



Issue: 6

# RKMVCC News Letter

January to December  
2022





# Our Inspiration



When you perform a music,  
meditate that, God Himself is  
hearing to you.

..... Sri Ramakrishna Deva

Is there anything like  
music? Music leads to  
God realization...

..... Sri Ma Sarada Devi



Music is the highest art and,  
to those who understand is  
the highest worship

..... Swami Vivekananda



# Principal's Desk



The Ramakrishna Mission Vivekananda Centenary College, Rahara tries to provide education that not only accelerates the external developments of human life but also improves the trend of internal development. In continuation with this attempt we are glad to bring out the sixth issue of the RKMVCC News Letter containing the highlights of the various efforts put forth by the College and the support and admiration from various corners of the society which has been enriching it. In this issue we have focused on various Indian musical instruments as page background. Actually Music has been an inseparable part of Indian culture and tradition. It has served as a form of general entertainment for the masses as well as a spiritual means for God realization. The history of Indian music can be traced back to the Sama Veda, which contained the slokas that were set to music. Religious rituals still include the chanting of Vedic hymns with prescribed pitch and accent. It is thought that, Music was first invented as a manifestation of *Naada Brahma*, the sound that pervades the entire universe. Modern Research shows that music can have a beneficial effect on brain chemicals such as dopamine, which is linked to feelings of pleasure, and oxytocin. And there is moderate evidence that music can help lower levels of the stress hormone cortisol. So, We hope that this issue will bring a positive mindset to one and all.

*Swami Kamalasthananda*

*Principal*

*Ramakrishna Mission*

*Vivekananda Centenary College, Rahara*



# College Dynamics

- ✓ Academics
- ✓ National Youth Day Celebration 2022
- ✓ Celebration of 125<sup>th</sup> Birth Anniversary of Netaji Subhash Chandra Bose
- ✓ Swami Vivekananda Janmatithi Celebrations
- ✓ Saraswati Puja Celebration 2022
- ✓ Commemorating National Science Day & Jijnasa Quiz Contest
- ✓ Sri Ramakrishna Janmatithi Celebrations
- ✓ Inauguration of Swami Vijnanananda Gallery on Indian Knowledge Systems
- ✓ Others Cultural Events
- ✓ Convocation 2022
- ✓ Freshers' Welcome 2022
- ✓ Observation of 75<sup>th</sup> Independence Day
- ✓ Observation of 125<sup>th</sup> anniversary of Ramakrishna Mission
- ✓ Teachers' Achievements
- ✓ Students' Achievements
- ✓ Outreach Programmes
- ✓ Webinar, Seminar & Workshops
- ✓ Student Induction Programmes
- ✓ NSS Activities

# Academics

**Taanpura** is a stringed Indian musical instrument. Indian tanpura is supposed to have come in its modern shape around 500 years ago when it started featuring in paintings of that era. The name tanpura is derived from sanskrit word *taana*, referring to a musical phrase and *pura* means full. It does not play melody, but rather supports and sustains the melody of another instrument or singer by providing a continuous harmonic bourdon or drone.





- One new PG programme M.Sc. in Physics was introduced from this academic session 2022- 23
- UG & PG End-Semester Theory and Practical Examinations were held online from 17th January to 31st January 2022.
- Classes for Semester II/IV/VI UG & PG students commenced offline from 03.02.2022
- UG & PG Mid-Semester Examinations were held from 1st April, 2022 to 7th April, 2022.
- UG & PG End-Semester Examinations were held from 13th June, 2022 to 24th June, 2022.
- UG & PG Mid-Semester Examinations were held from 19th September, 2022 to 24th September, 2022.  
Mid sem exam for PG Sem-I was held from 3rd November, 2022 to 5th November, 2022.
- UG & PG End-Semester Examinations were held from 14<sup>th</sup> December, 2022 to 24<sup>th</sup> December, 2022.



# National Youth Day Celebration 2022



**Mridangam** is a percussion instrument of ancient origin. It is the primary rhythmic accompaniment in a Carnatic music ensemble. In Dhrupad, a modified version, the pakhawaj, is the primary percussion instrument. The word "Mridangam" is formulated by the union (sandhi) of the two Sanskrit words mṛit (clay or earth) and anga (limb), as the earliest versions of the instrument were made of hardened clay.



National Youth Day 2022 was celebrated by an online cultural programme by the students of the college. In this programme Readings and speeches on the life and teachings of Swami Vivekananda and it's relevance to the youth was held, instrumental music was played on, devotional songs were performed by the students. An Intra-College Online Art Competition on the topic 'Swami Vivekananda-An Inspiration' was organized in the College and National Youth Day Essay Writing Competition on the topic 'Swami Vivekananda and the Rise of India' were organized on that day.

### Result of Essay Writing Competition

Name	Rank
Writawrik Bhattacharya	1st
Subham Sadhukhan	1st
Himanish Manna	2nd
Suvradeep Das	2nd
Sirshabha Biswas	3rd
Subhadip Patra	3rd

### Result of Art Competition

Name	Rank
Siddhartha Das	1st
Ishaan Chatterjee	2nd
Anomitra Neogy	2nd
Dipanjan Ghosh	3rd



# Celebration of 125<sup>th</sup> Birth Anniversary of Netaji Subhash Chandra Bose on 23<sup>rd</sup> January, 2022

The **Esraj** is an Indian stringed instrument found in two forms throughout the Indian subcontinent. It is a relatively recent instrument, being only about 300 years old. It is found in North India, primarily Punjab, where it is used in Sikh music and Hindustani classical compositions and in West Bengal. The esraj is a modern variant of the dilruba, differing slightly in structure. The esraj, had been declining in popularity for many decades. In West Bengal, esraj is considered the main accompanying instrument for traditional Rabindra Sangeet.





125<sup>th</sup> Birth Anniversery of Netaji Subhash Chandra Bose was celebrated by a special online programme by the students of the college on 23<sup>rd</sup> January, 2022. In this programme the students were presented speeches on Netaji Subhash Chandra Bose, Patriotic songs, Readings from the letters of Netaji Subhas Chandra Bose, Reading on the influence of Swamiji on Netaji etc.

An Extempore Competition was organized for commemorating 125 years of Netaji Subhash Chandra Bose and Republic Day on the topic 'How will I express my gratitude towards the great patriots of India'

Result of Extempore Competition	
Name	Rank
Nirmalendu Mukherjee	1st
Sayan Chakraborty	1st
Nilay Saha	2nd
Avik Mukherjee	3rd



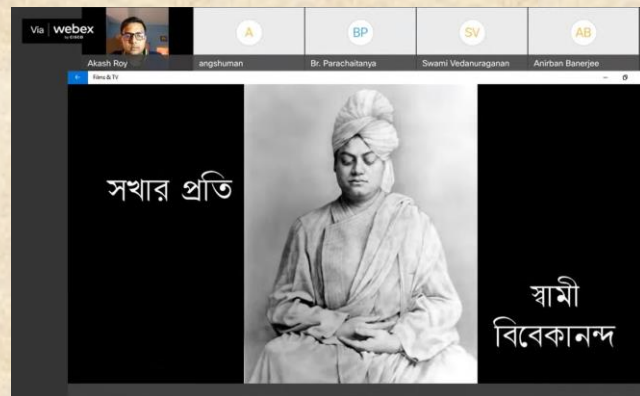
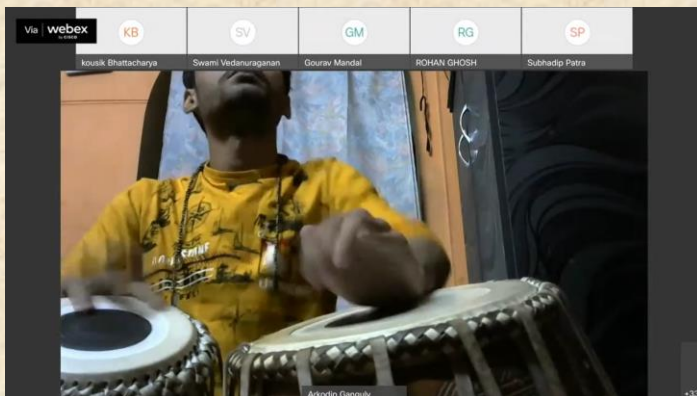
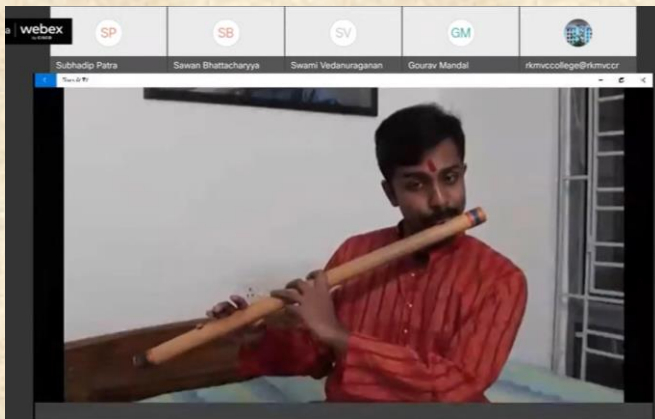
# Swami Vivekananda Janmatithi Celebration

**Damaru** is a small two-headed drum, used in Hinduism and Tibetan Buddhism. The drum is typically made of wood, metal with leather drum heads at both ends. The resonator is made of brass. The height of the damaru is 6 inches and weight varies from 250-330 gm. In Tibetan Buddhism, the damaru is used as an instrument in meditation practices.





On the Auspicious Janmatithi Day of Swami Vivekananda, the College organized an online programme on 27<sup>th</sup> January, 2022. In this programme students presented Reading from the life, reminiscences and teachings of Swami Vivekananda, bhajans, instrumental recital, recitations on Swamiji.



# Saraswati Puja Celebration 2022

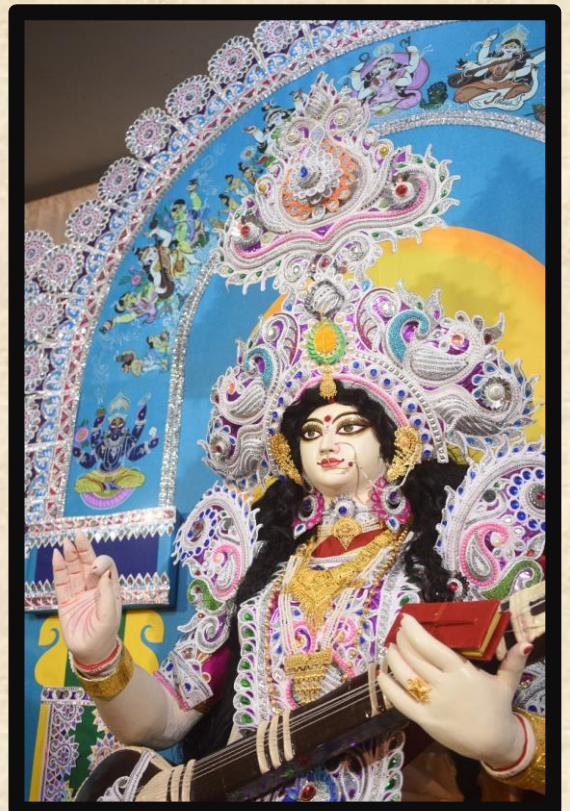
The **Veena**, also spelled vina, comprises various chordophone instruments from the Indian subcontinent. Ancient musical instruments evolved into many variations, such as lutes, zithers and arched harps. The many regional designs have different names such as the Rudra veena, the Saraswati veena, the Vichitra veena and others.





On the auspicious day of ‘Saraswati Puja (5<sup>th</sup> February, 2022) the students, ex-students and faculty members of Ramakrishna Mission Vivekananda Centenary College, came together to seek the blessings of the goddess of knowledge, music, art and culture. The event was celebrated with a lot of devotion and dedication by worshipping Mother Saraswati. Students were engaged for decoration, all preparations and worshipping Maa Saraswati to seek wisdom, artistic and technical skills, academic excellence and a good heart. The rituals of the worship reflect the eternal sense of devotion and traditional way of praying to the almighty for the success of an individual and an institution as a whole. After Sandhyarati the students performed a Geeti-alekhyia named Sarada Saraswati.







Goddess Saraswati has been worshiped since ancient period in India. Saraswati idol progressed from Vedic period to Pauranic period and as well as Tantric period. This year students participated in the entire decoration process of Goddess Saraswati idol from the ancient Indian period to the modern period. In Vedic period Devi Saraswati was worshipped as holy river like Ganga, Yamuna. In Pauranic period various mythological stories was popularized. There various form of Devi Saraswati was described, such as Mahasaraswati. She regulates the intelligence of all living creatures. In Modern age Devi Saraswati is worshipped as the deity of Wisdom, purity, Culture and Art. So in modern age, this festival is central to the students of different fields.



# Commemorating National Science Day & Jijnasa Quiz Contest



The **Bansuri** is a type of flute made of bamboo and is a transverse alto flute used in Hindustani classical music. There are six or seven finger holes, and it is between twelve and thirty inches long with the longer the instrument, the deeper the notes. It is mentioned as an important musical instrument in the Natya Shastra, a Sanskrit text on Indian classical music dating between 200 BCE and 200 CE. The Bansuri is held slanting slightly downwards and horizontally while the fingers of the right-hand cover the outer holes and the left-hand fingers cover the others.



A Scientific Quest entitled 'Jijnasa' an Intra-College quiz competition on different dimensions and branches of science was organised on 28<sup>th</sup> February, 2022 to commemorate the National Science Day in a befitting manner. After the prelims the four finalist teams named CV Raman, SN Bose, PC Roy and MN Saha had a healthy competition among themselves. Ultimately Team PC Roy turned out to be the topper. The Winner Team comprised of Aahitagni Das, Mayukh Mitra, Rudraditya Chakraborty, Atri Bhattacharya.



# Sri Ramakrishna Janmatithi Celebration



The **Shreekhhol** is a terracotta two-sided drum used in northern and eastern India for accompaniment with devotional music (bhakti). It originates from the Indian states of West Bengal, Assam and Manipur. The shreekhhol is a drum with a hollow earthen body, with drumheads at both ends, one far smaller than the other. The drum is played with palms and fingers of both hands.



## On 4<sup>th</sup> March 2022

On the Auspicious Janmatithi Day of Sri Ramakrishna, The College organized a programme, where students participated in Meditation, Reading, Devotional Music on Sri Ramakrishna. The College celebrated the holiest occasion through a series of different cultural competition and programme.

## On 7<sup>th</sup> March 2022

Intra-College Art Competition on ‘Sri Ramakrishna: An Inspiration’ was organized, where several students participated

Result of Art Competition	
Name	Rank
Siddhartha Das	1st
Ishaan Chatterjee	2nd
Tirtharaj Ghosh	2nd
Sayonil Sen	3rd





## On 9<sup>th</sup> March 2022

Intra-College Extempore Competition on : The Life & Message of Sri Ramakrishna. The topic was “What do I admire in Sri Ramakrishna?”



### Result of Extempore Competition

Name	Rank
Ishaan Chatterjee	1st
Suprakash Sahoo	2nd
Akash Roy	3rd

## On 10<sup>th</sup> March 2022

Intra-College Essay Writing Competition on The Life & Message of Sri Ramakrishna was organized. The topic was: “Sri Ramakrishna's relevance in today's world”.



### Result of Essay-Writing Competition

Name	Rank
Nilay Saha	1st
Swarnava Chatterjee	2nd
Akash Roy	2nd
Amitesh Chakraborty	3rd





## On 11<sup>th</sup> March 2022

Special Cultural Programme was organized for commemorating Holy Janmatithi of Bhagavan Sri Ramakrishna, where the students presented speech, recitation, devotional music on Sri Ramakrishna.



## On 14<sup>th</sup> March 2022

Intra-College Sri Ramakrishna Quiz competition was organized, based on the life, message and impact of Sri Ramakrishna. Swarnava Chatterjee and Atmadeep Ganguly comprised the winner team of the competition.



# Inauguration of Swami Vijnanananda Gallery on Indian Knowledge Systems



The **Sārangi** is a bowed, short-necked string instrument played in traditional music from South Asia – Punjabi folk music, Rajasthani folk music, and Boro folk music (there known as the serja) – in India and Bangladesh. Sarangi derives its name from the bow of Lord Vishnu and probably as it is played with a bow it is named sarangi. It is said to most resemble the sound of the human voice through its ability to imitate vocal ornaments such as gamaks (shakes) and meends (sliding movements).



17<sup>th</sup> March 2022 Swami Vijnanananda Gallery on Indian Knowledge Systems was inaugurated by Prof. Virendra Kumar Tewari, Director, IIT Kharagpur and Revered Swami Balabhadranandaji Maharaj, Assistant General Secretary, Ramakrishna Math & Ramakrishna Mission, Belur Math. A special cultural programme was also arranged for this purpose. Prof. Joy Sen, Chairperson, Centre of Excellence for Indian Knowledge System, IIT Kharagpur and Prof. Suman Chakraborty, Dean SRIC, IIT Kharagpur were also present in this gracious occasion.



# Other Cultural Events

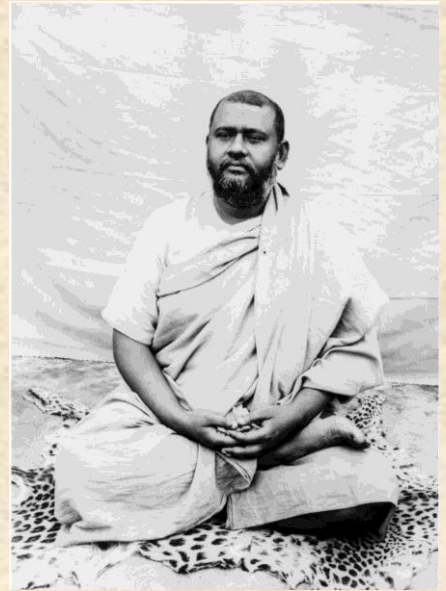


**Sitar** is a plucked stringed instrument, originating from the Indian subcontinent, used in Hindustani classical music. The instrument was invented in medieval India, flourished in the 18th century, and arrived at its present form in 19th-century India. Khusrau Khan, an 18th-century figure of Mughal Empire has been identified by modern scholarship as the originator of Sitar. According to most historians, he developed the sitar from the setar, an Iranian instrument of Abbasid or Safavid origin.



## Online Janmatithi programme of Swami Brahmananda, A Direct Disciple of Sri Ramakrishna

3<sup>rd</sup> February, 2022: A special online Programme was organized by the students, where they presented speech on the life of Swami Brahmananda and readings from Dharmaprasange Swami Brahmananda-teachings of Swami Brahmananda.



## Online Janmatithi programme of Swami Trigunatitananda, A Direct Disciple of Sri Ramakrishna



4<sup>th</sup> February, 2022: A special online Programme was organized by the students, where they presented speech on the life of Swami Trigunatitananda and readings from lectures of Swami Trigunatitananda





## Special Janmatithi programme of Swami Adbhutananda, A Direct Disciple of Sri Ramakrishna

16<sup>th</sup> February, 2022: A special Programme was organized for commemorating Janmatithi of Swami Adbhutananda, a direct disciple of Sri Ramakrishna by the students, where they presented Speech on the life of Swami Adbhutananda and readings from Satkatha - teachings of Swami Adbhutananda





## Vocal Music & Tabla Competition

17<sup>th</sup> February, 2022 a vocal music and Tabla competition was organized. Several participants sincerely participated in this competition.

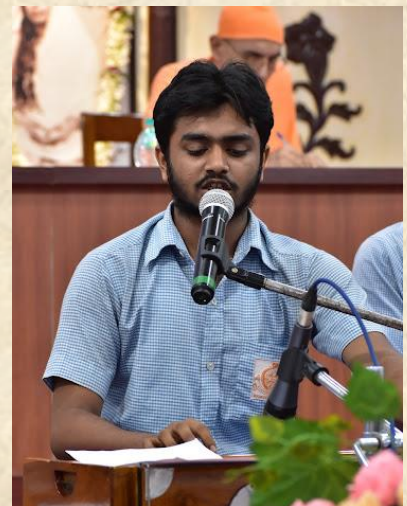
### Result of Tabla Competition

Name	Rank
Chandan Adhikary	1st
Shibanjan Saha	2nd
Ishaan Chatterjee	3rd



### Result of Vocal Music Competition

Name	Rank
Gaurav Mandal	1st
Tirtharaj Ghosh	2nd
Atri Bhattacharya	3rd





## Special Programme Commemorating Janmatithis of Sri Chaitanya Mahaprabhu & Swami Yogananda , A Great Disciple of Sri Ramakrishna




23<sup>rd</sup> March, 2022 a special Programme was organized by the college students, where they presented Speeches on the life of Swami Yogananda and Sri Chaitanya Mahaprabhu, Bhajan and kirtan.





## Special Programme for Commemorating Janmatithi of Sri Shankaracharya: A Great Philosopher of India



  
Special Programme  
Commemorating  
Janmatithi  
of  
Sri Shankaracharya  
A Great Philosopher of India  
  
Organized by  
Ramakrishna Mission  
Vivekananda Centenary College, Belhara  
12<sup>th</sup> May, 2022  
2:00 PM- 3:00 PM  
  
Venue: Swami Vivekananda Hall  
(Main Building 2nd Floor)



12<sup>th</sup> May, 2022 a special Programme was organized by the college students for commemorating the Janmatithi of Sri Shankaracharya: a great philosopher of India, where they presented Speech on the life of Sri Shankaracharya, hymns and devotional music on Shankaracharya





## Rabindra-Nazrul Smaran : Intra-College Recitation Competition

12<sup>th</sup> May, 2022: A Recitation Competition was organized by the college students for commemorating the Birth Anniversary of Rabindranath Tagore and Kazi Nazrul Islam, two great poets of Bengal, based on the poems of Rabindranath Tagore and Kazi Nazrul Islam. Several students of this institution participated in this recitation competition.



Result of Recitation Competition	
Name	Rank
Soumyadeep Banerjee	1st
Parthib Paul	1st
Ayantana Roy	2nd
Atmadeep Ganguly	3rd





## Special Programme for Commemorating Janmatithi of Bhagavan Buddha : A Great Philosopher of India



On 19<sup>th</sup> May, 2022 a special Programme was organized by the college students for commemorating the Janmatithi of Bhagavan Buddha, a great philosopher of India. In this programme the students presented Speech on the life of Bhagavan Buddha, hymns and instrumental music.





## Special Programme for Ramanavami

On 11<sup>th</sup> April, 2022 a special Programme was organized by the college students for commemorating the Janmatithi of Sri Ramchandra. In this programme there was Reading and devotional music on Bhagavan Sri Ramachandra.

## Special Programme commemorating Shodashi Puja

On 28<sup>th</sup> May, 2022 a special Programme was organized for commemorating Shodashi Puja- the day when Sri Ramakrishna worshipped Holy Mother Sri Sarada Devi as the Divine Mother. In the Programme several students performed Matri-nama sankirtan and Kali kirtan. Some students read about the incident from biographies and also discussed the relevance of this incident in modern perspective.





## Special Programme Commemorating Janmatithis of Swami Ramakrishnananda and Swami Niranjanananda, Two Great Direct Disciples of Sri Ramakrishna

On 12<sup>th</sup> August, 2022 a special Programme was organized by the college students for commemorating the Janmatithis of Swami Ramakrishnananda and Swami Niranjanananda, two great direct disciples of Sri Ramakrishna, where they presented Speeches on the life of Swami Ramakrishnananda and Swami Niranjanananda and Bhajan.

## Special Programme Commemorating Janmatithi of Sri Krishna

On 18<sup>th</sup> August, 2022 a special Programme was organized by the college students for commemorating the Janmatithi of Sri Krishna. Various students participated in Speeches on the life and message of Sri Krishna, Bhajan, kirtan and instrument recitals throughout the programme.



# Convocation 2022



**Santoor** is an Indian instrument, generally made of walnutwood and has 25 bridges. Each bridge has 4 strings, making for a total of 100 strings. It is a traditional instrument in Jammu and Kashmir, and dates back to ancient times. It was called *Shatha Tantri Veena* in ancient Sanskrit texts. The santoor is played while sitting in an *asana* called *ardha-padmasana* and placing it on the lap.



6th Samavartana (Convocation) for UG/PG and Ph.D. Courses for the students who passed out in 2022 was organized by the College on 14th September, 2022 in the presence of Dr. Sanghamitra Bandypadhyay, Padmashri, Director Indian Statistical Institute, as the Chief-Guest, Prof. Mahua Das, Hon'ble Vice Chancellor, West Bengal State University and Revered Swami Jayanandaji Maharaj, Secretary, Ramakrishna Mission Boys' Home, Rahara. This year 355 UG & PG students and 2 Ph.D. scholars received their certificates.



# Freshers' Welcome 2022



**Ektara**, is a one-stringed musical instrument used in the traditional music of South Asia, and used in modern-day music of Bangladesh, India, and Pakistan. In origin the ektara was a regular string instrument of wandering bards and minstrels from India and is plucked with one finger. The ektara is a drone lute consisting of a gourd resonator covered with skin, through which a bamboo neck is inserted. It is used in parts of India and Nepal today by Yogis and wandering holy men to accompany their singing and prayers.



Freshers' Welcome 2022 was held on 8<sup>th</sup> September, 2022 at 2.00 p.m. in Sri Ramakrishna Hall of this college. Prof. Uday Bandyopadhyay, Director, Bose Institute, Kolkata was present as chief guest. The students of the college presented in various cultural events like music, speech, recitation, playing of musical instruments throughout the programme. At last, Jogesh Mime Academy performed their mime show.



# Observation of 75th Independence Day



The **Shankha** is a sea snail (conch) shell with a hole made for the player's embouchure and is played in Hindu religious rituals. It is often carved on the outside with religious symbols and Hindu deities. The shankha was used as a trumpet of war to summon allies, but these days it is mainly blown in homes and temples when presenting offerings of light to Hindu deities.



Ramakrishna Mission Vivekananda Centenary College, Rahara, celebrated 75<sup>th</sup> Independence Day on 15<sup>th</sup> August 2022, at the College campus. The event included hoisting of National Flag, speech, patriotic songs sung by the Staff and Students of the College, cultural programme, and the celebration ended with the National Anthem followed by distribution of Sweets to all. Through this programme a sense of patriotism was induced among the students. They could be given the opportunity to relive the history.



# Observation of 125th Anniversary of Ramakrishna Mission



The **Shehnai** is a musical instrument, originating from the Indian subcontinent. It is made of wood, with a double reed at one end and a metal or wooden flared bell at the other end. Its sound is thought to create and maintain a sense of auspiciousness and sanctity and as a result, is of nine instruments found in the royal court.



To commemorate 125th Anniversary of Ramakrishna Mission a special programme was organized by the college on 1<sup>st</sup> September, 2022 at 1.00 p.m. in Sri Ramakrishna Hall of this college. Revered Swami Jnanalokananda, Secretary, Ramakrishna Mission Swami Vivekananda's Ancestral House and Cultural Centre, Kolkata, and Melinda Pavek, American Consulate General were present as chief guest. The students of the college presented in various cultural events like music, speech, recitation, playing of musical instruments throughout the programme. In this programme a Book entitled ***“Swami Vivekananda, Modern Science and Education”*** with ISBN Number 978-81-957412-0-5 was published by our college.



# Teachers' Achievements



**Sarod** is a stringed instrument in the lute family and one of the most popular instruments in Hindustani classical music. The instrument has a deep, heavy sound with a resonant quality provided by the sympathetic strings. The sarod is 100 cm, or 39 inches, long and has a body made from hollow teak, sagwan or tun wood. The sarod produces several different tones and pitches through the use of multiple types of strings. The melody strings are tuned to different standards depending on the Gharana of the player or personal preference.



Dr. Anirban Bhar, Assistant Professor, Department of Botany has got National Faculty Award 2022-23 for Excellence in Research by Novel Research Academy.





# Teachers' Publication

## Department of Botany

### Dr. Biswajit Ghosh

#### Research Article Publication from Plant Biotechnology Laboratory

1. Biswas, D., Chakraborty, A., & Ghosh, B. (2023). Endophytic Fungal Diversity in Solanaceous Medicinal Plants and Their Beneficial Impact. In Medicinal Plants: Biodiversity, Biotechnology and Conservation. Springer, Cham.
2. Chakraborty, A., Ghosh, B. (2023). In vitro regeneration and conservation of the medicinal and aromatic genus *Kaempferia*: An overview. In Micropropagation of Medicinal Plants. Bentham Science Publishers.
3. Halder T, Kundu S, Ghosh B (2022) *Withania somnifera*: A Future Pharma Factory. In: Makhzoum A, Hefferon K (eds) Applications in Plant Biotechnology: Focus on Plant Secondary Metabolism and Plant Molecular Pharming. Taylor and Francis, CRC press, pp 1-42.
4. Biswas D, Chakraborty A, Haque SM, **Ghosh B.** (2023) Endophytic fungal diversity in solanaceous medicinal plants and their beneficial impact. In Jha S, Halder M, (eds.) Medicinal plants: biodiversity, biotechnology and conservation, **Springer nature**, Singapore.
5. Mukherjee S, Biswas D, **Ghosh B.** (2023) Micropropagation of the medicinal plant 'Sarpagandha' [*Rauvolfia serpentina* (L.) Benth. ex Kurz] and its applications in human welfare. T. Pullaiah (ed.) In Micropropagation of medicinal plants. **Bentham Books**.
6. Haque SM, Santra I, Ghosh B. (2023). Pollen mitosis is a good choice for gametophytic chromosome study in higher plants investigation with *Allium cepa* L. and *Aloe vera* L. **Cytologia** 88(1): 1–8.
7. Santra I, Mukherjee S, Haque SM, Ghosh (2023). Occurrence and Diversity of Major Naphthoquinones in Higher Plants: Their Distribution and Conservation Strategies. In Jha S, Halder M, (eds.) Medicinal plants: biodiversity, biotechnology and conservation, **Springer nature**, Singapore.



**Department of Botany****Dr. Swapan Kr. Ghosh****Research Article Publication from Molecular Mycopathology Laboratory**

1. Pandey K, Ghosh S K , Sanyal T, Bera T, Pal S. (2023) Mycochemistry antioxidant content and antioxidant potentiality of ethanolic extract of *Pleurotus florida* and its anti-cancerous effect on HeLa cancer cell line, and antitumor effect on HeLa-implanted mice. International J. of Health Sciences (Quasim Uni.) Vol. 17(1) (January - February 2023): 18-35 (Saudi Arab, Thomson Reuter Im F. 2.97, Scopus, Pubmed.
2. Mukherjee A and Ghosh SK (2023) An ecofriendly approach of biocontrol of aphid (*Aphis gossypii* Glover) by *Trichoderma harzianum*. Environmental Monitoring and Assessment Environ Monit Assess (2023) 195:102 <https://doi.org/10.1007/s10661-022-10726-0>, Springer, Thomson Reuter Im F. 3.46, Scopus, Switzerland.
3. Pandey K., Ghosh, SK (2022) A wild indigenous edible mushroom *Astraeus asiaticus*, its biodiversity in the forests of Bankura district, West Bengal and antioxidant property. Acta Mycologia 57, DOI: <https://doi.org/10.5586/am.575>, Poland Botanical Society, Poland, Scopus, Thompson reutter Im F. 0.9, Pubmed. H index 06, Scopus
4. Ghosh, S.K., Pal, S., & Banerjee, S. (2022) Identification and pathogenicity of *Alternaria alternata* causing leaf blight of *Bacopa monnieri* (L.) Wettst. and its biocontrol by *Trichoderma* species in agrifields- an ecofriendly approach. Journal of Applied Research on Medicinal plants, 31, 100406 <https://doi.org/10.1016/j.jarmap.2022.100406>, Elsevier, Thomson reuter Impact factor 3.90, Scopus.
5. Pandey K and Ghosh SK (2022) Nutritional Profile and Mycochemistry Analysis Of Some Mushrooms In West Bengal. Plant Cell Biotechnology And Molecular Biology 23 (13):88-96; 2022; ISSN: 0972-2025: Scopus Index, IF -0.38 NAAS (4.5), UK
6. Ghosh SK et al (2022) Benzaldehyde induced developmental genotoxicity triggers both neural and non-neuronal cells including the cells of immunity in *Drosophila melanogaster* , Biologia Futura 73, 245–257 (2022). <https://doi.org/10.1007/s42977-022-00116-5>, Springer Nature , Switzerland, Im. Factor 1.06 (Thompson Reuter), Scopus.
7. Pandey, Koushik and Ghosh, Swapan Kumar R. and Sur, Pradip Kumar, Mycochemistry of Partial Purified F12 of *Astraeus Asiaticus* Ethyl Acetate Extract and its Anticancerous Activity on Human Breast, Lung, and Cervical Cancer Cell Lines. Available at <http://dx.doi.org/10.2139/ssrn.4233873>, SSRN, Elsevier,



**Department of Botany****Dr. Harisankar Dey:**

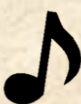
1. Debnath P and Dey HS. Diversity of cyanobacteria from freshwater bodies of krishnagar sadar subdivision of Nadia District, West Bengal, India. Journal of Biodiversity and Environmental Science (JBES), 21(5): 190–197, November 2022.
2. Debnath P and Dey HS. Diversity of Cyanobacteria in the Freshwaters of Kaliganj Region, Nadia, West Bengal. Indian Hydrobiology, 21(2): 139–148, December 2022.
3. Debnath P and Dey HS. Diversity of Cyanobacteria from Freshwater Habitats of Tehatta Subdivision, Nadia, West Bengal. Indian Journal of Natural Sciences (IJONS), 13 (76): 52706–52714, February 2023.

**Department of Zoology:****Dr. Arunava Mukherjee:****Book Chapter:**

1. Das, A., Sen, A., Mitra, M., Acharya, S., Ghosh, R., Chakraborty, R., Chakraborty, S., Bhattacharjee, S., Ghosh, P. k., Sardar, S. and Mukherjee, A. ; Study of neighbouring bird diversity during lockdown period in different districts of West Bengal; Birds around us: science and emotion; Bharti publications, New Delhi (communicated & accepted)
2. Bhattacharjee, S., Ghosh, P. k., Mandal, B. and Mukherjee, A, soft stratum mangrove pools of Indian Sundarbans: A potential nursery ground for estuarine juvenile fish; Fundamentals of Biodiversity. Bharti publications, New Delhi ( Communicates & Accepted)

**Book (published):**

1. Mitra, B., Panja, B., Jana, S., Mukherjee, A., Mandal, B., Sardar, S., Saha, N. C. and A.B. Roy: Butterflies of Sundarbans, published by RKMVCC on 30.11.2022, ISBN NO.: 978-81-957412-1-2
2. Mukherjee, A., Ghosh, P. K., Ghosh, D. and Mandal, B. ; Men, Mosquito and Malaria: The Circle of Life in Plasmodium; in Ecological and Evolutionary Perspectives on Infections and Morbidity, IGI USA (Scopus)





## Department of Mathematics:

### Dr. Partha Ray

Fuzzy Multi-item Inventory model with Unit Production Cost under Space constraint: A Geometric programming approach. Dr. Partha Ray & Dr. Sahidul Islam

Communicated to Independent Journal of Management & Production (IJM&P)

### Dr. Bikash Chakraborty

1. Bikash Chakraborty and Sagar Chakraborty, An Elementary Proof That  $2.5 < e < 2.75$ , **Resonance – Journal of Science Education**, Volume 28, Issue 3, pp 489-492 (Indian Academy of Science, Springer, Scopus Indexed)
2. Bikash Chakraborty & Sagar Chakraborty, A Generalization of Euler's Limit, **The College Mathematics Journal**, DOI: 10.1080/07468342.2023.2183543 (Mathematical Association of America, Taylor and Francis, Scopus Indexed)
3. Bikash Chakraborty, Sum of a Geometric Series Via the integral  $\int_1^r \frac{1}{x} dx$ , **The American Mathematical Monthly**, Accepted, (Mathematical Association of America, Taylor and Francis, Web of Science and Scopus Indexed)
4. Bikash Chakraborty, Visualising the Sum of Cubes by Cutting and Pasting, **The Mathematical Gazette**, Accepted, (Cambridge University Press, Scopus Indexed)
5. S. Saha, A. K. Pal & B. Chakraborty, Some convergent subseries of the harmonic series, Asian-European Journal of Mathematics, 16(04) (2023) 2350064, DOI: 10.1142/S179355712350064X



# Students' Achievements



**Tabla** is a pair of twin hand drums from the Indian subcontinent, that are somewhat similar in shape to the bongos. Since the 18th century, it has been the principal percussion instrument in Hindustani classical music, where it may be played solo, as accompaniment with other instruments and vocals, and as a part of larger ensembles. It is frequently played in popular and folk music performances in India, Bangladesh, Afghanistan, Pakistan, Nepal and Sri Lanka. The tabla is an essential instrument in the bhakti devotional traditions of Hinduism and Sikhism, such as during bhajan and kirtan singing.



Deep Chakraborty, PG Botany has been finalized for the record titled, 'Maximum varieties of Hibiscus plant grown through cross-pollination' under India Book of Records 2023 for growing 30 varieties of Hibiscus from seeds received an award from the Green Friends Third Meetup 2022.

Deep Chakraborty, PG Botany who has been credited for 'Maximum varieties of Hibiscus plant grown through cross-pollination' under India Book of Records has been honoured by the Botanical Gardens and Botanical Survey of India in a programme held on World Environment Day 5th June, 2022. In its history of about 200 years the Botanical garden did not have any specialized section of hibiscus. Now it has a dedicated section on hibiscus with the unique varieties of hibiscus produced by our student Deep Chakraborty.

Deep Chakraborty PG Botany has been awarded the Best Achievers Award 2022 by Magic Book of Record in the category Young Achiever Award for outstanding contribution in the field of Horticulture on 29th April, 2022.





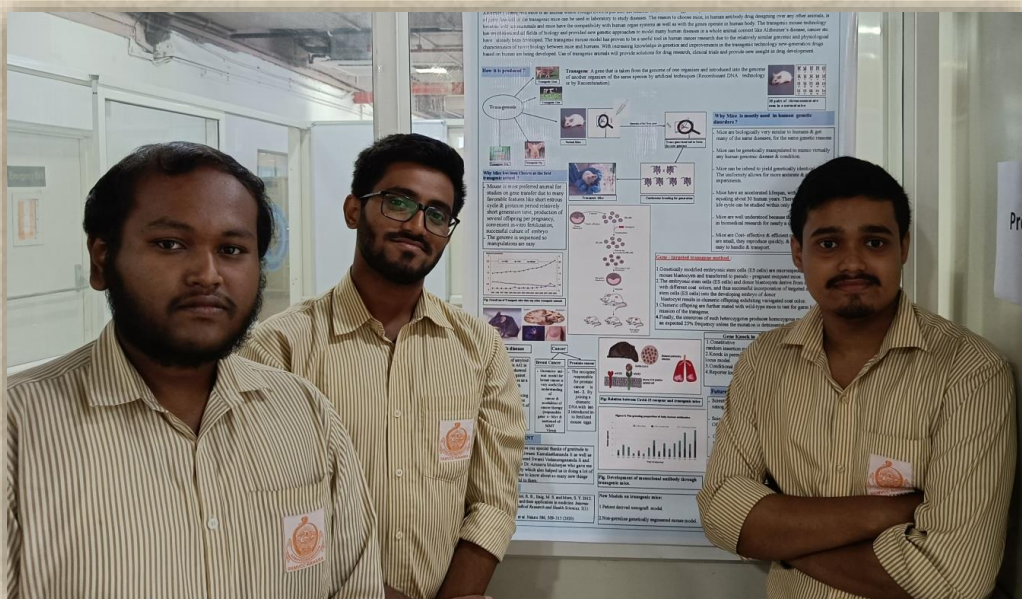
Sayantan Bera, student of PG Zoology received the **ZSK Excellence Award, 2022** for outstanding Research Presentation

Sarthak Ghosh, student of UG Microbiology achieved “**Best Student Award 2022**” by Microbiologists Society India for outstanding academic performance



Avik Mukherjee, UG Chemistry became the **RJ Talent Hunt Winner** by Yuvavani All India Radio (AIR).





Koustav Adhikary, Sayan Bhowmik, Sayan Ghosh of M.Sc. Zoology received the 1st prize in Poster Competition organized by JIS University as a part of Genetics, Biotechnology, Civilisation Symposium held on August 06, 2022 by Centre for Health Science and Technology (CHeST), JISIASR, Kolkata

Kaustav Adhikary and Suman Ghosh has participated in the poster competition held on 06.08.2022 in JIS University in the genetics, Biotechnology, Civilization symposium. Kaustav Adhikary has got the best poster award in poster competition entitled – Transgenic Mice: The key to unlock new paths of modern Antibody Drug Designing.





Aakash Roy & Ramit Mitra, Department of Zoology secured 1st Position in Poster presentation organized by WWF-India in Observation of 'World Wildlife Day' on 3rd March, 2022.





Sayonil Sen, Department of Zoology secured the Ist position and Rohan Ghosh, Prattyush Kumar Dutta, Department of Zoology received the IIIrd position in a poster Competition organized by WWF.





Pallab Ghosh, Sayan Das, Kunal Roy, Sourav Chatterjee, Ritam Kumar Medda, Department of Zoology got the first prize in Inter College Model Competition organized by South Calcutta Girls' College for their model on Frog-Friend-Ecostitution





Darpan Bhattacharya, Department of Computer Science received 1st prize in coding competition, organised by GNIT Sodepur on 23rd and 24th September, 2022

Darpan Bhattacharya and Bijit Mondal of Computer Science became Champions (First Position) in an Inter-College Coding Competition organized in Bhavanipur Education Society on 12<sup>th</sup> November, 2022

Tathagata Patra, of Computer Science secured 2nd prize in the Electronics model competition at GNIT, Sodepur on 23rd and 24th September, 2022. Ritayudh Laha, Shubham Mitra, Samyaraj Ghosh and Abinash Kundu are the students who participated in the competition.





Ritayudh Laha, Tathagata Patra, Shubham Mitra, Abinash Kundu, and Samyaraj Ghosh, Department of Computer Science received the 2nd prize in the inter college Model Display competition of the Electrofusion 4.0 -2022 organised by the Guru Nanak Institute of Technology college during Sep'2022.

Bitan Majumder, Department of Computer Science completed the Azure AI Fundamentals certification by Microsoft in Oct'2022.

Arka Maity, Department of Computer Science has completed the coding competition Hash Code 2022.





Aahitagni Das, Anamitra Sen, Devjyoti Mondal, Nirban Pramanik & Aakash Roy of Department of Zoology, stood 3rd in inter college oral presentation competition organized by Save The Frog, India on 30th April, 2022



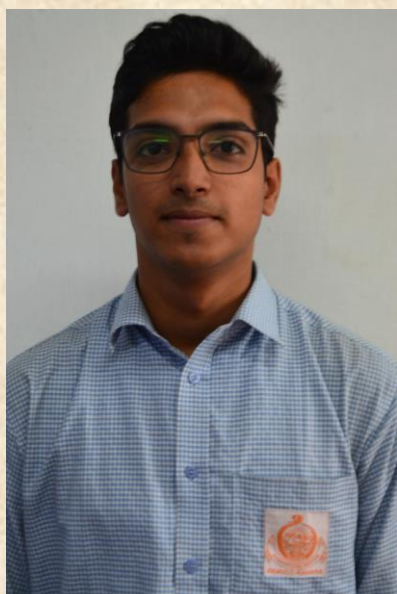


Writawrik Bhattacharya, Aatmadeep Ganguly & Amitesh Chakraborty, Department of Microbiology achieved “Best Poster Award” in the Poster competition held in 10<sup>th</sup> November, 2022 organized by PG Department of Botany to celebrate World Science Day for Peace & Development.





Udit Bhattacharya (Department of Botany) and Soumesh Adak (Department of Microbiology) secured the first position in Debate Competition (Econotoned) organized as a part of Ecomatric 3.0 held on 17<sup>th</sup> November, 2022 by the Department of Economics, Dinabandhu Andrews College.



Writawrik Bhattacharya Department of Microbiology secured 2nd position in AMR Story writing competition 2022 organised by CSIR Institute of Genomics and Integrative Biology.





Aneendya Dutta Gupta, B.Sc. Mathematics Hons. student has secured the Second position in INFINITY 2022, a Paper Presentation Competition organized by the Department of Mathematics, Ramakrishna Mission Residential College, Narendrapur.

Nazrul Haque, PG Mathematics has been selected for the prestigious Indian Academy of Sciences Summer Fellowship programme (SRFP), 2022 to work in NISER Bhubaneswar in June-July, 2022



Kunal Chakraborty, Sem II PG Chemistry and Arunabha Dutta Sem IV UG Chemistry has also been selected for Indian Academy of Sciences Summer Fellowship programme (SRFP), 2022 .





Monojit Majhi, Department of Microbiology, has qualified for prestigious Indian Academy of Sciences Summer Fellowship programme (SRFP), 2022 and successfully completed his project under the guidance of Dr. Mamta Chawla Sarkar, Scientist F, National Institute of Cholera and Enteric Diseases (NICED), Kolkata

Sagnik Mondal Department of Microbiology, has qualified for prestigious Indian Academy of Sciences Summer Fellowship programme (SRFP), 2022 and successfully completed his project under the guidance of Dr. Shubhra Ghosh Dastidar, Bose Institute, Kolkata





# Students' Publication

Journal	Article	Author
PlosOne Journal	Dynamics of natural product Lupenone as a potential fusion inhibitor against the spike complex of novel Semliki Forest Virus	Anubhab Das, Nobendu Mukherjee, Department of Microbiology, RKMVCC, Rahara
Frontiers in Pharmacology	Target Specific inhibition of protein Tyrosine Kinase in Conjunction with Cancer and SARS COV -2 by Olive Nutraceuticals	Nobendu Mukherjee, Department of Microbiology, RKMVCC, Rahara
World Journal of Pharmaceutical Research vol. 10 issue 6 pg 716-723	Treatments Discovery so far on SARS – COVID -19 : A brief report	Nobendu Mukherjee, Department of Microbiology, RKMVCC, Rahara
PlosOne Journal	Nonlinear molecular dynamics of quercetin in <i>Gynocardia odorata</i> and <i>Diospyros malabarica</i> fruits: its mechanistic role in hepatoprotection	Nobendu Mukherjee, Department of Microbiology, RKMVCC, Rahara
Journal of Multidisciplinary Digital Publishing Institute (MDPI)	Inhibition of filamentous Thermosensitive Mutant Z Protein in <i>Bacillus Subtilis</i> by Cyanobacterial Bioactive Compounds	Nobendu Mukherjee, Department of Microbiology, RKMVCC, Rahara
Ohio Journal of School Mathematics, 89	Proof Without Words: The Sum of Odd Integers is a Perfect Square	Ritam Sinha, PG Sem IV, Department of Mathematics, RKMVCC, Rahara





Journal	Article	Author
The Open Public Health Journal	Drug Development strategies in Immunological Aspects of SARS- CoV - 2	Nobendu Mukherjee, Department of Microbiology, RKMVCC, Rahara
Molecules, 2022	QSAR, Molecular Docking, MD Simulation and MMGGBSA Calculations Approaches to Recognize Concealed Pharmacophoric Features Requisite for the Optimization of ALK Tyrosine Kinase Inhibitors as Anticancer Leads	Nobendu Mukherjee, Department of Microbiology, RKMVCC, Rahara
Hindwai Oxidative Medicine and Cellular Longevity	Therapeutic Potential of Different Natural Products for the Treatment of Alzheimer's Disease	Nobendu Mukherjee, Department of Microbiology, RKMVCC, Rahara
Cells	Discovery of Novel HSP27 Inhibitors as Prospective Anti-cancer Agents Utilizing Computer-Assisted Therapeutic Discovery Approaches	Nobendu Mukherjee, Department of Microbiology, RKMVCC, Rahara
European Polymer Journal Volume 177, 15 August 2022, 111455	Flavonoid-based polymeric nanoparticles: A promising approach for cancer and diabetes treatment	Arghya Acharyya Department of Zoology, RKMVCC, Rahara





Trinanjan Daw and Debarpito Sinha, Department of Computer Science has published a Book Chapter named Green Computing- A Study of Barriers, Benefits, Needs and Approaches in the book Basics & Advances in Intelligent Systems in Developing Digital Society (ISBN:978-93-92513-63-3) Editors: P.K. Paul, & Soumya Paul





## Some Student Progression: Department of Chemistry

Student's Name	Qualified Examination
Bodhisattwa Mandal	IIT-JAM
Ayan Basu	IIT-JAM
Subrata Pal	IIT-JAM
Soumyadip Parya	IIT-JAM
Bikram Pal	IIT-JAM
Subho Ghosh	IIT-JAM
Sk Aksar Ali	IIT-JAM
Akshay Mann	IIT-JAM
Tanmoy Das	IIT-JAM
Deepanjan Patra	IIT-JAM
Souvik Pramanick	IIT-JAM
Santu Dhal	IIT-JAM
Subrata Das	NET
Debraj Ganguly	NET
Surojit jana	GATE
Sayan Samanta	GATE
Souvik Pramanick	GATE
Biswarup Pal Choudhury	GATE
Akkash Ali Mallick	GATE





## Some Student Progression: Department of Zoology

Dhruba Datta - M.Sc.  
Biotechnology, IIT Bombay



Sekhar Kundu -M.Sc. in Molecular  
and Human Genetics, Banaras  
Hindu University (BHU)

Sukriti Mait - M.Sc. Biology (by  
Research) Ashoka University



Sanmitra Biswas, North Eastern  
Hill University (NEHU)

Manas Saha, M.Sc. Biotechnology, KIIT  
School of Biotechnology, Kalinga  
Institute of Industrial Technology,  
Bhubaneswar





## Some Student Progression: Department of Zoology

Arghya Acharyya, M.Sc.  
Biotechnology, Dept. of Life  
Science and Biotechnology,  
Jadavpur University



Indrajit Mondal, M.Sc.  
Biotechnology, Dept. of Life  
Science and Biotechnology,  
Jadavpur University

Arnab Mandal, M.Sc.  
Biotechnology, Amrita School  
of Biotechnology, Amrita  
Vishwa Vidyapeetham



Tanmoy Dutta, Alumnus of Dept. of  
Zoology got selected for Department of  
Molecular and Clinical Medicine,  
University of Gothenburg, Sweden





## Some Student Progression: Department of Microbiology

-	Student Name	Admitting Institute
	Subrta Patra, Microbiology Sem VI	IIT, Mumbai
	Srinjay Paray, Microbiology Sem VI	IISc Bengaluru
	Shaswata Modak, Microbiology Sem VI	IISER, Thiruvananthapuram
	Mourya Mondal, Microbiology Sem VI	NIBMG, Kolkata
	Santanu Kuilya, Microbiology Sem VI	Banaras Hindu University (BHU)
	Soham Changdar, Microbiology Sem VI	Tezpur University
	Rounak Basu, Microbiology Sem VI	Pondicherry University
	Kaushik Bhattacharya & Pinaki Ghosh, Microbiology Sem VI	Presidency University
	Rakesh Ghosh, Microbiology Sem VI	North Eastern Hill University (NEHU)
	Ritam Mondal, Microbiology Sem VI	Kanpur University
	Subhradeep Roy, Microbiology Sem VI	Jadavpur University
	Sohamdeep Chakraborty, Microbiology Sem VI	National Forensic Sciences University





## Some Student Progression: Department of Computer Sc.

Students	Current Status	Institute
Debpritam Roy	MCA	VIT Vellore
Alapan Ghosh	MCA	Jadavpur University
Sawan Bhattacharyya	B. Tech.	University of Calcutta
Abhishek Dutta, Santanu Mukherjee, Pratick Maiti, Soumyadip Maity, Srijeet Ghosh	M.Sc.	Ramakrishna Mission Vidyamandira
Trinanjan Daw	MCA	University of Calcutta
Venkatesh Aanand	M.Sc.	Banaras Hindu University
Sudipta Ghosh	Job	Cognizant Technology Solutions India Private Limited
Imon Kalyan Saha	Job	Cognizant Technology Solutions India Private Limited
Swapnanil Ghosh, Debamoy Datta, Jaychandra De, Koustv Bal	M.Sc.	St. Xaviers College
Sayan Nath	M.BA.	Bengal Insitute of Business Studies
Akhilakh Ahmed Reja	M.Sc.	University of Calcutta
Debarpan Goswami	Job	Cognizant Technology Solutions India Private Limited



Subrata Patra, Department of Microbiology, has secured **All India Rank 14** in IIT- JAM (Joint Admission Test for Masters) 2022 and is doing M.Sc. in Biotechnology at IIT Bombay



Shree Mitra, Dept. of Computer Science (2018-21) got job in TCS

Jaychandra De, Department of Computer Sc. won the complementary prize for the pan India Red Hat Academy Challenge- 2022 held during Jan 2022.

Pankaj Sadhukhan came under top 10 of pan India Red Hat Academy Challenge- 2022 held during Jan 2022.





Sashadhar Dutta, M.Sc. Mathematics student qualified in the qualification round of the International Astronomy and Astrophysics Competition 2022 and has qualified for the prefinal round on 30<sup>th</sup> May, 2022.

Sashadhar Dutta from the department of mathematics, has successfully completed 'Summer Research Internship Program' through online mode on the topic 'Differential Equations and their Solutions' in the Department of Mathematics, National Institute of Technology Tiruchirappalli during 1st May, 2022 – 30th June, 2022.

Sashadhar Dutta, PG Mathematics got selected for ATM School in IISER Kolkata to be held from 28th November-

10th December, 2022





Several students like Anirban Banerjee from the Department of Zoology participated in the Education Day on the occasion of 14<sup>th</sup> Annual Meeting of the Proteomics Society, India and International Conference on Proteins & Proteomics (PSI-ICPP 2022) at CSIR IICB, Kolkata on November 02, 2022

Anirban Banerjee, Department of Zoology, had registered for Edufabrica Training Program with Ethical Edufabrica Pvt Ltd conducted in association with ELAN & NVISION, IIT Hyderabad conducted in the month of May-June 2022. As a part of the Training and Internship program, the candidate was required to undertake a project showcasing the aspects of the chosen training program and as a criteria towards finishing the internship. The student has done the project on the topic of "Movers & Shakers of the Cancer - Cytoskeleton" in Food Microbiology as a part of the Internship and the project





Soujata Banerjee Department of Microbiology, has successfully completed his intern project entitled “Microbial Composition of Drosophila Gut in Exposure to Diet Pertaining Neurodegenerative Drugs like Rotenone” under the guidance of Dr. Piyali Mukherjee, Institute of Health Science, Presidency University.

Subhadip Chakraborty, Department of Microbiology, has successfully completed his intern project entitled “Cloning of mRNA Capping Enzyme (CE) for bacterial expression and purification” under the guidance of Dr. Subhra Majumder, Institute of Health Science, Presidency University.



Dwaipayan Dey, Department of Microbiology, has successfully completed his intern project entitled “The Prevalence of Giardiasis in Tropical Countries” under the guidance of Dr. Tapashi Ghosh, Department of Microbiology, Calcutta School of Tropical Medicine, Kolkata





Sawan Bhattacharyya Department of Computer Science has successfully completed the requirements of Qiskit Global Summer School 2022 - Quantum Excellence of IBM

A paper by Sawan Bhattacharya, Dept of Computer Science entitled Comparative Study of Noises over Quantum Key Distribution Protocol has been accepted for DRDO Conference.



Three students from the Department of Chemistry B.Sc. Sem III Arif Ahmed Beg, Suman Bhowmik, Biswajit Ghosh got selected for TIFR NIUS Programme for Chemistry and attended two of them attended it on HBCSE from 23-27

December, 2022

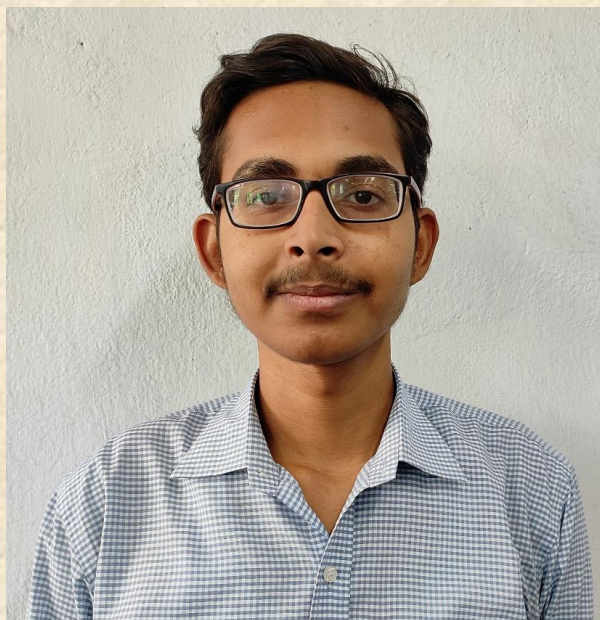




Sarthak Ghosh, Tamonash Debnath, Ayan Kar, Sayan Roychoudhury, Twisampati Das, Ayan Ghosh, Bishal Saha and Writawrik Bhattacharya Department of Microbiology, Ramakrishna Mission Vivekananda Centenary College, Rahara has participated an intern project under the guidance of Dr. Jayanta Bikash Dey, Head of the Department, Department of Microbiology, Nil Ratan Sircar Medical College and Hospital

- ✓ Sarthak Ghosh, Department of Microbiology has successfully completed the online internship programme 2022 on “Potential of Microalgal Nutraceuticals in the Prevention of Cardiovascular Diseases” under the guidance of Dr. Kiran Bala, Indian Institute of Technology, (IIT) Indore.
- ✓ Tamonash Debnath, Department of Microbiology, has successfully completed the online internship programme 2022 on “Applications of Microalgae –derived compounds in the Pharmaceutical World” under the guidance of Dr. Kiran Bala, Department of Biosciences and Biomedical Engineering Indian Institute of Technology, (IIT) Indore





Sagnik Goswami (Department of Botany) and Debarshi Bhattacharya (Department of Zoology) were selected on an all-India basis for participating in TIFR-NIUS Programme for Biology organized by HBCSE, Mumbai. The two students participated in the workshop from 1st November, 2022 to 7th November, 2022. The programme consisted of classes, lab sessions, projects and interactive sessions and presentations. Based on his performance Sagnik Goswami has further been selected for summer internship by TIFR NIUS under the mentorship of Dr. Dharmendra Shah, M.S University of Baroda.





- ✓ Arkadeep Das and Ramchandra Bera Department of Microbiology, has successfully completed an intern project under the guidance of Dr. Saikat Pal, Calcutta Medical Research Institute (CMRI), Kolkata.
- ✓ Atmadeep Ganguly, Department of Microbiology, has successfully completed an intern project entitled “Stem cells and infectious biology with particular focus on Mycobacterium tuberculosis” under the guidance of Dr. Bikul Das, Kavi Krishna Laboratory, Research and Development section, IIT Guwahati.
- ✓ Soumen Ghosh, Department of Microbiology, has participated four months’ online internship programme on “Basic aspects of structural biology and techniques” under the guidance of Dr. Dileep Vasudevan, Scientist, DBT- Institute of Life Science, Bhubaneswar.





Mangolik Bongo, Department of Microbiology, Rahara has participated an intern project under the guidance of Dr. Mausumi Sikdar, Department of Life Science, Presidency University.

- ✓ Mangolik Bongo, Department of Microbiology, Ramakrishna Mission Vivekananda Centenary College, Rahara has participated in hands-on workshop on “Molecular Biology Techniques” held on 8th & 9th April, 2022 by Centre for Health Science and Technology, JIS Institute of Advanced Studies and Research, Kolkata
- ✓ Mangolik Bongo, Department of Microbiology, Ramakrishna Mission Vivekananda Centenary College, Rahara has participated in MSI MCQ Mini Test Series Competition organised by Microbiologist Society of India (10th to 17th May, 2022) and has been awarded for Best Performance.





Tarun Halder, Research Scholar, Post-graduate Department of Botany has received “Best Oral Presentation Award” in the two Days National Seminar (Online), 2022 on Cytogenetics, in vitro Culture and Phytochemistry of Plants and Microbes for Sustainable Use Jointly Organized By Department of Botany, (UGC DRS & DST-FIST Sponsored) Siksha-Bhavana, Visva-Bharati, Shantiniketan, West Bengal-731235 & Department Of Botany, Raidighi College held on 22.01.2022 and 23.01.2022. The title of his presentation was “In vitro clonal propagation of selected elite chemotype and synthesis of secondary metabolites of three important solanaceous medicinal plants”





Avijit Chakraborty, Research Scholar, Department of Botany received the Best Paper Award for the Research Paper entitled : Antibacterial Activity of Tissue Cultured Plants of *Coleus Forskohlii*. BRIQ against multi-drug resistant clinical isolates of Urinary tract infecting Bacteria in the International Conference on Advances in Biotechnology and Applied Microbiology organized by the School of Life Science and Technology, IIMT University, Meerut, UP, India on March 30-31, 2022.



# Outreach Programme



The **Dhak** is a huge membranophone instrument from India. The shapes differ from the almost cylindrical to the barrel. The manner of stretching the hide over the mouths and lacing also varies. It suspended from the neck, tied to the waist and kept on the lap or the ground, and usually played with wooden sticks. The left side is coated to give it a heavier sound. Drum beats are an integral part of Durga Puja. It is mostly played by the Bengali Hindu community.



## Placement Programme by Magic Bus Foundation:

A placement related training programme by Magic Bus Foundation was organized online by the college in collaboration with Ramakrishna Mission, Vidyamandira, Belur Math and Ramakrishna Mission Residential College, Narendrapur on 31st January, 2022. 102 students enrolled for the programme. 8 students are currently short listed for the training.

### Science Promotion Programme

Students from 1 College & 4 schools participated in a one day science promotion programme organized by DBT STAR College scheme of the college. Total 50 students with teachers visited five departments Physics, Chemistry, Mathematics, Botany and Zoology:

The schools those have participated are:

- Sodepur Chandrachur College
- Madhyamgram High School
- Madhyamgram Girls' School
- Bhabanath Girls' School
- Taki Govt. School for Boys.





## Training Programme on Medicinal Plants



26<sup>th</sup> March, 2022 an one-days training programme on Medicinal Plants was organized by post graduate department of Boatany, Ramakrishna Mission Vivekananda Centenary College, Rahara in collaboration with Medicinal Plant Biotechnology Laboratory sponsored by West Bengal State Medicinal Plant Board. Tootal 110 farmers of different 10 districts of West Bengal had participated in that training programme





## Aero Modeling Workshop

A two-days Workshop of Aero modeling was organized in this college during 22- 23 July 2022. This workshop was organized by Vigyan Prasar under SCoPE-Bangla project with collaboration of West Bengal State University. The participants was the school students of different regional schools like, Kalyannagar Vidyapith for Boys, Kalyannagar Vidyapith for Girls, Bandipur Ideal Academy for Boys, Bandipur Ideal Academy for Girls. Sri Madhav Khare, chief editor for 'Shastrabodh', Pune was present as resource person throughout the workshop.





## Swachha Sagar Surakshit Sagar Programme

Seminar on Swachha Sagar Surakshit Sagar was held on 6<sup>th</sup> September, 2022. Dr. Nakul Parasar, Director of Vigyan Prasar, Dr. Parasuraman Jaisankar, Chief Scientist, IICB as Guest of Honour, Dr. Sarita Ghosh, Scientist, IICB, Prof. S. Mukherjee, WBSU were present. Dr Manas Pratim Das, programme Executive Akashbani and Dr. Siddhartha Narayan Joarder, Prof. of Veterinary Microbiology, West Bengal University of Animal & Fishery, Kolkata were the speaker of the Seminar.

The drawing and Poster making competition held on 05.09.20022 in the college for the outside school students. 30 Girls from Bhabanath Institution for Girls have participated in the drawing competition and 10 boys from Bandipur Ideal Academy for Boys have participated in the poster competition.



# Seminars & Workshop



The **Ghaṭam** is a percussion instrument used in various repertoires across India especially in Tamil Nadu. It's a variant played in Punjab and known as gharha as it is a part of Punjabi folk traditions. Its analogue in Rajasthan is known as the madga and pani mataqa. The ghatam is one of the most ancient percussion instruments of India. It is a clay pot with narrow mouth. From the mouth, it slants outwards to form a ridge. Made mainly of clay baked with brass or copper filings with a small amount of iron filings, the pitch of the ghatam varies according to its size.



Date: 12<sup>th</sup> February, 2022

Seminar under DBT STAR College Scheme  
on “The Art of Science Communication”

Organised by Department of Zoology

Speaker: Dr. Manas Pratim Das, Programme  
Executive, All India Radio, Kolkata

Date: 8<sup>th</sup> March, 2022

Interdisciplinary seminar on Chiron amino acids  
derived heterocycles and natural products: isolation,  
design, synthesis and biological activity by the DBT  
STAR College Scheme, Department of Zoology

Speaker: Dr. Goutam Panda, CDRI

Date: 12<sup>th</sup> March, 2022

One day DBT STAR career Orientation Program in  
collaboration with Current affairs review

Organised by Department of Mathematics

Speaker: Sri Amit Kumar Bose, Eminent person in Civil  
Service Coaching





Date: 11<sup>th</sup> & 12<sup>th</sup> February, 25<sup>th</sup> & 26<sup>th</sup> February,  
11<sup>th</sup> & 12<sup>th</sup> March, 25<sup>th</sup> & 26<sup>th</sup> March, 2022

Workshop on Arc GIS, organized by the DBT  
STAR College Scheme, Department of Zoology

Speaker: Dr. Tanoy Mukherjee, Research  
Associate, Zoological Survey of India

Date: 28<sup>th</sup> March, 2022

Special Workshop on Vermicompost Preparation and  
Sustainable Farming by the DBT STAR College  
Scheme, Department of Zoology

Speaker: Mr. Krishnapada Biswas (Biofarmer)

Date: 9<sup>th</sup> 22<sup>nd</sup> & 23<sup>rd</sup> April, 2022

Workshop on Uses of R software by the DBT STAR  
College Scheme, Department of Zoology

Speaker: Dr. Tanoy Mukherjee, Research Associate,  
Zoological Survey of India





Date: 12<sup>th</sup> March, 2022

One Day DBT STAR seminar on – “Life style modification & health promotion program for students: prevention, counseling & wellbeing”.

Organised by Department of Botany

Speaker: Dr. Biswajit Das, Chief Medical officer, Coal India Limited, Govt. of India.

Date: 15<sup>th</sup> & 16<sup>th</sup> March, 2022

National Level Workshop on – Herbarium Methodology and plant Nomenclature.

Organised by Department of Botany, RKMVCC, Rahara In collaboration with Central national Herbarium (CNH), ENVIS resource partner on Biodiversity (Flor), Botanical Survey of India (MoEF & CC)

Resource Person: Dr. K. Karthigeyan, Scientist-E, CNH, BSI





Date: 15<sup>th</sup> March, 2022

Hand's on Training Workshop on Herbarium  
Methodology & Plant Nomenclature  
Organized by the DBT STAR College  
Scheme, Department of Botany

Date: 22<sup>nd</sup> March, 2022

Interdepartmental Poster and Elocution  
Competition on “Earth Day” organized by the  
DBT STAR College Scheme, Department of  
Botany





Date: 21<sup>st</sup> March 2022

Seminar on 'ABC of Genome Editing.'

Organised by Department of Botany

Speaker: Dr. Kutubuddin Ali Molla, Scientist,  
Crop Improvement Division, ICAR National  
Rice Research institution, Cuttack.

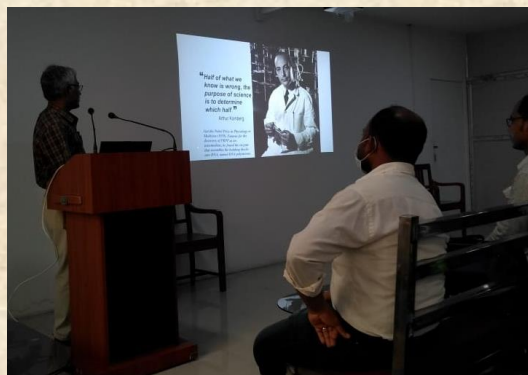
Date: 22<sup>nd</sup> March 2022

One day international Seminar on- "Regulatory  
mechanism of eukaryotic gene expression and  
genome integrity with implication in disease  
pathogenesis and therapeutic development"

Organised by Department of Chemistry

Speaker: Prof. Sukesh Ranjan Bhoumik, Prof.,  
Dept. of Biochemistry and Molecular Biology ,  
Southern Illinois University School of  
Medicine.





❖ Date: 25<sup>th</sup> March 2022

Seminar on 'Insulin resistance: our real enemy'

Organised by Department of Microbiology

Speaker: Dr. Partha Sarathi Ain

Demonstrator, Department of Anatomy

Raiganj Government Medical College and  
Hospital

❖ Date: 27<sup>th</sup> March 2022

International Seminar on 'NMR in Life and  
Science.'

Organised by Department of Chemistry

Speaker: Prof. Tapas Mal, Prof., Dept. of  
Chemistry , NMR Director, The Pennsylvania  
State University





Date: 23<sup>rd</sup> April, 2022

Seminar on ‘Understanding the syllabus of IAS Examination & Analysis of previous years question papers ’

Organised by DBT STAR College Scheme,  
Department of Mathematics

Speaker: Amit Kumar Bose, and eminent faculty member in the civil services coaching

Date: 5<sup>th</sup> July, 2022

Seminar on ‘Bioactive natural product and Drug design’

Speaker: Prof. Arun Ghosh

Ian P. Rothwell Distinguished Professor,  
Department of Chemistry, Purdue University,  
USA

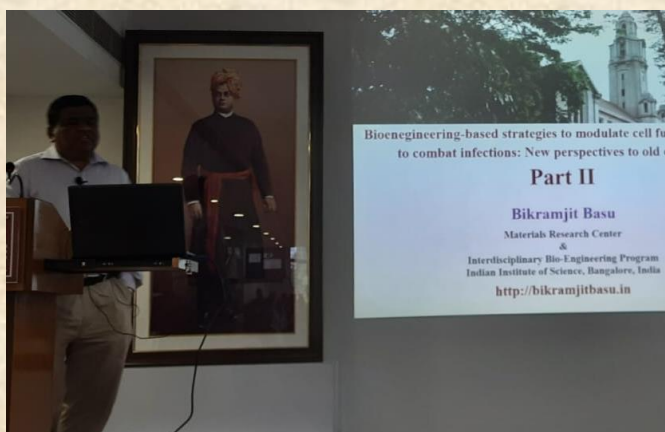




Date: 6<sup>th</sup> August, 2022

Seminar on 'Bioengineering based strategies to modulate cell functionality and to combat infections : new perspective to old challenges'

Speaker: Prof. Bikramjit Basu, Materials Research Centre and Center for Biosystems Science and Engineering





Date: 22<sup>nd</sup> August, 2022

Awareness Programme on ‘Save the Frogs’  
organized by Department of Zoology,  
Along with Debate Competition and Elocution  
Competition

Date: 2<sup>nd</sup> September, 2022

International Seminar on Material Science,  
Under DBT STAR college Scheme, Topics:  
“Human Interactive energy harvester and self-  
powered electronics”

Speaker: : Dr. Suman Nandy

Department of Materials Science, CENIMAT-  
13N, NOVA School of Science and Technology, Portugal





Date: 28<sup>th</sup> September, 2022

International colloquium and student interaction session with Dr. Amit Roy, Czech University of Life sciences, Prague, Czech Republic.

Organized by Department of Botany





Date: 10<sup>th</sup> November, 2022  
Celebration of World Science Day  
Organised by Department of Botany  
Chief Guest was Prof. Gourav Gangopadhyay,  
HOD, Division of Plant Biology Bose Institute,  
Kolkata. Poster competition for UG and PG  
students were organized on that day.





## Workshops organized by PG Department of Botany



Date: 23rd - 28th May, 2022

Workshop on “Hands on training in Plant Biotechnology”

Number of participated Institutes : 11

Number of Participants: 33



Date: 26th - 28th September, 2022

Three days Workshop on “Hands on training in Plant Biotechnology”

Total Participants: 27





## Workshops organized by PG Department of Botany



Date: 09th - 11th November, 2022

Three days Workshop on “Hands on training in plant tissue culture techniques”

Number of participated Institutes : 9

Number of Participants: 32



Date: 22nd - 24th November, 2022

Three days Workshop on “Hands on training in Molecular Biology Techniques”

Number of participated Institutes : 12

Number of Participants: 31



# Students' Induction Programme



The **Jal-tarang** is a melodic percussion instrument that originates from the Indian subcontinent. It consists of a set of ceramic or metal bowls filled with water. The bowls are played by striking the edge with beaters, one in each hand. al-tarang was also mentioned in the medieval Sangeet Parijaat text, which categorized this instrument under Ghan-Vadya (idiophonic instruments in which sound is produced by striking a surface, also called concussion idiophones.)



**Induction Programme on  
9<sup>th</sup> August, 2022  
For the newly admitted UG students of  
Chemistry**



**Speaker: Prof. Dulal Panda, Director  
National Institute of Pharmaceutical Education And Research  
(NIPER) Mohali**





Induction Programme on  
11<sup>th</sup> August, 2022  
For the newly admitted UG students of  
Computer Science



Speaker: Prof. Arvind Choubey,  
Director, Indian Institute of Information  
Technology





Induction Programme on  
12<sup>th</sup> August, 2022  
For the newly admitted UG students of  
Microbiology



**Speaker: Dr. J Gowrishankar, Director,  
Indian Institutes of Science Education and  
Research (IISER) Mohali**





# Induction Programme on 13<sup>th</sup> August, 2022 For the newly admitted UG students of Botany



**Speaker: Dr. A.K. Shasany,**  
Director, ICAR- National Institute for Plant  
Biotechnology





Induction Programme on  
15<sup>th</sup> August, 2022  
For the newly admitted UG students of  
Physics



Speaker: Sunil Kumar, Palakurissi Balagopal,  
Director, Indian Institute of Technology  
(IIT) Palakkad





Induction Programme on  
16<sup>th</sup> August, 2022  
For the newly admitted UG students of  
Mathematics



Speaker: Dr Anish Ghosh,  
Tata Institute of Fundamental Research  
(TIFR) Bhatnagar Awardee





**Induction Programme on  
17<sup>th</sup> August, 2022  
For the newly admitted UG students of  
Zoology**



**Speaker: Prof. Sudhanshu Vрати,  
Director, Regional Centre for Biotechnology**



# NSS Activities



The **Manjira** (also spelled manjīrā or manjeera), is a pair of clash cymbals, originating in the Indian subcontinent, which make high-pitched percussion sounds. In its simplest form, it consists of a pair of small hand cymbals. In Hindu religious contexts it is known as karatalas typically used to accompany devotional music such as bhajan and kirtan.



## Adult Education Centre

On 14<sup>th</sup> February, 2022 our NSS Unit has made arrangements for 50 elderly mothers of indigenous and backward classes (mainly Scheduled Tribe) to be educated in a coaching class named 'Ma Sarada Pathshala'. This coaching class will be held once in a week.

## Special NSS Meeting

NSS volunteers attended a special NSS Meeting on 24<sup>th</sup> February, 2022 in the presence of Hon'ble Chief Minister, West Bengal



## Pulse Polio Immunization Programme

Ramakrishna Mission Vivekananda Centenary College, Rahara houses Pulse Polio Immunization campaign whenever Govt. declares the date. This year the date for Pulse Polio Immunization programme was 19<sup>th</sup> June 2022. 15 male children and 22 female children were immunized from the College Campus Center. Many NSS Volunteers took an active part in pulse polio immunization programme.





## Disaster Management Awareness Programme



On 5<sup>th</sup> September, 2022 at Haldia Riverfront Beach, students and teachers of Ramakrishna Mission Vivekananda Centenary College, Rahara have started disaster management awareness journey at the Haldia Riverfront Beach. The programme was organized in collaboration with other groups from Vigyan Prasara, Government of India; Indian Institute of Chemical Biology (IICB) and West Bengal State University (WBSU). The programme includes collection of non-biodegradable waste from the beach area. A public awareness was raised about utilizing and enjoying the environment, especially the sea coasts in an ecofriendly and sustainable manner. Leaflets were circulated explaining the importance of the clean coast-safe sea mission. Messages could be sent to a large general audience present in the Haldia Riverfront Beach about the importance of sea coasts. 17 NSS volunteers were present from this College.





# Blood Donation Camp 2022



Like every year a Blood Donation Camp was organized by the NSS wing of the college in collaboration with the Association of Voluntary Blood Donors on 9<sup>th</sup> September, 2022.





## Eye Operation Camp



NSS Unit of Ramakrishna Mission Vivekananda Centenary College, Rahara have organized Free Cataract Operation Camp in 4 phases. Preliminary Eye Check-up was on 30th November 2022. 143 patients came for initial checkup. Then the Free Cataract Operation took place at Vivekananda Mission Ashram Netra Niramay Niketan Chandi, Amtala, South 24 Parganas, on 7th and 9th December 2022. 84 (38 male and 46 female) poor and destitute patients undergone operation. The Post Operative General Check-Up on 22nd December 2022. And finally, the distribution of Free Eye glasses was done on 04th February 2023. 45 NSS Volunteers were present in this entire programme.





# Special Rural NSS Camp 2022

A 7-days special NSS camp was organized by the College in a nearby village “Mahadever Aat” between 27<sup>th</sup> December, 2022 to 2<sup>nd</sup> January, 2023. The camp focused on rural development, health, hygiene, creative arts etc. The schedule of the Camp was as follows:

27 <sup>th</sup> December, 2022	Inaugural Programme
28 <sup>th</sup> December, 2022	Health Check-up by Dr. Depak Das Mahapatra Special Kantha Stitch Training for women by a teacher from Calcutta Handlooms
29 <sup>th</sup> December, 2022	A Seminar was organized on food and nutrition especially for village women and children. Prof. Sayantani Brahmo, Assistant Professor Food and Nutrition Department, EIILM, Kolkata delivered the seminar
30 <sup>th</sup> December, 2022	Child Education Workshop with Art and Sketch and handwork
31 <sup>st</sup> December, 2022	Mathematics, Sit-and-Draw and Recitation Competitions for children
1 <sup>st</sup> January, 2023	Workshop on designing, stitching and tailoring. Mrs. Shukla Das, entrepreneur, and trainer needle work, trained the village women on designing and stitching and tried to teach them ways to self-employment. Go-as-like sports was organized for the children.
2 <sup>nd</sup> January, 2023	Seminar on “Health is Wealth”. Mr. Rahul Sarkar, Yog Instructor and Naturopathist spoke about the need for yoga and had a yoga camp with villagers. Blanket and Mosquito-net were distributed. Prize distribution ceremony was also held.





# Special Rural NSS Camp 2022



# Eminent Visitors' Column



The **Rebab** is an instrument close to the guitar in terms of design and construction was popularised around 1562 in Northern India by Tansen, a high-profile figure in classical Hindustani music. The hollowed bowl has skin stretched over the top, with two bridges fixated on the neck and skin. Six strings are tied at both ends of the piece, allowing the player to adjust the sound seamlessly. Moreover, ancient texts dating back to the 7th Century mention the formidable instrument. The additional relationship with Punjabi hymns provided a diverse use for the rebab. With a range of two and a half octaves, the rebab is perfect for rhythmic elaborations and fast-paced patterns.



I am happy to visit this college when it is celebrating 125 years of establishment of Ramakrishna Mission and praying to the holy trinity to bless all, so that we can lead an ideal life.

.....Swami Jnanalokananda, Secretary,  
Ramakrishna Mission Swami Vivekananda's Ancestral  
House and Cultural Centre, Kolkata

I am honored to have been called to attend this function in its great institute. I wish all the best to all the students, teachers and others in their journey ahead.

.....Prof. V. K. Tewari, Director, IIT  
Kharagpur



Wonderful college with highest sense of value for education. The educational ambience is so beautiful. This college is certainly providing a solemn service for educational upliftment in India by generating world famous students.

.....Prof. Uday Bandyopadhyay,  
Director, Bose Institute, Kolkata





A delight to visit this college. Relationship with the college goes years back. Its wonderful to see the college attain ever increasing heights at the national level. My pranams to all the monks for so ably running this institution.

..... Dr. Sanghamitra Bandypadhyay,  
Padmashri, Director Indian Statistical Institute (ISI)

It is a great feeling. A fusion of knowledge, tranquility and wisdom with philosophy makes me feel privileged to be here.

.....Prof. Suman Chakraborty,  
Dean Sponsored Research and Industrial  
Consultancy, IIT Kharagpur



I feel blessed and humbled to serve my brothers and sisters (our students) through the opportunity given.

.....Prof. Joy Sen, Chairperson, Centre of  
Excellence for Indian Knowledge System, IIT  
Kharagpur



# Passages of Light



The **Swarmandal** or surmandal, or Indian harp is a plucked box zither, originating from India, similar to the qanun that is today most commonly used as an accompanying instrument for vocal Indian classical music. It is part of the culture of Northern India and is used in concerts to accompany vocal music. The name combines Sanskrit words *svara* (notes) and *maṇḍala* (circle), representing its ability to produce many notes.



Now will people gradually understand that a language, or art, or music that expresses no meaning and is lifeless is of no good. Now they will understand that the more strength is infused into the national life, the more will language, art, and music, etc. become spontaneously instinct with ideas and life. The volume of meaning that a couple of words of everyday use will convey, you may search in vain in two thousand set epithets. Then every image of the Deity will inspire devotion, every girl decked in ornaments will appear to be a goddess, and every house and room and furniture will be animated with the vibration of life.

.....Swami Vivekananda

