

REPORT

on

One-Day Workshop on ‘Molecular Biology Techniques’

Organized at

Departments of Zoology and Botany,

G. B. Pant Memorial Govt. College, Rampur

Bushahr, Shimla, Himachal Pradesh

on

20 December 2024

by



Department of Biotechnology and Bioinformatics

Jaypee University of Information Technology

Waknaghat, Solan

Introduction:

On 20 December 2024, a One Day Workshop was organized by **Department of Biotechnology and Bioinformatics, Jaypee University of Information Technology, Waknaghat, Solan (H.P.)** in collaboration with **Departments of Zoology and Botany, G.B.Pant Memorial Govt. College, Rampur Bushahr, Shimla, Himachal Pradesh** in the domain of ‘**Molecular Biology Techniques**’. The workshop aimed to provide hands-on training and theoretical insights into advanced molecular biology techniques for students and researchers.

Organized by: Jaypee University of Information Technology, Waknaghat, Solan

In Collaboration with: The Departments of Zoology and Botany, G.B.Pant Memorial Govt. College, Rampur Bushahr, Shimla, Himachal Pradesh

Date: 20 December, 2024

Venue: Labs of Zoology and Botany, Govt. College, Rampur Bushahr, Shimla,

Objectives of the Workshop

- To introduce participants to fundamental and advanced molecular biology experimental techniques.
- To bridge the gap between theoretical knowledge and practical applications in molecular biology.
- To foster collaboration and knowledge exchange between departments and institutions.

Inaugural Session

The workshop commenced with an inaugural session attended by esteemed faculty members, and students. The session began with a welcome address by Dr. Yojana Thakur, who emphasized the importance of molecular biology in understanding complex biological systems. Dr. Rahul Shrivastava, Professor of Biotechnology from JUIT, Waknaghat, highlighted the collaborative efforts and shared the vision of fostering academic and research excellence.

Workshop Sessions

The workshop featured a blend of theoretical lectures and hands-on practical sessions, ensuring a comprehensive learning experience for all participants by Prof. Dr. Rahul Shrivastava.

Session 1: Introduction to Molecular Biology Techniques

- Speaker: Dr. Rahul Shrivastava, Jaypee University of Information Technology
- Key Topics: Principles of ELISA, types (direct, indirect, sandwich, and competitive), and its applications in diagnostics and research.

Session 2: Hands-On Training

- Resource Person: Dr. Rahul Shrivastava
 1. Key Topics: Preparation of samples and reagents for ELISA.
 2. Performing a sandwich ELISA to detect a target antigen.
 3. Reading and interpreting results using a microplate reader.
 4. Troubleshooting common challenges in ELISA experiments.

Session 3: Data Analysis and Interpretation

- Key Topics: Quantitative and qualitative analysis of ELISA data, standard curve generation, and practical applications.

Participant Feedback

The workshop witnessed enthusiastic participation from over 70 students faculty members of Zoology and Botany. Participants appreciated the interactive sessions and the opportunity to gain hands-on experience with advanced laboratory techniques. Feedback highlighted the clarity of instruction and the availability of modern equipment as key strengths of the workshop.

Closing Ceremony

The workshop concluded with a vote of thanks from Dr. Asha, Head of the Department of Zoology. She delivered the closing remarks, expressing gratitude to JUIT Wagnaghat for their collaboration and to the organizing committee for their efforts in making the workshop a success.

Acknowledgments

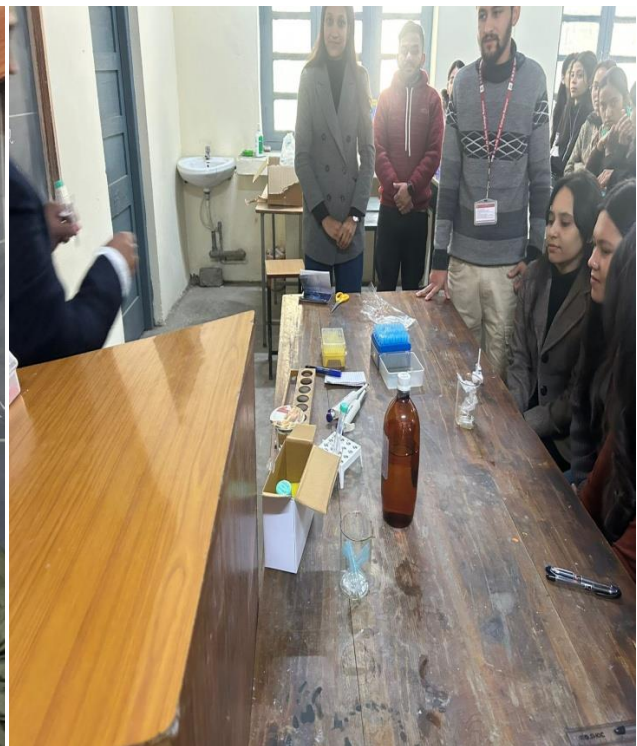
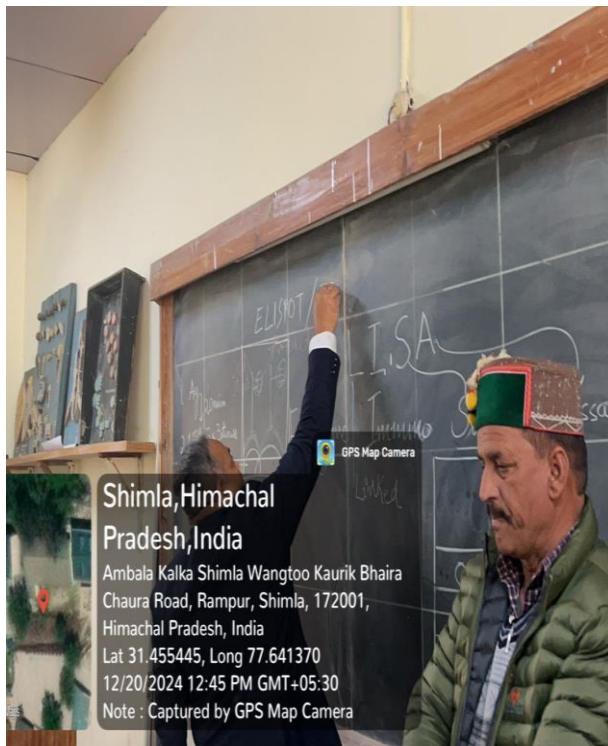
The Departments of Zoology and Botany extend their heartfelt thanks to Jaypee University of Information Technology, Wagnaghat, Solan, for their support and collaboration. Special thanks to the organizing committee, facilitators, and participants for their active involvement and contribution to the success of the workshop.

Report prepared by:



Dr. Rahul Shrivastava













One Day Workshop

ATTENDANCE ROLL OF 20TH Dec 20224

Workshop on (ELISA) :- Exploring Experimental Technique in Mol. Bio.

Name of student	Roll no.	Signature
Rachna	2313014	Rachna
Kamika	2313010	Kamika
Kashish Ghori	2313001	Kashish Ghori
Anjali Roshni	2313029	Anjali
Shruti Sharma	2313002	Shruti
Geeta Devi	2313018	Geeta
Muskaan Thakur	2313030	Muskaan
Niharika	2313015	Niharika
Hemraj	2313024	Hemraj
Tarun	23401009	Tarun
Monika Thakur	2213020	Monika
Chirag	2213018	Chirag
Rachika	2213024	Rachika
Ananya	2113021	Ananya
Aditi Ke Thakur	2213017	Aditi
Ritika	2213027	Ritika
Taneesha Bhaluni	2113008	Taneesha
Kamini	2313023	Kamini
Tanya Sharma	2313008	Tanya
Shrey	2213008	Shrey
Vijay Lakshmi	2313003	Vijay Lakshmi
Parul	2217008	Parul
Isha Chauhan	2217026	Isha
Namraj	2217030	Namraj
Shikha	2217024	Shikha
Ranjita	2317044	Ranjita
Ritika Verma	23401001	Ritika
Anchal Thakur	2217003	Anchal
Aastha	2217012	Aastha
Akha	2217021	Akha
Sakshi Kapadia	2217018	Sakshi
Gijwal	2217043	Gijwal
Lokender	2217001	Lokender
Vijay	2217029	Vijay
Chirag	2213018	Chirag
Shubham Kumar	2317026	Shubham
Sakina	23401006	Sakina
Manisha Raj	2317010	Manisha
Priy Nagi	2317014	Priy Nagi
Richa	2317021	Richa
Brishka Brice	22105017	Brishka
Muskaan Thakur	2313030	Muskaan
Shweta	2317003	Shweta
Oshin	2317017	Oshin
Vaishvi	2317004	Vaishvi
Bhavana	2317002	Bhavana
Sakuna	2317030	Sakuna

ATTENDANCE ROLL OF 20TH Dec 20224

Name	Roll no.	Signature
Aushika	2217027	<u>Ashu</u>
Vandana	2117023	<u>Vandana</u>
Nitasha	2117012	<u>Nitisha</u>
KULSKAN NEGI	2217040	<u>Kulskan</u>
Deepa	2313018	<u>Deepa</u>
Rajee Thakur	22401003	<u>Rajee</u>
Shailja	2217009	<u>Shailja</u>
Richa	2317035	<u>Richa</u>
Ancha Soni	2317006	<u>Ancha Soni</u>
Shivani	242105038	<u>Shivani</u>
Disha	2317042	<u>Disha</u>
Ayushi	2217019	<u>Ayushi</u>
Sansiti Negi	22401012	<u>Sansiti</u>
Kalpna	248105008 (MSC)	<u>Kalpna</u>
Monika Thakur	2356093 (M SC)	<u>Monika</u>
Jenvi	2356003 "	<u>Jenvi</u>
Vipasha	2356011	<u>Vipasha</u>
Darvin	2356015	<u>Darvin</u>
Vaibhav	2356013	<u>Vaibhav</u>
Talun	2356024	<u>Talun</u>
Nitesh	2256002	<u>Nitesh</u>
Chashtha Khandil	248105013	<u>Chashtha</u>
Rishika	2217017	<u>Rishika</u>
Diya Shrivastava	2217038	<u>Diya</u>
Rushal Chauhan	2217022	<u>Rushal</u>
Tyoti	248100017 (MSC)	<u>Tyoti</u>
Divya	248105018 (MSC)	<u>Divya</u>
Anchal Naram	248105002 (MSC)	<u>Anchal</u>

Dr Asha Gang

Dr. Yojana Thakur

Dr. Rahul Shrivastava

J.P Univ. Of Biotechnolgy