

A Three-Day  
Workshop on Basic Molecular Biology Techniques



Organized by The Zoological Society, Kolkata-India  
Research & Application Foundation

In association with

City College, Kolkata & Raja Peary Mohan College, Hooghly

December 7 – 9, 2022



Organizing Sub-committee:

- Dr. Sriparna Datta Ray
- Dr. Aniruddha Chatterjee

- Dr. Deep Chandan Chakraborty
- Dr. Sanjukta Chaudhuri

About the workshop:

The recent advancements in molecular biology techniques play a major role in biomedical and healthcare innovations. The current workshop focuses on some basic molecular biology tools and techniques. The participants will be provided theoretical knowledge with emphasis on hands-on training through experimentation.

Venue: City College, Kolkata & Raja Peary Mohan College, Hooghly

Eligibility: Undergraduate students of Zoology

Intake Capacity: 50 (Maximum number of participants for each college: 25)

Registration details:

- Registration Link- <https://forms.gle/wfWWNQZqveEDV5Sk6>
- Workshop participation fee: Rs. 300.00
- Upon registration, the selected candidates will be sent e-mail for payment of registration fees.



Registration Opens: 21/11/2022

Registration closes: 30/11/2022

Contact: 9836242844 / 9831802169



# CITY COLLEGE

Affiliated to the University of Calcutta  
102/1, Raja Rammohan Sarani, Kolkata – 700009  
Phone: 033 2350 1565, Office: 033 2360 7463  
E-mail: principal.citycollege@gmail.com  
Website: www.citycollegekolkata.org  
GST No. : 19CALC00619D1DE

Date: 03.11.2022

To  
Prof. (Dr.) Sumit Homechaudhuri  
Hony. General Secretary  
The Zoological Society, Kolkata  
35, Ballygunge Circular Road,  
Kolkata-700019.

**Sub: Request for organizing Workshop on Advancement on Biological Sciences In Collaboration with The Zoological Society, Kolkata.**

Dear Sir,

As you are well aware that City College, Kolkata-700009 is a century old Under-Graduate College offering Zoology Honours Courses since 1956. It has received research grants from UGC, DST and WBBB in different times. The Enthusiastic Departmental faculties always willingly extend their knowledge and skill to various students along with their own. Our recent endeavour includes capacity building and skill enhancement Workshops for different students through knowledge transfer programme in association with esteemed organizations.

In view of it Zoology Department is willing to organize A Workshop on Modern Tools and Their Application In Molecular Biology for different Undergraduate Students of Bio sciences. Such extension Knowledge Transfer Endeavour will be more successful in having collaboration with **The Zoological Society, Kolkata in future.**

Hoping an affirmative response from your end to our request

Thanking You,

*Supriti Sarkar*

Dr. Supriti Sarkar  
Head  
Dept. of Zoology  
City College,  
Kolkata -9

*Sitalprasad Chattopadhyay*

Dr. Sitalprasad Chattopadhyay  
Principal  
City College  
Kolkata - 9



81#

# ZSK- INDIA

## (THE ZOOLOGICAL SOCIETY KOLKATA – INDIA)

*Celebrating 75 years in the pursuit of knowledge and wisdom*



**Department of Zoology, University of Calcutta. 35, Ballygunge Circular Road Kolkata – 700 019, India**

Date: 22.11.2022

To,  
The Principal  
City College,  
Kolkata-700009

Dear Sir/Madam,

Greetings from The Zoological Society, Kolkata- India. This is with reference to our previous communication about organisation of workshop at your respective department.

I have received request for collaboration from two colleges i.e. Raja Peary Mohan College, Hooghly and City College, Kolkata for such workshops.

The Zoological Society, therefore, proposes to take the responsibility of holding the workshops under the umbrella of the society with necessary administrative support. The workshops may be held concurrently in two different colleges at the same time on the scheduled days. A committee is formed with the teachers of the respective colleges for the required coordination. The society will bear the expense towards printing and photocopy of certification and study materials, remuneration of response persons and any other administrative functions.

The proposed workshop may be organized on the 7<sup>th</sup> to 9<sup>th</sup> of December, 2022 by the concerned departments in the college.

Looking forward to a good coordinated event for the benefit of the students.

Thanking you,

Yours truly,

(Prof. Sumit Homechaudhuri)  
Department of Zoology,  
University of Calcutta  
Hony. General Secretary,  
The Zoological Society, Kolkata



**Department of Zoology  
CITY COLLEGE**

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Website: www.citycollegekolkata.org  
GST No. : 19CALC00619D1DE

*Se.  
02/12/2022*

Date : 2/12/2022

To,  
The Principal,  
City College  
Kolkata - 09

**Sub: Requisition of Zoology General Laboratory for organizing 'A Three-Day Workshop on Basic Molecular Biology Techniques' in the Dept. of Zoology**

Dear Sir/Madam,

This is to inform you that Dept. of Zoology, City College is going to organize 'A Three-Day Workshop on Basic Molecular Biology Techniques' during December 7-9, 2022 in collaboration with the Zoological Society Kolkata (ZSK). For conducting it the Zoology General Laboratory will be required from 10.30 am to 5.30 pm each of these 3 days.

We would request to the Principals of City College, Ram Mohan College, and Ananda Mohan College to kindly co cooperate us for smooth running of the aforesaid workshop. Hope you will take necessary arrangements and oblige us.

Thanking You,

Yours faithfully  
*Supriya Saha*  
Head, Dept. of Zoology  
City College  
Head, Department of Zoology  
City College, Kolkata-700009

Copy to :

- 1.Principal, Ram Mohan College
- 2.Principal, Ananda Mohan College

# Three-Day Workshop on Basic Molecular Biology Techniques

Organized by the Zoological Society, Kolkata in Association with Dept. of Zoology, City College, Kolkata

## Programme Schedule

### Day 1 - 07.12.2022 (Wednesday)

Time	Session	Guests/ Resource Persons
11 am to 12 noon	Inaugural Session	Dr. Sital Prasad Chattopadhyay, Principal, City College
		Prof. (Dr.) Sumit Homechaudhuri, Professor, Department of Zoology
		Prof. (Dr.) Sagartirtha Sarkar, Professor, Department of Zoology
		Dr. Supriti Sarkar, HoD and Associate Professor, Dept of Zoology, City College (SS)
		Dr. Aniruddha Chatterjee, HoD and Assistant Professor, Dept of Zoology, Scottish Church College
Tiffin Break - 10 Mins		
12.10 pm to 1 pm	Discussion on theoretical aspects of DNA Isolation and Agarose Gel Electrophoresis	Dr. Saiful Anam Mir, Assistant professor, Department of Zoology, City College (SM)
1 pm to 2.30 pm	Casting Agarose Gel	SS, SM, AM
	DNA isolation upto Sodium Acetate Step	
Lunch Break - 30 Mins		
3 pm to 3.30 pm	Discussion on theoretical aspects of Quantitative estimation of DNA by DPA method	Dr. Arkadeep Mitra, Assistant Professor, Department of Zoology, City College (AM)
3.30 pm to 5.30 pm	Quantitative estimation of DNA by DPA method and graph plotting	SS, SM, AM
	Running Agarose Gel	
Day 2 - 08.12.2022 (Thursday)		
11 am to 12 noon	Discussion on theoretical aspects of Protein Isolation and SDS-Gel Electrophoresis	Dr. Saiful Anam Mir, Assistant professor, Department of Zoology, City College
Tiffin Break - 10 Mins		
12.10 pm to 1.10 pm	Casting Polyacrylamide Gel	SS, SM, AM
	Protein Isolation	
1.10 pm to 1.30 pm	Loading SDS-PAGE and start running	
1.30 pm to 2.30 pm	Discussion on theoretical aspects of Quantitative estimation of Protein by modified Lowry's method	Dr. Supriti Sarkar, HoD and Associate Professor, Dept of Zoology, City College
Lunch Break - 30 Mins		
3 pm to 5 pm	Quantitative estimation of Protein by modified Lowry's method and graph plotting	SS, SM, AM
	Staining SDS-PAGE by Coomassie Blue	
5 pm onwards	Destaining SDS-PAGE	

Day 3 - 09.12.2022 (Friday)		
11 am to 12 noon	Discussion on theoretical aspects of ELISA	Dr. Supriti Sarkar, HoD and Associate Professor, Dept of Zoology, City College
Tiffin Break - 10 Mins		
12.10 pm to 2.30 pm	ELISA demonstration	SS, SM, AM
	Gel loading practice by students	
Lunch Break - 30 Mins		
3 pm to 4 pm	Valedictory Session	Dr. Sital Prasad Chattopadhyay, Principal, City College
		Dr. Asok Kumar Sarkar, Ex-HoD and Associate Professor, Vivekananda College, Thakurpukur
		Dr. Supriti Sarkar, HoD and Associate Professor, Dept of Zoology, City College
		Dr. Aniruddha Chatterjee, HoD and Assistant Professor, Dept of Zoology, Scottish Church College

**\*\*The programme schedule may change in unavoidable circumstances\*\***

# LIST OF PARTICIPATING STUDENTS

A Three-Day Workshop on Basic Molecular Biology Techniques  
Organized by The Zoological Society, Kolkata-India Research and Application Foundation  
In Association with City College, Kolkata and Raja Peary Mohan College, Hooghly  
December 7-9, 2022

**(City College Center)**

Workshop  
Mote may  
given

Sl. No.	Name of the student	Mobile	Name of College	Affiliating University	Sem	Center
1	Soham Roy ✓	7319534368	Bankura Sammilani College	Bankura University	Sem III	City College
2	Md. Rakibulla Khan ✓	9883621624	Fakir Chand Collage Diamond Harbour	University of Calcutta	Sem I	City College
3	Md Faruk khan ✓	8597246166	Fakir Chand Collage Diamond Harbour	University of Calcutta	Sem I	City College
4	SIMRAN PARVIN ✓	7718429286	Fakir Chand Collage Diamond Harbour	University of Calcutta	Sem I	City College
5	Payel Bagani ✓	9382509138	Fakir Chand Collage Diamond Harbour	University of Calcutta	Sem I	City College
6	Anish Chakraborty ✓	7679927845	Fakir Chand Collage Diamond Harbour	University of Calcutta	Sem I	City College
7	Habibur Rahaman Laskar ✓	6296401679	Fakir Chand Collage Diamond Harbour	University of Calcutta	Sem I	City College
8	Piyali Baidya ✓	7318669533	Fakir Chand Collage Diamond Harbour	University of Calcutta	Sem I	City College
9	Indrani Bolel ✓	7029218987	Fakir Chand Collage Diamond Harbour	University of Calcutta	Sem I	City College
10	Haimanti sinha ✓	8584880759	Behala college	University of Calcutta	Sem V	City College
11	Priyanka Bag ✓	7439756611	Behala college	University of Calcutta	Sem V	City College
12	Sheena Dalui ✓	7891169729	Behala college	University of Calcutta	Sem III	City College
13	Biswadip Sanfui ✓	9330403449	Behala college	University of Calcutta	Sem V	City College
14	Sambit Chakraborty ✓	9007420518	Behala College	University of Calcutta	Sem V	City College
15	Annesha Roy ✓	6291699560	Behala college	University of Calcutta	Sem III	City College
16	Sayani Dhara ✓	9748119939	Jogamaya Devi College	University of Calcutta	Sem V	City College
17	Tanisha Halder ✓	8240016884	Jogamaya Devi College	University of Calcutta	Sem III	City College
18	Shyamorupa Datta ✓	9831516735	Jogomaya Devi college	University of Calcutta	Sem III	City College
19	Mandira Kar ✓	8585859856	South Calcutta Girls' College	University of Calcutta	Sem III	City College
20	Tiyasha Mondal ✓	9330082196	South Calcutta Girls' College	University of Calcutta	Sem III	City College
21	Joyshree Mondal ✓	8582910150	South Calcutta Girls' College	University of Calcutta	Sem III	City College
22	Syantani Poddar ✓	9123745017	South Calcutta Girls' College	University of Calcutta	Sem III	City College
23	Arunima saha ✓	8697642570	South Calcutta Girls' College	University of Calcutta	Sem III	City College
24	Anik Dey ✓	8670210206	Bankura Sammilani College	Bankura University	Sem V	City College
25	Swetasree Chakraborty ✓	9477638423	Dinabandhu Andrews College	University of Calcutta	Sem III	City College

**A Three-Day Workshop on Basic Molecular Biology Techniques**  
**Organized by The Zoological Society, Kolkata-India Research and Application Foundation In Association with City College, Kolkata and Raja Peary**  
**Mohan College, Hooghly December 7-9, 2022**  
**(City College Center)**

Sl. No.	Name of the Student	Mobile	Attendance Record		
			07.12.22	08.12.22	09.12.22
1	Soham Roy	7319534368	Soham Roy	Soham Roy	Soham Roy
2	Md. Rakibulla Khan	9883621624	Md. Rakibulla Khan	Md. Rakibulla Khan	Md. Rakibulla Khan
3	Md Faruk Khan	8597246166	Md Faruk Khan,	Md Faruk Khan,	Md Faruk Khan.
4	SIMRAN PARVIN	7718429286	Simran Parvin	Simran Parvin	Simran Parvin
5	Payel Bagani	9382509138	Payel Bagani	Payel Bagani	Payel Bagani
6	Anish Chakraborty	7679927845	Anish Chakraborty	Anish Chakraborty	Anish Chakraborty
7	Habibur Rahaman Laskar	6296401679	Habibur Rahaman Laskar	Habibur Rahaman Laskar	Habibur Rahaman Laskar
8	Piyali Baidya	7318669533	Piyali Baidya	Piyali Baidya	Piyali Baidya
9	Indrani Bolel	7029218987	Indrani Bolel.	Indrani Bolel.	Indrani Bolel.
10	Haimanti sinha	8584880759	Haimanti Sinha	Haimanti Sinha	Haimanti Sinha
11	Priyanka Bag	7439756611	Priyanka Bag	Priyanka Bag	Priyanka Bag
12	Sheena Dalui	7891169729	Sheena Dalui	Sheena Dalui	Sheena Dalui
13	Biswadip Sanfui	9330403449	Biswadip Sanfui	Biswadip Sanfui	Biswadip Sanfui
14	Sambit Chakraborty	9007420518	Sambit Chakraborty	Sambit Chakraborty	Sambit Chakraborty



Sl. No.	Name of the Student	Mobile	Attendance Record		
			07.12.22	08.12.22	09.12.22
15	Annesha Roy	6291699560	Annesha Roy	Annesha Roy	Annesha Roy
16	Sayani Dhara	9748119939	Sayani Dhara	Sayani Dhara	Sayani Dhara
17	Tanisha Halder	8240016884	Tanisha Halder	Tanisha Halder	Tanisha Halder
18	Shyamorupa Datta	9831516735	Shyamorupa Datta	Shyamorupa Datta	Shyamorupa Datta
19	Mandira Kar	8585859856	Mandira Kar	Mandira Kar	Mandira Kar
20	Tiyasha Mondal	9330082196	Tiyasha Mondal	Tiyasha Mondal	Tiyasha Mondal
21	Joyshree Mondal	8582910150	Joyshree Mondal.	Joyshree Mondal.	Joyshree Mondal.
22	Sayantani Poddar	9123745017	Sayantani Poddar	Sayantani Poddar.	Sayantani Poddar.
23	Arunima saha	8697642570	Arunima Saha.	Arunima Saha.	Arunima saha.
24	Anik Dey	8670210206	Anik Dey.	Anik Dey	Anik Dey
25	Swetassree Chakraborty	9477638423	Swetassree Chakraborty	Swetassree Chakraborty	Swetassree Chakraborty

## **Workshop on Basic Molecular Biology Techniques**

### **Dept. of Zoology, City College, Kolkata- 700009**

1. **Name of the Event:**  
Three-Day workshop on Basic Molecular Biology Techniques
2. **Date:**  
December 7-9, 2022
3. **Organizer:**  
The Zoological Society Kolkata- India Research and Application foundation in association with City College Kolkata and Raja Peary Mohan College, Hooghly.
4. **Total No. of Participants:**  
49 (City College Center- 25; Peary Mohan College Center- 24)
5. **Participants:**  
Undergraduate students of Bioscience stream from different colleges of West Bengal.

#### **Brief Description:**

In an attempt to give support and exposure to students of different undergraduate colleges, especially from remote areas and those with limited resources, The Zoological Society Kolkata-India Research and application Foundation in association with City College, Kolkata and Raja Peary Mohan College, Hooghly; came up with this idea of organizing this three-day workshop, where students can get some hands-on training on different techniques and methods, related to their subject. This can also help them make more interested in the subject as well through such activities.

This three-day workshop was organized in the Dept. of Zoology, City College and was focused on theoretical and practical, hand-on training on some basic molecular biology techniques like- DNA Isolation, DNA estimation, Agarose gel electrophoresis, Protein extraction, Protein quantitation, SDS-PAGE and ELISA. Students from different colleges viz. Fakirchand College, Behala College, South Calcutta girls' College, Bankura Sammilani College, Syampur Siddheswari Mahavidyalaya, Dinabandhu Andrews College, Jogamaya Devi College, Anandamohan College, Serampur College, Hooghly Women's College, Lady Brabourne College, Maulana Azad College, Bangabasi Morning College, Ram Krishna Mission Vivekanda Centenary College participated in the workshop and made it a grand success. Students were provided with hard copy of workshop material along with a workshop participation certificate issued by both The Zoological Society Kolkata and City College, Kolkata. They were also given breakfast and lunch for all three days. On the final day of the workshop, we got enormous positive feedback from the participants in presence of delegates from The Zoological Society Kolkata. Because of this huge positive feedback, the delegates from the Zoological Society Kolkata had informally promised us for more collaborative endeavors like this with the Dept. of Zoology, City College, in near future.

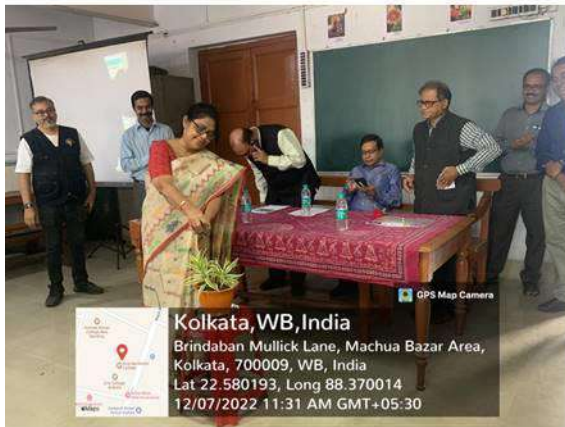


Figure Plate 1: Glimpses of the inaugural ceremony of the Workshop



Figure Plate 2: Glimpses of the Workshop