RAMAKRISHNA MISSION VIVEKANANDA CENTENARY COLLEGE





RAHARA KOLKATA – 700 118 Website: <u>www.rkmvccrahara.org</u> Email: rkmvccollege@rkmvccrahara.org

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 seven science branches – UG & PG courses in Chemistry Mathematics & Botany and UG courses in Botany, Mathematics, Physics, Microbiology, Computer Science 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 seven Ph.D. s, and currently fourteen(14) students are persuing research work for 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.

Our college has achieved the following milestones (2020-2021) :

- NAAC accreditation : Accredited with Grade A (CGPA : 3.14),
- **CPE Status** : College with Potential for Excellence (CPE) by the UGC from 2016
- **WBDST-FIST Award** : Physics, Chemistry, Botany and Zoology have been awarded WBDST-FIST from 2014-2015 (for 3 years)
- **DST-FIST Award** : The College as a whole has been awarded by the DST, Govt of India from the session 2013-2018
- West Bengal Sate University has approved our college as a Research Centre named "Swami Vivekananda Centre for Multidisciplinary Research in Basic Sciences and Social Sciences " on 2015.
- UGC has conferred the status of **Autonomy** to our college from the session 2017-2018.
- **NIRF** India ranking-2019 is 8th and ranking-2020 is 11th in India.
- The college is the INSTITUTIONAL MEMBER of ASIA PACIFIC QUALITY NETWORK in 2019
- Recognition of **SIROs** by Ministry of Science and Technology, New Delhi.
- **DBT STAR** College status by The Department of Biotechnology, Govt. of India.

Vision and Mission of the Institution

<u>Vision</u>

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' & and 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.

<u>Mission</u>

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.

| Facilities | Details of facilities | Numbers and other details |
|---|-----------------------|---------------------------|
| Auditorium/seminar complex with infrastructural facilities | | 3 |
| | Playground | 5 |
| Sports facilities | Gymnasium | 2 |

Detailed Existing Facilities of the college

| Residential facilities for teaching and non- | For teaching staff | 5 residential quarters | | |
|--|---|--|--|--|
| teaching staff | For non -teaching staff | 6 residential quarters | | |
| Cafeteria | | 1 | | |
| | Inpatient facility | Ramakrishna Mission Sevapratishthan 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 | | |
| | Bank | United Bank of India, Rahara Branch | | |
| Facilities like | Post Office | Rahara Post Office | | |
| banking, post office, book shops | | Vivekananda Book House (rented) | | |
| | Book Shops | Sales Counter For Books on Value Education | | |
| Biological waste disposal | Organic waste management system | All the microbiological waste products and equipments used for that purpose are autoclaved on a regular basis | | |
| Generator or other facility for | Generator | Three (3)125 KVA | | |
| management/ regulation of | Green power supply with large battery bank | 1. 5 kVA (three numbers) | | |

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| electricity and voltage | | 2. 10 kVA (one number) 3. 3 kVA (five number) |
|---------------------------------------|-----------------------|--|
| | Solar power (on-grid) | 92 Kwatt |
| Solid waste management facility | | This is regularly done by Khardah Municipality |

Details of PhD students registered per teacher during the year

| Name of full-time teachers with PhD | Qualific ation | Wheth er recogn ised as a resear ch guide for PhD? | Year of recogn ition as a Resear ch Guide | Is the teacher still serving the instituti on?/If not,whe n did he/she leave the instituti on? | Name of the scholar | Month and Year of registr ation of the scholar | PhD Scholar's Title of the Thesis |
|--|-------------------|---|---|---|---------------------------|--|--|
| ANIRBAN KUNDU | PhD | Yes | 2021 | yes | ParbejL askar | 29/09/ 2021 | Genome-wide identification of abiotic stress responsive miRNAs in <i>Phaseolus</i> vulgaris. |
| ANIRBAN KUNDU | PhD | Yes | 2021 | yes | Pranab Santara | 29/09/ 2021 | Identification of genomic LOCI responsible for abiotic stress tolerance through transcriptome analysis in <i>Vigna</i> |

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|--------------------------------|-----|-----|------|-----|--------------------------------|----------------|--|
| | | | | | | | |
| BISWAJIT GHOSH | PhD | Yes | 2015 | yes | Suprote em Mukher jee | 29/09/ 2021 | Application of biotechnological methods towards improvement of the synthesis of medicinally important bioactive compounds from Indian pennywort (<i>Centellaasiatica</i> (L.) Urb) |
| BISWAJIT GHOSH | PhD | Yes | 2015 | yes | Diptesh Biswas | 29/09/ 2021 | Exploitation of underutilization wild species of Solanum for nutritionally and medicinally important compounds and modulation in their synthesis using biotechnological strategies. |
| SWAPAN KUMAR GHOSH | PhD | Yes | 2015 | yes | Tanmay Bera | 29/09/ 2021 | Evaluation of <i>in</i> <i>vitro</i> anticancer and antioxidant activity of solvent extract of some mushrooms. |
| KOUTILYA BHATTARC HARJEE | PhD | Yes | 2021 | yes | Partha Ganguly | 29/09/ 2021 | Isolation, characterization and comparative efficacy evaluation of Duttaphrynusmelan ostictusand Hoplobatrachustige rinusskin anti- microbial |

| | | | | | | | components against common pathogenic microbes. |
|-----------|-----|-----|------|-----|--------|--------|---|
| HARISANKA | PhD | Yes | 2019 | yes | Basude | 29/09/ | Isolation and |
| R DEY | | | | | V | 2021 | Characterization of |
| | | | | | Murmu | | Cyanobacterial |
| | | | | | | | Bioactive Secondary |
| | | | | | | | Metabolites from |
| | | | | | | | Freshwater habitats |
| | | | | | | | of "Jangal Mahal" |
| | | | | | | | region of West |
| | | | | | | | Bengal and |
| | | | | | | | screening for novel |
| | | | | | | | antimicrobial |
| | | | | | | | agents from |
| | | | | | | | potential species. |

Details of teachers awarded National/International fellowship for advanced studies/ research during the year

| Name of the teacher awarded national/ international fellowship/financial support | Name of the Award/Fellowship | Month and Year of Award | Awarding Agency |
|---|--|----------------------------|--|
| Swami kamalasthananda | National Seminar on "Planetary Crisis and | 04.03.2021 | Indian Council of philosophical research |
| Bipul Mondal | Huan liberation" DST-SERB Fellowship | 13.11.2019 | DST-SERB |
| Koustab Mondal | DST-SERB Fellowship | 26.11.2019 | DST-SERB |
| Saugata Sarkar | DST-SERB Fellowship | 3.3.2021 | DST-SERB |

Details of grants received from Government and Non-governmental agencies for research projects, endowments, Chairs in the institution during the year (INR in lakhs),

| Name of the Principal Investigator/ Co- Investigator (if applicable) | Name of the Funding Agency | Type (Governmen t/Non- Government) | Funds provided (INR in lakhs) | Month and Year of receving the grant | Duratio n of the Project |
|--|---|---|--|---|--------------------------------|
| Dr. P.K.Rana | WB DST | Government | 855300 | 2019 | 3 years |
| Dr. Bikash Chakraborty | WB DST | Government | 759900 | 2019 | 3 years |
| Dr. Harisankar Dey | WB DST | Government | 1099800 | 2018 | 3 years |
| Dr. Koutilya Bhattacharjee | WB DST | Government | 1153000 | 2018 | 3 years |
| Dr. Swapan Kumar Ghosh (Co PI) | WB DST | Government | 1999600 | 2018 | 3 years |
| Dr. Sougata Sarkar | WB DST | Government | 405000 | 2018 | 3 years |
| Dr. Buddhadeb Dutta | WB DST | Government | 300000 | 2018 | 3 years |
| Dr. Swapan Kumar Ghosh (Co-PI) | WB DST | Government | 1265000 | 2019 | 3 years |
| Dr. Swapan Kumar Ghosh (Co-PI) | WB DST | Government | 1999600 | 2018 | 3 years |
| Dr. Swapan Kumar Ghosh (Co-PI) | WB DST | Government | 2661600 | 2018 | 3 years |
| Dr. Biswajit Ghosh | RCFC-ER, NMPB, Jadavpur University | Government | 304700 | 2020 | 6 months |
| Dr. Sougata Sarkar | DST-SERB | Government | 1830000 | 2018 | 3 years |

Details of research papers per teacher in CARE Journals notified on UGC website during the year

| enlistme |
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| | | | | | nt of the Journal |
|---|---|---|----------------|----------------------------------|----------------------|
| A Note on the value distribution of a differential monomial and some normality criteria | Saha, Sudip; Chakraborty, Bikash | Rendiconti del Circolo Matematico di Palermo Series 2 | 2021-04- 26 | 000972 5X | Scopus |
| A Visual Proof That e < A double right arrow e(A) A(e) | Haque, Nazrul | MATHEMATIC AL INTELLIGENCE R | SEP 2020 | | WoS |
| A Visual Proof: $e \le A \le B$ $\Rightarrow AB > BA$ | Haque, Nazrul | Resonance | 2021-02- 04 | 0971- 8044 / 0973- 712X | WoS |
| An assessment of the temporal alterations in the trophic status and habitat heterogeneity of the anthropogenically influenced Bhagirathi– Hooghly estuary in reference to phytoplankton community and environmental variables | Dutta, Soumak; Choudhury, Avik Kumar | Environmenta I Science and Pollution Research | 2021-04- 29 | 944134 4 | Scopus |
| Anticancer Activity of Solvent Extracts of Hexogonia glabra against Cervical Cancer Cell Lines | Ghosh, Swapan Kumar; Sanyal, Tapojyoti; Bera, Tanmay | Asian Pacific Journal of Cancer Prevention | 2020-07- 01 | 151373 68 | Scopus |
| Antiproliferative and apoptotic effect of ethanolic extract of Calocybe indica on PANC-1 and MIAPaCa2 cell lines of pancreatic cancer. | Ghosh, S K; Sanyal, T | Experimental Oncology | 2020 Sep | 181292 69 | Scopus |

| Austinualifaurst | | | 0+20 | 200267 | Coord |
|---------------------------------------|-------------------|----------------------|----------|--------|--------|
| Antiproliferative, | Ghosh S.K., Bera | Middle East | Oct-20 | 200867 | Scopus |
| apoptotic, and antimigration property | T., Pal S. | Journal of Cancer | | 09 | |
| of ethyl acetate extract | | Cancer | | | |
| of calocybe indica | | | | | |
| against hela and caski | | | | | |
| cell lines of cervical | | | | | |
| cancer, and its | | | | | |
| antioxidant and | | | | | |
| mycochemistry analysis | | | | | |
| Benzoic acid treated | Chatterjee, | Toxicology | 2021-03- | 200597 | Scopus |
| Drosophila | Tridip; Ghosh, | and | 01 | 52 | Scopus |
| melanogaster: the | Swapan Kumar; | Environmenta | 01 | 52 | |
| genetic disruption of | Paik, Shauvik; | l Health | | | |
| larval brain stem cells | Chakravarty, | Sciences | | | |
| and non-neural cells | Amit; Basak, | 001011000 | | | |
| during metamorphosis | Ashim Kumar | | | | |
| Biological control (in | Gatak S., Polley | Plant Cell | Dec-20 | 972202 | Scopus |
| vitro) of the pathogen | S.K., Ghosh S.K., | Biotechnolog | | 5 | |
| causing leaf blight | Chakrabarty N. | y and | | - | |
| disease of mint (Mentha | | , Molecular | | | |
| arvensis L.) | | Biology | | | |
| Correction to: On the | Chakraborty, B.; | Ukrainian | 2021-05- | 1573- | Scopus |
| Cardinality of Unique | Chakraborty, S. | Mathematical | 12 | 9376 | - |
| Range Sets with Weight | | Journal | | | |
| One | | | | | |
| Cu(II)-Based Nanofibrous | Sarkar, Sougata; | ACS Applied | 2021-01- | 2574- | WoS, |
| Metallogel for | Maji, Pradip K.; | Nano | 14 | 0970 | Scopus |
| Phenoxazinone | Negishi, Yuichi; | Materials | | | |
| Synthase-like Activity | Dutta, Soumen; | | | | |
| | Das, Tarak N.; | | | | |
| | Pan, Rahul; | | | | |
| | Sarkar, Saikat | | | | |
| Cytological, genetical | Halder, Tarun; | Biocatalysis | | 1878- | Scopus |
| and phytochemically | Ghosh, Biswajit | and | | 8181 | |
| stable meta-Topolin | | Agricultural | | | |
| (mT) - induced mass | | Biotechnolog | | | |
| propagation of | | У | | | |
| underutilized Physalis | | | | | |
| minima L. for production | | | | | |
| of withaferin A | | | | | |
| | | | | | |

| De-polymerization of LDPE plastic by Penicillium simplicissimum isolated from municipality garbage plastic and identified by ITSs locus of rDNA | Ghosh, Swapan Kumar; Pal, Sujoy | Vegetos | 2021-01- 17 | 970407 8 | Scopus |
|--|---|---|----------------|---------------|----------------|
| Effect of interfacial imperfections on SH- wave propagation in a porous piezoelectric composite | Rakshit, Sharmistha; Mistri, Kshitish Ch.; Das, Amrita; Lakshman, Anirban | MECHANICS OF ADVANCED MATERIALS AND STRUCTURES | | 1537- 6494 | WoS, Scopus |
| In silico fight against novel coronavirus by finding chromone derivatives as inhibitor of coronavirus main proteases enzyme | Sepay, Nayim; Sepay, Nadir; Hoque, Ashique Al; Mondal, Rina; Halder, Umesh Chandra; Muddassir, Mohd. | Structural Chemistry | 2020-05- 13 | 1040- 0400 | WoS, Scopus |
| In target areas where human mosquito-borne diseases are diagnosed, the inclusion of the pre- adult mosquito aquatic niches parameters will improve the integrated mosquito control program | Ghosh, Swapan Kumar; Podder, Dipanjan; Panja, Atanu Kumar; Mukherjee, Sabyasachi | PLOS Neglected Tropical Diseases | 2020-08- 14 | 193527 27 | WoS, Scopus |

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|---------------------------|------------------|------------|-----------|-------------|---------------------------------------|
| Neem leaf glycoprotein | Sarkar, | MELANOMA | Apr-21 | 960893 | WoS, |
| salvages T cell functions | Madhurima; | RESEARCH | | 1 | Scopus |
| from Myeloid-derived | Bhuniya <i>,</i> | | | | |
| suppressor cells- | Avishek; Ghosh, | | | | |
| suppression by altering | Sarbari; Sarkar, | | | | |
| IL-10/STAT3 axis in | Anirban; Saha, | | | | |
| melanoma tumor | Akata; Dasgupta, | | | | |
| microenvironment | Shayani; Bera, | | | | |
| | Saurav; | | | | |
| | Chakravarti, | | | | |
| | Mohona; Dhar, | | | | |
| | Sukanya; Guha, | | | | |
| | Ipsita; Ganguly, | | | | |
| | Nilanjan; Das, | | | | |
| | Tapasi; | | | | |
| | Banerjee, | | | | |
| | Saptak; Pal, | | | | |
| | Smarajit; Ghosh, | | | | |
| | Swapan Kr; | | | | |
| | Bose, Anamika; | | | | |
| | Baral, | | | | |
| | Rathindranath | | | | |
| On the Cardinality of a | Chakraborty, B. | UKRAINIAN | APR 2021 | 415995 | WoS, |
| Reduced Unique-Range | Chakraborty, D. | MATHEMATIC | AI N 2021 | 413333 | Scopus |
| Set | | AL JOURNAL | | | Scopus |
| On the Cardinality of | Chakraborty, B.; | UKRAINIAN | DEC 2020 | 415995 | WoS, |
| Unique Range Sets with | Chakraborty, S. | MATHEMATIC | DLC 2020 | 413333 | Scopus |
| Weight One | Chakiaborty, 5. | AL JOURNAL | | | Scopus |
| Productive method for | Haque S.M., | Industrial | DEC 1 | 926669 | WoS, |
| commercial propagation | Ghosh B. | Crops and | 2020 | 920009 0 | Scopus |
| through direct | GHOSH D. | Products | 2020 | 0 | Scopus |
| _ | | FIGUUCES | | | |
| embryogenesis and | | | | | |
| organogenesis in | | | | | |
| Ledebouria | | | | | |
| revolutaâ€"an | | | | | |
| underutilized medicinal | | | | | |
| plant with | | | | | |
| cardioprotective | | | | | |
| properties | | | | | |

| Soil pathogen, Fusarium oxysporum induced wilt disease in chickpea: a review on its dynamicity and possible control strategies | Bhar, Anirban; Jain, Akansha; Das, Sampa | Proceedings of the Indian National Science Academy | 2021-06- 24 | 370004 6 | WoS, Scopus |
|---|--|--|--------------------|----------------------------------|----------------|
| SOME RESULTS ON THE UNIQUE RANGE SETS | Chakraborty, Bikash; Kamila, Jayanta; Pal, Amit Kumar; Saha, Sudip | JOURNAL OF THE KOREAN MATHEMATIC AL SOCIETY | MAY 2021 | 304991 4 | WoS, Scopus |
| Soil pathogen, Fusarium oxysporum induced wilt disease in chickpea: a review on its dynamicity and possible control strategies | Bhar, A., Jain, A. and Das, S | Proceedings of the Indian National Science Academy | 44371 | 0370- 0046 / 2454- 9983 | WoS |
| Pinned or moving: States of a single shock in a ring | Parna Roy, Anjan Kumar Chandra, and Abhik Basu | PHYSICAL REVIEW | 44013 | 2470- 0045 / 2470- 0053 | WoS |
| Mitochondrial DNA diversity: Insight into population diversity, structure and demographic history of Penaeus monodon along the entire coastal region of India | D Mondal, S Dutta, A Mallik, N Mandal | Aquaculture Research | 08-Aug- 20 | 1355- 557X / 1365- 2109 | WoS |
| Evolving Trends of Indian Research Performance in Cryptography: A Bibliometric and Computational Investigation. | B Ghosh, SP Dutta, A Mallik | JOURNAL OF SCIENTOMET RIC RESEARCH | Decembe r, 2020 | 2321- 6654 / 2320- 0057 | WoS |

| Identification and characterization of novel microRNAs in disease- resistant and disease- susceptible Penaeus monodon | D Mondal, U Chakrabarty, S Dutta, A Mallik, N Mandal | Fish & Shellfish Immunology | May, 2021 | 1050- 4648 / 1095- 9947 | WoS |
|---|---|---|--------------------|----------------------------------|-------------------|
| Diversity of Cyanobacteria from Paddy Fields of Purba Bardhaman District of West Bengal, India. | Harisankar Dey and Tuhin Mallick | Indian Hydrobiology. | Sep-Dec, 2020 | 0971- 6548 | UGC- CARE List |
| HOMOLOGY THEORY ASSOCIATED WITH NEW OMEGA-SPECTRUM,, | PRAVANJAN KUMAR RANA AND BHASKAR MANDAL | JOURNAL OF THE CALCUTTA MATHEMATIC AL SOCIETY,17(1) ,1-8,2021 | | 2231- 5314 | UGC- CARE List |
| Productive method for commercial propagation through direct embryogenesis and organogenesis in Ledebouria revoluta-an underutilized medicinal plant with cardioprotective properties | Haque, SM and Ghosh, B | INDUSTRIAL CROPS AND PRODUCTS | Dec 1 2020 | 0926- 6690 / 1872- 633X | WoS |
| Assessment of foliar and floral micromorphology, pollen morphology and other reproductive traits of different colour-forms of Caesalpinia pulcherrima (L.) | Goswami, S.; Karmakar, M.; and Roy, B. | Sw. J. Botan. Soc. Bengal 74 (2):91-104 | Decembe r, 2020 | 0971- 2976 | UGC- CARE List |
| Naringenin Ameliorates Palmitic Acid-induced Fatty Acid Stress in Hepatocytes | Subhajit Maity, Partha Chakrabarti, Abhay Sankar Chakraborti. | The Natural Products Journal | 44197 | 2210- 3155 / 2210- 3163 | WoS |

| Formulation, physico- chemical characterization and antidiabetic potential of naringenin-loaded poly D, L lactide-co-glycolide (N-PLGA) nanoparticles, | Subhajit Maity, Abhay Sankar Chakraborti. | European Polymer Journal | 2020 | 0014- 3057 / 1873- 1945 | WoS |
|---|--|--|----------------|----------------------------------|-----|
| Structural insight into the effect of polymorphic variation on the functional dynamics of methionine synthase reductase: Implications in neural tube defects, doi.org/10.1111/cbdd.1 3780[Joint 1st author]. | Susanta Sadhukhan, Subhajit Maity, Sandipan Chakraborty, Silpita Paul, Dinesh Munian, Arup Kumar Pattanayak, Biman Jana Madhusudan Das. | Chemical Biology & Drug Design | 44228 | 1747- 0277 / 1747- 0285 | WoS |
| Effectiveness of natural carotenoids and coloured chemical factorse on growth and colouration in red molly Poecilia latipinna (Lesueur, 1821) | Mandal, B., Mukherjee, A. and Ganguly, A. | Journal of Environment & sociobiology | 30.06.20 21 | 0973- 0834 | WoS |
| First report of Geocoris lituratus (Geocoridae: Hemiptera) as egg predator of Graphium agamemnon (Papilionidae: Lepidoptera) in urban landscape, West Bengal | Shil, D, Bagchi, A., Sarkar, P., Sardar, S., Mandal, B., Mukherjee, A. and Mitra, B. | Ambient Science | 44287 | 2348- 5191 / 2348- 8980 | WoS |

Details of books and chapters in edited volumes / books published per teacher during the

year

| Name of the teache r | Title of the book/ch apters publishe d | Title of the paper | Title of the proceed ings of the confere nce | Name of the confere nce | Nationa I / Internat ional | Year and month of publica tion | ISBN/ISSN number of the proceedin g | Name of the publish er |
|-------------------------------|--|--|--|----------------------------------|-------------------------------------|---|---|--|
| Anirba n Bhar | Rice Research for Quality Improve ment: Genomic s and Genetic Engineeri ng | Rice Toleranc e to Multiple Abiotic Stress: Genomic s and Genetic Engineeri ng | NA | NA | Internat ional | Novem ber, 2020 | 978-981- 15-4120-9 | Springer , Singapo re. |
| Anirba n Bhar | Genome Engineeri ng for Crop Improve ment | Improvin g Biotic and Abiotic Stress Toleranc e in Plants: A CRISPR- Cas Approac h. | NA | NA | Internat ional | April, 2021 | 978-3- 030- 63372-1 | Springer , Switzerl and. |
| Dr. Harisa nkar Dey | Biodivers ity Conserva tion and Livelihoo d Manage ment | Freshwat er Cyanoba cterial Diversity of Similipal Biospher e Reserve, Odisha, India. | NA | NA | National | April, 2021 | 97893512 48897 | Astral Internat ional Pvt. Ltd. |

| Dr. | Science | Beginnin | NA | NA | National | Decem | 97881945 | Kumud |
|--------|-----------|------------|----------|----------|----------|-------|-----------|----------|
| Sekhar | and | g of | | | | ber, | 06034 | Publicat |
| Pal | Technolo | journey | | | | 2020 | | ions. |
| | gy: A | of some | | | | | | |
| | Concise | pioneerin | | | | | | |
| | History | g Science | | | | | | |
| | and | Research | | | | | | |
| | Evolution | Institutes | | | | | | |
| | | in Bengal | | | | | | |
| Dr. | Recent | A Survey | Recent | 3rd | Internat | 2021 | 978-981- | Springer |
| Chaya | Trends in | on Line | Trends | Internat | ional | | 16-0506- | Singapo |
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| | Pattern | es for | ng and | Recent | | | | |
| | Recogniti | Indic | Pattern | Trends | | | | |
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| n | Internati | ation of | Internat | Confere | | | | Singapo |
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| | ce on | ten | nce on | ed | | | | |
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| | d | Text | ed | ing | | | | |
| | Computi | Lines | Comput | Applicat | | | | |
| | ng | | ing | ions | | | | |
| | Applicati | | Applicat | | | | | |
| | ons | | ions | | | | | |

Details of collaborative activities for research, faculty exchange, student exchange, internship, on-the-job training, project work, etc. during the year

| SI. No. | Title of the collaborative activity | Name of the collaborating agency with contact details | Name of the participant | Duration | Nature of the activity |
|------------|---|--|-------------------------|----------------|---|
| 1 | Summer Project | IISER Kolkata | Sutanu Mukhopadhyay | 2 months | Summer Project |
| 2 | virtual internship | YAI | Sutanu Mukhopadhyay | 2 months | virtual internship |
| 3 | Online Course- 14 nos. | Coursera | Souvik Sarkar | 1 months | online course |
| 4 | Summer Project | IISER Kolkata | Souvik Sarkar | 2 months | Summer Project |
| 5 | Summer Research Training program | CSIR-NEIST | Souvik Sarkar | 2 months | Summer Research Training program |
| 6 | Online webianr, workshop and program-50 Nos. | 50 different Institutions | Souvik Sarkar | 1 or 2 days | Online webianr, workshop and program-50 Nos. |
| 7 | International Conference | VNIT Nagpur | Swarnava Adhikari | 5 days | International Conference |
| 8 | Natioanl Webinar | IIT Dhanbad | Swarnava Adhikari | 2 days | National Webinar |
| 9 | Summer Research Training program | CSIR-NEIST | Pranab Ghosh | 2 months | Summer Research Training program |
| 10 | learn LATEX for research using Overleaf | LLRO | Rohit Bose | 7 days | One week online Workshop on learn LATEX for research using Overleaf |
| 11 | Virtual Math Fest 2020 | ISI, Kolkata, IMSc, Chennai & HRI | Rohit Bose | 7 days | Virtual Math Fest 2020 |
| 12 | Summer Research Training program | CSIR-NEIST | Sandipan Chakraborty | 2 months | Summer Research Training program |
| 13 | Summer Fellowship 2020 | FOSSEE | Somnath Pandit | 6 days | FOSSEE Summer Fellowship 2020 |

| 14 | Virtual Internship with Science Leader Program | Young Academy of Sciences | Sukriti Maity | 2 months | Virtual Internship with Science Leader Program |
|----|---|------------------------------|---------------|----------|--|
| 15 | Summer project | IISER, Kolkata | Rakesh Ghosh | 2 months | Summer project : Coronavirus disease COVID-19 study on the disease and its pathogenesis |

Details of functional MoUs with institutions of national, international importance, other universities, industries, corporate houses etc. during the year (only functional MoUs with ongoing activities to be considered)

| Name of the institution/ industry/ corporate house | Month and Year of signing MoU | Duration | List of activities under each MOU | Number of students/ teachers who benefitted from MoUs |
|---|-------------------------------------|----------|---|---|
| Institute of Nano science and Technology (INST), Mohali | 16.01.2021 | 5 yrs | 2 months internship program provided by INST to PG and UG studnets of our college | 5 |
| Nahata Vivekananda Yuva Pathachakra | 04.01.2021 | 5 yrs | To facilitate service activities and relief works for the poor, needy and under priviledged people of the villages | 8 |
| Nagarukhra Vivekananda Yuva Pathachakra | 14.01.2021 | 5 yrs | To facilitate service activities and relief works for the poor, needy and under priviledged people of the | 10 |

| | | | villages | |
|--|------------|-------|---|----|
| Akhil Bharat Vivekananda Yuva Mahamandal, Chowberia branch | 08.02.2021 | 5 yrs | To facilitate service activities and relief works for the poor, needy and under priviledged people of the villages | 21 |
| Rampur Vivekananda Yuva Pathachakra | 22.03.2021 | 5yrs | To facilitate service activities and relief works for the poor, needy and under priviledged people of the villages | 10 |

Details of awards/medals for outstanding performance in sports and/or cultural activities at inter-university / state /national / international events (award for a team event should be counted as one) during the year

| Name of the award/ medal | Team / Individual | Name of the student | Inter- university / State / National / International | Name of the event | Month and Year |
|--|----------------------|---------------------|--|---|--------------------|
| Sate Level Online Quiz Competition | Individual | Nilay Saha | State | Sate Level Online Quize Competition | September, 2020 |
| International Yoga Day | Individual | Subhadip Maiti | International | International Yoga Day | June, 2020 |
| Envision T20 | Individual | Venkatesh Anand | Inter University | Envision T20 | 2020 |
| Thomas School of Music and | Individual | Sagnik Mondal | International | Thomas School of Music and | 2020 |

| Dance | | | | Dance, | |
|----------------|------------|--------------|---------------|----------------|--------------|
| | | | | Malaysia | |
| International | Individual | Shreedam | International | International | June, 2020 |
| Yoga Day | | Chakraborty | | Yoga Day | |
| Ayush Yoga | Individual | Arita Mondal | National | Ayush Yoga | 2020 |
| Quiz | | | | Quiz | |
| Certificate of | Individual | Arita Mondal | National | Certificate of | August, 2020 |
| Energy | | | | Energy | |
| Literacy | | | | Literacy | |
| IFS- Forensic | Individual | Arita Mondal | National | IFS- Forensic | June, 2020 |
| Investigation | | | | Investigation | |
| Quiz | | | | Quiz | |
| Awareness in | Individual | Arita Mondal | National | Awareness in | June, 2020 |
| Yoga Quiz | | | | Yoga Quiz | |
| Get CISSP | Individual | Arita Mondal | National | Get CISSP | June, 2020 |
| certified in | | | | certified in | |
| quick and | | | | quick and | |
| easy steps | | | | easy steps | |
| online video | Individual | Arita Mondal | National | online video | June, 2020 |
| creator for | | | | creator for | , |
| quick & amp: | | | | quick & amp: | |
| Professional | | | | Professional | |
| vedios in | | | | vedios in | |
| vedio | | | | vedio | |
| Barbicide | Individual | Arita Mondal | National | Barbicide | 2020 |
| Covid-19 | | | | Covid-19 | |
| certification | | | | certification | |
| online quiz | Individual | Arita Mondal | National | online quiz | 2020 |
| on Covid-19 | | | | on Covid-19 | |
| awareness | | | | awareness | |
| program | | | | program | |
| Keyword | Individual | Arita Mondal | National | Keyword | May. 2021 |
| Research | | | | Research | |
| Exam | | | | Exam | |
| E-waste | Individual | Arita Mondal | National | E-waste | June, 2020 |
| Pledge | | | | Pledge | |
| Awareness | Individual | Arita Mondal | National | Awareness | 2020 |
| program | | | | program | |
| Covid-19 | | | | Covid-19 | |
| Entrepreneur | Individual | Arita Mondal | National | Entrepreneur | July, 2020 |
| ship Pledge | | | | ship Pledge | 30.7, 2020 |
| Online Quiz | Individual | Arita Mondal | National | Online Quiz | 2020 |
| | | | | | 2020 |

| janata Curfew | Individual | Arita Mondal | National | janata Curfew | June, 2020 |
|----------------|------------|---------------|---------------|----------------|--------------|
| pledge | mannadar | | Hational | pledge | 34110, 2020 |
| Ek bharat | Individual | Arita Mondal | National | Ek bharat | June, 2020 |
| Shreshtha | | | | Shreshtha | |
| Bharat Quiz | | | | Bharat Quiz | |
| Ayush | Individual | Arita Mondal | National | Ayush | 2020 |
| Sanjivani Quiz | | | | Sanjivani Quiz | |
| Electronics | Individual | Arita Mondal | National | Electronics | 2020 |
| Quiz-2020 | | | | Quiz-2020 | |
| e-Quiz | Individual | Arita Mondal | National | e-Quiz | June, 2020 |
| Environment | | | | Environment | |
| Awareness | | | | Awareness | |
| Online Quiz o | Individual | Arita Mondal | National | Online Quiz o | 2020 |
| Gandhi | | | | Gandhi | |
| Spit Free | Individual | Arita Mondal | National | Spit Free | August, 2020 |
| India | | | | India | |
| movement | | | | movement | |
| E Quiz on | Individual | Arita Mondal | National | E Quiz on | july, 2020 |
| Business | | | | Business | |
| Economics | | | | Economics | |
| Quiz on C | Individual | Arita Mondal | National | Quiz on C | 2020 |
| programming | | | | programming | |
| Onliene Quiz I | Individual | Arita Mondal | National | Onliene Quiz I | July, 2020 |
| National | | | | National | |
| Doctors' Day | | | | Doctors' Day | |
| Sangit Bivakar | Individual | Koushik Mitra | National | Sangit Bivakar | 2020 |
| 1st | | | | 1st | |
| e-Quiz on | Individual | Nobundee | State | e-Quiz on | September, |
| Entomology | | Mukherjee | | Entomology | 2020 |
| International | Individual | Nobundee | International | International | October, |
| e Conference | | Mukherjee | | e Conference | 2020 |
| Drawing | Individual | Nobundee | State | Drawing | 2020 |
| Competition | | Mukherjee | | Competition | |
| E-MAT Quiz | Individual | Subham | National | E-MAT Quiz | June, 2020 |
| | | Kundu | | | |
| Award | Individual | Sayan Biswas | International | Award | 2020 |
| obtained | | | | obtained | |
| from | | | | from | |
| YouTube | | | | YouTube | |
| Gaming | | | | Gaming | |
| Online quiz | Individual | Sagar | International | Online quiz | 2020 |
| on Covid-19 | | Bowmick | | on Covid-19 | |

| awareness | | | | awareness | |
|----------------|------------|---------------|----------|----------------|--------------|
| program | | | | program | |
| Chemi Quiz | Individual | Sagar | State | Online quiz | 2020 |
| | | Bowmick | | on Covid-19 | |
| | | | | awareness | |
| | | | | program | |
| Online quiz in | Individual | Atim Kumar | State | Online quiz in | 2020 |
| Vedic | | Sasmal | | Vedic | |
| mathematics | | | | mathematics | |
| Sports meet | Individual | Pradyut Das | State | Sports meet | 2020 |
| Online Quiz | Individual | Manash | State | Online Quiz | 2020 |
| | | Mukherjee | | | |
| Online Quiz | Individual | Manash | State | Online Quiz | August, 2020 |
| on Covid-19 | | Mukherjee | | on Covid-19 | |
| Photography | Individual | Rupam Das | State | Photography | 2020 |
| Competition | | | | Competition | |
| Sangit Visarad | Individual | Aritra Mondal | State | Sangit Visarad | July, 2020 |
| Online | Individual | Sandip | National | Online | 2020 |
| National Quiz | | Pramanik | | National Quiz | |
| Online | Individual | Sandip | National | Online | 2020 |
| Botany Quiz | | Pramanik | | Botany Quiz | |
| Online | Individual | Sandip | National | Online | 2020 |
| Internship | | Pramanik | | Internship | |
| talk | | | | talk | |
| Mimamsa- | Individual | Soumya Roy | National | Mimamsa- | 2020 |
| 2020, centre | | | | 2020, centre | |
| topper | | | | topper | |

Number of teachers who have undergone online/ face-to-face Faculty Development Programmes during the year (Professional Development Programmes, Orientation / Induction Programmes, Refresher Courses, Short-Term Course, etc.)

| Name of Teacher who attended the programme | Title of the programme | Duration (from - to) (DD-MM- YYYY) |
|--|--|---------------------------------------|
| Anirban Bhar | 1. FACULTY DEVELOPMENT PROGRAMME ON "ADVANCED RESEARCH METHODOLOGY FOR DECISION-MAKING" organized by BIRLA SCHOOL OF COMMERCE, BIRLA GLOBAL UNIVERSITY, | 15-12-2020 to 16-12-2020 |

| | BHUBANESWAR | |
|------------------|-----------------------------------|--------------------------|
| | | |
| | | |
| | | |
| | | |
| | | |
| Dr. Bipul Mondal | Refresher Course (16.03.2021 to | 16-03-2021 to 31-03-2021 |
| | 31.03.2021) | |
| Dr Anjan Kumar | 1) One day Orientation program on | 15-03-2021 to 26-03-2021 |
| Chandra | "NAAC & CAS" (23rd August, 2020) | |
| | 2) One week FDP on "HIGHER | |
| | EDUCATION: ROAD AHEAD | |
| | DEVELOPING NEXT GENERATION | |
| | ACADEMIC LEADERS" from | |
| | November 25- December 01, 2020 | |
| | organised by Department of | |
| | Commerce & IQAC, Sri | |
| | Venkateswara College, University | |
| | of Delhi in Collaboration with | |
| | Pandit Madan Mohan Malviya | |
| | National Mission on Teachers and | |
| | Teaching, Teaching Learning | |
| | Centre, Ramanujan College. | |
| | 3) Two week Online Faculty | |
| | Development Programme on "ICT | |
| | Tools for Teaching, Learning | |
| | Process and Institute" jointly | |
| | organized by Electronics and ICT | |
| | Academies held from 15 th – 26 th | |
| | March, 2021 under Ministry of | |
| | Electronics and Information | |
| | Technology (MeitY), Government | |
| | of India | |
| Mr. MANAS MOULIC | 1. Successfully completed the | 30-11-2020 to 29-12-2020 |
| | Faculty Induction Programme | |
| | organized by the UGC - Human | |
| | Resource Development Centre, | |
| | University of Hyderabad from 30th | |
| | November to 29th December, | |
| | 2020 and obtained grade 'A+'. | |

| Bikash Chakraborty | 1. FIP from Noth Bengal University 25.11.2020 - 24.12.2020 | 25-11-202 to 24-12-2020 & 8-01- 2021 to 21-01-2021 |
|----------------------------|--|---|
| | 2. Attended One RC in Mathematics from Noth Bengal University 8.01.2021-21.01.21 | |
| Dr. Kshitish Ch Mistri | Refresher Course-01 (15.03.2021 27.03.2021) Faculty Induction Programme November 25, 2020 to December 24, 2020 | 15-03-2021 to 27-03-2021 & 25.11.2020 to 24-12-2020 |
| Dr. Chayan Halder | 1) 5 day international FDP organized by South Asian Institute for Advanced Research & Development (SAIARD) on Research Methodology. From 10/05/2021 to 14/05/2021 2) 2 day national FDP organized by Women's College, Calcutta and Bhairab Ganguly College on CAS, WBHS & Other Service Benefits for College Employees. From 08/06/2021 to 09/06/2021 | 10-05-2021 to 14-05-2021 |
| DR.PRAVANJAN KUMAR RANA | ONE WEEK FDP ON PYTHON 3.4.3,IQAC ,BARNAGAR COLLEGE,SORBHOG,BARPETA,27TH AUGUST TO 2ND SEPTEMBER,2020 | 27-08-20220 to 02-09-2020 |
| Dr. Partha Ray | 5-day Faculty Development Programme on "Applied Mathematical skills for Science and Engineering Using Contemporary Tools" from 14th to 18th September, 2020. | 14-09-2020 to 18-09-2020 |
| Bhaskar Haldar | Participated in Faculty Induction Programme - 18.11.2020 - 17.12.2020 from Bharathidarsan University Refresher Course - 22.02.2021 - 06.03.2021 from Jadavpur University | 18-11-2020 to 17-12-2020 & 22- 02-2021 to 06-03-2021 |

| Dr. Palash Nath | Attended in UGC-Sponsored | 02-03-2021 to 29-03-2021 |
|-----------------|-------------------------------------|----------------------------|
| | Faculty Induction Programme (FIP) | |
| | conducted by HRDC, CU from | |
| | March 02, 2021 to March 29, 2021. | |
| Samir Sardar | 1. Online FDP from UGC- HRDC | 18-11-2020 to 17.12.2020 & |
| | Kurukshetra University from | 16.02.2021 to 01.03.2021 |
| | 18.11.2020 to 17.12.2020. | |
| | 2.RC on Quantum Biology | |
| | (interdisciplinary Science) from | |
| | 16.02.2021 to 01.03.2021. From | |
| | UGC HRDC University of Goa . | |
| Dr. Sekhar Pal | FDP on "ICT Tools for Teaching, | 15-03-2021 to 26-03-2021 |
| | Learning Process and Institute" | |
| | jointly organized by | |
| | Electronics and ICT Academies (NIT | |
| | Patna, MNIT Jaipur, PDPM IIITDM | |
| | Jabalpur, IIT Guwahati, IIT Kanpur, | |
| | and IIT Roorkee) held from 15th – | |
| | 26th March, 2021. | |

Total webinar organized by the college during the session:

| Total webinar =59; International= 9, National=35, State level=15 | | | | |
|--|---|---|--|--|
| Date | | Торіс | Speaker | |
| 1 st July, 2020 | N | Webinar on STEM Education and Then What? | Prof. Subhasish Choudhry, Director; IIT Bombay | |
| 1 st July, 2020 | N | Webinar on Yantra, Tantra, Mantra | Sri Tapan Misra, Former director, Space Application centre, Department of Space, ISRO | |
| 3 rd July, 2020 | I | Webinar on Molecular Detection of Diabetes Mellitus from Exhaled Breath Analysis | Dr. Chiranjit Ghosh, Post-doctorate Research Fellow, Division of Infectious Disease, Harvard Medical School/BWH, Harvard University | |

| 3 rd July, 2020 | 1 | Webinar on Biophysics of protein folding aggregation in Neurodegenerative diseases | Dr. Sumanta Ghosh, Postdoctoral Research Fellow, University of Texas, USA |
|-------------------------------------|---|--|---|
| 18 th July, 2020 | N | Webinar on Capacity Building & Career Guidance | Prof. Anil Sahasrabudhe, Chairman, All India Council for Technical Education, New Delhi |
| 22 nd July, 2020 | N | Webinar on Career prospects for students in higher education in the basic sciences - a contemporary perspective | Prof. Sarit K. Das, Director, Indian Institute of Technology, Ropar |
| 22 nd July, 2020 | 1 | Webinar on Algorithm Design: An Overview of Recent Advancement) | Prof. Diptarka Chakraborty, Assistant Professor, National University of Singapore |
| 23 rd July, 2020 | 1 | International webinar On Capacity Building & Career Guidance | Dr. Anujit Chakraborty, Assistant Professor of Economics, University of California, Davis |
| 24 th July, 2020 | N | Capacity Building & Career Guidance | Prof. Santanu Choudhury, , Indian Institute of Technology, Jodhpur |
| 23 rd August, 2020 | 1 | International webinar on Swami Vivekananda : The man and His message in a national perspective. | Revered Swami Devapriyanandaji Maharaj, The Spiritual Director, Ramakrishna Vedanta Center, Lusaka, Zambia |
| 29 th August, 2020 | I | One Day International Webinar on Mathematics and Mathematical Sciences Topic: Are We Prepared | Prof. Ravi P. Agarwal, Texas A & M University-Kingsville. |

| | | To Accept The Reality? | |
|--|---|---|---|
| 26 th September, 2020 | N | Induction Programme For the Newly admitted students of Microbiology of the college | Prof. Pratip Kumar Kundu, director Calcutta school of tropical medicine |
| 28 th September, 2020 | N | Induction Programme For the Newly admitted students of Chemistry of the college | Dr. Ashok Kumar Mishra, Professor and Dean Academic Research, Department Of Chemistry, IIT Madras. |
| 29 th September, 2020 | N | Induction Programme For the Newly admitted students of Zoology of the college | Prof. Arun Bandyopadhyay, Director, Indian Institute of Chemical Biology (IICB) |
| 30 th September, 2020 | N | Induction Programme For the Newly admitted students of Mathematics of the college | Prof. Asok Kumar Nanda, Indian Institute of Science Education and Research- (IISER) Kolkata |
| 1 st October, 2020 | N | Induction Programme For the Newly admitted students of Physics of the college | Prof. Rajesh Gopakumar, International Centre for Theoretical Sciences (ICTS-TIFR), Bengaluru |
| 2 nd October, 2020 | N | Induction Programme For the Newly admitted students of Computer Science of the college | Prof. Krishnendu Mukhopadhyay, ISI, Prof. In-charge, Advanced Computing and Microelectronics Unit, Indian Statistical Institute, |
| 2 nd October, 2020 | N | Induction Programme For the Newly admitted students of Computer Science of the college | Professor Amlan Chakrabarti, Professor and Director, A.K.Choudhury School of Information Technology, University of Calcutta |
| 14 th October, | N | Induction Programme For the Newly admitted students of Botany of | Dr. Subhra Chakraborty, Director, National Institute of Plant Genome |

| 2020 | | the college 2020 | research, New Delhi |
|--------------------------------------|---|---|---|
| 8 th November, 2020 | S | Motivation Programme For the Newly admitted B.Sc. 1st yr. students of the college 2020 | Dr. Paromita Roy, Deputy Director, JBNSTS |
| | | | Dr. Smarajit Manna, Student Advisor, JBNSTS |
| 13 th | N | Motivation Programme | Prof Rajeeva Laxman Karandikar, |
| November, 2020 | | For the Newly admitted M.Sc. Mathematics 1st yr. students of the college 2020 | Director, Chennai Mathematical Institute, H1 Sipcot IT Park, Siruseri, Kelambakkam |
| 18 th | N | Induction Programme | Prof. Amitava Patra, FRSC, FNASc, |
| November, 2020 | | For the Newly admitted M.Sc. Chemistry 1st yr. | FASc Director, Institute of Nano Science and Technology, |
| | | students of the college 2020 | Government of India Habitat Centre, Phase - X, |
| 21 st | N | Induction Programme | Dr. Subeer Majumdar. FNA, FNASc, |
| November, 2020 | | For the Newly admitted M.Sc. Zoology 1st yr. students of the college 2020 | FASc, Director, National Institute of Animal Biotechnology, Hyderabad |
| 23 rd | N | Induction program For | Professor S.K. Barik, Director, CSIR- |
| November, 2020 | | the Newly admitted Botany M.Sc. 1st yr. students of the college 2020 | National Botanical Research Institute, Rana Pratap Marg |
| 28 th | S | Motivational Programme | Prof. Ramkrishna Sen, Professor & |
| November, 2020 | | For the all students of Microbiology of the college | Head, Department of Biotechnology, Indian Institute of Technology (IIT), Kharagpur. |
| 5 th December, | N | Webinar on 'Understanding the social language of | Dr. Subhadeep Chatterjee, Scientist, Centre for DNA Fingerprinting & Diagnostics, Hyderabad-500039, |

| 2020 | | bacteria: Speak or not to speak?' | Telengana (Bhatnagar Awardee- 2020) |
|---------------------------------------|---|--|--|
| 5 th December, 2020 | | Webinar on Covid-19: history, awareness and therapeutic | Dr.Malabendu Jana, Assistant Professor, Rush University Medical Center Neurological Science, Chicago, IL-60612, USA Topic- Covid-19: Possible strategies to prevent neurodegenerative diseases Prof. Projit Kumar Palit, Professor, Department of History, Jadunath Sarkar School of Social Sciences, |
| 8 th December, 2020 | S | Webinar on 'Awesome geographical sweep of a mutant coronavirus, with | Assam University, Silchar Topic- Pandemic time and Educational Institutions : looking to Positivity Prof. Partha P Majumder, Former Director, NIBMG, Kalyani and President, Indian Academy of |
| 11 th December, 2020 | 1 | some hesitations.' Webinar on Bacterial warfare mediated by Type VI Secretion system | Sciences. Biswanath Jana, Department of Clinical Microbiology and Immunology, Sackler Faculty of Medicine, Tel Aviv University, Tel Aviv, Israel. |
| 2nd January, 2021 | 1 | Webinar on "Large deviations for random graphs" | Prof. Sourav Chatterjee, Professor of Mathematics and Statistics Stanford University, USA (Infosys Prize awardee 2020 in Mathematics) |
| 4th January, 2021 | N | Webinar on "Emerging Physics and Devices with Atomic Membranes" | Prof. Arindam Ghosh, Professor, Department of Physics, Indian Institute of Science, Bangalore (Infosys Awardee 2020 in Physical |

| | | | sciences) |
|---------------------------|---|--|--|
| 8th January, 2021 | S | Webinar on "Protein folding and interactions" | Prof. Pinakpani Chakrabarti, Senior Prof and J.C. Bose Fellow, Department of Biochemistry, Bose Institute |
| 12th January, 2021 | N | Observation of National Youth Day 2021. Webinar on "Swami Vivekananda : His Life and Message" | Prof. Subramanian Yashonath, Emeritus Professor, Solid State and Structural Chemistry Unit (SSCU), Indian Institute of Science, (IISC), Bangalore. |
| 23rd January, 2021 | N | Webinar on "Novel Aspects of Modern Physics" | Professor Nilmani Mathur, , Dept. of Theoretical Physics, Tata Institute of Fundamental Research (TIFR), Mumbai. |
| 28th January, 2021 | S | West Bengal Health Scheme for Govt. and Govt. Aided College and University Teachers and Officers of West Bengal. | Dr. Partha Karmakar, Deputy Secretary Academic, WBBSE, Former OSD & Ex-officio Assistant Director of Public Instruction, Govt. of West Bengal |
| 11th February, 2021 | S | Basic field approaches for pollination | Dr. Udipta Chakraborti Former Research Scholar University of Kalyani, Kalyani, Nadia West Bengal, India Pin code: 741235 |
| 20th February, 2021 | S | Scientific Beekeeping for Managed Pollination and Production of Quality Honey and other Hive Products | Dr. Dipak Nayak Sr. Scientist & In-Charge ICAR-Central Institute for Subtropical Horticulture, Regional Research Station, Malda, WB |

| 05th March, 2021 | S | Election Process Awareness Programme | Dr. jayanta Debabrata Chowdhury, BDO, Barrackpore II & Sri Gopal Dey, Joint BDO, Barrackpore II |
|------------------------|---|---|--|
| 31st March, 2021 | S | Tackling the Flu: From H1N1 to SARS-CoV-2 | Dr. Arindam Mondal, Assistant Professor, IIT Kharagpur |
| | | Organized by DBT STAR College Scheme, Department of | |
| | | Chemistry, | |
| | | Ramakrishna Mission Vivekananda Centenary College, Rahara | |
| 8th May | N | Amino Acids and Trisubstituted Methanes (TRSMs) as Versatile Synthon: Rays of Hope for Autophagic Cell Death and Tuberculosis respectively? | Dr. Gautam Panda Scientist F Senior Principal Scientist & Professor CSIR-CDRI |
| | | Organized by DBT STAR College Scheme, Department of Chemistry, | |
| | | Ramakrishna Mission Vivekananda Centenary College, Rahara | |
| 12th May, 2021 | N | Chiral checkpoints during protein | DR. Rajan Sankaranarayanan |

| | | biosynthesis | FNASc, FNA |
|---------------------------|---|---|---|
| | | Organized by DBT STAR College Scheme, Department of Zoology, | Chief Scientist, Structural Biology Laboratory CSIR-Centre for Cellular and Molecular Biology (CCMB), Awarded Infosys Prize 2020 in Life Sciences |
| | | Ramakrishna Mission Vivekananda Centenary College, Rahara | |
| 05th June, 2021 | N | World Environment Day Webinar on Broken Chain of Events: | Dr. Maria Thacker, Associate Professor,,Macrophysiology Lab, Centre for Ecological Sciences, IISc Bangalore |
| | | connecting predation risk to prey population abundance | |
| | | Organized by DBT STAR College Scheme, Department of Zoology, | |
| | | Ramakrishna Mission Vivekananda Centenary College, Rahara | |
| 7th April, 2021 | S | The department of Computer Science organized a two day cyber security workshop in collaboration with Zero Dollar Security | CEO Mr. Sohang along with his collegues Mr. Harshit and Mr. Debjeet |
| 054 | | | |
| 25th February, 2021 | S | Introduction to Data Science | Prof. Anirban Mukhopadhyay of Kalyani University |
| 01st March, | S | Basics of image | Dr. Kaushik Roy, WBSU |

| 2021 | | processing and pattern recognition | |
|---------------------------|---|--|---|
| 10th June, 2021 | S | Recent trends in security and authentication in communications | Prof. Jyotsna Kumar Mandal |
| 12th June, 2021 | S | How to face interview board of various industries, what is their expectations from students etc. | Shri Subir Bandyopadhyay |
| 24th June, 2021 | N | Celebration of 7th International Yoga Day Webinar on Yoga and Youth of India | Prof B.R. Ramakrishna, Vice Chancellor, Swami Vivekananda Yoga Anusandhana Samsthana Prof. Y. Narahari, Dean of Division EECS, IISC, Bangalore Dr. Sreekrishnan Venkiteswaran, CTO, GTS cloud unit, IBM |
| 13th & 14th July, 2021 | Ν | National Webinar on The Philosophy of Education and Swami Vivekananda Sponsored by Indian Council of Social Science Research, New Delhi | Swami Divyasudhananda, Principal, Ramakrishna Mission Vidyapith, Deoghar, Jharkhand Swami Ekachittananda, Principal, Ramakrishna Mission Vidyamandira, Belur Math Swami Narasimhananda, Secretary, Ramakrishna Mission Sevashrama, Kozhikode, Kerala Prof. Bishnupada Nanda. Professor, Department of Education, Jadavpur University. Dr Saradindu Mukherjee, Member, ICHR, New Delhi Prof. Kumar Ratnam, D.Litt., Member Secretary, ICHR, New Delhi |

| | 1 | | |
|----------------------------|---|--|--|
| 16th July, 2021 | N | Webinar on "Water, water everywhere Understanding how water plays important role in life and science" | Prof. Biman Bagchi, Distinguished Professor, Indian Institute of Science (IISC), Bangalore |
| 15th September, 2021 | N | Induction Programme For the newly admitted UG student of Chemistry Topic: The status of Chemistry Research in India: From P. C. Ray to the present" | Professor Vadapalli Chandrasekhar, Centre Director, Tata Institute of Fundamental Research (TIFR) Hyderabad |
| 16th September, 2021 | N | Induction Programme For the newly admitted UG student of Computer Science Topic: "An open interaction on the perspective of Computing Technology". | Professor P. Nagabhushan Director, Indian Institute of Information Technology, Allahabad |
| 17th September, 2021 | N | Induction Programme For the newly admitted UG student of Botany Topic: 'Abiotic Stresses in Agriculture: Impacts and Management' | Dr. H. Pathak Director, ICAR-National Institute of Abiotic Stress Management (NIASM) Baramati, Pune, |

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| 18th | Ν | Induction Programme | Professor V. M. Katoch |
|------------|---|--|-------------------------------------|
| September, | | For the newly admitted | Former Director General, Indian |
| 2021 | | UG student of | Council of Medical Research (ICMR) |
| | | Microbiology | |
| | | Microbiology | |
| | | | |
| | | Tania: " Onnartunitian in | |
| | | Topic: " Opportunities in Microbiology and Life | |
| | | Sciences". | |
| | | | |
| | | | |
| 19th | Ν | Induction Programme | Dr D.M. Salunke |
| September, | | For the newly admitted | Director, International Centre for |
| 2021 | | UG student of Zoology | Genetic Engineering & Biotechnology |
| | | Topic: 'Modern Science | |
| | | and Nation Building' | |
| | | | |
| | | | |
| 20th | N | Webinar on | Dr. Amit Ghosh, |
| September, | | "Gut Microbiome, Brain | J.C.Bose Distinguished Professor, |
| 2021 | | and Behaviour" | National Institute of Cholera and |
| | | | Enteric Diseases (NICED) |
| | | | Formerly Director, Institute of |
| | | | Microbial Technology, Chandigarh & |
| | | | School of Biological Sciences |
| | | | Indian Institute of Advanced |
| | | | Research, Gandhi Nagar, Gujarat |
| | | | |
| | | | |
| 22nd | Ν | Induction Programme | Prof. (Dr.) Dipankar Banerjee, |
| September, | | For the newly admitted | Director, Aryabhatta Research |
| 2021 | | UG student of Physics | Institute of Observational Sciences |
| | | | (ARIES) |
| | | Topic: A journey | |

| | | towards our nearest star the Sun | |
|------------|---|-------------------------------------|---------------------------------------|
| 24th | Ν | Webinar on "Science | Prof. Raghavendra Gadagkar, DST |
| September, | | For All: To Do Cutting- | Chair Professor, Centre for |
| 2021 | | Edge Research at | Ecological Sciences, Indian Institute |
| | | Trifling Cost" | of Science (IISC) Bangalore |

Students' achievements:

- Sourabh Kundu from Department of Microbiology has successfully completed one-month summer internship on the subject "Single molecule level detection of cisplatin drug treated DNA" under the guidance of Dr. Rupa Mukhopadhyay, senior scientist, Department of Life science, Indian Association for the Cultivation of Science (IACS), Kolkata
- Somnath Roy, Joydip Majumder, and Sohamdeep Chakraborty from Department of Microbiology has successfully completed one-month summer internship training on the subject "Principles of Computer aided Drug Design" at NIELT (National Institute of Electronics and Information Technology) Guwahati during 29th June to 30th July, 2021.
- Anubhab Das, from Department of Microbiology qualify the Young Academy of India's MentX 2021 programme and doing the internship on "Laser molecular spectroscopy and imaging methods for fast label-free detection of viruses" under the guidance of Dr. Mrinal Majumder, Department of Biophysics Manipal School of Life science.
- Koushik Bhattacharya, and Rakesh Ghosh from Department of Microbiology has successfully completed one-month summer internship training on the subject "Adaptive Evolution in Microbial Genome" Under the guidance of Prof. Sujoy Chattopadhya, head, Center of Health Science and Technology at JIS Institute of Advance Studies and Research, Kolkata

- Arghya Acharya, UG Fifth Semester student and Arya Mukherjee, UG Third Semester student from the Department of Zoology got selected Young Academy of India's MentX programme for doing the internship under Dileep Vasudevan, PhD, Scientist, DBT - Institute of Life Sciences, Bhubaneswar.
- A paper entitled 'Proving inequalities via definite integration: a visual approach' by Nazrul Haque, a Sem VI student of the Dept. of Mathematics has been accepted for publication by The Mathematical Gazette of the Cambridge University Press.
- Sawan Bhattacharya, a Fourth Semester, Computer Science Hons student received the Certificate of Quantum Excellence in 2021 Qiskit Global Summer School on Quantum Machine Learning in the field of Quantum Computing, Quantum Machine Learning which continued from July, 2021 to August, 2021 where he received the highest grade 100/100. He completed the two-week intensive course provided by IBM Quantum, completing all graded lab work assignments with a final cumulative score above 75%, demonstrating applied understanding and comfort with and about Quantum Computing and Quantum Machine Learning using Qiskit.
- Sawan Bhattacharya received the Certificate of achievement for successful completion of two months summer internship at QRDLAB Pvt Ltd during 20/5/2021 to 18/07/2021.
- 18 students of the Second Semester student of the Department of Zoology Devjyoti Mondal, Swapnamoy Chakraborty, Anamitra Sen, Debnath Bid, Kaushik Mitra, Sandip Acharya, Debjyoti Goswami, Akash Roy, Subhamoy Mondal, Tathagata Chowdhury, Pratyush Kumar Datta, Arya Mukherjee, Debabrata Das, Subhagata Ghosh, Akash Chatterjee, Debayan Chakroborty, Rajat Subhra Bhattacharya participated in the Online International Summer Program 2021 Osaka University, Graduate School of Science.
- Arghya Acharya, Sem IV student and Anamitra Sen, Sem II student from the Dept. of Zoology received a Certificate of Appreciation from WWF-India, West Bengal State Office for exceptional performance in a virtual interactive session

for the observation of World Environment Day in a virtual programme on 'Sharing thoughts for Ecological Restoration' on 6th June, 2021 on the topics 'Ecological restoration for Wildlife and Biodiversity'and 'Ecological restoration for climate & environment' respectively.

- Koushik Bhattacharya participated a workshop on "Computational Structural Based Screening and Molecular based Dynamics" conducted by Rajiv Gandhi Centre for Biotechnology (RGCB)
- Anamitra Sen, Third Semester student of the Department of Zoology submitted a
 proposal on the topic 'Non-conventional way of Hydrogen Economy Hydrogen
 fuel & car in greener & cost-efficient way' for Nasser Bin Hamad International
 Youth Creativity Award which has got selected for the judging round.
- Sukriti Maity, a Fifth Semester student in the Department of Zoology has been selected internationally amongst the top 50 candidates to participate in Scientific Illustration Workshop organized by the Centre for Cognitive and Brain Sciences, IIT Gandhinagar.
- Sukriti Maity, a Fifth Semester student in the Department of Zoology has participated in the hands-on training program on NGS & Other large scale biological data analysis conducted by Shodhaka Life Sciences Pvt. Ltd., from 5th June 2021 to 19th June 2021 The training mainly focused on the use of biological databases and tools for mass scale data analysis.
- Sukriti Maity, a Fifth Semester student in the Department of Zoology successfully completed the online quiz with 95% score conducted by Junglemahal Zoological Park, Jhargram held on 1st July 2021 by the Directorate of Forests, Govt. of West Bengal Jhargram Division.
- Many students qualified for the entrance examinations in different M.Sc. and Integrated Ph.D courses in reputed institutions like TIFR, IITs, IISERs, HRI, Kerela School of Mathematics, RKMVERI etc.
- Students of the Department of Computer Science got job placements in various reputed companies like WIPRO, TCS etc.

- Rishav Kar, Department of Microbiology, got Young Researcher Award 2021, organized by Institute of Scholars (INSC) Bengaluru. for his review article Medico Ethnobotanical Effects and Other Health Benefits on Nine Divine Plants of Navapatrika, published in International Journal of Engineering Applied Sciences and Technology, Vol. 5, Issue 3
- Sayonil Sen, Department of Zoology got the Second Prize in Online Poster Competition on Environmental Pollution on 10th February, 2021 organised by COHORT Team DS Bengal-Can supported by Switch on Foundation
- Chandan Bahumik, our 2018 B.Sc. Mathematics Hons. alumnus, received the Chairman Board of Governors Gold Medal after completing M.Sc. in Maths and Computing from IIT Kharagpur in 2021
- Sawan Bhattacharyya presented his dissertation work on 'Post Quantum Cryptography- A brief survey of classical cryptosystems, their fallacy and the advent of post-quantum cryptography with the deep insight into hashed based signature scheme' done under the supervision of Dr. Amlan Chakraborti. AK Chowudhury School of Information Technology, University of Calcutta at the 5th International Conference on Data Management, Analytics and Innovation (ICDMAI 2021) on 17th January, 2021
- Inter college competitions as a part of Student Development Program-Date- 5th June, 2021, on the occasion of World Environment Day

Organized by- Department of Environmental Science, Department of Microbiology, Department of Botany and Department of Zoology, research and guidance cell of Vijaygarh Jyotish Ray College, Kolkata in collaboration with the Science Association of Bengal, Kolkata

Topic- 'Nature and Development go hand in hand'

- Inter college debate competition : 1st position secured by: Nirmalendu Mukherjee, Department of Microbiology, RKMVCC Rahara; 2nd position secured by: Tamonash Debnath, Department of Microbiology, RKMVCC Rahara
- Inter college quiz competition; Sandip Acharyya, Dept. of Zoology, RKMVCC Rahara stood 3rd in quiz program organized by Bijoygarh Jyotish Roy college
- World Environment Day Competitions organized by Alipore Zoo, Kolkata:
 1. Sandip Acharyya, Dept. of Zoology, RKMVCC Rahara stood 3rd in online quiz contest

2. Abhishek Shyam Chowdhury and Arpan Mondal, Department of Botany stood 3rd in poster competition organized by Acharya Brojendra Nath Seal College Cooch behar.

<u>Competition on Concept note on Ecological Restoration WWF-INDIA</u>

Prizes won by our students:

Ecological Restoration for Wildlife and Biodiversity - Arghya Acharyya, Dept. of Zoology, RKMVCC Rahara

Ecological Restoration for Climate and Environment - Anamitra Sen, Arghya Acharyya, Dept. of Zoology, RKMVCC Rahara

Ecological Restoration for Habitat and Home - Mayukh Mitra, Arghya Acharyya, Dept. of Zoology, RKMVCC Rahara

• PPT Presentation Competition by Team Bengal CAN:

Mr. Anamitra Sen, Mr. Akash Chatterjee and Mr. Mayukh Mitra students of Ramakrishna Mission Vivekananda Centenary College have secured the winners position for the PPT Presentation competition on 24th April 2021 at Earth Day Competition themed "Restore our Earth" by Team Bengal CAN.

- Internships: 5 students from PG section of our College has been selected for summer internship at INST, Mohali. They are pursuing their internship at INST Mohali from April-June 2021
- Anamitra Sen from Ramakrishna Mission Vivekananda Centenary College (Autonomous), Rahara, Kolkata has successfully secured COVID-19 Awareness Survey & Research internship at Dr. APJ Abdul Kalam Research Foundation through Internshala.
- Anamitra Sen from Ramakrishna Mission Vivekananda Centenary College (Autonomous), Rahara, Kolkata has successfully secured Research (Biologist) internship at FaunaNation (Flora & Fauna Conservation & Development Society) through Internshala.

Workshops organized:

- Department of Microbiology, Ramakrishna Mission Vivekananda Centenary College, Rahara organized 14 days' Intradepartmental workshop on "Biostatistics & Bioinformatics" by Dr. Sekhar Pal, Asst. Professor, Department of Microbiology, Ramakrishna Mission Vivekananda Centenary College, Rahara.
- An interdepartmental Workshop on 'How to Write a Review : through Computational Approach' was organised by Department of Zoology, DBT STAR College with Dr. Ajoy Mallik, Asst. Professor, Department of Zoology, Ramakrishna Mission Vivekananda Centenary College, Rahara as the resource person, for the students of the Department of Botany, Zoology and Microbiology from 9/05/2021 to 20/05/2021 where 159 students enrolled and for the students of the Departments of Physics, Chemistry, Mathematics and Computer Science on the topic 'Review Paper Writing : Processes & Prospects In Future Research' from 20/09/2021 to 05/10/2021where 198 students enrolled.

Celebration of 128th Anniversary of Swami Vivekananda's Chicago Address:

An Intra-College Online Online Essay Competition on the topic 'Significance of Swami Vivekananda's Chicago Address in the Reawakening of India' and Online Extempore Competition on the topic 'Swami Vivekananda's Chicago Address: An Inspiration for me' were organized on 11th September, 2021.Swami Urjitananda, Controller of Examinations, Ramakrishna Mission Shikshana Mandira was the special guest for the Online Extempore Competion.

Online Workshops arranged (by the Department of Zoology):

1) TOPIC : Mapping & GIS System; DATE:15.02.2021

Ritam Dutta, Senior Research Fellow, Zoological survey of India, M-Block, New Alipore, Kolkata, Ph.D scholar, University of Madras.

2) TOPIC: Practical Demonstration on the dissection of Corbicula & Stinger Of Honey Bees & Mouthparts of Mosquito

DATE: 18.02.21

Sankarsan Roy , Ph. D. Research Scholar, Dept. of Zoology, Vidyasagar University And District Entomologist, Dept. of Health & Family Welfare, GoWB, Purulia.

Outreach Programme:

Outreach Programe organized Ramakrishna Mission Vivekananda Centenary College, Rahara by under DBT STAR College Scheme in collaboration with Govt Sponsored Multipurpose School for Boys' Taki House on 9th April 2021 (Friday):

| Lecture 1 | Dr Arunava Mukherjee |
|---|----------------------------|
| Subject: Zoology | |
| Title: Why We Need To Know Ecology | |
| Lecture 2 | Dr Sougata Sarkar |
| Subject: Chemistry | |
| Title: <i>History of</i> Coordination Chemistry | |
| Lecture 3 | Dr Kalyan Brata Chatterjee |
| Subject: Physics | |
| Title: <i>Origami and Modern</i> Science | |
| Lecture 4 | Dr Avik Kumar Choudhury |
| Subject: Botany | |
| Title: Light and Life: The Indispensible Process of | |
| | |

Photosynthesis

Interdepartmental Enrichment Programe:

Organized Ramakrishna Mission Vivekananda Centenary College, Rahara by under DBT STAR College Scheme

7th April, 2021 (11am - 4.00pm)

Dr. Kalayan Brata Chatterjee, Physics, RKMVCC (Topic : The art of estimation)

Dr. Anirban Kundu, Botany, RKMVCC (Topic: Protein bioinformatics – Structural dynamics and properties)

Dr. Sougata Sarkar, Chemistry, RKMVCC (Topic: Chemistry of Buffer Solution)

Dr. Subham Mookherjee, Zoology, RKMVCC (Topic: Environmental water sources and diarrhea)

Dr. Phonindra Nath Das, Mathematics (Topic: LaTeX for scientific documentation)

| Journal | Article | Author |
|--|--|--|
| International Research Journal of Modernization in Engineering Technology and Sciences, Vol. 2, Issue 7 | Pathogenesis of RNA Virus and Recently Available Therapeutics in Treatment – A Review | Rishav Kar, Kaushik Bhattacharya Dept of Microbiology |
| International Journal of | Medico Ethnobotanical | Rishav Kar |
| Engineering Applied Sciences and Technology, Vol. 5, Issue 3 | Effects and Other Health Benefits on Nine Divine Plants of Navapatrika | Dept of Microbiology |
| International Journal of Scientific | Molecular Inhibitor for | Nobendu Mukherjee |
| Research in Engineering and Management, Vol. 4, Issue 8 | Inhibiting Breast Cancer – A path other than surgery | Dept of Microbiology |

Student Publications (14 students' publications):

| International Journal of Science | Polycystic Ovary Syndrome | Nobendu Mukherjee |
|--|--|---|
| and Research (IJSR) | (PCOS) Symptoms, Causes & Treatments – A Review | Dept of Microbiology |
| International Journal of Research | Neuroimaging & Other Biomarkers For Alzimer's Disease – a brief review | Nobendu Mukherjee |
| Cancer Research Journal | Uses Of R.O.S.(H2O2) In Nano-robot Technology : For Aggressive Cancer Treatment Without Side Effects | Arghya Acharyya Dept. of Zoology |
| International Journal of Research in Engineering and Science (IJRES) vol. 8, Issue 10. | A Brief Glimpse on Advancement of CRISPER/Cas in Research | Nobendu Mukherjee Dept. of Microbiology |
| International Journal of Science and Research (IJSR) | A Brief Review on the Overview on Immunology of COVID-19: Current State of the Research | Nobendu Mukherjee Dept. of Microbiology |
| International Journal of Pharmaceutical Research and Applications (IJPRA) Vol. 6, Issue 1 | Analysis of Potentiality and Anti-Tumour activity of Cap in cancer treatment | Nobendu Mukherjee, Dept. of Microbiology |
| Ambient Science, 2021: Vol. 08(1); 39-40 | First Report of Geocoris (Geocoris) lituratus (Geocoridae: Hemiptera) as Egg Predatorof Graphium agamemnon (Papilionidae: Lepidoptera) inUrbanLandscape, WestBengal | Dipak Shil, Amarttya Bagchi , Prachyaprachetah Sarkar, Dept. of Zoology |
| Rejoy Chakraborty, Arpan Bairagi and Prof. Samir Kumar | Design and implementation of Two Layer Encryption | International Journal of Scientific Development and |

| Bandyopadhyay | System in Cryptography | Research - IJSDR [ISSN: 2455-2631] |
|--|--|---|
| Arpan Bairagi, Rejoy Chakraborty, Shree Mitra and DR. Soumya Paul | A Novel Approach for Searching an Element in a Sorted Array – Log Search | International Journal of Information Science and Computing [Print ISSN: 2348-7437 & Online ISSN: 2454- 9533] |
| Soumen Halder and Anubrata Das | IoT on E-Health: Application and Security Challenges | International Journal of Information Science and Computing [Print ISSN: 2348-7437 & Online ISSN: 2454- 9533] |
| Soumen Halder and Prof. Samir Kumar Bandyopadhyay | A Smart Application of IoT for Green Environment | International Journal for Research in Applied Science & Engineering Technology - IJRASET [ISSN: 2321-9653] |
| Soumen Halder, Arkadip Maitra and DR. Soumya Paul | Comparative study of Different Data Science Classification Algorithms | Information, Communications and Computation Technology (ICCT): The Pillar for Transformation by New Delhi Publisher [ISBN: 978-93-88879-95-8] |

Special Achievements and Certifications

Special certificate to the college (31 certificate or recognition received from national and international bodies):

| SI. No. | Purpose | Authority | Date |
|---------|---|--|------------|
| 1 | Jal Shakti Abhiyan : Catch The Rain" | National Water Mission & MyGov. in | 17/04/2021 |
| 2 | The Festivals of India | MyGov Manipur | 17/04/2021 |
| 3 | Wetland Management and Biodiversity Conservation | Govt of India | 13/06/2021 |
| 4 | International Day of Yoga | Ministry of Ayush MoA, Govt. Of India | 13/06/2021 |
| 5 | Clinical management of patients with COVID 19: Initial approach to the acutely ill patient | World Health organization | 16/06/2021 |
| 6 | COVID-19 and work: Staying healthy and safe at work during the COVID-19 pandemic | World Health organization | 16/06/2021 |
| 7 | Guidance on mask use in the context of COVID 19 | World Health organization | 16/06/2021 |
| 8 | COVID-19 vaccine-specific resources | World Health organization | 16/06/2021 |
| 9 | Health and peace: Concepts and tools for frontline workers | World Health organization | 16/06/2021 |
| 10 | Prevention, identification and management of infections in health workers in the context of COVID 19 | World Health organization | 16/06/2021 |
| 11 | Introduction to Infection Prevention & Control (IPC) | World Health organization | 16/06/2021 |

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| 12 | Leadership and programme | World Health | 16/06/2021 |
|----|--|--------------|-------------|
| 12 | management in Infection | organization | 10/00/2021 |
| | Prevention and Control (IPC) | organization | |
| | | | |
| 13 | Standard precautions: The role | World Health | 16/06/2021 |
| | of personal protective | organization | |
| | equipment (PPE) | | |
| 14 | Transmission-based | World Health | 16/06/2021 |
| | Precautions | organization | |
| | | , | |
| 15 | COVID-19 infodemic | World Health | 16/06/2021 |
| | management: risk | organization | |
| | communication and | | |
| | community engagement | | |
| | challenges | | |
| 16 | Clinical management of | World Health | 16/06/2021 |
| | patients with COVID-19 | organization | |
| | | | |
| | - Rehabilitation of patients with | | |
| | COVID-19 | | |
| 17 | COVID-19 vaccination training | World Health | 16/06/2021 |
| | for health workers | organization | |
| 10 | | | 4.0/00/2024 |
| 18 | Neglected tropical diseases in the context of the COVID 19 | World Health | 16/06/2021 |
| | pandemic: impact and | organization | |
| | pandemic. Impact and | | |
| | guidance | | |
| 19 | Orientation to national | World Health | 16/06/2021 |
| 13 | deployment and vaccination | organization | 10/00/2021 |
| | planning for COVID-19 | organization | |
| | vaccines | | |
| | | | |
| 20 | Clinical management of | World Health | 17/06/2021 |
| | patients with COVID- | organization | |
| | 19 - General considerations | | |
| | | | |

Recognition received by the college:

| Agency | Area | Date |
|--------|-----------------------------|------------|
| UNICEF | Centre of Eminence in | 03.09.2021 |
| | MANAGEMENT | |
| | INFORMATION SYSTEM | |
| | of the Institution | |
| UNICEF | Centre of Excellence in | 03.09.2021 |
| | Capability Enhancement | |
| | and Development Schemes | |
| UNICEF | Playing active role in | 03.09.2021 |
| | setting up INCUBATION | |
| | CENTRES and START- | |
| | UPS | |
| UNICEF | RKMVCC-Rahara-NSS for | 03.09.2021 |
| | commendable efforts in | |
| | various service activities | |
| | conducted in rural villages | |
| UNICEF | RKMVCC-Rahara-Alumni | 03.09.2021 |
| | for commendable efforts in | |
| | relief work during the | |
| | COVID-19 pandemic | |
| UNICEF | Swami Vivekananda Centre | 01.08.2021 |
| | for Multidisciplinary | |
| | Research in Basic Science | |
| | and Social Science , as a | |
| | "Centre of Excellence in | |

| | Research and Education for | |
|----------------------------|----------------------------|------------|
| | Social Transformation" | |
| | | |
| Stanford University School | Swami Vivekananda Centre | 01.08.2021 |
| of Medicine | for Multidisciplinary | |
| | Research in Basic Science | |
| | and Social Science , as a | |
| | "Centre of Excellence in | |
| | Research and Education for | |
| | Social Transformation" | |
| | | |
| UNICEF | Centre of Eminence in | 30.7.2021 |
| | Online teaching and | |
| | learning | |
| | | |
| UNICEF | Centre of Excellence in | 30.7.2021 |
| | Environmental | |
| | Management and Green | |
| | Management | |
| | | 0070004 |
| UNICEF | Centre of Excellence in | 30.7.2021 |
| | Energy Management and | |
| | Conservation | |
| | Contro of Eminoration | 20.09.2024 |
| UNICEF | Centre of Eminence in | 20.08.2021 |
| | Green Building Audit | |
| | | |

Other Activities

Corona Relief:

On the very outset of the complete Lockdown, the research scholars, teachers and resident staff-members of the college has prepared the Hand Sanitizer as part of the relief work conducted by Ramakrishna Mission Head Quarter, for the use by vendors of

the local market, Police persons, bank employee, Electric supply employee, post office employee and other persons, preferably those who are working on the forefront during pandemic situation.

During the complete lockdown, the college has started the distribution of the food grains, vegetables, cereals, edible oil and soap to our nearby adopted village to mitigate the plight of villagers during complete lockdown.

After that, relief camp of distribution of the food grains, vegetables, cereals, edible oil and soap started in several corners of the state like Hasnabad, Madhyamgram, Kalyani and several villages of Sunderban area.

Our ex-students also started several initiatives for the poor villagers, slum dwellers in different districts of West Bengal.

Free Eye Operation Camp :

An Eye screening and cataract patient selection for surgery was conducted by the College on 3rd February, 2021 from at 11 am. in collaboration with Vivekananda Mission Ashrama Netra Niramay Niketan, Amtala, South 24 Parganas. A total of 145 patients were screened and 39 patients (Female-24, Male- 15) underwent Free cataract operation on 10th February, 2021. Operation was held at the concerned Eye Hospital at Amtala. 67 free power eye glasses were distributed.

Saraswati Puja

Saraswati Puja was celebrated in the college with due solemnity on 16th and 17th February, 2021

National Youth Day Competitions:

An Intra-College Online Art Competition on the topic 'Swami Vivekananda-An Inspiration' was organized in the College on 12th January, 2021. Online Essay Competition on the topic 'Swami Vivekananda and the Rise of India' and Online Extempore Competition on the topic 'Why do I admire Swami Vivekananda' were also organized on 12th January, 2021.

The list of winners are as follows:

Extempore Competition:

| Name | Rank |
|---------------------|------|
| Rohan Ghosh | 1st |
| Kousik Bhattacharya | 2nd |

| Jaidip Patra | 2nd |
|---------------------|-----|
| Saptak Das | 3rd |
| Swarnava Chatterjee | 3rd |

Essay Competition:

| Name | Rank |
|----------------------|------|
| Sutanu Mukhopadhyay | 1st |
| Koushik Mitra | 2nd |
| Ahan Roy | 2nd |
| Anubhab Jana | 3rd |
| Nirmalendu Mukherjee | 3rd |

Art Competition:

| Name | Rank |
|---------------------|------|
| Ramit Mitra | 1st |
| Ahan Roy | 2nd |
| Pratyay Chakraborty | 2nd |
| Pinaki Ghosh | 3rd |
| Siddhartha Das | 3rd |

National Youth Day celebration:

The college has organized the National Youth Day celebration on 12.02.2021 in the Barasat, Subhas Gram area. About 150 local school students have participated in this program. They have participated in essay competition, elocution competition, music competition in the life and message of Swamiji.

Blanket Distribution in Barasat Madhyamgram:

As part of the NSS work, the college has organisied a service activity in Barasat area, 24- parganas (north) with the help of the local people on 28.12.2020. Blankets and mosquito nets were distributed to 60 poor people of the locality.

Yas Cyclone Relief Activities:

The NSS Unit of the college was engaged in various service activities in the Yas cyclone affected Sunderbans and coastal areas. Dry food, rice, dal, soyabean, mustard oil, vegetables, medicine, baby food to 230 families, 50 clothes, Rs 500 to two families were distributed in those areas.

NIRF Ranking-2019:

The National Institutional Ranking Framework (NIRF) of MHRD ranked our College 8th in India and 1st in West Bengal In the year 2019