

Newsletter



Rani Rashmoni Green University

Present Office:
Government General Degree College Singur
Singur-712409
West Bengal
India
Phone: +913326300026
www.rrgu.in
www.ranirashmonigreenuniversity.ac.in

In this Issue	Page
1. Academic:	
Teaching	05
Research	06
2. Seminars/Conferences:	6-7
3. Workshops/Lectures/webinar:	7-14
4. Distinguished Academicians associated with the University	
a. Professors of Eminence & Excellence:	15-16
b. Adjunct Professors:	16-17
5. Students' Achievements:	18
6. Special Achievements:	18-19
7. Publications:	19-21
8. Developmental:	
Administrative Reform initiatives:	21-22
Outreach Activities:	22-23

Compilation (Publication Unit)

Dr. Birendra Nath Ghosh

Sh. Jayanta Mukhopadhyay

Shri Sudeb Karmakar

Photography: Shri Tridib Das

“Rani Rashmoni was one of the eight nayikas (Attended Goddesses) of the Divine Mother. She came down to the world to spread to the world the worship of the Devine Mother”
- **Shri Ramakrishna**

From the Vice-Chancellor's Desk

Rani Rashmoni Green University (RRGU) is unique in the present context of imparting modern quality higher education for innovations in green energy and efficient/skilled human resource development. It is worthy to mention that RRGU journey started since 2020-21 Masters with the disciplines of M.A. in Bengali & English, M.Sc. in Computer Science, Chemistry, Environmental Science and Nutrition & Public Health.

It gives me immense pleasure to extend my warm greetings to all stakeholders, students, resource persons, and the wide-ranging community of RRGU that RRGU is going to bring out its first Newsletter to share the activities performed and undertaken during the period January-June, 2025. This half-yearly newsletter has been marked by significant contributions in academic, administrative and special attainment. The entire Master degree curricula completed in pre-scheduled academic calendar, first of its kind. Following the guidelines, as framed by the Department of Higher Education (HED), Govt. of West Bengal, results and mark sheet were provided in all the semesters timely.

Special activities were undertaken that include seminars/conferences/workshops, the Regional Science & Technology Congress, fresher's welcome of students, named as "Inception-2025". Celebration of republic day, special lecture, memorial lecture, international mother language day, National Science day, International women's day, lecture series and tribute to Acharya Satyendra Nath Bose. It is worthy to mention that Professor of Eminence & Excellence associated with the university delivered motivational lectures to the students for all round development and scope of service to different sectors of the country and abroad. Some remarkable lectures, worthy to be mentioned, include awareness on snake venom remedial measures on human health, landslides awareness, workplace environment and ergonomics, world environment day and Indian Photobiology Society Science talk. I am delighted to share that RRGU celebrated the birthday of Gurudev Rabindranath Tagore and Raja Rammoham Ray with great enthusiasm and sprite. Many challenging activities undertaken during the period like approval of approval more disciplines for masters, infrastructure particularly own building preemies at Tarakeshwar, MOU of affiliated undergraduate's private institution (PPT model) to fulfil board of statues vision and mission. Last but not the least, I happy to share that our students and resource persons not only published original research papers in high impact factor journal in national and international repute but also significant number of students in most of the subjects qualified for UGC NET/GATE examination indicating quality education since its nascent stage.

I am confident that our synchronized works with all the stake holders will bring many more laurels overcoming many huddles with limited resources. I integrate with poem of "Kabiguru", great visionaries of centuries on education and humanities

সেই সাধনার সে আরাধনার
যজ্ঞশালায় খোলা আজি দ্বার,
হেথায় সবারে হবে মিলিবারে আনতশিরে –
এই ভারতের মহামানবের সাগরতীরে –

[That austere, that arduous sincere prayer. The door is open today of that holy fire, here all will have to mingle with ardent humble desire, Around this shore of India's great men.]

Prof. Amiya Kumar Panda

From the Registrar's Desk

It gives me immense pleasure to present the inaugural edition of the “Newsletter of Rani Rashmoni Green University” This milestone marks a significant step forward in fostering communication, collaboration, and knowledge-sharing within our academic community.



Our newsletter is envisioned as a dynamic platform that will chronicle the achievements, innovations, research activities, student initiatives, and sustainable development efforts undertaken by the University. It will serve not only as a medium of information but as a reflection of the vibrant and eco-conscious academic culture we are striving to cultivate.

As the Registrar, I take great pride in witnessing the growth of this institution, guided by the principles of academic excellence, inclusivity, and environmental responsibility. The launch of this newsletter symbolizes our commitment to transparency, academic discourse, and community engagement.

I extend my heartfelt congratulations to the editorial team, faculty members, students, and all contributors who have worked tirelessly to bring this publication to life. May this be the beginning of a legacy of thoughtful communication and institutional pride.

Let us continue to move forward together, informed and inspired.

Shri Tapan Kumar Jana

**From the Editor' Desk
Development Officer**



The Publication of the Rani Rashmoni Green University Newsletter 2025 (No. 01) coincides with very happy tidings for the entire university community.

Prof. Amiya Kumar Panda, an eminent academician and a perceptive administrator, has taken over as the full-term Vice-Chancellor of Rani Rashmoni Green University on December 18, 2024. This momentous event has triggered a celebratory mood amongst all the stakeholders of our beloved university. This edition of the University newsletter primarily focuses on the achievements, awards and recognitions received by various stakeholders of this higher educational institution from January 2025 to June 2025. It has also been mentioned that proposal of various Memorandum of Understanding (MOUs) signed between Rani Rashmoni Green University and other institutions of eminence in the national and international arenas.

Visits of several academic luminaries to the university and the visits of our faculty members and other stakeholders to various important seminars, conferences and workshops in India and abroad have also been documented with utmost care. The newsletter includes various prestigious national and international fellowships won by the university students. Some outstanding publications also find place in this newsletter.

Any unintentional oversight of any important event or achievement made during the said tenure, can be included in the next issue with proper acknowledgement. We would also wait for the readers' feedback to make the next issues more inclusive.

Shri Jayanta Mukhopadhyay

Teaching-Master Courses (Semester-II & IV)

During the period, all the approved Master's Degree Courses of Bengali, English, Computer Science, Chemistry, Nutrition & Public Health and Environmental Science conducted as per pre-scheduled academic calendar of Semester-II & IV with reputed adjunct Professors and resource person in the respective subjects. Each course having 5 units with 5 resource persons/adjunct faculty completed 70 classes for 70 hours to complete the syllabus of both theoretical and practical. All the processes of semester obtaining degree like teaching, examinations, reviews, results and mark sheet were (following higher education guidelines) completed as per academic calendar (Fig1.).

Academic Calendar

SEM II (2023-2024)

	Month	T.D.	Month	T.D.	Month	T.D.	Month	T.D.	Month	T.D.
	Mar,25		Apr,25		May,25		Jun,25		July,25	
Sat		WH		WH		WH		WH		WH
Sun		WH		WH		WH	1	WH		WH
Mon							2	46		
Tue			1	HD			3	47	1	65
Wed			2	10			4	48	2	66
Thu			3	11	1	HD	5	49	3	67
Fri			4	12	2	27	6	HD	4	68
Sat	1	WH	5	WH	3	WH	7	WH	5	WH
Sun	2	WH	6	WH	4	WH	8	WH	6	WH
Mon	3		7	13	5	28	9	50	7	69
Tue	4		8	14	6	29	10	51	8	70
Wed	5		9	15	7	30	11	52	9	PL
Thu	6		10	HD	8	31	12	53	10	PL
Fri	7		11	16	9	HD	13	54	11	PL
Sat	8	WH	12	WH	10	WH	14	WH	12	WH
Sun	9	WH	13	WH	11	WH	15	WH	13	WH
Mon	10		14	HD	12	HD	16	55	14	PL
Tue	11		15	HD	13	32	17	56	15	PL
Wed	12		16	17	14	33	18	57	16	
Thu	13		17	18	15	34	19	58	17	ED
Fri	14		18	HD	16	35	20	59	18	
Sat	15	WH	19	WH	17	WH	21	WH	19	WH
Sun	16	WH	20	WH	18	WH	22	WH	20	WH
Mon	17	1	21	19	19	36	23	60	21	ED
Tue	18	2	22	20	20	37	24	61	22	
Wed	19	3	23	21	21	38	25	62	23	ED
Thu	20	4	24	22	22	39	26	63	24	
Fri	21	5	25	23	23	40	27	HD	25	ED
Sat	22	WH	26	WH	24	WH	28	WH	26	WH
Sun	23	WH	27	WH	25	WH	29	WH	27	WH
Mon	24	6	28	24	26	41	30	64	28	ED
Tue	25	7	29	25	27	42			29	
Wed	26	8	30	26	28	43			30	
Thu	27	HD			29	44			31	
Fri	28	9			30	45				
Sat	29	WH		WH	31	WH		WH		WH
Sun	30	WH		WH		WH		WH		WH
Mon	31	HD								

TD: Teaching Day (1,2,3,...); PL: Preparatory Leave;
HD: Holiday; WH: Weekly Holiday; ED: Exam Day

Internal Assessment and Practical Examination –To be decided by the department

SEM IV (2023-2024)

	Month	T.D.	Month	T.D.	Month	T.D.	Month	T.D.	Month	T.D.
	Feb,25		Mar,25		Apr,25		May,25		Jun,25	
Sat		WH		WH		WH		WH		WH
Sun		WH		WH		WH		WH	1	WH
Mon									2	57
Tue					1	HD			3	58
Wed					2	21			4	59
Thu					3	22	1	HD	5	60
Fri					4	23	2	38	6	HD
Sat	1	WH	1	WH	5	WH	3	WH	7	WH
Sun	2	WH	2	WH	6	WH	4	WH	8	WH
Mon	3		3	7	24	5	39	9	61	7
Tue	4		4	8	25	6	40	10	62	8
Wed	5		5	9	26	7	41	11	63	9
Thu	6		6	10	HD	8	42	12	64	10
Fri	7		7	11	27	9	HD	13	65	11
Sat	8	WH	8	WH	12	WH	10	WH	14	WH
Sun	9	WH	9	WH	13	WH	11	WH	15	WH
Mon	10		10	8	14	HD	12	HD	16	66
Tue	11		11	9	15	HD	13	43	17	67
Wed	12		12	10	16	28	14	44	18	68
Thu	13		13	11	17	29	15	45	19	69
Fri	14		14	HD	18	HD	16	46	20	70
Sat	15	WH	15	WH	19	WH	17	WH	21	WH
Sun	16	WH	16	WH	20	WH	18	WH	22	WH
Mon	17		17	12	21	30	19	47	23	PL
Tue	18		18	13	22	31	20	48	24	PL
Wed	19		19	14	23	32	21	49	25	PL
Thu	20		20	15	24	33	22	50	26	PL
Fri	21		21	16	25	34	23	51	27	HD
Sat	22	WH	22	WH	26	WH	24	WH	28	WH
Sun	23	WH	23	WH	27	WH	25	WH	29	WH
Mon	24		24	17	28	35	26	52	30	PL
Tue	25		25	18	29	36	27	53		29
Wed	26		26	19	30	37	28	54		30
Thu	27	1	27	HD			29	55		31
Fri	28	2	28	20			30	56		
Sat	29	WH	29	WH		WH	31	WH		WH
Sun	30	WH	30	WH		WH		WH		WH
Mon			31	HD						

TD: Teaching Day (1,2,3,...); PL: Preparatory Leave;
HD: Holiday; WH: Weekly Holiday; ED: Exam Day

Internal Assessment and Practical Examination –To be decided by the department

Salient research highlights (in collaborative mode):

A collaborative research and review work during the period revealed properties to perspective applications in environmental remediation of nanomaterials and sustainable nanomaterials use in waste water remediation. Several nano-sensors identify promising to monitor wastewater pollutants.

Another studies in digital soil mapping in a part of Eastern Himalayan Foothills, India indicated lithological discontinuity for sustainable land use planning.

**SEMINARS, CONFERENCES, PROGRAMMES
& WORKSHOPS/LECTURES****Special Lecture: Prof. Chien-Hsiang Chang**

Department of Chemistry, Rani Rashmoni Green University organized a Special Lecture Session. Prof. Chien-Hsiang Chang, Department of Chemical Engineering, National Cheng Kung University, Taiwan deliberated on the topic titled “Modulating Characteristics of Catanionic Vesicles by the Addition of Fatty Acids” on 10th February, 2025 in the Seminar Hall, Government General Degree College, Singur. Faculty members, students of the department of chemistry as well as other departments of Rani Rashmoni Green University were present.



At the outset he elucidated how the catanionic vesicles are self-assembled, hollow spherical structures formed spontaneously in water from mixing two types of surfactants with oppositely charged head groups to show significant modulating characteristics by addition of several fatty acids including several applications. Catanionic vesicles are effective carriers for both water-soluble and hydrophobic drugs, such as curcumin, providing sustained release and preventing drug degradation. It was very enlightening lecture especially for all the students and faculty members of chemistry department. His illustrations will encourage participating students in formulation of research projects and motivate for future research. He also interacted with students of chemistry department regarding the exchange academic program for project work and Ph.D. of National Cheng Kung University, Taiwan.

7th Regional Science & Technology Congress:

Hon'ble Vice-Chancellor, Rani Rashmoni Green University, as the Chief Guest, is addressing the august gathering of the 7th Regional Science & Technology Congress organized at Rampurhat College on January 11, 2025. In his speech, he emphasized the importance of S&T congress and stressed upon recent advances in Science and Technology highlighting green energy, environmental awareness and the use of modern tools in resolving the issues.



He also emphasized on the use of science in everyday life.

First Rani Rashmoni Memorial Lecture

For the first time, Rani Rashmoni Memorial Lecture was organized on 19th February, 2025 at RRGU Campus of Government General Degree College (GGDC), Singur in collaboration with GGDC, Singur. Shri Tapan Kr. Jana, Registrar of the University felicitated the distinguished speaker with citation and shawl. The Hon'ble Vice-Chancellor of the University inaugurated the programme and introduced the



distinguished Speaker, Shri Kushal Chowdhury, Trustee & Secretary, Dakshineswar Kali Temple to the audience. Shri Chowdhury deliberated the Memorial Lecture on that auspicious day. He talked about enactment of the West Bengal Green University (Amendment) Act, 2018 and pointed out how the name of the university was renamed in the name of legendary Women Rani Rashmoni, the founder of Dakshineswar Kali Temple, Dakshineswar. He also highlighted how Rani Rashmoni was emerged as a prominent figure of the 19th century, became famous for her intellect, forward-thinking personality and woman of progressive outlook. He emphasized that without Rani Rashmoni, there would have been no Ramakrishna Paramahansa and no Dakshineswar Temple.

Special Lecture***A tribute to Acharya Satyendra Nath Bose***

Two Special Lecture Sessions were organized in the Department of Chemistry, Rani Rashmoni Green University on 8th April 2025. Two eminent personalities namely Prof. Dulal Mukherjee of University of Calcutta and Prof. Tanmaya Kumar Pathak of IIT Kharagpur were invited to deliver lectures. Prof. Dulal Mukherjee deliberated



on the topic entitled “A tribute to Acharya S.N. Bose on the occasion of the Centennial celebration of his epoch making paper, Plank’s law and the Light-Quantum Hypothesis” and the topic titled “Organic Reactions in Cells” was deliberated by Professor Tanmaya Kumar Pathak. Prof. Kali Prasanna Dhara, Former Professor, Department of Chemistry, University of Calcutta, chair the Technical Session and concluded that both the talks were very interesting and to be significantly useful for the students and faculty members of RRGU. Students and faculty members interacted with the speakers and became profusely benefited by the thought provoking deliberations. Both the speakers immensely motivated the students to enhance thinking, improve knowledge and shape the future.

Environmental impact assessment (EIA) and management plan (EMP):

A special Lecture was organized in the Department of Environmental Science, Rani Rashmoni Green University on 20th March,2025. Dr. Asoke Kumar Banerjee, Director, Environtech East (P) Ltd delivered lecture on the topic titled “EIA–EMP Study: Need in National and Global Perspective.” Dr. Banerjee highlighted the importance of EIA as a scientific tool to predict and mitigate environmental consequences of developmental projects.



Prof. Sunando Bandyopadhyay, Department of Geography, University of Calcutta deliberated on the theme “Whose Coasts? Human Inroads into the Nature: Experiences from West Bengal.” Prof. Bandyopadhyay presented critical reflections on coastal environmental changes caused by human interferences such as port construction, aquaculture, and tourism. The lecture series witnessed enthusiastic participation from postgraduate students, research scholars, and faculty members. The interactive discussions enabled participants to connect theoretical aspects of EIA-EMP with real-world environmental challenges. The session was highly appreciated as it enriched students’ understanding of policy frameworks, environmental ethics, and sustainable management approaches. Above all, the programme successfully advanced the department’s commitment to imparting applied knowledge and fostering critical thinking on environmental governance and sustainable development.

Landslides and environment

A special lecture session was organized in the department of Environmental Science, Rani Rashmoni Green University on April 24,2025. Prof. Subir Sarkar, Former Head, Department of Geography, University of North Bengal, the distinguished speaker delivered a talk on “Landslide: Mechanism, Causes and Consequences-A Case Study from Eastern Himalayas.” The session was commenced with a formal welcome address by the faculty member of the department highlighting the significance of natural hazards and their mitigate management in the context of environmental studies. Prof. Sarkar, with his vast research experience in geomorphology and natural hazards, provided a comprehensive overview of landslide mechanisms, including geological, hydrological, and anthropogenic triggers. Drawing upon detailed case studies from the Eastern Himalayas, he emphasized the region’s vulnerability due to fragile geology, intense rainfall, unplanned urbanization, and infrastructural developments. The lecture not only enhanced the understanding of the physical processes behind landslides but also elucidated the socio-economic and environmental consequences faced by communities in hilly terrains. Special emphasis was given to sustainable mitigation strategies, hazard mapping, and community-based disaster risk reduction approaches. The event witnessed active participation from postgraduate students, research scholars, and faculty members, who were engaged in an interactive discussion with the speaker. The participants expressed that the session broadened their perspective on disaster studies and its interdisciplinary linkages with environmental science. The lecture was highly insightful and inspiring, aligning with the department’s objective of fostering academic excellence and awareness of pressing environmental issues.

Snake venom effects on human health and remedial measures

A special seminar was hosted by the Department of Nutrition and Public Health, Rani Rashmoni Green University, on 23rd April 2025. The distinguished speaker, Professor Antony Gomes, Former Professor, Department of Physiology, University of Calcutta, a renowned academician and eminent researcher in the field of Toxicology and Experimental Pharmacodynamics deliberated on the composition and physiological effects of snake venom, with special reference to its toxicological

impact on human health. The seminar began with an introduction to the fascinating world of snakes, their diversity and behavioural characteristics.



The classification of snakes on the basis of venom potency and quantity was clearly explained, which helped to understand the differences between venomous and non-venomous species. The speaker also highlighted key morphological features that help in distinguishing harmless snakes from dangerous ones. This not only enhanced our scientific knowledge but also built community awareness about snake safety. Practical demonstrations enriched the session, including the display of snake parts responsible for biting and samples of venom collected during research. The hunting mechanisms of snakes were elaborated in detail, giving us insight into their ecological role. A crucial part of the seminar dealt with the management of snakebite cases, including WHO-recommended first-aid guidelines. The speaker explained the different types of venom—neurotoxic, hemotoxic, and cytotoxic—and their effects on the human body. Interestingly, the session also explored, how venom components can be transformed into valuable pharmaceutical products, such as pain relievers, anticancer drugs, anti-hypertensive, and life-saving anti venoms. Participants gained valuable knowledge about the signs and symptoms of snakebite, immediate first-aid measures, and the role of anti-venom therapy. The discussion also included ongoing research in experimental pharmacodynamics and the potential therapeutic applications of venom components in modern medicine. The session concluded with an interactive question–answer round, where students and faculty actively participated and clarified their queries. The seminar not only enhanced awareness regarding snake venom and its remedial measures but also motivated students to explore the research scope in toxicology, pharmacology, and biomedical sciences. Overall, it was highly informative and inspiring for both the students and faculty members to consider innovative information's on venom and its medical applications.

University Foundation Day

Foundation day was observed on 9th January, 2025, at RRGU campus of Government General Degree College, Singur. Students, guest faculties, Registrar, Finance Officer were present. The Hon'ble Vice-Chancellor of RRGU addressed the gathering on objectives, visions, missions and formation of university history.



Inception, 2025

Freshers' welcome - the “Inception-2025” was celebrated by the students of Rani Rashmoni Green University on January 14, 2025. The programme was inaugurated with watering the plant sapling by the Hon'ble Vice-Chancellor (followed by all the officers), instead of traditional lamp-lightening ceremony. Then warm welcome address to the students were given by the Vice-Chancellor, Registrar, Finance Officer, Controller of Examinations and Guest Teachers of the University. The address energized newly admitted students and make understood the path way of academic curriculum.



REPUBLIC DAY 2025

The 76th Republic day was observed on January 26, 2025 with great enthusiasm in presence of staff, faculty and students in the Singur campus premises of RRGU. On this auspicious day, Day, the Hon'ble Vice-Chancellor & Registrar, RRGU did unfurling the National Flag and address the gathering in the light of significance of Indian constitution.



International Mother Language Day

International mother language day was organized on 21st February, 2025 at RRGU Campus of Tarakeswar Degree College, Tarakeswar. Registrar of the University felicitated the distinguished speakers with citation and shawl. The Vice-Chancellor of the University inaugurated and address the functions on the importance mother language. Shri Amitav Chakraborty, renowned writer delivered the lecture titled- “ভূমি আজ জাগো ২১শে ফেব্রুয়ারী”.



In his lecture, he shared information about Language Movement of 1952. While at early twentieth century no leading figures of Bengal paid attention to their mother tongue, Kabiguru Rabindranath Tagore delivered a speech at Pabna Provincial Conference in 1908. Eminent linguist Muhammad Shahidullah and Maulana Akram Khan, respectively raise their voices for Bengali language to recognize as a national language of India in different platform (Visva-Bharati, Bangiya Sahitya Parishad). November 17th, in the year 1999, UNESCO declared 21st, February as ‘International Mother Language Day’. The Barak valley, Manbhum, South Indian and Konkani language (Goa) coincide with the significance of this day.”

National Science Day 2025

National Science Day was organized on 28th February, 2025 at RRGU Campus of Govt. General Degree College (G.G.D.C), Singur in collaboration with G.G.D.C, Singur. Registrar of the University felicitated the esteemed speaker Dr. Debiprasad Duari (Former Director, Research & Academics, M. P Birla Inst. of Fundamental Research, Kolkata Writer) with citation and shawl. The Hon'ble Vice-Chancellor of the University inaugurates the programme with his valuable words. Dr. Duari delivered the lecture titled “A Cosmic Voyage”. In his lecture session, he shared the rare insights about the Universe from the astronomical perspective.



Chemistry is fun: The celebration of National Science Day was organized by the department of chemistry, IIT Kharagpur in collaboration with Chemical Research Society of India, Kharagpur Chapter, on 01st March, 2025. This event included exhibition, poster presentation, lectures and workshop. Prof. Uday Maitra, Indian Institute of Science, Bangalore delivered the fascinating lecture on the topic “Chemistry is Fun” in the workshop of National Science Day, that imbibed the students. All the students from department of chemistry, Rani Rashmoni Green University participated in this workshop. Professor Maitra demonstrated several live chemical experiments to make chemistry enjoyable and accessible for the students.



International Women's Day

International Women's Day was observed on 10th March, 2025 at RRGU Campus of Govt. General Degree College (G.G.D.C), Singur jointly by Rani Rashmoni Green University and G.G.D.C, Singur. Registrar of the University felicitated all the distinguished speakers with citation and swal. The Vice-Chancellor of the University inaugurated the programme with his valuable words. Dr. Swati Guha, Institute of Language Studies and Research Kolkata delivered the motivational speech on her experience of ongoing service life to motivate our students. Ms. Mandira Saha and Ms. Mou Hira, S.I, Hooghly rural police were also invited to share their experiences and motivate especially the girl's students. All of them talked about women empowerment and advise the girl's students to learn self-defence.



Rabindra Jayanti

Rabindra Jayanti was observed on May 13, 2025 at RRGU Campus of Tarakeswar Degree College, Tarakeswar. The programme was organised by Rani Rashmoni Green University in collaboration with T.D.C, Tarakeswar. Theme of the programme was “প্রথম দিনের রবি”. Registrar, RRGU felicitated the esteemed speaker Shri Nirmalya Mukhopadhyay (renowned writer) with citation and shawl. Hon’ble Vice-Chancellor inaugurated the programme with his valuable words. Sri Mukhopadhyay delivered the lecture on –“সঙ্গ-নিঃসঙ্গ রবি” and he glorified all, who were present on that program. Also, he found commonality with all from his research experiences about the whole life of Tagore. Mr. Mukhopadhyay shared that how Rabindranath Tagore experienced his tragic personal life. Also, he told the story about the poem “শেষের কবিতা” when it was written by Rabindranath Tagore at Shillong during the last year of his life.



Raja Rammohan Ray: Janma Jayanti

Raja Rammohan Ray Janma Jayanti was organized on May 22, 2025 at RRGU Campus of Tarakeswar Degree College, Tarakeswar. The programme was jointly organised by RRGU and T.D.C, Tarakeswar. Theme of the programme was “Rammohan Fire Dekha”. Registrar of the University felicitated to individual distinguished speakers with citation and shawl. The hon’ble Vice-Chancellor of the University inaugurated the programme with his valuable words. Prof. Shibaji Pratim Basu, Former Vice-Chancellor, Vidyasagar University delivered the lecture on “ভারত পথিক রাজারামমোহন রায়”. In his lecture session, he shared how Rammohan Ray grew up from village Radhanagr, Khanakul, Hooghly, protested against the “সতীদাহ প্রথা” and translated the various Upanishads in other languages (like French, Arabic, Greek etc) into Bengali. Also, Prof. Subodh Sarkar, an eminent poet and renowned writer delivered the lecture on the topic of –“আমার রামমোহন”. He shared the information about Raja Rammohan Ray about his learning English to better interact with the British India company, also his knowledge extends to French, Latin, Greek furthering boarding his understanding of Western Philosophies and cultures also. Also Prof. Sarkar explained the letter written by Raja Rammohan Ray to Lord Amherst. Prof. Barid Baran Ghosh, Former Professor, Bengali delivered the lecture titled – “রামমোহন ও তার সময়”. In his lecture session, he shared how Rammohan Ray became the Raja Rammohan Ray, being the first Indian to travel to Europe. All the eminent speakers shared their individual perspectives on the life of Raja Rammohan Ray from their research experiences. Debashis Mukhopadhyay, Head Teacher of



Majpur Primary Schools and a social awareness campaigner, was felicitated on that day.

Seminar on Workplace Environment and Ergonomics

The Department of Environmental Science, Rani Rashmoni Green University, organized a Special Lecture on June 5, 2025 in observance of World Environment Day. The session featured Dr. Debdut Ghosh Thakur, Advisor, School of Media Science and Entertainment, MAKAUT, an expert in occupational health and ergonomics, who delivered a thought-provoking lecture on “Workplace Environment and Ergonomics. Dr. Thakur emphasised the growing importance of ergonomics in ensuring a safe, healthy, and productive workplace environment.



His lecture covered critical aspects such as indoor air quality, lighting, ventilation, and noise, along with ergonomically designed furniture and workstations that help minimize occupational hazards. He also highlighted the physiological and psychological impacts of poor workplace conditions, particularly in the context of rapid industrialization and the increasing prevalence of sedentary jobs. The speaker provided practical insights into ergonomic practices that can be incorporated into both industrial and office settings, thereby enhancing employee well-being and overall efficiency. He further discussed the need for policy-level interventions and organizational responsibility in maintaining sustainable and worker-friendly environments. The event was well-attended by postgraduate students and faculty members of the department. An interactive discussion followed the lecture, where participants raised questions about workplace health, stress management, and environmental ergonomics in diverse occupational sectors. The lecture successfully broadened the participants’ understanding of the intersection between environment, health, and occupational safety, aligning with the department’s objective of addressing contemporary environmental issues in a multidisciplinary manner. The session concluded with a formal vote of thanks to the esteemed speaker.

World Environment Day

On the occasion of ‘World Environment Day’, RRGU organized a one- day symposium on “Global Environmental Challenges and Perspectives” on June 12, 2025. The event served as a vibrant platform for academic exchange, bringing together scholars, researchers, faculty members and students across West Bengal to deliberate on emerging environmental concerns and policy responses at global and regional levels. Registrar of the University felicitated to all the distinguished speakers with citation and shawl. The symposium was inaugurated by Prof. Amiya Kumar Panda, hon’ble Vice-Chancellor, RRGU, who emphasized the urgent need for interdisciplinary collaboration and robust environmental governance in addressing escalating ecological crises. The academic sessions



were enriched by keynote lectures from three eminent experts: Dr. Kalyan Rudra (Chairman, West Bengal Pollution Control Board), Prof. Ranjan Chakrabarty (Former Vice-Chancellor, Vidyasagar University), and Prof. Subhas Chandra Santra (Retired Professor, Kalyani University). Their talks addressed critical themes such as climate change, pollution mitigation, and ecological governance, offering valuable insights for both policymakers and researchers.

To encourage young scholars, a poster presentation session was organized, featuring 23 posters covering diverse themes in environmental science and sustainability. Participants include 17 postgraduate students from RRGU, 3 external research scholars, and 3 faculty members from the Department of Environmental Science. The symposium recorded an active participation of over 120 delegates from universities, colleges, and research organizations, fostering a dynamic environment of scholarly dialogue and collaboration.

The 24th IPS Scientific Lecture series

Indian Photobiology Society, Kolkata organized a webinar in collaboration with RRGU and Tilka Manjhi Bhagalpur University on 28th June, 2025 in online mode. Frontiers of phytobiology were discussed to take necessary policy measures.



Distinguished academicians associated with the University

Professors of Eminence & Excellence



Prof. Deb Narayan Bandyopadhyay
Chief Executive Director (Academics)
Swami Vivekananda University



Prof. Mita Banerjee
Chief Academic Advisor (Education)
Swami Vivekananda University



Prof. Sibajipratim Basu
Former Vice-Chancellor
Vidyasagar University



Prof. Santanu Bhattacharya
Director, IISER, Tirupati



Prof. Manoj Kumar Chakrabarti
NICED, Kolkata



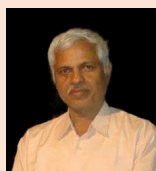
Prof. Ranjan Chakrabarti
Former Vice-Chancellor
Vidyasagar University



Sri Utpal Chatterjee
Former Seriff,Kolkata and BBC
Reporter



Prof. Manjusha Tarafder
Former Professor
Calcutta University



Prof. Bijay Kumar Mishra
The Former Professor
Sambalpur University, Odissa



Prof. Siddhartha Sankar
Mukhopadhyay
Former professor
Punjab Agricultural University
Ludhiana, Punjab

Prof. Mahua Das
The Former Vice-Chancellor
West Bengal State University



Prof. Asit Baran Mandal
Former Director
Central Leather Research Institute,
Chennai



Prof. Devkumar Mukherjee
The Former Vice-Chancellor
CoochbeharPanchananBarma
University, W.B



Prof.Swapan Kumar Saha
Former Professor and Emeritus
Fellow (UGC)
Department of Chemistry, University
of North Bengal

Prof. Dipak Kumar Kar
Hon'ble Vice-Chancellor
Vidyasagar University



Prof. Nimai Chandra Saha
Former Vice-Chancellor
University of Burdwan



Prof. Anuradha Mukhopadhyay
Former Vice-Chancellor
Diamond Harbour Women University



Prof. Debi Prasad Sarkar
Former Director, IISER
Mohali

Adjunct Professors



Prof. Nandadulal Bairagi
Professor of Mathematics
Jadavpur University



Prof. Chidananda Bhattacharya
Former Professor of English
Rabindra Bharati University



Prof. Swapan Kumar Bhattacharya
Former Professor of Chemistry
Jadavpur University



Dr. Arindam Biswas
Department of Computer Science
Kazi Nazrul University



Prof. (Dr.) Kaushik Bose
Department of Anthropology
Vidyasagar University



Prof. Utpal Biswas
Dept. of Computer Science
Kalyani University



Prof.Subenoy Chakraborty
Former Professor of Mathematics
Jadavpur University



Prof.(Dr.) Soumendranath Chatterjee
Department of Zoology
University of Burdwan



Prof. Amitabha Das
Department Bengali
University of Burdwan



Prof. (Dr.) Utpal Kumar De
North-Eastern Hill University,
Meghalaya



Dr. Debdut Ghosh Thakur
Advisor, School of Media Science and
Entertainment, MAKAUT



Prof. Rina Ghosh
Former Professor of Chemistry
Jadavpur University



Prof. Apurba Ratan Ghosh
Former Professor
Dept. of Environmental Science
University of Burdwan



Prof. Abhijit Chakrabarti
Professor
Ramakrishna Mission Vivekananda
Educational & Research Institute



Prof. (Dr.) Swati Guha
Director, Institute of Language studies
and Research



Prof. Narayan Chandra Jana
Department of Geography
University Burdwan



Prof. Sunil Karforma
Department of Computer Science
University Burdwan



Prof. Susanta Laheri
Former Professor of Chemistry
Saha Institute of Nuclear Physics



Prof. Tanmoya Patahak
Former Professor of Chemistry
IIT Kharagpur



Prof. Jaydeep Sarangi
Principal
New Alipore College, Kolkata



Prof. Ranjit Kumar Samanta
Former Professor of Computer
Science
North Bengal University



Prof. Satyajit Saha
Professor, Department of Physics
Vidyasagar University



Prof. Siddhartha Shankar Saha
Professor, Department of M.B.A
Calcutta University



Dr. Subodh Chandra Sarkar
Professor, Department of English
City College, Kolkata
Renowned Writer

Achievements of Students

	YEAR	Number	INSPIRE Fellowship	SUBJECT	OTHER SPECIAL ACHIEVEMENTS
NET/GATE	2022	02		Chemistry	One student is pursuing Ph.D. at NTU-Singapore
NET/GATE	2022	02		Chemistry	Several students are pursuing Ph.D. at IACS Kolkata, IIT Kanpur, VisvaBharati University., SRM University, AP etc
NET/GATE	2023	02		Chemistry	RRGU achieved a proud milestone in 2021 when it seemed in the nature Index ranking.
NET/GATE	2024	04	01	Chemistry	Over the past three years, several students have emerged as TOPPERS in various course.
NET/GATE/SET	2024	02		Environmental Science, Nutrition & Public Health	---
NET/GATE	2025	03		Nutrition And Public Health, Bengali, English	---

Special Achievements

Dr. Amrit Kr. Mitra, Controller of Examinations (Oftg.) RRGU, conducted a 'Students' Training Workshop' for Vidyasagar Science Olympiad' under the aegis of Jagadish Chandra Bose National Science Talent Search (JBNSTS), Government of West Bengal as a 'Resource Person' of Chemistry on 29th January, 2025.

Dr. Mitra is having at his credit nine articles in internationally reputed Scopus- and Web of Science-indexed journals and publishing houses. He also serves as a

Reviewer and Editorial Board Member for several prominent international research journals. Actively engaged in chemistry education, he was re-elected to the Executive Council of the Association of Chemistry Teachers (ACT) [Mailing Address: Homi Bhabha Centre for Science Education (HBCSE), TIFR, Mumbai] in January 2025.

Dr. Mitra was appointed by the National Coordinator, Science Olympiads, Government of India, as a Scientific Observer and Jury Member for the Indian delegation at the International Chemistry Olympiad (ICHO) in Dubai, United Arab Emirates. He also contributed as a resource person for the Vigyan Pratibha Teachers' Training Workshops at NISER-Bhubaneswar and IISER-Kolkata, initiatives under the aegis of the Department of Atomic Energy, Government of India. (May,2025)

Dr. Mitra is a Group A officer in the West Bengal Education Service. He currently serves as an Assistant Professor and is the former Founder Head of the Department of Chemistry at Government General Degree College, Singur, affiliated with The University of Burdwan. From January to June 2025, he held the additional charge of Controller of Examinations at Rani Rashmoni Green University, appointed by the Higher Education Department, Government of West Bengal.

PUBLICATIONS

1. Mitra, A. K., & Das, S. (2025). A Journey Through Advances in 6-Acyl-2-(Dimethylamino) Naphthalene (DAN) Fluorescent Probes: Synthesis, Photo physical Insights, and Beyond. *Journal of Molecular Structure*, 142817. <https://doi.org/10.1016/j.molstruc.2025.142817>
2. Maity, P., & Mitra, A. K. (2025). Ionic Liquid-Assisted Approaches in the Synthesis of Nitrogen-Containing Heterocycles: A Focus on 3-to 6-Membered Rings. *Journal of Ionic Liquids*, 100146. <https://doi.org/10.1016/j.jil.2025.100146>
3. Malik, S., & Mitra, A. K. (2025). Conduritols: Synthesis strategies from classic to contemporary. *Tetrahedron*, 134605. <https://doi.org/10.1016/j.tet.2025.134605>
4. Mitra, A. K., & Saha, R. (2025). Functionalized Nanomaterials: Properties to Perspective Applications in Environmental Remediation. In *Nanomaterials in Environmental Remediation* (pp. 127-152). CRC Press. [eBook ISBN9781003484189] <https://doi.org/10.1201/9781003484189>
5. Mitra, A. K., & Nayak, S (2025) Sustainable Nanomaterials in Waste Water Remediation in *Nanomaterials in Wastewater Research Progress and Challenges*. Springer [ISBN: 978-981-96-3910-6] Publication Date: July, 2025 [Link: <https://link.springer.com/book/9789819639076>]
6. 5. Mitra, A. K., Dey, S (2025) Nano sensors to Monitor Wastewater Pollutants in *Nanomaterials in Wastewater Research Progress and Challenges*. Springer [ISBN: 978-981-96-3910-6] Publication Date: July, 2025 Link: <https://link.springer.com/book/9789819639076>
7. Adhikari, S., & Mitra, A. K. (2023). Perspective on acridine: A versatile heterocyclic biologically imperative framework. *Journal of the Iranian Chemical Society*, 20(10), 2399-2455. <https://doi.org/10.1007/s13738-023-02840-8>
8. Sadhu, C., & Mitra, A. K. (2024). Synthetic, biological and optoelectronic properties of phenoxazine and its derivatives: a state of the art review. *Molecular Diversity*, 28(2), 965-1007. <https://doi.org/10.1007/s11030-023-10619-5>

9. Koley, P., Ghosh, B., Bhattacharyya, J., & Hazari, A. (2024). Phenoxazinone synthase-like activity: Schiff base bound model complexes. *Molecular Catalysis*, 569, 114523. <https://doi.org/10.1016/j.mcat.2024.114523>
10. Hazari, A., & Dutta, A. (2022). Catecholase like activity on heterometallic model complexes of Ni (II)-Mn (II) and Cu (II)-Mn (II) with N2O2 donor di-Schiff base ligands: A short review. *Polyhedron*, 228, 116153. <https://doi.org/10.1016/j.poly.2022.116153>
11. Middya, P., Ghosh, S., & Chattopadhyay, S. (2022). Synthesis and characterization of cobalt and iron complexes with di-azine ligands based on salicylaldehyde or its derivatives: A review. *Polyhedron*, 225, 116036. <https://doi.org/10.1016/j.poly.2022.116036>
12. Roy, S., & Chattopadhyay, S. (2023). Recent advances in the synthesis, characterization and application of lead (II) complexes with hydrazine based bis-pyridine Schiff base ligands. *Inorganic Chemistry Communications*, 157, 111403. <https://doi.org/10.1016/j.inoche.2023.111403>
13. Bera, S., Majumdar, S., & Chattopadhyay, S. (2022). A comprehensive overview on the synthesis and characterization of nickel, copper and hetero-nuclear copper/lanthanoid and nickel/lanthanoid complexes with salicylaldehyde-based azine ligands. *Polyhedron*, 225, 116068. <https://doi.org/10.1016/j.poly.2022.116068>
14. Middya, P., Mondal, S. G., Bhowmik, P., Bera, S., & Chattopadhyay, S. (2023). An overview on the synthesis, structure and application of mercury complexes with hydrazine based bis-pyridine Schiff base ligands. *Inorganica Chimica Acta*, 558, 121754. <https://doi.org/10.1016/j.ica.2023.121754>
15. "Sulfides, Polyphenolics, and Phytoestrogens as Nutraceuticals." S. Majumder, P. Jana, S. R. Pradhan, S. Tripathi, M. Manna, P. Pradhan, A. K. Panda, C. Ghosh, In: Mukherjee, B. (eds) *Dietary Supplements and Nutraceuticals*. Springer, Singapore. https://doi.org/10.1007/978-981-97-9936-7_6-1
16. "Dynamic properties of mixed layers of a lipid with a protein or its fibrils" A. G. Bykov, E. A. Tsyganov, D.V. Tulin, A.V. Akentiev, O. Yu. Milyaeva, G. Loglio, R. Miller, A. K. Panda, Z. Wan, B.A. Noskov, *Langmuir* 41, 18126–18133, <https://doi.org/10.1021/acs.langmuir.5c02103>
17. "Structural and Functional Analysis of the Accessory Gene Regulators of *Staphylococcus aureus* and *Staphylococcus epidermidis*: An *in silico* Approach" S. Dey, T. Manna, K. C. Guchhait, M. Karmakar, D. Jana, P. Raul, S. Ballav, M. Manna, S. Hazra, A. K. Panda, C. Ghosh, *BMC Microbiol.* 25:538, <https://doi.org/10.1186/s12866-025-04257-0>
18. "Interfacial and Aggregation Behavior of Hexadecyltrimethylammonium Bromide in Dioxane-Water Mixed Solvent Systems with Special Reference to Their Antibacterial Activity Studies" M. Mitra, S. Panja, S. Mandal, B. Roy, D. Jana, B. Dutta, S. Kumar, S. Mondal, A. Patra, P. A. Hassan, V. K. Aswal, M. Hossain, C. Ghosh, A. K. Panda, *J. Mol. Liq.* 436, 128269, <https://doi.org/10.1016/j.molliq.2025.128269>
19. "Methanolic Extract of *Acorus Calamus* Rhizome Loaded Nanostructured Lipid Carriers: Characterization and *In vivo* Anti-Allergic Activity Studies", S. Panja, S. Mandal, S. Mondal, D. Jana, M. Mitra, B. Roy, T. Biswas, T. Mondal, C.-H. Chang, A. Patra, C. Ghosh, A. K. Panda, *Colloids Surf. A*: 725, 137580, <https://doi.org/10.1016/j.colsurfa.2025.137580>
20. "Thermodynamic Analysis on Ionic Liquid Induced Aggregation Behavior of Bile Salts: An Isothermal Titration Calorimetric Approach" H. Sultana, M. Mitra, S. Panja, M. Hossain, A. K. Panda, *J. Surfactants Deterg.*, <https://doi.org/10.1002/jsde.12875>
21. "Modern Bioactive Delivery System for Higher Bioavailability." K. C. Guchhait, S. R. Pradhan, P. Jana, S. Ballav, M. Mitra, D. Jana, S. Mukhopadhyay, A. K. Panda, C. Ghosh. In: D. Lahiri, M. Nag, D. Bhattacharya, S. Pati, T. Sarkar, (eds) *Bioactive Ingredients for Healthcare Industry Volume 1*. Springer, Singapore. https://doi.org/10.1007/978-981-96-3663-1_6

22. "Efflux Pumps and Their Role in the Development of Multi-drug Resistant Bacterial Biofilm" S. Ballav, D. Jana, K. C. Guchhait, B. Das, M. Manna, S. Hazra, J.-i. Kadokawa, A. K. Panda, C. Ghosh in D. Lahiri, M. Nag, R. Rani Ray & S. Ghosh, (Eds.). (2023). Biofilm Associated Antimicrobial Resistance and Its Recovery (1st ed.). CRC Press. <https://doi.org/10.1201/9781003281238>
23. "Effect of biogenic gold nanoparticles on gut microbiota composition during larval-to-pupal 1 transition in *Bombyxmori* L." T. Biswas, R. Bhattacharya, R. Mondal, H. Kurt, M. M. Islam, S. Shaw, P. Mandal, P. Dam, D. Gangopadhyay, A. Husen, A. K. Panda, A. Sadat, Y. N. Ertas, A. K. Mandal, ACS Omega, 10, 29317–29330, <https://doi.org/10.1021/acsomega.5c02279>
24. "Bioactive Alkaloids in *Azadirachta indica* Seed and Their Biological Activities." K. C. Guchhait, S. Dey, A. Das, T. Manna, D. Jana, M. Karmakar, S. Majumder, A. K. Panda, C. Ghosh In: Ramawat, K.G., Mérillon, JM. (eds) Natural Products. Springer, Berlin, Heidelberg. https://doi.org/10.1007/978-3-642-36202-6_278-1
25. "Investigations on genomic, topological and structural properties of diguanylatecyclases involved in *Vibrio cholerae* biofilm signalling using *in silico* techniques: Promising drug targets in combating cholera" T. Manna, S. Dey, M. Karmakar, A. K. Panda, C. Ghosh, Current Res. Struct. Biol. 9, 100166, <https://doi.org/10.1016/j.crstbi.2025.100166>
26. Soil texture and lithological discontinuity mapping for sustainable land use planning: An application of digital soil mapping in a part of Eastern Himalayn Foothills, India (2025). S. Chattaraj, A.Daripa, S.K.Reja, B.N. Ghosh, S.Majhi, D.Mallick, S.Paul, S.Dey F.H.Rahman. Catena. <https://doi.org/10.1016/j.catena.2025.1092563>
27. Quantitative Pedogenesis to Assess Soil Maturity vis-a vis Impact on Soil Quality in Easternghat of Odisha. Siladitya Bandyopadhyay, P.De DalA, b.Das, S, Roy, Bhowmik (2025), A, S. Talukdar, S.K.Reza, B.n.ghosh, S.gupta Choudhury, S.Chattaraj, A.K.mitra, A.Haldar and F.H.Rahman. Journal of the Indian Scoiety of Soil Science, vol 73, No.2, pp129-`147.DOI: 10.5958/0974-022.2025.000139

Administrative Reform Initiatives

RRGU continues its journey of academic and administrative strengthening through a series of proactive reform measures aimed at expanding academic horizons, improving governance, and enhancing institutional efficiency.

A comprehensive proposal has been submitted to the Department of Higher Education (HED), Government of West Bengal, seeking approval for the introduction of eight new Post Graduate programmes, including a Post Graduate Diploma. The proposed courses are: Journalism and Mass Communication, Anthropology, Fishery Science, Mathematics, Library and Information Science, Master of Business Administration (MBA), Medical Labatory Science and Technology, and one year post graduate diploma in Agriculture Marketing and Management.

In infrastructural advancement, administrative initiatives have been undertaken for the re-tendering of the upcoming permanent campus at Tarakeswar, ensuring transparency and timely implementation. Besides, Interim Campus Area have been identified at Baijnath Shaw College and Purusottampur Upper Primary

School and have also been acquired through the District Magistrate, Hooghly. Environmental commitment remains central to RRGU's ethos, as reflected in the 'Van Mahotsav' plantation drive organized across the new and developing campuses in collaboration with local stakeholders. In addition, The RRGU Campus Greenery Project' at New RRGU Campus has been successfully initiated in collaboration and financial assistance by West Bengal Pollution Control Board. The project is being executed in phased manner.

To expand academic outreach, the University has initiated the MoU process with Rabindra Mahavidyalaya, Champadanga, Hooghly, proposing it as the third campus for Postgraduate studies. Parallely, a formal MoU with Webel Technology Limited (WTL), a Government of West Bengal agency, is under process for efficient maintenance of the University's digital portal integrated with University Management System (UMS) and printing solutions in phased manner.

A significant administrative milestone was achieved with the approval of His Excellency, the Hon'ble Governor and Chancellor, for issuing degree certificates to the pass-out students of 2019–2023. In line with institutional strengthening, steps have been taken for the filling up of key vacant administrative positions, including those of the Deputy Registrar, Development Officer, Controller of Examinations, Assistant Registrar through Re-employment Scheme and other supporting staff through WTL.

The University has also moved towards finalizing the forthcoming Finance Committee meeting and the publication of its Annual Report, marking an important step toward transparency and good governance. The semester courses continue to operate seamlessly in accordance with the academic calendar year, ensuring smooth academic delivery and evaluation.

Through these initiatives, RRGU reaffirms its commitment to dynamic growth, sustainable development, and quality higher education in the state of West Bengal.

Outreach activities: Dum Dum Motijheel College-A ICSSR sponsored, FDA

Faculty Development Program

Internal Quality Assurance Cell (IQAC) of Dum Dum Motijheel College organized the FDP in association with Indian Academic Researchers Association (IARA), Sponsored by Indian Council of Social Science Research (ICSSR) during January 10-25, 2025. Hon'ble Vice-Chancellor was invited as the Chief Guest for Faculty development Programme (FDP) at Dum Dum Motijheel College on 10th January, 2025. -*In the Chief Guest address, he emphasized the importance updated UGC curriculum and development of modern tools efficient faculty as well as need of the job oriented education system for human resource development.



Field trip of the students of ENVS

Exposure visit of field trips for the students of Environmental Science was conducted and were a part and parcel of academic curriculum particularly where students can get the opportunities to learn on landscape geology, land forms, biodiversity, natural resource management system and hydrology/watershed as practical.



Environmental studies Field trip, Sikkim, January, 2025

Produced & Published
by
The Registrar
Rani Rashmoni Green University
Tarakeswar, Hooghly, West Bengal