

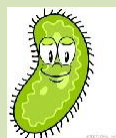
# Information Brochure of Microbiology 2024



**POSTGRADUATE DEPARTMENT  
OF MICROBIOLOGY**  
**BIDHANNAGAR COLLEGE**  
GOVT.OF WESTBENGAL  
EB-2, SECTOR1, SALT LAKE, KOL-700064



**Faculty Members and Students of the department**



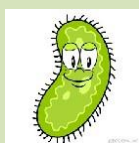
## Brief Introduction:

- Department of Microbiology in Bidhannagar College started its journey on 2002 under the headship of Dr. A.K.Guin. The course was started under the affiliation under the University of Calcutta. Post Graduate course started on 2004. At present the college is under West Bengal State University, Barasat. We are following the CBCS syllabus both in UG & PG courses.
- The Department is well equipped with sophisticated instruments like UV- Spectrophotometer, Gel Doc System, Fermentor, PCR, ELISA Reader along with the other basic instruments required for UG & PG practical classes.
- The faculties are highly qualified. Among the present faculties seven faculties have Ph.D. degree and two have Post Doctoral experience. At present there are 9 faculties out of which 8 are permanent. The faculties have expertise in different microbiological field and are able to cover all the topics incorporated in UG & PG syllabus. All Practical included in the syllabus were done by the UG & PG students individually in the laboratory.
- Department has also Research facilities. In past 2 students awarded their Ph.D. degree from this department. Faculties also got minor & major Research Project funded by different state & central funding agencies like Ministry of Environment, Govt. of West Bengal, WBDST, UGC, CSIR etc. Total publication by our faculties in last five years is 36 in peer reviewed, indexed and UGC recommended Journals
- Department has strong student Alumni. Some of the glimpses are like Max Plank Fellow, SPM fellow, Rama Lingam Fellow etc. Several students are post Doctoral Fellow in USA and other European Countries. Some of them also got permanent assignment as Assistant Professor in different Universities in India & abroad. Many students are well placed in different Colleges, Research Institutes and R & D section of many reputed MNCs. In recent years our B.Sc. and M.Sc. students qualified TIFR, JAM, IISc, CSIR-UGC NET, GATE and other all India entrance exam successfully.
- Our students were going different R & D Laboratories, Research Institute, Universities etc. like IICB, NICED, Bose Institute, Jadavpur University, Calcutta University, St. Xavier's College IIT Kharagpur etc. for their summer project as per guideline of their course curriculum. Some of our students were doing their summer project work in our Department under the guidance of our faculties. Our faculty members are continuing their research work in their thirst area like, cell biology, environmental microbiology, bioinformatics, biochemistry Some students from other Universities were also completed their summer internship in our Department.



**2. Few of the Best Placements:**

<b>Sr. No</b>	<b>Name of the student</b>	<b>Batch</b>	<b>Placement</b>
<b>1</b>	<b>Avijit Poddar</b>	<b>2007</b>	<b>DBT Scientist in New Delhi</b>
<b>2</b>	<b>Deep Chatterjre</b>	<b>2008</b>	<b>Max Plank fellow, Faculty in German University</b>
<b>3</b>	<b>Prosun Trivedi</b>	<b>2008</b>	<b>Associate Professor The Neotia University</b>
<b>4</b>	<b>Rahul Bhowmik</b>	<b>2010</b>	<b>Rama Linga Swami Fellow, Research Track Faculty, Biochemistry Department, Vanderbilt University, USA</b>
<b>5</b>	<b>Toshali Banerjee</b>	<b>2013</b>	<b>JAM AIR 03, qualified TIFR, Completed Ph.D., Post Doc Fellow inAustralia</b>
<b>6</b>	<b>Raktim Maiti</b>	<b>2013</b>	<b>SPM fellow, AIR 13 in CSIR-NET in Life Sciences, IISc. Bangalore</b>
<b>7</b>	<b>Rakesh Sarkar</b>	<b>2013</b>	<b>SPM fellow, AIR 04 in CSIR-NET in Life Sciences, NICED, Kolkata</b>
<b>8</b>	<b>Prakash Biswas</b>	<b>2020</b>	<b>qualified Joint CSIR-UGC NET for JRF and LS, Dec 2020, GATE in 2021, pursuing PhD at IISER, Kolkata .</b>
<b>9</b>	<b>Saurav Kumar Saha</b>	<b>2020</b>	<b>qualified DBT-JRF Category -II in 2021, CSIR-UGC NET LS in 2020 and GATE 2021 and 10is pursuing higher Ph.D. work at IISER, January 2022..</b>
<b>10</b>	<b>Souporno Das</b>	<b>2021</b>	<b>TIFR, Mumbai</b>
<b>11</b>	<b>Priyabrata Chakraborty</b>	<b>2022</b>	<b>JAM AIR 25, IISc.</b>



### 3. Faculties:

#### DR ABUL KALAM

Present Status

Associate Professor&Head, P.G. Department Of Microbiology, Bidhannagar College

Post Doc. –Research Associateship awarded by CSIR, Govt. of India., (April, 1998 – Nov. 2002)

Ph. D (Sc.), 1997 Burdwan University.

Thesis Title : Bioassay, biodegradation & effects of Tridemorph on Non-target organisms and selected microbial processes. .

GATE : 1990

Academic Qualifications :

M.Sc. in Botany (Microbiology Specialization) 1988, Burdwan University

Teaching Experience : About 20 Years in UG and P.G. in Biotechnology & Microbiology.

Research Experience: About 25 years after obtaining Ph.D. degree in the field of Pesticide Microbiology, Environment Microbiology, Vermi technology, Microbial Biodiversity and Food Microbiology.

AWARD: Received the STATE AWARD in the category of OUTSTANDING EMPLOYEE WITH DISABILITY FOR EFFICIENCY, DEDICATION, SINCERITY AND DEVOTION given by the Ministry of Women Development & Social welfare Department, Govt. of West Bengal, in 3<sup>rd</sup> December, 2012.

International Foundation for Environment and Ecology (*Incorporated under the Act II of 1882, Govt. of India* ) awarded NATIONAL ENVIRONMENTAL EDUCATION AND RESEARCH EXCELLENCE AWARD on the occasion of 7th International Conference on Environment and Ecology held on 26-28 November 2021.

#### PROFESSIONAL SOCIETY MEMBERSHIP

Life Member - Association of Microbiologists of India, since 2008

Life Member - Indian Mycological Society, since 2009

Life Member - Indian science congress Association Since 2009

Life Member - Indian Science News Association Since 2009

Full Member - American Society of Microbiology 2010

Life Member - Microbiologists Society, India Since 2022

Publication of Book/Chapters – 2

1. “ Bacterial Toxins – Mode of Action & Regulation, pp 105-120 , Chapter no.7” in the Book “ Microbial Toxins and Toxigenic Microbes (Authors : V.D. Pandey & Santosh K. Singh, Stadium, , Press, LLC, Texas, USA, 2012.

2. “Identification of Novel Microbial Strains for Reduced Pesticide Use in Millets” was published in the book Millet Rhizosphere by Dr. Abul Kalam, Head, Department of Microbiology on September 26, 2023

Funded Research & Development Project :

1. Funded by Ministry of Environment , Govt. Of West Bengal. Total Fund Rs. 2,39,000 for 2 years.
2. Funded by UGC. Minor Research Project, Total fund Rs. 1,19,000 for one & Half Years.
3. Funded by Ministry of Environment , Govt. Of West Bengal. Total Fund Rs. 3,98,000 for 2 years.
4. Major research Project Funded by West Bengal Dept. Of Science & Technology. Total fund Rs. 9,05,000 for three years

RESEARCH PUBLICATIONS: 31 (In peer reviewed and indexed Journal) Last five years : 12

Seminar/Symposium/ National Science Congress/ W.B. state science congress : 24

Summer Project Supervision / Research Guidance : BNC – 8, other University : 5

Others:

Member of the Editorial Board of Research Journal “Indian Journal of Microbiology Research” 2014-2016

Reviewer - Indian Journal of Microbiology Research” since inception of the Journal from 2014

Reviewer of an Elsevier Journal.



### **Dr. Anup Kumar Halder**

Present Position : SACT 2

Academic Qualifications

M.Sc. in Life Sciences(Botany) , Ph.D., Post Doc Japan

Joining in WBES : 01.09.2006

Joined Bidhannagar College on 01.09.2006

No. of Publications 12

List of Published Book/ Chapter : 3

Area of Specialization : Plant Physiology, Biochemistry & Microbial Biotechnology

### **Dr. Sandip Bandopadhyay**

#### **Present Status**

Assistant Professor, West Bengal Education Service (WBES), Post Graduate Department of Microbiology, Bidhannagar College, Kolkata from 2<sup>nd</sup> December 2006.

#### **Academic Qualifications**

**M.Sc.:** In Microbiology, **University of Calcutta.**2003

**NET:** Qualified joint CSIR-UGC NET in 2004

**GATE:** Qualified GATE in 2006 with AIR 351

**Ph.D.:** Awarded Ph.D. degree with effect from **26<sup>th</sup> March, 2014** from **Jadavpur University**, Kolkata

**Teaching Experience : 19 years of UG & PG teaching**

**Publications : 11**

**Presentations in Seminar/Symposium : 5**

**Project:** Completed one UGC minor project. Guided more than 10 in-house students, as well as students from other institutions in their M.Sc/B.Sc. projects in Bidhannagar College

**Research interest:** Microbial Biotechnology, PGPR properties of microbes & Biofertilizer production, Industrial Microbiology

### **Dr. Rini Roy**

#### **Present Status**

Assistant Professor, West Bengal Education Service (WBES), Post Graduate Department of Microbiology, Bidhannagar College, Kolkata from 28<sup>th</sup> February 2018.

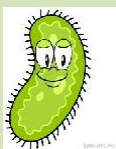
Joined Department of Microbiology, Maulana Azad College on 29<sup>th</sup> July 2009. Acted as Head in the Department of Microbiology, Maulana Azad College from 1<sup>st</sup> October 2015 to 27<sup>th</sup> February 2018.

#### **Academic Qualifications**

##### **1. Ph.D. 2008**

**Title of Thesis :** 'Designing of Organophosphorous Pesticides with Low Non-target Nerve Damageable and High Phytoremediable Characteristics Using Quantitative Structure Activity Relationship'

##### **2. M.Sc.: In Biochemistry, **Stood First** in Biochemistry, 2001 from the University of Kalyani.**



**Teaching Experience : 18 Years in UG & PG Departments**

**Publications : 25**

**Presentations in Seminar/Symposium: 23**

Book chapters: 3

Guided many students in their M.Sc projects at Lady Brabourne College and Bidhannagar College

**Awards**

Nominated as Young Scientist contestant under Indian Science Congress Association Young Scientists (ISCA) Award Programme in the Section of Environmental Sciences at 93rd Indian Science Congress held at Hyderabad, January 3 – 7, 2006.

**Research interest:** Biochemistry, neuro-biochemistry and microbiology (medicinal microbiology, bioremediation and nanobiotechnology)

**Life membership:**

1. Life member of Indian Science Congress Association (ISCA), Kolkata.
2. Life member of National Environmental Science Academy (NESA).
3. Life member of Society for Biological Chemists (SBC)
4. Life member of Alumni Association of Lady Brabourne College, Kolkata.
5. Life member of Indian Chemical Society, Kolkata (2010-2012).
6. Life member of Prof. J.J. Ghosh Foundation
7. Annual member of Microbiologist Society, India.

**Dr. Sudipta Chakraborty**

**Present Status**

Assistant Professor, West Bengal Education Service (WBES), Post Graduate Department of Microbiology, Bidhannagar College, Kolkata from 16th January 2016.

**Academic Qualifications**

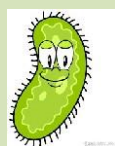
M.Sc.: In Microbiology, 2009, University of Calcutta.

NET: i) Qualified Lectureship in CSIR-UGC NET in December, 2008  
ii) Qualified Lectureship in ICAR-NET in May, 2014

**Ph.D.:** Awarded Ph.D. degree in Biochemistry, with effect from 19th July, 2022 from University of Calcutta, Kolkata.

**Teaching Experience:** 9 years

**Publications : 5**



### Recent Publications:

1. NaBH<sub>4</sub> induced chemoselective mechanochemical neat synthesis of bio-active dihydrofuran/  $\epsilon$ -hydroxy- $\alpha,\beta$ -unsaturated esters, and synthetic application to isoindoles. Shubhankar Samanta, Paritosh Barik, Chandan Kumar Pal, Sudipta Chakraborty, Sk Abulkalam Azad, Prasanta Patra, Rathin Jana, Mijanur Rahaman Molla, Eur. J. Org. Chem. 2024, e202400534. First published: 15 July 2024 <https://doi.org/10.1002/ejoc.202400534>. IF: 2.5
2. Pd/Cu Dual Catalysis for The Oxidative Dearomatization of Pyrrole Derivatives: Mechanistic Insights and Biological Studies. Tapas Das, Madan Sau, Sapana Dubey, Shreya Roy, Jigyansa Sahoo, Gokarneswar Sahoo, Nayim Sepay, Sudipta Chakraborty, Shubhankar Samanta, Eur. J. Org. Chem. 2024, e202400626. First published: 15 July 2024. <https://doi.org/10.1002/ejoc.202400626>. IF: 2.5

### Presentations in Seminar/Symposium: 4

Awarded Best prize in the oral presentation in one day National Level Seminar on 'Recent Trends in Microbiology (RTM-2023) on 18th August, 2023 held at department of Microbiology, Acharya Prafulla Chandra College.  
Guided 4 in-house students, as well as students from other institutions in their M.Sc/B.Sc. projects in Bidhannagar College.

**Area of Specialization:** Cell biology, Molecular Biology, Biochemistry, Biophysical chemistry and instrumentation, Immunology, medical microbiology

**Research interest:** Novel drug development against Leishmaniasis, Antimicrobial and anti-Biofilm activities of novel chemical compounds

### Dr. Upal Das Ghosh

#### Present Status

Assistant Professor, West Bengal Education Service (WBES), Post Graduate Department of Microbiology, Bidhannagar College, Kolkata from 18<sup>th</sup> January 2016.

#### Academic Qualifications

**M.Sc.:** Passed M.Sc in Microbiology with 1<sup>st</sup> class in the year **2008** from the **University of Kalyani**.

**NET:** Qualified CSIR-SRF in 2009

**Ph.D.:** Awarded Ph.D. degree with effect from **6<sup>th</sup> May, 2015** from **University of Calcutta**.

**Teaching Experience :** 8 yrs teaching experience in UG and PG level

**Publications :** 6

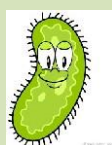
**Book chapter:** 2

**Presentations in Seminar/Symposium :** 7

Guided 4 in-house students, as well as students from other institutions in their M.Sc/B.Sc. projects in Bidhannagar College

**Area of Specialization:** Microbial Biotechnology, Molecular Biology, Virology, Bioinformatics

**Research interest:** Computer aided drug designing,



## **Parama Das Gupta**

### **Present Status**

Assistant Professor, West Bengal Education Service (WBES), Post Graduate Department of Microbiology, Bidhannagar College, Kolkata from 3<sup>rd</sup> February, 2016.

### **Academic Qualifications**

M.Sc. in Microbiology from the University of Calcutta in 2004

GATE Examination 2009 in Life Sciences

CSIR-NET Examination, June 2009 in Life Sciences

UGC-NET Examination, Dec.2009 in Life Sciences

**Teaching Experience:** 18 yrs

**Publications :** 1

**Presentations in Seminar/Symposium :** 5:

Guided 4 in-house students, as well as students from other institutions in their M.Sc/B.Tech. projects in Bidhannagar College

**Interest of Research:** Environmental Microbiology, General Microbiology

**Membership:** Annual member of Microbiologists Society of India

## **Dr. Sandip Misra**

### **Present Status**

Assistant Professor, West Bengal Education Service (WBES), Post Graduate Department of Microbiology, Bidhannagar College, Kolkata from 19<sup>th</sup> January 2016.

### **Academic Qualifications**

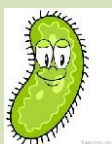
**M. Sc:** Passed M.Sc in Microbiology with 1<sup>st</sup> class in the year **2010** from the **Barrackpore Rastraguru Surendranath College**

**NET:** Qualified LET- LS in the year 2011, 2013

**Ph.D.:** Awarded Ph.D. degree with effect from **22.09.2020** from **Jadavpur University.**

**Teaching Experience : 6 yrs**

1. Assistant Professor in the Department of Microbiology of Bidhannagar College, Kolkata – 700064 (from January, 2016 to till date): More than 6 years of teaching experience in UG and PG level





**Publications : 10 (In international Peer Reviewed with Impact Factor);**

**Presentations in Seminar/Symposium : 3**

Guided 4 in-house students, as well as students from other institutions in their M.Sc/B.Tech. projects in Bidhannagar College

**Area of Specialization:** Cell biology, Immunology, Molecular Biology, Medical Microbiology

**Research interest:** Investigate the role of non canonical function of PTEN in development of cancer

### **Dr. Sourav Pakrashi**

#### **Present Status**

Assistant Professor, West Bengal Education Service (WBES), Post Graduate Department of Microbiology, Bidhannagar College. Date of Joining: 4<sup>th</sup> February, 2016

#### **Academic Qualifications**

**M.Sc.:** Passed M.Sc in Microbiology with 1<sup>st</sup> class in the year **2009** from the **West Bengal University of Technology**.

**M.Tech:** Passed M.Tech in Marine Biotechnology with 1<sup>st</sup> class in the year **2011** from the **Cochin University Science and Technology**.

**JRF:** Qualified as UGC-JRF in 2010 with AIR 309. Qualified as ICMR-JRF in 2013, Qualified as UGC- LS in 2011.

**GATE:** Qualified GATE in 2009 and 2011.

**Ph.D.:** PhD submitted in the Department of Biotechnology, Maulana Abul Kalam Azad University of Technology, West Bengal (formerly known as **West Bengal University of Technology**). Yet to be awarded.

#### **Teaching Experience**

1. Assistant Professor in the Department of Microbiology of Bidhannagar College, Kolkata – 700064 (from February, 2016 to till date): More than 6 years of teaching experience in UG and PG level.

#### **Publications : 10**

**Presentations in Seminar/Symposium : 3;** Guided 2 in-house students their M.Sc projects in Bidhannagar College

**Research interest:** Cell Biology, Medical Microbiology, Recombinant DNA Technology, Molecular Biology



## Our Laboratory:

Well equipped air-conditioned separate spacious laboratory for Microbiology, Biochemistry, Immunology and Molecular Biology. We have total 3 laboratories 2 culture inoculation room. All the laboratories are being cleaned and sanitization works are performed on regular basis. Enough numbers of glass goods and chemicals along with all types of molecular biological and immunological kits and other resources allow all the students to do the bench work individually in hand. All practical included in syllabus are performed by the students during their tenure. Our students are allowed to perform extra- curricular project work in laboratory.

## Some instruments of our Laboratory:



UV-Visible Spectrophotometer



Thermocycler

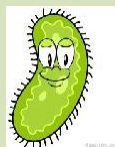


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## Departmental activities:



PG students are doing Practical in Biochemistry Laboratory





**Departmental seminar**



**Parent Teacher meeting in our department**





**Faculties of the Department in our fresher welcome and Departmental fest "VIBRIOS" 2022**



**Quiz competition 2023**



**Seminar given by PGstudents in our Department**



**Felicitation of Dr. Anup Kumar Halder, January, 2023 one of our past faculties.**





**Some moments of Departmental picnic 2023**



**Teacher's day, 2022 celebration in our Department**





**Departmental faculties and students in college sports**



**Industrial Tour 2022 with UG semester V students**



### The proposed structure of PG Course Content in Microbiology as per CBCS guideline

Semester	Paper	Theory/ Practical	Title of the Paper	Paper Full marks	Semester Full marks	Paper Credit	Semester credit
Semester 1	Paper 1	Theory	Biomolecules and Enzymology	50		4	
	Paper 2	Theory	Basic Microbiology and Microbial Diversity	50		4	
	Paper 3	Theory	Basic Cell Biology	50		4	
	Paper 4	Practical	Biomolecules and Enzymology	50		4	
	Paper 5	Practical	Microbiology and Molecular Biology	50		4	
		AECC	Laboratory Safety Measures	50		2	
<b>Total</b>					<b>300</b>		<b>22</b>
Semester 2	Paper 6	Theory	Metabolism and Bioenergetics	50		4	
	Paper 7	Theory	Biophysical Techniques	50		4	
	Paper 8	Theory	Fundamentals of Molecular Biology	50		4	
	Paper 9	Practical	Biophysical Techniques and Immunology	50		4	
	Paper 10	Theory	Environmental Microbiology	50		4	
		SEC	Diagnostic Microbiology	50		2	
<b>Total</b>					<b>300</b>		<b>22</b>
Semester 3	Paper 11	Theory	Immunology	50		4	
	Paper 12	Theory	Microbial Genetics	50		4	
	Paper 13	Theory	Recombinant DNA Technology	50		4	
	Paper 14	DSE 1 Theory	Bioethics and Intellectual Property Rights Or Bioprocess Technology	50		4	
	Paper 15	Practical	Biostatistics and Bioinformatics	50		4	
			GEC	Microbes in Sustainable Development	50		4
<b>Total</b>					<b>300</b>		<b>24</b>
Semester 4	Paper 16	Theory	Medical Microbiology	50		4	
	Paper 17	Theory	Food and Industrial Microbiology	50		4	
	Paper 18	Theory	Virology	50		4	
	Paper 19	DSE 2 Theory	Agricultural Microbiology Or Application of Microbial Technology	50		4	
	Paper 20	Project Work and Review Work	To be opted by the student	100		8	
<b>Total</b>					<b>300</b>		<b>24</b>
	<b>Total</b>				<b>1200</b>		<b>92</b>

**Table 2 : List of Project performed in Bidhannagar College done in in last 5 years:-**

SL.No.	PROJECT TITLE	NAME OF GUIDE
1	Isolation and Characterisation of Mercury Resistant Organisms from Samples Collected from Tanneries in Kolkata	Mr. SouravPakrashi
2	Comparative studies on the effect of Polymyxin B and Silver nanoparticles on the membrane lipid of Gram-positive and Gram-negative bacteria	Dr. Rini Roy
3	<i>In silico</i> docking analysis of bio-actives from <i>Zingiber officinale</i> , <i>Allium sativum</i> with RdRP of SARS CoV-2 Delta Variant	Dr. Upal Das Ghosh
4	Assessment of Antimicrobial and Antibiofilm activities of novel Pyridopyrimidinium Ion against <i>Staphylococcus aureus</i>	Dr. Sudipta Chakraborty
5	Isolation And Characterization Of Rhizospheric Microorganisms From Potato Plant And Evaluation Of Their PGPR Characteristics	Ms. Parama Das Gupta
6	Assessment of the Augmentation in Antimicrobial and Antibiofilm activities of Streptomycin and Thymoquinone by Vitamin D3 against <i>Pseudomonas aeruginosa</i>	Dr. Sudipta Chakraborty
7	Assessment of antimicrobial activities of <i>Saracaasoca</i> flower extract against gram positive and gram negative bacteria.	Dr. Sandip Mishra
8	Isolation and characterization of amylase producing bacteria	Dr. Upal Das Ghosh
9	<i>In silico</i> comparative study between beta lactamases from <i>Klebsiella pneumonia</i> and <i>Mycobacterium tuberculosis</i>	Dr. Upal Das Ghosh
10	Determination of antibacterial, antibiofilm activities, cellular localization and cytotoxic effects of novel benzimidazole compound, also able to act as an inhibition of $\alpha$ -amylase	Dr. Sudipta Chakraborty
11	Heterologous expression of FRB domain of mTOR in <i>E.coli</i> BL2103	Dr. Sudipta Chakraborty
12	Isolation and characterization of protease producing bacteria from soil	Ms. Parama Das Gupta
13	Isolation and characterization of protease enzyme produced by a soil bacterium	Ms. Parama Das Gupta
14	Preparation of silver nanoparticles and its effect on morphological character of bacteria	Dr. Rini Roy
15	Preparation of Silver nanoparticles by different methods and effect of nanoparticles on the growth of bacteria	Dr. Rini Roy
16	Isolation of a Potent Bio-Control Agent (A lactic acid producing bacteria) from Sauerkraut and its effect against vegetables/Fruit Spoilage Fungi)	Dr. Abul Kalam
17	Solid State Fermentation of bacterial amylase using different low cost substrates	Dr.Sandip Bandopadhyay



18	Isolation and characterization of amylase and protease producing bacteria from soil	Dr. Abul Kalam Dr.Sandip Bandopadhyay
19	Isolation and biochemical characterization of heavy metal and antibiotic tolerant bacteria from environmental sample	Mr. SouravPakrashi
20	Partial purification of the blue- green pigment of pseudomonas sp. BNC2906 and analysis the antimicrobial and anticancer activity of this pigment.	Dr. Sandip Misra
21	Isolation and characterization of lactic acid bacteria from fermented food product(curd) and evaluating their antimicrobial activity on selected microorganisms	Mrs. Parama Dasgupta
22	Isolation and partial characterization of pigment-producing organism from soil	Dr. Rini Roy
23	<i>In silico</i> docking analysis of bioactive from <i>Azadirachta indica</i> with MECA of MRSA	Dr.Upal das ghosh
24	Analysis & killing of antibiotic resistant bacteria isolated from fecal sample	Dr. Sandip Misra

**Table 3 : List of Review guided by Faculties of Bidhannagar College**

Sl.No.	Review Title	Name of guide
1	Application of statistical methods in microbiological research	Dr. Sandip Bandyopadhyay
2	Isolation, characterization, estimation and significance of the salt tolerance bacteria	Dr. Abul Kalam
3	Biological role of non-standard amino acid.	Dr. Rini Roy
4	Application of microbial enzymes	Dr. Rini Roy
5	Role of gut microflora in health and disease	Parama Das Gupta
6	Role of microbes in agriculture sustainability	Parama Das Gupta
7	Effects of novel chemical compounds in the oxidative phosphorylation of unicellular pathogenic eukaryotes.	Dr.Sudipta Chakraborty.
8	Development of antibiotics resistance in biofilm forming ESCAPE pathogens.	Dr.Sudipta Chakraborty
9	Phylogenetic diversity and identification of non-culturalable microbes from a hot spring.	Dr. Upal Das Ghosh
10	Development of antimicrobial drug resistance in Covid 19 survivors.	Dr. Upal Das Ghosh
11	DNA barcoding in bacteria	Dr. Upal Das Ghosh
12	Importance of microbes in pharmaceutical industry	Dr. Sandip Misra
13	Life style and risk of cancer	Dr. Sandip Misra
14	Classification, habitat, cell structure of Archaea	Sourav Pakrashi
15	Membrane transport and its therapeutical	Sourav Pakrashi

	implication.	
16	Cell wall structural differences in various microbes and cell wall as antimicrobial target	Sourav Pakrashi