

Department of Biochemistry

Academic activities of the Department (2020-2021)

- WORKSHOPS/WEBINARS/CONFERENCES:

DATE	TITLE	SPEAKER/S	VENUE/Seminar Mode
19.02.2020	My Encounter with Cancer: An Unfinished Story	Prof. Tanya Das Ex-Professor and Scientist Bose Institute, Kolkata	Centenary Building Asutosh College, Kolkata
04.07.2020	COVID-19: Present Scenario and Future Perspectives	Dr. Sanmitra Basu Assistant Professor Department of Microbiology School of Life Sciences ADAMAS University, Kolkata	National Webinar Lecture Series via Google Meet
06.07.2020	COVID-19: Present Scenario and Future Perspectives	Dr. Gauri Anil Achari Assistant Professor Department of Biotechnology, DCTS DEMPE College of Science & Arts Miramar, Goa	National Webinar Lecture Series via Google Meet
26.07.2020	Scopes and Trends in Research in Biochemistry	Dr. Moumita Sarkar Postdoctoral Scientist at MRC LMS- Imperial College London (Alumni, Dept. of Biochemistry, Asutosh college)	International Webinar Lecture Series via Google meet
27.07.2020	Scopes and Trends in Research in Biochemistry	Dr. Arkadipta Bakshi Research Associate University of Wisconsin-Madison (Alumni, Dept. of Biochemistry, Asutosh college)	International Webinar Lecture Series via Google Meet
19.09.2020	Industrial Prospects in Studying Biochemistry (UG & PG)	Khushboo Ray Pharmacovigilance Officer, Biocon, Bengaluru (Alumni, Dept. of Biochemistry, Asutosh college)	National Webinar Lecture Series via Google Meet
20.09.2020	Industrial Prospects in Studying Biochemistry (UG & PG)	Suranjay Ray Pharmacovigilance Officer, Biocon, Bengaluru (Alumni, Dept. of Biochemistry, Asutosh college)	National Webinar Lecture Series via Google Meet

DATE	TITLE	SPEAKER/S	VENUE/Seminar Mode
02.11.2020	Biochemistry: journey from biomolecules to covaxine	<p>1. Prof. Dhrubajyoti Chattopadhyay Vice Chancellor Sister Nivedita University</p> <p>2. Prof. Anirban Siddhanta (Chairperson, UGBOS Biochemistry) Head and Professor Department of Biochemistry University of Calcutta National Webinar Lecture Series via Google Meet</p>	National Webinar Lecture Series via Google Meet
3.11.2020	Biochemistry: journey from biomolecules to covaxine	<p>1. Prof. Maitrayee Dasgupta Professor, Department of Biochemistry University of Calcutta</p> <p>2. Prof. Sanjay Ghosh (Chairperson, UGBOS Microbiology) Professor, Department of Biochemistry University of Calcutta</p>	National Webinar Lecture Series via Google Meet
04.02.2021	DNA Topoisomerase IIB	<p>Prof Caroline Austin Professor of Molecular Biology, Newcastle, University Biosciences Institute Faculty of Medical Sciences, University of Newcastle upon Tyne Framlington Place, Newcastle upon Tyne NE2 4HH</p>	International Webinar Lecture Series via Google meet

- **DEBATE/SEMINAR/POSTER PRESENTATION:**

Event	Date	Topics	Participants
Debate	15.02.2022	Medical Research should be focused on increasing the health span and not the life span?	All Semesters
		Intelligence is gained from Gene's and not surroundings	
Seminar	21.03.2022	Autoimmune Diseases	All Semesters
		Metabolic and life style disorders	
		Neurodegenerative diseases	

Upcoming Event

Event	Date	Topics	Participants
Poster Competition	25.04.2022	Heavy metal toxicity in human health	All Semesters
		Community diseases	
		Advanced Molecular biology techniques in disease diagnosis	

Co-curricular activities (Students)

Date	Name of the student	Semester/ Year	Competition and Event	Organised By	Rank
05.09.2020	KINJAL MAZUMDER	6 th SEM	Online biology quiz competition	IABM (Affiliated to FABA)	None
30.03.2021- 31.03.2021	KINJAL MAZUMDER, SAYAN MONDAL	6 th SEM	Online training program on Flow Cytometry	NIPER , Kolkata	None
14.08.2020	KINJAL MAZUMDER	6 th SEM	Recitation event of West Bengal Intercollege Competition	IQAC, Charuchandra College	None
17-18 th Sept 2020	Nayna Gupta	4 th SEM	Virtual Workshop on "CONFOCAL MICROSCOPY AND IMAGE POCESSING	Kalyani University	None

- RESEARCH PAPER PRESENTATION/ PUBLICATION DATA (Highlight if anyone publishes paper/patent/thesis related to COVID19):

Name	Research paper publication/Chapter title	Name of Journal/Title of the book/Title of the conference	Year of publication
Dr. Poulami Khan Assistant Professor	Pyridoxine enhances chemo- responsiveness of breast cancer stem cells via redox reconditioning.	Free Radical Biology and Medicine ISSN: 0891-5849	2020
	SMAR1 repression by pluripotency factors and consequent chemoresistance in breast cancer stem-like cells is reversed by aspirin	Science Signaling ISSN: 1945-0877 (print) 1937-9145 (web)	2020

Dr. Shyamalina Haldar Assistant Professor	Rhizosphere impact bacterial community structure in the tea (<i>Camellia sinensis</i> (L.) O.Kuntze.) estates of Darjeeling, India	J Env Microbiol doi: 10.1111/1462-2920.15874	2021
	Evaluation of plant growth promotion properties and induction of antioxidative defense mechanism by tea rhizobacteria of Darjeeling, India	Sci Rep 10(1):15536. doi: 10.1038/s41598-020-72439-z.	2020
	Influence of biotic and abiotic stresses on Quinoa cultivation: insights into microbe assisted stress tolerance	Biology and Biotechnology of Quinoa. https://link.springer.com/book/9789811638312 .	2020
	Microbial and plant-assisted heavy metal remediation in aquatic ecosystems: A comprehensive review	3 Biotech 10:205. PMID: 32328403 PMCID: PMC7171024 (available on 2021-05-01). https://doi.org/10.1007/s13205-020-02195-4	2020
	Rhizosphere microbes and plant immunity	Advances in Environmental Research. Vol 75. Justin A. Daniels (Editor). Nova Science Publishers, USA ISBN: 978-1-53618-775-5	2020
Dr. Ayesha Kabir Assistant Professor	Polyamines and its analogue modulates amyloid fibrillation in lysozyme: A comparative investigation	Biochimica et Biophysica Acta (BBA) - General Subjects 1864(5):129557 DOI: 10.1016/j.bbagen.2020.129557	2020

Ms. Priyanka Mukherjee S.A.C.T- II	Tracking Zone-wise perturbation during unfolding of some globular proteins using Eu(III) complex of Tetracycline as a probe exhibiting Stark splitting.	Spectrochimica Acta Part A : Molecular and Biomolecular Spectroscopy https://doi.org/10.1016/j.saa.2021.120231 .	2021
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• RESOURCE PERSONS:

NAME	PARTICIPATION	DATE	TITLE (IF ANY)	ORGANISED BY
Dr. Chandra Chaudhuri Associate Professor	Resource Person at the State-Level Webinar on Skill Enhancement Courses(SEC) of UG Chemistry (Hons) , CBCS Syllabus, University of Calcutta	24-25 th August, 2020	Analytical Clinical Biochemistry (SEC-A2)	Dept. of Chemistry, Maulana Azad College, Dept. of Chemistry, Asutosh College, in collaboration with UG Board of Studies, University of Calcutta
Dr. Ayesha Kabir Assistant Professor	Guest Speaker at the National Webinar Lecture Series on Covid 19	27-28 th May 2020	Recent challenges associated with COVID-19 and its possible solutions: A chemist's overview	Department of Chemistry, S. M. College Bhagalpur (A constituent unit of T. M. Bhagalpur University)
Ms. Priyanka Mukherjee S.A.C.T-II	Assistant Resource Person at the State-Level Webinar on Skill Enhancement Courses(SEC) of UG Chemistry (Hons) , CBCS Syllabus, University of Calcutta	24-25 th August, 2020	Analytical Clinical Biochemistry (SEC-A2)	Dept. of Chemistry, Maulana Azad College, Dept. of Chemistry, Asutosh College, in collaboration with UG Board of Studies, University of Calcutta

• INNOVATIVE TEACHING-LEARNING PROCESS ADOPTED DURING PANDMIC (PLATFORMS USED)-

Platforms	Mode of Teaching
<ul style="list-style-type: none"> • Google Meet • Zoom • Skype • Youtube 	<p>Online Mode-</p> <ul style="list-style-type: none"> • Online MS-Powerpoint, Pdf materials Presentation • Virtual Demonstration of Practicals • Video Demonstration for both Theory and Practical courses • Virtual Meeting for Question Answer Discussions • Online Assignment and Panel discussions.

- CURRICULAR INNOVATION/DEVELOPMENT DURING THIS PERIOD (online content development, MOOC, SAYAM, YouTube Video):

➤ Not Applicable

- ANY NEW METHOD OF EVALUATION ADOPTED:

➤ Online Answer Scripts, Assignments Evaluation Using Pdf Editor Softwares.

- CONTRIBUTION OF FACULTY/STUDENTS TOWARDS COVID RELATED SERVICE (Personal/ Departmental)

CONTRIBUTION OF FACULTY:

Faculty Name	Mode of Service
Dr. Chandra Chaudhuri Associate Professor	Dr. Chaudhuri regularly performed pathological tests of Covid Patient's Sample in attachment with a private nursing home in Kolkata.

<p>Dr. Paromita Roy Chaudhury S.A.C.T- I</p>	<p>Robinhood Army, is one of the renowned NGO of India. They have done excellent work during Pandemic situation 2020-2021. Dr. Paromita Roychoudhury, a teacher of Department Of Biochemistry, Asutosh College, is a valuable member of that NGO. Along with other members, Dr. Roychoudhury extended her generous help towards the distribution of foods, clothes, winter garments to poor people who either live in the slum or lost jobs during pandemic. She saved so many hungry children, old people and many others. Nonetheless, she established a free school for poor children and donated her own garage space for the school “Alokdishari Mukhtangan”. The school not only educate the children but encourage them to learn art and craft work. Even the mothers of these children become enthusiastic with education and craft. The innovative craft work will be promoted in exhibition for sell. In this way the future of these misfortune children will be enlightened with a new sunshine. They will live at the cost of their own creation rather than begging. Many professors of Asutosh College helped Dr. Roy Choudhury proving essential foods, clothing, books, winter garments etc. Department of Biochemistry, Asutosh College, is blessed having a teacher like Dr. Roy Choudhury. She has worked with poor people ignoring the fear of Covid situation. And no accomplishment is enough for her contribution towards serving distressed people in Pandemic situation.</p>
<p>Dr. Ayesha Kabir Assistant Professor</p>	<p>Dr. Kabir is actively involved with Helping Hand Trust (HHT), a non-profit Organization which served daily free lunch and dinner during the entire lockdown period of 2020 and 2021, in various spots of central Kolkata and some outskirt areas of Kolkata like Ghatakpukur, Basirhat, Canning etc. They provided monthly ration for the poor and needy families in many areas of West Bengal during and after the lockdown. Members of the organization also played an active role in supplying oxygen cylinders for free during the second wave of the pandemic along with other continued services.</p>

Student Name	Mode of Service	Name of the organization
<p>Subhadeep Roy Sem-V</p>	<p>Shubhadeep distributed food, dress material and other necessary things for girls to the cyclone Yash affected area of Namkhana.</p>	<p>Haatekhor</p>
<p>Sampurna Biswas Sem-V</p>	<p>In south Kolkata and Sundarban areas, Sampurna along with her organization provided raw food materials like rice, potato, salts to poor people and free meals for poor Covid positive patients during the pandemic. Also she provided food materials for the blind people at the orphanage ‘Voice of World’ and distributed pens, note books, sanitary napkins and food items to another orphanage named ‘Providence’ during this pandemic period.</p>	<p>Hand-in-Hand</p>
<p>Brishti Bhattacharya Sem-I</p>	<p>Bristi have been an active participant in the ‘Calcutta Anti Covid Belt’ as well as ‘Red Volunteers’ for Covid related activities since the last year. She was also a part of ‘Bloodmates’ which is a blood donating organization which worked extensively during the last year Covid surge for blood as well as plasma donation. She herself even served as blood and plasma donor during the pandemic situation. As a member of Red Volunteers she helped in various ways like, for the hospitalization, supply of oxygen cylinder and food to the Covid positive patients, arrangement of RT-PCR tests etc. all over Kolkata.</p>	<p>Calcutta Anti Covid Belt, Red Volunteers, Bloodmates</p>

• PhD AWARDED:

NAME	DEPARTMENT	UNIVERSITY/INSTITUTION	YEAR OF AWARD
Dr. Kanchan Karmakar	Biochemistry	University of Calcutta	2021

• ANY OTHER INFORMATION NEEDED TO HIGHLIGHT-

-Dr. Poulami Khan acted as reviewer of World Journal of Surgical Oncology in 2020 and the journal Nature Scientific Reports on 2021 and reviewed two research papers during this time.

-Dr. Shyamalina Haldar acted as reviewer of 3-Biotech Journal in 2020-2021 and reviewed one research paper during this time.

-Our faculties are directly involved in different kind of voluntary works by attaching with different private and govt. organization during this COVID-19 pandemic situation.