



10TH RANKED
in West Bengal
59TH RANKED
in India

Education World

EW NON-AUTONOMOUS COLLEGES
STATE RANKINGS 2023-24



PhD
ADMISSION
BROCHURE
2024

*Change is the end result
of all true learning*

MIDNAPORE
CITY COLLEGE

+91 9547414192 | +91 8967598946 | +91 9932318368

Recognized by: UGC, Govt. of India and Department of Scientific Industrial Research (DSIR) Govt. of India as Scientific and Industrial Research Organisation (SIRO).

Affiliated to: Vidyasagar University

Name of the Research Centre: BIODIVERSITY AND ENVIRONMENTAL STUDIES

Research is the backbone of academics. It simplifies the concept building activities and transforms new ideas into innovations in pursuance of a new era of passion for researchers. Each finding gives immense pleasure and multiplies enthusiasm towards achieving the target.

The 'Research Centre' aims to nurture research culture in the college by promoting research in newly emerging and challenging areas of 'Biodiversity and Environmental Studies'. It encourages the students and faculty to undertake the research in newly emerging frontier areas of 'Biodiversity and Environmental Studies' including multidisciplinary fields. It enables us to address challenges that societies face today through collaborative efforts that bring together different approaches in an innovative way. It integrates knowledge and methods from different disciplines, using a real synthesis of approaches. This enhances the general research capability of budding technocrats and researchers by way of participating in conferences, seminars, workshops, project competition, etc.

THRUST AREAS

- I. Biodiversity and Environment (BE)
- ii. Computational Science (CS)
- iii. Community Nutrition and Food Science (CNFS)
- iv. Cancer Biology (CB)
- v. Microbial Technology (MT)
- vi. Space & Interstellar Environment (SIE)
- vii. Atmospheric Analysis (AA)
- viii. Green Chemistry (GC)
- ix. Biomedical Sciences Research (BSR)
- x. Societal and Cultural Research (SCS)



OBJECTIVES:

- i. To develop human resource in the field of "Biodiversity and Environmental Studies" so that skilled and technically enriched human resource would be generated for vertical up-gradation.
- ii. To encourage multidisciplinary and cross disciplinary research for serving the community in a better-than-now way.
- iii. To translate the research output from laboratory to community for up-gradation of public health, environmental protection, upliftment of public awareness, modification in attitude and practices for generation of developed community in future.
- iv. To conduct a resource centre for dissemination of knowledge through organization of national-level seminars, workshops, summer & winter training schools and science camps to motivate the students of various levels and common people in the professional empowerment, and entrepreneurship development for socio-economic evolution in positive direction.
- v. To expand the intellectual property bank at State and National level from the research output and impact of the centre in connection to forward progression.
- vi. To exchange knowledge among investigators in the proposed research centre and eminent experts inside and outside the country through conducting research in joint venture.
- vii. To publish the obtained results in National and International Journals of repute for dissemination of knowledge to the community in connection to modification of attitudes, behaviour, habits of common people for societal upgradation and health friendly environment development.
- viii. To provide opportunities to young researchers to compete for M. Phil and Ph.D degrees.

LIST OF ONGOING GOVT. FUNDED RESEARCH PROJECTS

Sl. No.	Title of the Project	PI & Co-PI Name	Amount (Rs.)	Status
1.	Establishment of new anti-cancer activity of peptide(s) and conjugate fatty acids CFA(s) extracted from Tapra fish (<i>Opisthoperus tardoore</i>) oil: A mechanistic study. Funded by ICMR, Govt. of India.	PI: Dr. Shrabani Pradhan, Assistant Professor, Department of Biological Sciences, Midnapore City College. Co-PI: Dr. J. Srinivasa Rao, Scientist E and Deputy Director, National Institute of Nutrition (ICMR), Hyderabad.	23,42,476.00	Completed
2.	Screening and profiling of genomic composition of <i>Vibrio harveyi</i> -infecting bacteriophages and assessment its efficacy in field trial condition to prevent <i>Vibrio harveyi</i> infection in tiger shrimps (<i>Penaeus monodon</i>) Funded by SERB, Govt. of India.	PI: Dr. Kuntal Ghosh, Assistant Professor, Department of Biological Sciences, Midnapore City College.	34,94,829.00	Completed
3.	Early detection of kidney dysfunction and identification of bioactive phytocompound(s) from <i>Asparagus racemosus</i> roots for protection of renal failure in rats. Funded by ICMR, Govt. of India.	PI: Dr. Suchismita Roy, Assistant Professor, Department of Biological Sciences, Midnapore City College Co-PI: Dr. Dilip Kumar Nandi, Professor and of Physiology, Midnapore City College	44,01,834.00	Ongoing
4.	Multicentric project: Comprehensive Tribal TB Management Program for Decentralised TB Care Services. Funded by ICMR, Govt. of India.	PI: Dr. Santanu Kar Mahapatra, Associate Professor, Department of Paramedical & Allied Health Science, Midnapore City College. Co-PI: Dr. Shrabani Pradhan, Assistant Professor, Department of Biological Sciences, Midnapore City College.	77,30,426.00	Ongoing
5.	Determination of the role of Syringic acid in conversion of poor learning mice into good learners: Implications in memory improvement. Funded by ICMR, Govt. of India.	PI: Dr. Sudipta Chakrabarti, Midnapore City College, Medinipur, West Bengal, India.	46,94,332.00	Ongoing
6.	Establishment of anti-obesity potentiality of new conjugated fatty acids isolated from marine Phasa fish oil (<i>Setipinna phasa</i>) on <i>in vivo</i> and <i>in vitro</i> model-A Mechanistic study. Funded by ICMR, Govt. of India.	PI: Dr. Shrabani Pradhan, Assistant Professor, Department of Biological Sciences, Midnapore City College. Co-PI: Dr. Santanu Kar Mahapatra, Associate Professor, Department of Paramedical & Allied Health Science, Midnapore City College.	43,79,932.00	Ongoing
7.	Magnetic skyrmions and their transverse transport studies for spintronic applications. Funded by SERB, DST, Govt. of India.	PI: Dr. Subhendu Kumar Manna, Department of Pure and Applied Sciences, Midnapore City College.	42,54,335.00	Ongoing
8.	Study of macrophage repolarization to augment anti-leishmanial immune response by isolated glycoprotein from the nutshell of <i>Arachis hypogea</i> L. Funded by SERB-CRG , Govt. of India.	PI: Dr. Santanu Kar Mahapatra, Associate Professor, Department of Paramedical & Allied Health Sciences, Midnapore City College.	45,98,440.00	Ongoing
9.	Study of the synergic anti-leishmanial effect of eugenol oleate and amphotericin B through liposomal delivery. Funded by ICMR Ad-hoc, Govt. of India.	PI: Dr. Santanu Kar Mahapatra, Associate Professor, Department of Paramedical & Allied Health Sciences, Midnapore City College. Co-PI: Dr. Shrabani Pradhan, Assistant Professor, Department of Biological Sciences, Midnapore City College.	53,79,700.00	Ongoing

Linkage for Research and Development



LIST OF SUPERVISORS

NAME OF THE SUPERVISOR	DESIGNATION	MAJOR AREAS OF RESEARCH
Dr. Pradip Ghosh	Director & Professor	1. Network Security and Cryptography 2. Fuzzy System and Neural Networks
Dr. Sudipta Chakrabarti	Principal & Associate Professor, Dept. of Biological Sciences	1. Anti-inflammatory drug development for neurological diseases 2. Stem Cell Research and Cancer Biology
Prof. Nirmal Kumar Sarkar	Professor of Zoology, Dept. of Biological Sciences	1. Cytochemical studies 2. Chromosomal analysis
Dr. Dilip Kumar Nandi	Professor of Physiology in the Dept. of Paramedical and Allied Health Science	1. Functional Food Development for RENO Protection 2. Probiotic Establishment
Dr. Kuntal Ghosh	Vice-principal and Assistant Professor of Microbiology, Dept. of Biological Sciences	1. Functional Food Research 2. Bacteriophage as a biocontrol agent
Dr. Sabyasachi Pal	Associate Professor of Physics, Dept. of Pure & Applied Sciences	1. Astrophysics, Black holes, supernova remnants, Radio astronomy, Gamma ray burst etc. 2. Geological and Earth Science
Dr. Subhendu Kr. Manna	Assistant Professor of Physics, Department of Pure and Applied Sciences	1. Experimental condensed matter physics
Dr. Saptarshi De	Assistant Professor of Physics, Department of Pure and Applied Sciences	1. Computational physics & sensors
Dr. Biswajit Pal	Assistant Professor of Physics, Department of Pure and Applied Sciences	1. Low dimensional semiconductors: Structures and Devices.
Dr. Santanu Kar Mahapatra	Associate Professor of Paramedical and Allied Health Sciences	1. Macrophage polarization, Leishmania, leukemia
Dr. Shrabani Pradhan	Assistant Professor of Nutrition, Dept. of Paramedical and Allied Health Sciences	1. Fatty acid analysis 2. Drug development for anticancer and antiobesity
Dr. Suchismita Roy	Assistant Professor of Nutrition, Dept. of Paramedical and Allied Health Sciences	1. Public Health and Health Information 2. Nutrigenomics
Dr. Sangita Maiti Dutta	Assistant Professor of Zoology, Dept. of Biological Sciences	1. Bio diversity, Morphology, and Taxonomy
Dr. Somanka Sanyal	Assistant Professor of Zoology, Dept. of Biological Sciences	1. Ecology
Dr. Anulina Manna	Assistant Professor of Botany, Dept. of Biological Sciences	1. Transgenic plant
Dr. Alokesh Roy	Assistant Professor of Botany, Dept. of Biological Sciences	1. Plant-derived compounds with biological significance, Plant environment interaction
Dr. Soumitra Pal	Assistant Professor of Botany, Dept. of Biological Sciences	1. Pollination ecology palynology and florestics
Dr. Monjit Paul	Assistant Professor of Fishery Science, Dept. of Biological Sciences	1. Fish and shell fish parasitology
Dr. Prankrishna Manna	Assistant Professor of Chemistry, Dept. of Pure & Applied Sciences	1. Nanomaterial & Supramolecular Synthesis and Applications (NSSA)
Dr. Avishek Ghosh	Assistant Professor of Chemistry, Dept. of Pure & Applied Sciences	1. Nanomaterials
Dr. Jagannath Pal	Assistant Professor of Chemistry, Dept. of Pure & Applied Sciences	1. Theoretical and Computational Chemistry Electronic Structure 2. Calculations Atmospheric Chemistry
Dr. Manisha Das	Assistant Professor of Chemistry, Dept. of Pure & Applied Sciences	1. DNA binding cleavage activity of synthesized Schiff base metal ligand complex

Dr. Amartya Das	Assistant Professor of Mathematics, Dept. of Pure & Applied Sciences	1. Mathematical biology, mathematical modelling, dynamical system, stochastic modelling
Dr. Soumen Kr. Das	Assistant Professor of Mathematics, Dept. of Pure & Applied Sciences	1. Operation Search 2. Supply Chain Management
Dr. Anirban Baitalik	Assistant Professor of Geography, Department of Pure and Applied Sciences	1. Tourism 2. Development and Environment 3. Coastal Studies Disaster 4. Management Rural Development
Dr. Kartick Bera	Assistant Professor of Geography, Department of Pure and Applied Sciences	1. Watershed Management 2. Dry-land Management 3. Climate Risk Analysis 4. Disaster Management.
Dr. Arpita Raj	Assistant Professor of English, Department of Humanities	1. Tribal Literature 2. Tribal Culture and Identity 3. Folk Literature
Dr. Rajkumar Bera	Assistant Professor of English, Department of Humanities	1. Indian Writing in English and Literary Theory
Dr. Sharmila Roy	Assistant Professor of English, Department of Humanities	1. Indo Anglian Novels and Drama in pre - and post colonial period.
Dr. Rakesh Jana	Assistant Professor of Bengali, Department of Humanities	1. Bangala upanyase jibikagata boichitrya o tar samasya (1900-1950)
Dr. Sisir Ghorai	Assistant Professor of Management, Department of Management Studies	1. Attitude and purchase intention of consumers towards organic food: A study in West Bengal 2. Role of maintaining good patient and physician relationships to run the healthcare industry in a better way

ELIGIBILITY CRITERIA FOR APPLICATION

1. Candidate must obtain Master Degree in regular mode from any UGC recognized University/ Institute with 55% of marks and 5% relaxation for reserved category candidates as per Govt. of West Bengal norms and must qualify the NET/GATE/SET or any other equivalent examinations conducted by UGC and /or any other agency of Govt. of India / state Govt. or PhD written admission test conducted by Vidyasagar University (academic session 2023-2024) or M.Phil./M.Tech. from UGC/ AICTE recognized institutions can apply and appear at an interview only before the Ph.D committee.
2. Candidate who has completed at least a total period of 5 years in UG and PG study from a UGC recognized Institution or University.
3. Candidate is not running any other full time course of studies or registered for doing Ph.D in any other Institute and/or University.
4. Final semester Post Graduate students are eligible to apply for the Ph.D. programme provided that they must fulfill the aforesaid requirements on or before the interview process conducted by the Ph.D committee.
5. College deserved right to impose any other eligibility condition for admission subject to approval of Vidyasagar University as amended by UGC from time to time.

FEES STRUCTURE

Admission Fees:	Rs. 15,000.00
PhD enrolment fees:	Rs. 10,100.00
Course work fees:	Rs. 15,000.00
PhD thesis submission fees:	Rs. 17,000.00
Extending time for thesis submission:	Rs. 4000.00



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