



Entrepreneurship Cell  
IIT Kharagpur



**C.M.DUBEY POST GRADUATE COLLEGE, BILASPUR**  
Affiliated to Atal Bihari Vajpayee Vishwavidyalaya, Bilaspur (C.G.)

*Workshop on*  
**Recombinant DNA Technology & Genetic Engineering**

*In Collaboration with*  
**IIT Kharagpur & Makeintern**

*Organized by*  
**Department of Microbiology, Biotechnology & Biochemistry**

**Patron**  
**Honorable Pt. Sanjay Dubey**

**Principal**  
**Dr. Sanjay Singh**

**Convener**  
**Smt. Smriti Pandey**

**Co-convener**  
**Dr. Hanumant Pal Sharma**

**Technical Expert**  
**Dr. Sushil Kumar Middha**



## Training Center Program

In association with Makeintern & E-Cell (IIT Kharagpur)

&

Department of Microbiology & Biotechnology

C.M.DUBEY P.G. COLLEGE BILASPUR (C.G)



Duration  
18 Hours



### Details

**Topic:** Recombinant DNA  
Technology & Genetic Engineering  
**Date:** 09<sup>th</sup> to 11<sup>th</sup> Nov 2022  
**Fee:** 1600 + 18% GST  
**Faculty Coordinator:**  
Mrs. Smriti Pandey:  
+91 7974664141

### Benefits:

- ★ Get two Industry-recognized certificate:
  - Makeintern & E-Cell IIT Kharagpur Event.
  - Learntoupgrade Certificate.
- ★ Internship assistance for participants.
- ★ Theory & practical hands on session for 18 hours.
- ★ 4 Merit students will join the finale session @IIT campus.
- ★ Winners will receive the 50,000/- prize money.

### Details

1<sup>st</sup> round as Training Session  
by Industry Expert  
With  
C.M.DUBEY P.G. COLLEGE  
BILASPUR (C.G)  
Finale  
@E-Cell IIT Kharagpur

**Event Coordinator:**

**Sweta Jha**

**+91 7290085797**





(ESTD.1956)

**OFFICE OF THE PRINCIPAL**  
**C.M.DUBEY POST GRADUATE COLLEGE**  
**BILASPUR (C.G.)**

(Accredited "B+" by NAAC)

An Affiliated College of Atal Bihari Vajpayee Vishwavidyalaya, Bilaspur (C.G.)

Phone : +91 7752-225177

Mob. No.: +91 6262333158

Website: [www.cmdpgcollege.ac.in](http://www.cmdpgcollege.ac.in)

E-mail: [principal@cmdpgcollege.ac.in](mailto:principal@cmdpgcollege.ac.in)

**A REPORT ON " Three Days Workshop on Recombinant DNA**  
**Technology & Genetic Engineering"**

**In collaboration with Entrepreneurship cell IIT Kharagpur & Makeintern**

**SESSION 2022-23**

**Organized By:** Department of Microbiology, Biotechnology & Biochemistry

**Topic:** Recombinant DNA Technology and Genetic Engineering

**Date of Commencement:** 9<sup>th</sup> November 2022 to 11<sup>th</sup> November 2022

**Duration:** 18 hours

**Convener:** Smriti Pandey

**Co-Convener:** Dr. Hanumant Pal Sharma

**Technical Expert:** Dr. Sushil Kumar Middha, Associate professor, MLAC, Bangalore, India.

**No. of participants:** 64

Makeintern (Training partner of Entrepreneurship Cell( E-cell) IIT Kharagpur) is an online portal which provides internship opportunities in India such as summer internships, paid internships, workshops, Wetlab Championship and Certificate program, etc. Makeintern workshop partner of E-cell (IIT Kharagpur) is putting up 35 Training centers across India for being a part of the National Level Championship @ IIT Campus.

Three Days workshop on Recombinant DNA Technology & Genetic Engineering was organized by the Department of Microbiology, Biotechnology and Biochemistry in collaboration with Makeintern and Entrepreneurship Cell( E-cell) IIT Kharagpur. The total duration of the workshop is 18 hours for 3 days. The course starts from 9th November 2022 and successfully ended on 11th November 2022.

The Workshop was successfully handled and coordinated by **Mrs. Smriti Pandey** (HOD, Department of Microbiology).

**Aim/Objectives:** The major learning aim or objectives of this workshop is to get a hands – on training on a very trending and demanding subject on Recombinant DNA Technology &

Genetic Engineering i.e. Gene Cloning. It is very important research tool in biology. This workshop helps students to clear their concept about recent trends on Recombinant DNA Technology. Students get exposure for different job associated with this field.

### **Details of the Event:**

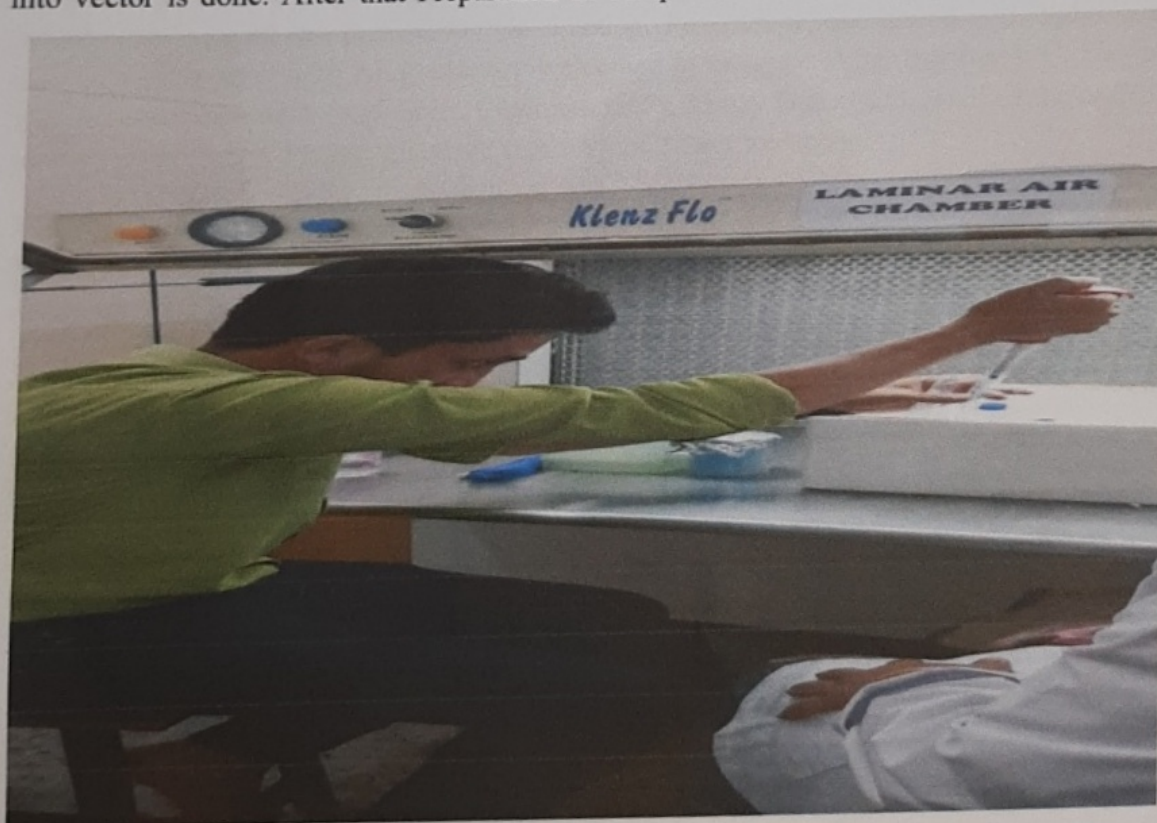
There are two rounds in this workshop.

**First round-** This is a training round, enrolled students are trained for 3 days i.e. from 09.01.22 to 11.09.22 offline on our college on the topic "Recombinant DNA Technology & Genetic Engineering" by the technical expert **Dr. Sushil Kumar Middha**, Associate professor, Maharani Lakshmi Ammanni College for Women, Bangalore, India.

**Day-1:** In the inaugural session in the dice the chief guest is **Dr.DSVGK Kaladhar**, Professor and Head, Department of Microbiology and Bioinformatics, UTD, ABVV, Bilaspur (C.G.), **Dr. Sushil Kumar Middha**, Associate professor, Maharani Lakshmi Ammanni College for Women, Bangalore, India, **Dr.Sanjay Singh**, Principal, C.M.Dubey P.G.College ,Bilaspur (C.G.) and **Mr. Aman Dubey**, Member of Governing Body, C.M.Dubey P.G. College , Bilaspur (C.G.). Programme starts with lighting the candle to Maa saraswati.

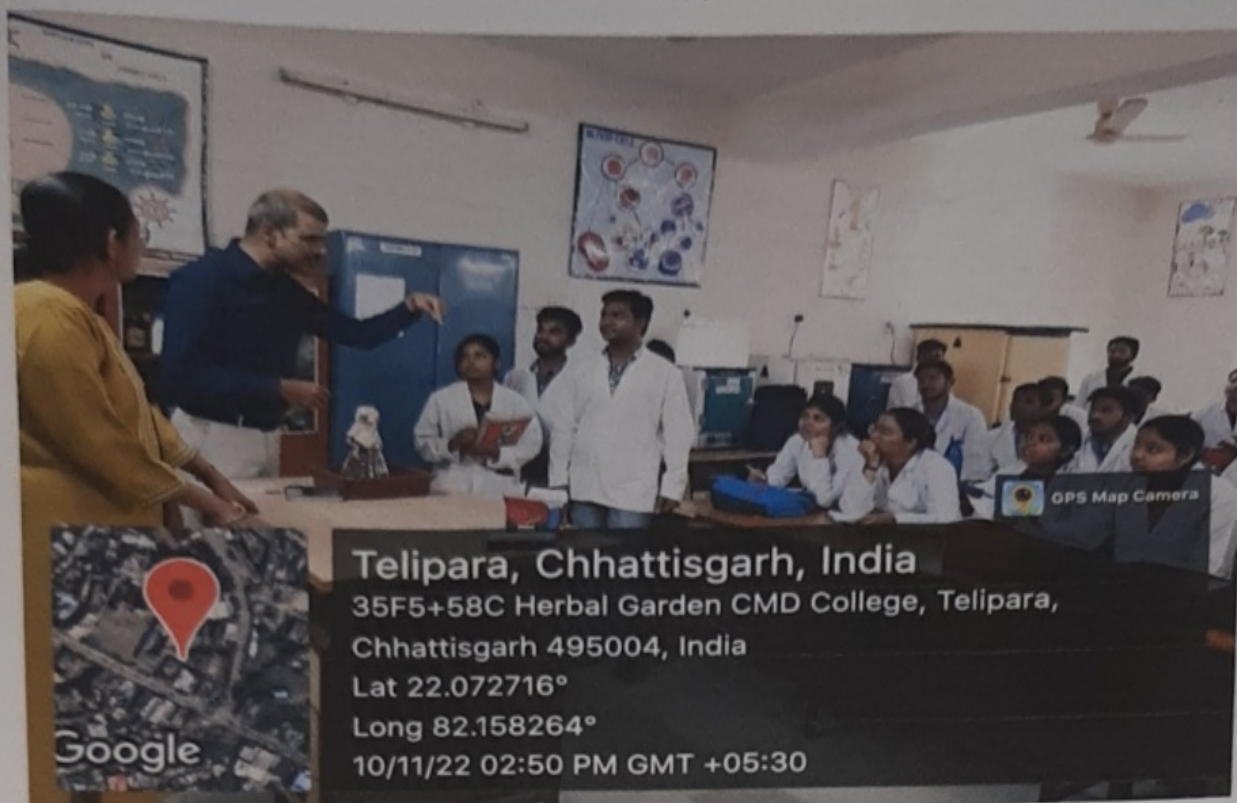
Smriti Pandey gives the welcome speech and provide the schedule for three days workshop. Dr. Kaladhar sir give light to the students regarding RDT. Principal sir give his regards to all the students and faculty members for successful completion of this workshop. After inaugural session workshop practical work has started in the microbiology department. Here designing of primers for PCR reaction, Preparation of LB broth and Revival of the host cell is done.

**Day-2:** In the 2<sup>nd</sup> day practical work has started from 10:00 AM and continued till 8:00 PM. In this day first of all a talk by technical expert is done on methods of preparation of competent cells. Then Setting up DNA ligation reaction in which inserting gene of interest into vector is done. After that Preparation of competent cells, Setting up of transformation





reaction is done. The result was seen on the next day.



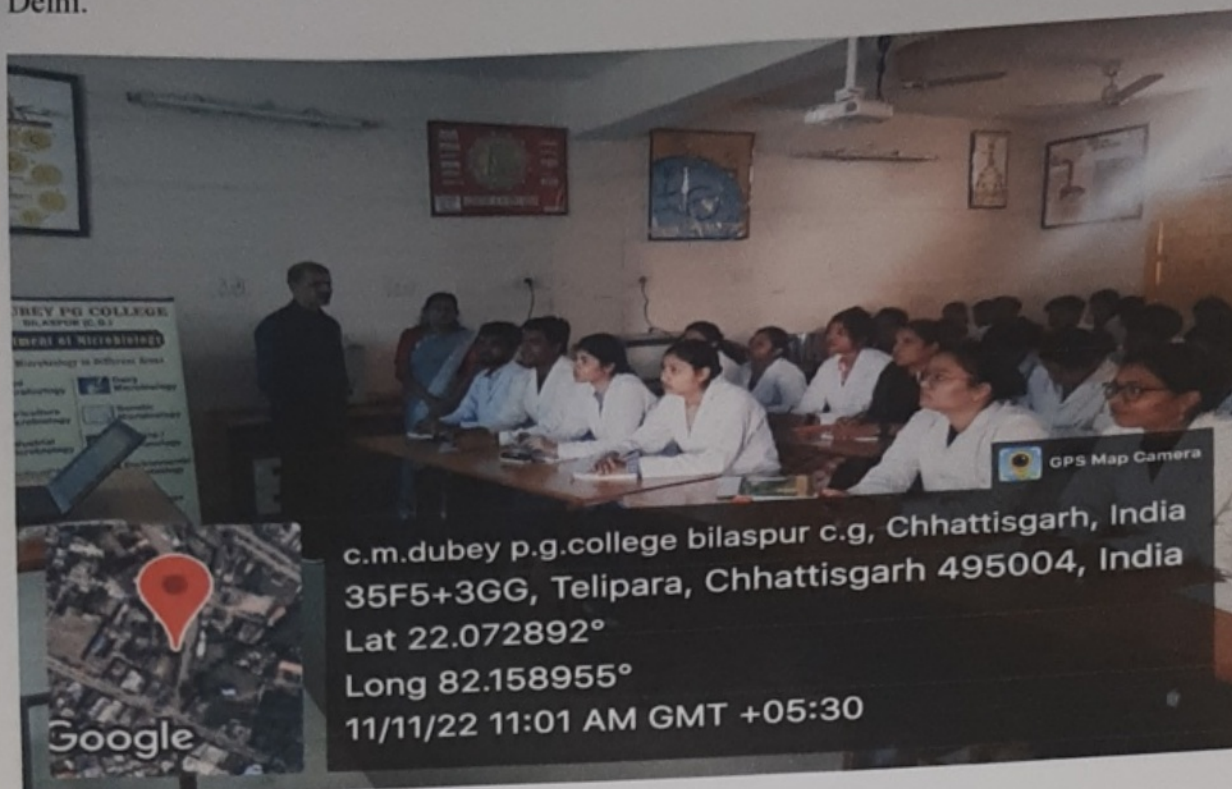
**Day-3:** In 3<sup>rd</sup> day first of all a talk is done on In-vitro amplification of DNA. Then lab work is performed on Setting up Polymerase Chain Reaction. Then the final result of workshop i.e. the counting of the number of transformed cell and visualization of clones is obtained.

After that the valedictory function is started and certificate is distributed. In this function the chief guest is **Prof. A.D.N. Bajpai** Vice Chancellor, Atal Bihari Vajpayee Vishwavidyalaya Bilaspur (C.G.). **Dr. Sushil Kumar Middha**, Associate professor, Maharani Lakshmi Ammanni College for Women, Bangalore, India, **Pt. Sanjay Dubey**, Chairman, C.M.Dubey P.G. College ,Bilaspur (C.G.). **Dr.Sanjay Singh**, Principal, C.M.Dubey P.G.College ,Bilaspur (C.G.) all are present in this function. Programme has started with lighting the candle to Maa saraswati. All guests are welcomed by bouquet. After that our V.C. Sir gave his motivational speech to all of us. Chairman sir Pt. Sanjay Dubey addressed all the ordiance present there. Smriti Pandey gives the summary of 3 days workshop.

A MOU is signed between Makeintern and C.M.Dubey P.G. College (C.G.). After that the certificate is distributed to all the participants. On the basis of 3 days working on workshop 4 of the students are selected for the final championship in IIT Campus Delhi. The name of the students are:

1. Shagufta Khan
2. Vikas Patel
3. Kalyani Singh
4. Reena Patel

The 4 selected students are invited to participate in the final championship in IIT Campus Delhi.



**Feedback:** At last Feedback is taken from the students by filling the hardcopy of form. After completion of the course and their assessment, certificates are provided to the students. All the students are satisfied by this event.

#### **Outcome of this workshop:**

1. Our Institute have received a letter of appreciation for being a Training center.
2. A MOU is signed between Makeintern and C.M.Dubey P.G. College (C.G.)



3. 4 of the merit students represented our college in the finale round in IIT Campus Delhi.
4. Best exposure of the industry to the students which makes them competent in Real Corporate life.
5. Best platform for the students to showcase their skills in front of the best minds.

*Susita*  
HOD OF MICROBIOLOGY  
Dept. of Microbiology  
C.M. Dubey P.G. College  
Bilaspur (C.G.)

*S. Dubey*  
PRINCIPAL (INCHARGE)  
C.M. DUBEY P.G. COLLEGE  
BILASPUR (C.G.)  
Incharge Principal  
C.M. Dubey P.G. College  
Bilaspur (C.G.)

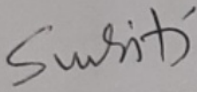
## Attendance for Workshop

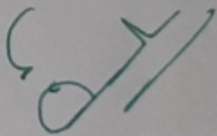
**Department of Microbiology, Biotechnology & Biochemistry**

S.N.	Name of the Participants	9/11	10/11	11/11
1	Nupur Mitra	P	P	P
2	Vinit Jha	P	P	P
3	Reeha Patel	P	P	P
4	Harsh Dhruw	P	P	P
5	Abhishek Kumar Bunkar	P	P	P
6	Madhusudan	P	P	P
7	Aalokita Verma	P	P	P
8	Vidushi Verma	P	P	P
9	Aditya Gahire	P	P	P
10	Samiksha Gupta	P	P	P
11	Nikita Sahu	P	P	P
12	Priti Patel	P	P	P
13	Indrajeet Shandilya	P	P	P
14	Anjali Thariya	P	P	P
15	Sanjay Sahu	P	P	P
16	Sumit Kumar Patel	P	P	P
17	Deepak Garhewal	P	P	P
18	Sumit Yadav	P	P	P
19	Madhu	P	P	P
20	Vikas Patel	P	P	P
21	Shriti Das	P	P	P
22	Priya Gurudwan	P	P	P
23	Deepak Singh	P	P	P
24	Richa Patil	P	P	P
25	Anjali Bhagat	P	P	P
26	Diksha Jani	P	P	P
27	Kiran Patel	P	P	P
28	Neha Yadav	P	P	P
29	Piyush Kesharwani	P	P	P
30	Prachi Pandey	P	P	P
31	Riya Bhardwaj	P	P	P
32	Sadhna Xalxo	P	P	P
33	Sandeep Banjare	P	P	P
34	Shagufta Khan	P	P	P
35	Shubham Bhagat	P	P	P
36	Shweta Tiwari	P	P	P
37	Tarini Dewangan	P	P	P
38	Sony Yadav	P	P	P
39	Aafreen Khan	P	P	P
40	Pooja Singh	P	P	P
41	Abhishek Singh Sidar	P	P	P
42	Barsha Mohanty	P	P	P



43				
44	Brijesh Patel	P	P	P
45	Chandrawati Armo	P	P	P
46	Chandani Yadav	P	P	P
47	Shahla Parween	P	P	P
48	Deepika Bhosle	P	P	P
49	Himanshu Banjare	P	P	P
50	Divya Shriwas	P	P	P
51	Diksha Sharma	P	P	P
52	Bibhu Sahay Mali	P	P	P
53	Aakanksha Pandey	P	P	P
54	Smith Sendray	P	P	P
55	Annapurna Katakwar	P	P	P
56	Arman Singh	P	P	P
57	Kalyani Singh	P	P	P
58	Chhaya Maan	P	P	P
59	Chandramohan Chandrakar	P	P	P
60	Ashish Tigga	P	P	P
61	Bharti	P	P	P
62	Azra Kausar Khan	P	P	P
63	Neha Kashyap	P	P	P
64	K. Praveena	P	P	P
	Binita Chauhan	P	P	P

  
Head  
 Dept. of Microbiology  
 C.M. Dubey P.G. College  
 Bilaspur (C.G.)

  
**Incharge Principal**  
 C.M. Dubey P.G. College  
 Bilaspur (C.G.)