

**RAMAKRISHNA MISSION
VIVEKANANDA CENTENARY COLLEGE**



Short Report
2017

Prepared by IQAC

**RAHARA
KOLKATA – 700 118**

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Introduction

The Ramakrishna Mission Boys' Home at Rahara, a branch centre of the Ramakrishna Mission, was founded in 1944 as an orphanage with a nucleus of 37 boys rendered orphan by the Great Bengal Famine of 1942-1943. Since then the Home grew in dimensions and activities adhering to the principle of service to mankind in the spirit of worship. Today, the Home is an educational complex with several schools and colleges wherein nearly four thousand students are receiving education and training in different subjects and trades according to the aptitude of each individual.

This College which forms an integral part and unit of this educational complex is owned and managed by the Ramakrishna Mission. The foundation stone of the College was laid by Srimat Swami Vireswaranandaji Maharaj, the then General Secretary of the Ramakrishna Mission, on 3rd December, 1961 and the College started functioning in July, 1963. The College was established with a view to commemorating the First Birth Centenary of Swami Vivekananda, the Illustrious Patriot-Saint of India and with a view to imparting a general, value-based education in the light of the teachings of Ramakrishna-Vivekananda so that the young pupils may get ample opportunities to build up their character to make themselves useful to their families and to fulfill at the same time their basic obligation to the country.

*The college is situated in the district of North 24-Parganas, identified by the Government as a district highly populated by citizens belonging to SC/ST, OBC and minority community. The district is also identified by the UGC Committee as low GER (**G**ross **E**nrolment **R**atio) district. The college not only caters the need of local students but it also attracts a large number of students belonging to lower-middle and low income groups from remote areas of West Bengal situated in the districts of South 24 Parganas, West Midnapore, Maldaha and areas adjacent to international border with Bangladesh.*

The college offers higher education in five science branches – UG & PG courses in Chemistry & Botany and UG courses in Botany, Mathematics, Physics and Zoology. Since its very beginning, the vision of this college has been two-fold –(i) exposing young minds to advanced scientific topics and imparting hands-on experiencing to sophisticated analytical instruments and (ii) establish the college as a potential center of research activities; thus creating a strong tradition of academic activities and an ambience that favours the scholarly activities.

In all these years, the students of this college has excelled academically in the University Exams and secured high ranks in merit lists. The students of this college are also very enthusiastic to assess their talents in different National-level Examinations [e.g. JAM conducted by IITs, entrance tests conducted by IISc (Bangalore), JNCASR (Bangalore, ISM Dhanbad() and various other Indian Universities such as Jadavpur University etc.]. Students from our Post Graduate

Department of Chemistry has qualified in various National-level examinations such as NET, GATE etc. to become eligible to receive research scholarships.

As is evident from the trends emerging in recent years, majority of the UG students pursue higher studies in pure science or technology in the universities, with a few opting for job-oriented courses such as MBA, MCA etc. The choice of the PG students has been either to pursue a research career or to undertake intensive preparation for different jobs. Overall, the placement record over the past four decades have been satisfactory. Our students are well placed in different Nationally and internationally acclaimed academic and research institutions, in schools, in Government and semi-Government jobs, in private sectors, NGOs etc.

*It is probably one of the very few undergraduate colleges in West Bengal which undertook research projects/programmes a decade ago. The devoted and untiring efforts of the staff members and research scholars have so far produced around **100** publications (in internationally refereed journals). The college has so far produced five Ph.D. s, and currently fourteen(14) students are persuing research work fo their Ph.D degrees..*

The college envisions itself as a potential center of higher education in near future with increasing thrust in undertaking research projects in advanced scientific topics, thus attracting and engaging the best of the students to the frontier areas of respective discipline. With its currently available limited human resource, infrastructural and instrumental facilities, attaining those higher standards have become more difficult. The college expects a generous funding from the various Government / Non-Government agencies to meet its scientific and social obligations.

Vision and Mission of the Institution

Vision

The college is a unit of Ramakrishna Mission Boys' Home, Rahara which is a branch centre of the worldwide organization, Ramakrishna Math & Ramakrishna Mission established by Swami Vivekananda.

Swami Vivekananda said 'My ideal indeed can be put into a few words and that is: to preach unto mankind their divinity, and how to make it manifest in every movement of life' & emphasized the need of 'Modern Science coupled with Vedanta'. Poised in these two visions the institution tries to follow the ideal of *Atmano mokshartham jagaddhitaya cha*, freedom from the bondage of all ignorance & misery by realizing one's divine Self and mending the path for material, intellectual and spiritual good of the entire world. Imbibing this spirit, the college envisions to manifest itself into a powerful centre of higher education aiming the full-fledged growth and fulfillment of all those coming in contact with it.

Mission

The method followed to achieve the supreme good for oneself and for all others is '*Shivajnane jivaseva*' – service done in a spirit of worship. Here in this college, the goal is to serve the students mostly coming from economically constrained circumstances by providing them quality education in the field of Science and in the art of all-square Personality Development by:

- (i) Exposing young minds to advanced scientific topics and imparting hands-on training over sophisticated analytical instruments
- (ii) To establish the college as a potential center of research activities thus creating a strong tradition of deep-rooted academic pursuits and an ambience that favours the scholarly activities
- (iii) Imparting a man-making, character-building education by a balanced development of the 3H's- Head, Heart and Hand so that the students may turn out to be wise citizens able to shoulder the responsibility of the Nation.
- (iv) A culture of labour and service, focus and perseverance, simple living and high thinking is transmitted to the students who are the future of the nation.

This sort of education system which harmonizes the best of the 3 'S's - Science, Service and Spirituality is indeed one of the striking features of the college. Thus the institution stands tall to reach unimaginable heights which many others may only dream about.

Detailed Existing Facilities of the college

Facilities	Details of facilities	Numbers and other details
Auditorium/seminar complex with infrastructural facilities		3
Sports facilities	Playground	5
	Gymnasium	2
Residential facilities for teaching and non-teaching staff	For teaching staff	5 residential quarters
	For non -teaching staff	6 residential quarters
Cafeteria		1
	Inpatient facility	Ramakrishna Mission Sevapratishtan being a branch center of the same organization, can be availed
	Outpatient facility	Ramakrishna Mission Boys' Home, Rahara Dispensary service is available
	Emergency care facility	Ramakrishna Mission Boys' Home, Rahara Hospital is available
	Qualified doctor- Part Time	10
	Qualified Male Attendant - Full Time	04
	Qualified Male Attendant - Part Time	02
Facilities like banking, post office, book shops	Bank	United Bank of India, Rahara Branch
	Post Office	Rahara Post Office
	Book Shops	Vivekananda Book House (rented)
		Sales Counter For Books on Value Education
Biological waste disposal		All the microbiological waste products and equipments used for that purpose are autoclaved on a regular basis
Generator or other facility for	Generator	40 kVA & two (2)125 kVA

management/ regulation of electricity and voltage	Green power supply with large battery bank	1. 5 kVA (three numbers) 2. 10 kVA (one number) 3. 3 kVA (one number)
	Solar power (on-grid)	30 Kwatt
Solid waste management facility		This is regularly done by Khardah Municipality

Details of increase in infrastructure facilities in last year:

Facilities	Existing	Newly created	Source of Fund	Total
Campus area	4 acres (approximately) for College & 100 acres land for whole Mission	Construction of five- storied building going on (32000 sq. ft.).	College Fund	-
Class rooms	28	04 + 3500 sq.ft (on-going)	College Fund	32
Laboratories	28	1 Virtual Class room + 600 sq.ft	State Govt.	29
Seminar Halls	01	01 (1100 seated AC Hall) : 9000 sq.ft	College Fund	02
No. of important equipments purchased (≥ 1-0 lakh) during the current year.	29	02 (Iron removal plant :2)	UGC	31
Value of the equipment purchased during the year (Rs. in Lakhs)	-	4.9 lakhs(approx)		
Others	NA	1) 03 Elevators 2) Remodelled and relocated Library 3) Newly furnished Controller of Examinations Room and Exam section. 4) New LPG gas line for Chemistry dept. 5) 42 Kwatt on-grid PV solar system 6) Multigym with modern equipments	NA	NA

Major Activities during the year in the sphere of extension activities and Institutional Social Responsibility

- Annual Eye Operation Camp
- Annual Blood Donation Camp
- Pulse Polio Immunization Programme Centre
- T.B. Seal Sale Camp
- Seminars: Total=26

Other Activities of the college

- **Freshers' Welcome Ceremony:** Every year after the commencement of the new session, a cultural programme under the name 'Freshers' welcome' is organised to mark the welcome ceremony of the new comers. The freshers' welcome is the celebration of joy and harmony where the newly admitted students are acquainted with the ideals and workings of the institution. **Dr. Basanta Kumar Das, Director, ICAR - Central Inland Fisheries Research Institute, Monirampur (Post), Barrackpore** was the Guest-in-Chief in this ceremony-2016. The newly freshers have got a card in this ceremony.



- **Prize Distribution Ceremony :** The college inspires the students for hard work and sincerity by all possible means. The students and staffs are encouraged for good work in different fields and duly awarded for their bright accomplishment. It has been a pleasure for the institution to be able to distribute prizes to the achievers every year in the same vivid fashion. Some generous well wishers and staff members present various endowments to our students. **In the year 2016, 148 students have got prizes for their Academic Excellence.**
- **Free Eye Operation Camp (IOL) :** The ideal of service followed in the Ramakrishna Movement is based on the principle, '*Siva-jnane-jiva-seva*', to serve man as potentially divine. For the last 18 years the college has been organising a free eye operation camp(IOL) as a part of the National Service Scheme (NSS) in collaboration with the Disha Eye Hospital, Barrackpore. The following is the details of Eye Operation Camp held in our college in the year 2016.

Event	Date	No. of patients
1 st Screening process	08/12/2016	162
Pre-operative check-up Disha Eye Hospital	11/12/2016	62
Camp on the college for Operation	17/12/2016 to 19/12/2016	45
Operation at Disha Eye Hospital	18/12/2016	45
Post Operative Check up at college	29/12/2016	45
Check up & Refraction at Disha	08/01/2017	45
Distribution of spectacle at college	20/02/2017	45

- Blood Donation Camp:** That blood is the most sacred and precious constituent of life has been the fact approved by medical experts for centuries. With a similar objective, the Ramakrishna Mission Vivekananda Centenary College initiated its first blood donation camp more than 30 years ago and still organises the camp every year in the same vivid fashion. The institution has been honoured with a memento and certificate by the Association of Voluntary Blood Donors, west Bengal for organising 25 voluntary blood donation camps on their annual convocation held on January 20, 2008.

All the members of the institution seem to have an indomitable urge for blood donation. Consequently, the number of donors has been growing remarkably higher every year. The college publishes the name of the donors and their respective blood groups to encourage and inspire everyone for this noble service. **About 130 students and staff-members donated blood in the year 2016.**



**Memento Donated By
Association Of Voluntary Blood
Donors , West Bengal**



Students donating their Blood

- **Annual Sports** : The ideology of the college finds its expression through a wide spectrum of activities where healthy physique and enriched soul is highly valued. The annual sports meet is such an event, which attempts to manifest the thoughts and principles of Swamiji regarding the upheaval of a healthy society. It is held in the Ashram Playground. A variety of events such as 100 mt. race, 200 mt. race, 800 mt. race, discus throw, high jump, long jump, shot-put, different types of relay races are fixed to persuade active participation. **20 students got prizes in different events in college sports in the year 2016.**



GO AS YOU LIKE



STUDENTS IN 100mt. RACE

- **Observation of memorable days throughout the year** : The college observed many programmes throughout the year with sincerity and succession. The humble way of observations of 15th August, 23rd January, 26th January, etc. are one of the special features of this college. These help the students to inculcate the values like the honouring of the motherland and the worthy sons of the motherland. The Saraswati Puja celebration i.e. the worship of Mother of Learning was performed every year with due solemnity and prayer. Moreover, the observation of Birth-day of Sri Sri Ramakrishna Deva, Sri Sarada Devi and Swami Vivekananda through the whole day programme in our Ashrama is a great attraction to all students and staff-members.
- **Samavartana-2017:** 2nd Samavartana of Ramakrishna Mission Vivekananda Centenary College, Rahara ws held to confer degree certificates to Postgraduate students who have passed out in 2016 and 2017. The 1st Convocation for Post-Graduate Courses was organized by the College last year on 15th July, 2016 where postgraduate students who passed out between the year 2010 and 2015 received their degree certificates. This year 133 postgraduate students, passed in 2016 & 2017 received their certificates.
- **Inauguration of Virtual classroom:** The College has set up a virtual classroom for the online teaching and learning process. E-classroom is the only medium through which teacher and students are connected globally and virtually. On 22-02-2017 Prof. Sougata Roy, Hon'ble MP has inaugurated this facility for our students and staff-members.

LIBRARY FACILITY FOR THE STUDENTS

- ❖ College Central Library (Accessible beyond College Hours)
 - *BOOK BANK facility, Short term lending, Reading Room for all*
 - *Software package (BookWarm developed by college) for Library Automation, Registered for INFLIBNET.*
- ❖ A **District Library** for all (about 50,000 Books).
- ❖ A **Mission Library** having value education books, articles and journals (about 10,000 Books)
- ❖ Our college is the Local Chapter member for National Programme on Technology Enhanced Learning (NPTEL). single point of contact (SPOC) of our college for this Local Chapter is conducting the following activities :
 - He publicises amongst the students and faculty of the college regarding all the initiatives of NPTEL.
 - Brochures/posters of NPTEL content sent to him should be displayed at the places frequented by faculty/students of the college to get maximum visibility.
 - The SPOC publicizes the online certification courses amongst the students and inform them about the courses being offered currently.
 - He encourages students to enroll in these courses.
 - The college identify faculty members who can act as mentors for the enrolled students who can encourage them to be active in the course, submit the assignments on time and register for the exam.

Library & its Services

	Existing		Newly added		Total	
	No.	Value	No.	Value	No.	Value
Text Books	32258	5478170	87	246302	32345	5724472
Reference Books	1375		84		1459	
e-Books	135000				1,35,000	
Journals	21	22055			21	22055
e-Journals	6250					
CD & Video	111			1	112	

COMPUTER FACILITY & INTERNET FACILITY

	Total Computers	Computer Labs	Internet	Browsing Centres	Computer Centres	Office	Depart-ments	Others
Existing	130	2	31	2	2	16	22	
Added	4	0	1	0	0	1	2	
Total	134	2	32	2	2	17	24	

Other Existing Facilities for students

- ❖ NSS Facility
- ❖ Endowment & Free-ships, Institutional & Departmental Scholarship Facility
- ❖ Ion-exchange distilled water generation plant for supply of sufficient distilled water for laboratories use.
- ❖ The college has an instrument room having **HPTLC, IR Spectroscopy, UV-Vis spectroscopy, Flourimeter, Ultra Speed Beckmen Centrifuge**, etc.
- ❖ A **30 KW on-grid solar power** station is installed on roof of the college building.
- ❖ A **250 seated capacity** centralized AC seminar hall for the all workshop and seminar purpose.
- ❖ **Eight class rooms** are equipped with DLP projector along with other multimedia facilities.
- ❖ The chemistry lab is equipped with **Electrochemical Workstation, Magnetometer and UV-Vis Spectrometer**.
- ❖ Drinking water supply is equipped with **Aqua-guard and Cooler system** for all students and staff-members.
- ❖ A **big poly-house, two green shade-net house** and experimental garden for Botany Department.
- ❖ A well-equipped **tissue culture laboratory** is used for Plant Biotechnology research and PG works.
- ❖ A molecular **Myco-pathological laboratory** for research and PG works.
- ❖ The Botany and Zoology dept. has **Two PCR, one Gel-Doc, One -86°C Freeze, One Lyca Make 3-D Microscope, Growth Chamber, Freeze Dryer, Precision Balance, Four(4) Laminar Air-Flows, HPLC, Fluorescence Microscope** and many other sophisticated instruments.

- ❖ A **Smart-classroom** for digital touch-screen facility is available.
- ❖ One **Mushroom Cultivation Laboratory**
- ❖ Auto-regulated **Deep tube well** for water conservation and use
- ❖ Two(2) **ATM counters** service for 24 hours
- ❖ **Electricity office** for whole Rahara area situated in our campus
- ❖ One **carpentry section** and one **tailoring section** present in our Ashrama
- ❖ One **Digital Press** for publication
- ❖ One **Bakery for production** of cheap biscuit and cakes
- ❖ One **electrical and electronics** section for maintenance of all electrical/electronic gadgets
- ❖ One **sales counter** for value educations books and CDs
- ❖ One big **Auditorium** (1200 seats capacity) for common functions
- ❖ One 1100 seating capacity fully Air-Conditioned Sri Ramakrishna hall
- ❖ One Universal temple cum prayer Hall for meditation and prayer
- ❖ Four (4) **play-grounds**
- ❖ One **vocational section** with different trades
- ❖ One **B.Ed. college** for professional course
- ❖ One **Primary Teachers' Training** Unit

Laboratory Facilities Available

Name of Department	No. of Laboratories
Chemistry	UG = 4 PG = 4 Research lab = 2 Computer lab = 1
Physics	UG = 7 Research lab = 1 Computer lab=1
Mathematics	Computer lab = 2

Botany	UG=4, PG=4, Herbarium = 1 Computer lab = 1 Tissue Culture lab = 1 Poly-House = 1 green House = 2 Advance Lab for Mycology=1 Cancer Research Lab=1 Research lab = 2
Zoology	UG = 4, Museum = 1 Computer lab = 1

RECORDS OF ACADEMIC EXCELLENCE B. Sc. (U.G.)

Title of the Programme	Total no. of students appeared	Division/Class			
		I (No.)	II (No.)	III (No.)	Pass (No.)
Physics	48	32	16		0
Chemistry	49	40	09		0
Mathematics	39	11	22		6
Zoology	45	23	21		1
Botany	39	11	25		3
Chemistry (M.Sc.)	39	36	03		
Botany (M.Sc.)	26	20	06		

RECORDS OF ACADEMIC EXCELLENCE M. Sc. (P. G.)

Title of the Programme	Total no. of students appeared	Division/Class			
		I (No.)	II (No.)	III (No.)	Pass (No.)
Chemistry (M.Sc.)	39	36	03		
Botany (M.Sc.)	26	20	06		

Short Profile of Faculty Members

Name of the faculty member	No. of students obtained Ph. D. degree	Number of students working/registered for Ph. D. degree
Prof. Chandrakanta Bandyopadhyay	Three	Two
Prof. Tapas Ghosh	One	Two
Prof. Swapan Kumar Ghosh	One	Fourteen
Prof. Biswajit Ghosh	Two	Five
Prof. D. Dutta	-	Two
Prof. P.K. Medda	-	Three

Research publication of the Department of Chemistry

Prof. C. Bandyopadhyay	60
Prof. T. Ghosh	44
Prof. K. R. Sur	17
Prof. R. Patra	08
Prof. S. Banerjee	29
Prof. B. Dutta	12
Prof. B. Mondal	15
Prof. P. K. Tarafdar	19
Prof. K. Mandal	7
Prof. S. Suin	22
Prof. S. Sarkar	45

Research publication of the Department of Botany

Prof. S. K. Ghosh	45
Prof. B. Ghosh	51
Prof. A. K. Choudhury	10
Prof. H.S. Dey	12
Prof. A. Kundu	09
Prof. B. Roy	02
Prof. A. Bhar	04

Research publication of the Department of Physics

Prof. A. K. Pal	12
Prof. C. K. Das	05
Prof. Atisdipankar Chakraborty	10
Prof. Rajen Kundu	13

Research publication of the Department of Zoology

Prof. P. K. Medda	16
Prof. D. Datta	23

Prof. K. Bhattacharya	04
Prof. A. Mukherjee	22
Research publication of the Department of Mathematics	
Prof. P.K. Rana	22
Prof. B. Mitra	04
Prof. S.K. Biswas	02
Prof. S. Pal	38
Prof. Amit Kumar Biswas	14
Research publication of the Department of Language	
Prof. M. Moulic	06
Research publication of the Library	
Sri R. K. Dey	02

Existing Patents

Prof. Biswajit Ghosh: GenBank (International Nucleotide Sequence Database)

Rice Accession numbers in NCBI GenBank.

- Bhog dhan (Accession: JQ345686)
- Chini atap (Accession: JQ345687)
- Khas dhan (Accession: JQ345688)
- Nayanmuni (Accession: JQ345689)
- Roygorh (Accession: JQ345690)

Prof. Subhabrata Banerjee: US Patents granted

1. **Process for the activation of perovskite-type oxide**

V. R. Choudhary and Subhabrata Banerjee

US Patent US 6,197,719 (2001).

2. **Low temperature process for the production of hydrogen**

Vasant Ramchandra Choudhary, Amarjeet Munshiram Rajput, Subhabrata Banerjee,

US Patent US 6,509,000 (2003)

Prof. Kaustab Mandal: India Patents filed for publication

1. A process of making bimetallic palladium based nanoporous alloy for hydrogen generation from formic acid at near ambient temperature.
Subrata Dasgupta, Kaustab Mandal and Debaleena Bhattacharjee
India Patent, Application No. 0622DEL2015
2. A process of making impervious palladium membrane over ceramic substrate at near ambient temperature.
Subrata Dasgupta, Debaleena Bhattacharjee, Kaustab Mandal and Trilochan P. Sahoo
India Patent, Application No. 2461DEL2013

Dr. Swapan Kumar Ghosh

Gene publication in Gene Bank, NCBI, U.S. National Library of Medicine 8600 Rockville Pike, Bethesda MD, 20894 USA)

1. *Pseudomonas aeruginosa* strain mmp1 16S ribosomal RNA gene, partial sequence GenBank: KM491554.1
2. *Beauveria bassiana* isolate SKG/BB/2014/LC1 internal transcribed spacer 1, partial sequence; 5.8S ribosomal RNA gene and internal transcribed spacer 2, complete sequence; and 28S ribosomal RNA gene, partial sequence GenBank: KM491553.1
3. *Beauveria bassiana* isolate SKG/BB/2012/SILKWORM 18S ribosomal RNA gene, partial sequence; internal transcribed spacer 1 and 5.8S ribosomal RNA gene, complete sequence; and internal transcribed spacer 2, partial sequence GenBank: KM604668.1
4. *Trichoderma asperellum* isolate SKG/TA/2009/Agri Soil internal transcribed spacer 1, partial sequence; 5.8S ribosomal RNA gene and internal transcribed spacer 2, complete sequence; and 28S ribosomal RNA gene, partial sequence GenBank: KM604669.1
5. *Diaporthe phaseolorum* strain DP/2013-14/SKG-02 internal transcribed spacer 1, partial sequence; 5.8S ribosomal RNA gene and internal transcribed spacer 2, complete sequence; and 28S ribosomal RNA gene, partial sequence GenBank: KJ451621.1
6. *Alternaria brassicae* isolate AB/2013-14/SKG-01 internal transcribed spacer 1, partial sequence; 5.8S ribosomal RNA gene and internal transcribed spacer 2, complete sequence; and 28S ribosomal RNA gene, partial sequence GenBank: KJ022772.1

No. of patents received this year

Type of Patent		Number
National	Applied	1
	Granted	1
International	Applied	NA
	Granted	NA

Awards received by the Faculty

Prof. Chandrakanta Bandyopadhyay :

Prof. T. Navneeth Rao Best Teacher Award 2013” by ‘A V Rama Rao Foundation’ at Indian Institute of Chemical Technology, Hyderabad, on 5th September, 2013

Dr. Chandrakanta Bandyopadhyay, Department of Chemistry, received ‘CCRS Best Teacher Award’ by Coastal Chemical Research Society in 2015.

Prof. Swapan Kr Ghosh :

Award received : “Distinguished Scientist Award” presented by the committee of National level Conference “Biodiversity :Threats & Conservation through traditional & biotechnological approaches : organized by Dum Dum Matijheel College, Kol -74 in collaboration with Bose Institute & Botanical Survey of India , sponsored by : UGC, CSIR , DST.

Dr.Swapan Kr Ghosh received the Science Excellent Award,2015,Presented by the presented by the committee of National level Conference “Natural Resource ,Diversity and Sustainable Development”: organized by University of North Bengal in collaboration with West Bengal Biodiversity of Board, FSE, Kolkata.

Dr.Swapan Kr Ghosh received UGC travel grant to visit Foreign country for presenting his paper ‘Study of ecofriendly control of *Penicillium* fruit rot of *Citrus reticulatus* by yeast’ in the 3rd International Academic Conference held between 27th May -31st May2012, organized by IJAS, Harvard University Campus , Boston , USA.

Dr.Swapan Kr Ghosh Chaired a session of the International Conference on 29th May,2012 from 14:00 -15:30 in the 3rd International Academic Conference held between 27th -31st May2012 ,organized by IJAS, Harvard University Campus , Boston , USA.

Prof. Biswajit Ghosh

Dr. Biswajit Ghosh , Department of Botany, received the Science Academies’ Research Fellowship Award for Teachers in 2009.

Dr. Biswajit Ghosh , Department of Botany, received *Young Scientist Award in Plant Biotechnology* at the First International Conference on Bio-Resource & Stress Management. Held in February 6-9, 2013)

Prof. Samir Sardar, Dept. of Zoology, received the Best Presentation Award for Poster Presentation in the International Conference on *Aquatic Resources and Sustainable Management* held in Kolkata.

International / National /State level Sponsored Seminars/workshop organized (during last year):

Seminars and Conferences (2016-2017)

INTERNATIONAL SEMINARS/PANEL DISCUSSIONS:

1. International Seminar on Road Map for decarbonization of Indian energy system
2. International Seminar on Molecular Biology
3. International Seminar and Scientist Meet
4. International Seminar on Towards the Design of adaptive selection strategies for multi factor authentication

NATIONAL SEMINAR:

5. UGC-DAE Seminar on *'Radiation Science and Technology.*
6. Seminar on Teachers' Day
7. UGC Sponsored National Level Seminar on Chemistry of Functional Molecules
8. UGC Sponsored National Level Seminar on Basic Mathematics and its Application
9. UGC Sponsored National Level Seminar on From Molecules to Ecosystem– A Zoological Perspective
10. NAAC Sponsored National Level Seminar on Innovations in Teaching-Learning Process for the Present-Day Scenario in India
11. National Seminar on 'Sister Nivedita and Her Contribution to India : A Historical Perspective' sponsored by Indian Council of Historical Research, New Delhi
12. National Seminar on Knowing Space Technology for Societal Benefits
13. UGC Sponsored Week long National Level Workshop on *Techniques in Plant Biotechnology* organised by the Department of Botany
14. National Seminar on *Energy Conversion in India* in collaboration with the Alumni Association
15. Science Academies' Lecture Workshop on Fundamentals of Chemistry
16. Seminar on Swami Vivekananda and Modern Science
17. Seminar on Activities of Indian Academy of Sciences, Bangalore

STATE LEVEL SEMINAR:

18. Seminar on **'Wise use of water and its conservation for sustainable development'**
19. Seminar on 'Bio-Nanotechnology Laboratory for Engineering Next Generation Drugs'
20. Seminar on Swami Vivekananda and his Philosophy of Service
21. Seminar on **'Biology behind diabetes' & 'Genomics- What's the excitement about?'**
22. Seminar on **'History of Indian Chemical Society, Kolkata'**
23. Seminar on **CBCS system in B.Sc. Courses according to UGC Regulation.**
24. **Statistics in different branches of science**

INSTITUTIONAL SEMINAR:

25. Seminar on 'Azadi-70 Zara yaad karo kurbani'
26. Seminar on NSS Orientation and Blood Donation Awareness Programme.

Seminars and Conferences with sponsoring Agency:

Level	International	National	State	University	College
Number	5	4	2	0	2

Sponsoring agencies	1) PCRA 2) RKMVC College	1) NAAC 2) UGC 3) Science Academies 4) UGC-DAE 5) ICHR	1) RKMVC College 2) Design Division, State Water Investigation Directorate (SWID), Govt. of West Bengal		RKMVC College
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Faculty participation in conferences and symposia:

Faculty participation in conferences and symposia:

No. of Faculty	International level	National level	State level
Attended Seminars/ Workshops	28	74	01
Presented papers	07	06	-
Resource Persons	02	06	01

<i>Faculty / Staff Development Programmes</i>	<i>Number of faculty benefitted</i>
Refresher courses	01
UGC – Faculty Improvement Programme	-
NAAC programmes	1
Orientation programmes	06
Faculty exchange programme	-
Staff training conducted by the university	25
Staff training conducted by other institutions	1
Summer / Winter schools, Workshops, etc.	07
Others	01

Details on research publications

	International	National	Others
Peer Review Journals	29	03	-
Non-Peer Review Journals	-	01	-
e-Journals	01	-	-
Conference proceedings	-	01	2

Details on Impact factor of publications:

Range	Average	h-index	Nos. in SCOPUS
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1.4-6	3.7	4-12	7
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Research funds sanctioned and received from various funding agencies, industry and other organisations

Nature of the Project	Duration Year	Name of the funding Agency	Total grant sanctioned	Received
Major projects	From 1.2.16-ongoing	WB-DST	Rs. 25,80,603/-	923056
		WB-DST	Rs. 19,78,000/-	
	3 years	DBT (Govt. of India)	Rs. 24,00,000/-	Rs. 8,00,000/-
	3 years	DBT (Govt. of India)	Rs. 42,00,000/-	Rs. 16,00,000/-
	3 years	DBT (WB)	Rs. 16,64,520/-	Rs. 16,64,520/-
Minor Projects	18.3.17-18.3.19	UGC	4,30,000/-	3,77,500/-
	18.3.17-18.3.19	UGC	2,95,000/-	2,25,000/-
	18.3.17-18.3.19	UGC	3,63,000/-	2,07,500/-
	18.3.17-18.3.19	UGC	4,10,000/-	3,15,000/-
	18.3.17-18.3.19	UGC	2,84,000/-	2,39,000/-
Interdisciplinary Projects	1year	WB-DST	1,40,000/-	1,40,000/-
Industry sponsored	NA	NA	NA	NA
Projects sponsored by the University/ College	NA	NA	NA	NA
Students research projects (other than compulsory by the University)	2016-17	SEBA	14,000/-	14,000/-
Any other(Specify)	NA	NA	NA	NA
Total	NA	NA	NA	NA

No. of research awards/ recognitions received by faculty and research fellows
Of the institute in the last year

Total	International	National	State	University	Dist	College
2	02	03	NIL	NIL	NIL	NIL

Plan of Action	Achievements
Application for <i>Autonomous College</i> status to UGC	Granted Autonomous status by UGC for the period 2017-2022
Syllabus design according to Choice-Based Credit System for the Autonomous mode.	The entire syllabus for 6 semesters have been framed according to CBCS pattern comprising of Core Courses, Generic Electives, Skill Enhancement courses, Discipline Specific Electives.

Formation of Academic Council for the autonomous mode	Academic Council was formed and the first meeting of the Academic Council was held.
Formation of Board of Studies for different courses as a part of autonomy.	Board of Studies was formed and the first meetings were held for the respective courses.
Application for NIRF Ranking	The College secured Rank 78 on a National basis.
Organization of Seminars & Workshops	26 Seminars & Workshops were organised in one year.
Promoting participation of the students in various Co-curricular events	<p>Students of the Department of Zoology participated in the Quiz competition in 'ZOOQUEST', jointly organized by W.B. Biodiversity Board, Zoology Department, University of Calcutta and Zoological Society, Calcutta and stood First.</p> <p>Students of the Department of Zoology participated in Model and Poster competition in "BIOSCOPE", jointly organized by Zoology Department, University of Calcutta and Zoological Society, Calcutta and stood First.</p> <p>A student of 1st Year, Zoology (Hons.) secured the Second Position in Inter-College Poster Competition on 'Sister Nivedita: Faces & Facets' organized by Bethune College, Kolkata on 7th February, 2017 to commemorate the 150th Birth Anniversary of Sister Nivedita.</p>
To promote all round development	Introduction of a Six-month Certificate Course in Yoga for Health and Mind in collaboration with West Bengal Council of Yoga and Naturopathy from the coming session 2017-18
Academic Excellence	<ul style="list-style-type: none"> • A Research Scholar, Dept. of Botany was selected as the best presenter in the session-1 (In-vitro regeneration and micropropagation of economically important crops and medicinal plants) in the 8th International Plant Tissue Culture & Biotechnology Conference on Biotechnology for Innovative Agriculture and Food Security (3-5 December, 2016) held at Department of Botany, University of Dhaka, Bangladesh. • Rohit Mukherjee, IIIrd Year Physics (Hons.) became the State Topper in National Graduate Physics Examination 2017 being placed in Top 1% among 774 students appearing from West Bengal. • Manish Nandy, one of our ex-students in Chemistry, secured the 5th Position in West Bengal Civil Service (Executive) Examination 2016.

	<ul style="list-style-type: none"> • A number of students qualified for the PG and Integrated Ph.D. programmes in the institutions like IISc. Bangalore, TIFR, IITs, IISERs, BHU, CUCET etc.
ISBN Publications	The College has published a book ' <i>Swami Vivekananda and his Universal Ideas</i> ' with ISBN No. mainly based on the lectures delivered in an International Seminar held in the College in 2016.

Research and Development

The Institution has a strong culture of Research for more than two decades. It always caters to the various needs of the Faculty members and Research Scholars involved in Research:

1. The College had plans to start a Research Centre of its own with self-sustained infrastructure for Doctoral thesis. After proceeding towards fulfilment of that agenda, the affiliating University –conferred the status of a Research Centre to the Institution by the name '*Swami Vivekananda Research Centre for Multidisciplinary Research in Basic Sciences & Social Sciences*' in the year 2016.
2. A New Research Centre entitled '*Swami Vivekananda Research Centre for Multidisciplinary Research in Basic Sciences & Social Sciences*' has started functioning from this session in the institution as proposed by the affiliating University. The College has conducted independent RET examination for Ph.D. Entrance. 5 Research Scholars have enrolled themselves last year in the Dept. of Botany for pursuing their Ph.D. They are undergoing Course Work for Ph.D. in the College itself under the Research Centre.
3. The research infrastructure includes an array of sophisticated scientific instruments like HPTLC, UV & IR Spectrophotometers, Fluorophotometer, Geldoc, Leica digital 3-D and 2-D Microscopes, Beckmann Ultracentrifuge, High precision balance etc. The College keeps on enriching its instrumental facility. In the last Academic Session the College had procured a Gas Chromatography instrument for research in the Department of Chemistry.
4. Many of the newly joined Faculty members have been encouraged to submit Minor Research Projects as well as Major Research Projects. This year five faculty member has got Minor Research Project from UGC.