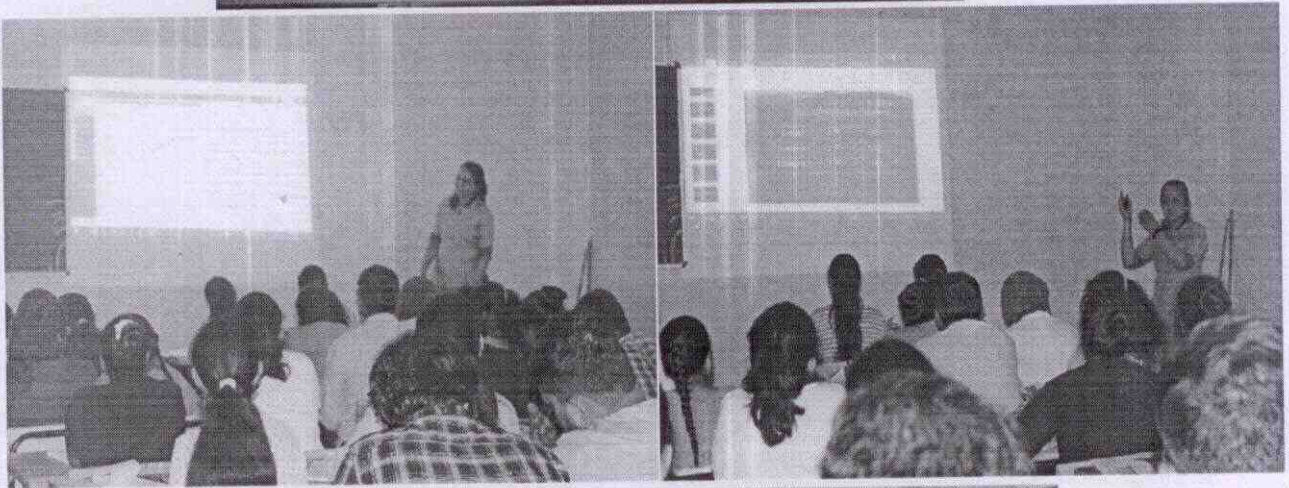
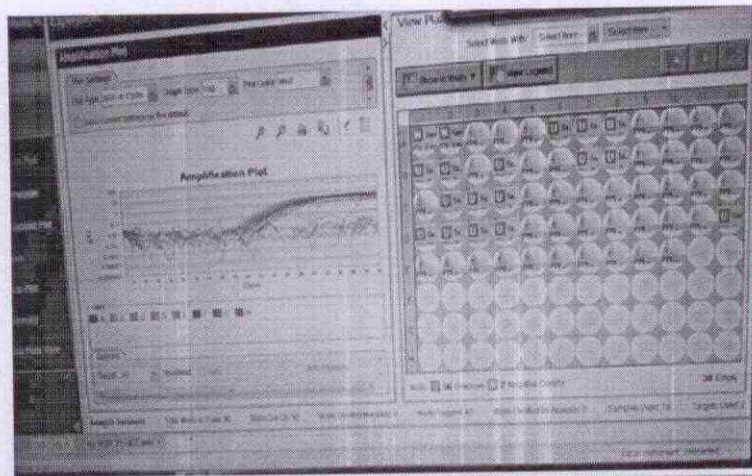


Figure 5. Students Learning Real Time PCR and Gene Expression Result Analysis.



Figure 6. Valedictory session with feedback from participants followed by vote of thanks and group photo of all participants with speakers and organizing team.

**Two days National Workshop on
"Hands-on Training in Molecular Biology Techniques"
22nd and 23rd October 2021**

Schedule

22nd October 2021		
Time	Program	Venue
8:30 am to 9:30 am	Registration and breakfast	SHRIMAD Hall, UTU
9:30 am to 10:00 am	Inaugural function, Introduction and Felicitation of Dignitaries, Light Lamping, Brief Introduction of Workshop	SHRIMAD Hall, UTU
10:00 am to 12:30 pm	Introduction and hands-on training of Genomic DNA/RNA Isolation (Dr. Gopal Jee Gopal, Assistant Professor, CGBIBT, UTU)	Lab 12
12:30 pm to 1:30 pm	Lunch	UTU Mess
1:30 pm to 3:00 pm	Hands-on Training on Agarose Gel Electrophoresis of PCR Products (Dr. Gopal Jee Gopal Assist Professor, CGBIBT, UTU)	Lab 12
3:00 pm to 3:15 pm	Tea Break	Corridor of CGBIBT 2nd Floor
3:15 pm to 5:00	Introduction and Hands-on training of PCR Setup for Conventional and RNA to cDNA – Reverse Transcription (Dr. Abhishek Sharma, Assist Professor, CGBIBT, UTU)	Lab 12
23rd October 2021		
8:30 am to 9:00 am	Breakfast	CGBIBT, UTU
9:00 am to 12:30 pm	Introduction and Hands-on training on Real-Time PCR (Dr. Abhishek Sharma Assist Professor, CGBIBT, UTU)	CGBIBT, UTU
12:30 pm to 1:30 pm	Lunch break	UTU Mess
1:30 pm to 3:30 pm	Real-Time PCR Result Analysis (Dr. Abhishek Sharma Assist Professor, CGBIBT, UTU)	CGBIBT, UTU
4:00 pm	Tea	SHRIMAD Hall, UTU
4:00 pm to 4:30 pm	Valedictory and feedback	SHRIMAD Hall, UTU