

**Government General Degree College,
Mangalkote**

In Collaboration with

**Government General Degree College,
Kalna-I**

Report

On

**Green Techniques for the Synthesis
of Bio-active
Organochalcogenides**


Organised by

**Department of Chemistry, Government General
Degree College, Kalna-I**

Date; 10.04.2023

Time : 12 noon to 1.30 pm.

Venue: Seminar Hall


Dr. Pradipta Kumar Basu
OFFICER IN CHARGE, W.B.E.S.
Government General Degree College, Mangalkote
Dt. Purba Bardhaman, West Bengal- 713132



Objective of the Seminar:

The Seminar aimed to enhance the utility of modern green techniques in the synthetic organic chemistry among the students by exploring the principles of green chemistry. The objective of this lecture was to provide a deep insight about the problems of using hazardous materials, waste management in the synthetic chemistry and the modern ways to deal with these problems for developing a sustainable environment.

Speaker:

Dr. Debasish Kundu, Assistant Professor (W. B. E. S.), Government General Degree College, Mangalkote

Proceedings of the Seminar:

The Seminar on “**Green Techniques for the Synthesis of Bio-active Organochalcogenides**” was organized by GGDC Kalna-I featuring Dr. Debasish Kundu from Department of Chemistry, GGDC Mangalkote. The programme commenced with an brief introduction of the importance of greener techniques in the synthetic organic chemistry.

Dr. D. Kundu first introduced the importance and utilities of different chemical industries in our daily needs. Then he showed some of the disasters in all around the globe that happened from chemical industries including Bhopal incident. With this he explained the importance of the concept of Green Chemistry in modern science. He then introduced 12 principles of Green Chemistry.

Dr. Kundu then showed some of the biologically active selenides which are used as potential medicines against different diseases. He then explained the reported protocols for their synthesis and also introduced their drawbacks in terms of environmental concern. The seminar then proceeded with the introduction of newly developed Ball Milling technique for the synthesis of such selenides where reactions were performed in absence of organic solvents under room temperature with in a very short range of time. The greener utility of modern ball milling technique over old conventional method was point wise explained by the speaker.

The final segment of the seminar was dedicated to the introduction of photocatalysis under visible light irradiation technique. Dr. Kundu started with plants who performed photosynthesis under sunlight without requiring any heating or hazardous condition. Dr. Kundu has introduced his development of photocatalyzed synthesis of organochalcogenides under the blue LED irradiation in room temperature. He explained the scenario of energy saving is photocatalysis from the conventional heating technique.

Throughout the seminar, Dr. Kundu encouraged interactive discussions and allowed students to ask questions to clarify their doubts. Students enjoyed the pictures and videos of the ball milling operations and visible light reaction technique in the slides.

Participant Details:

No of students registered for the seminar: 30

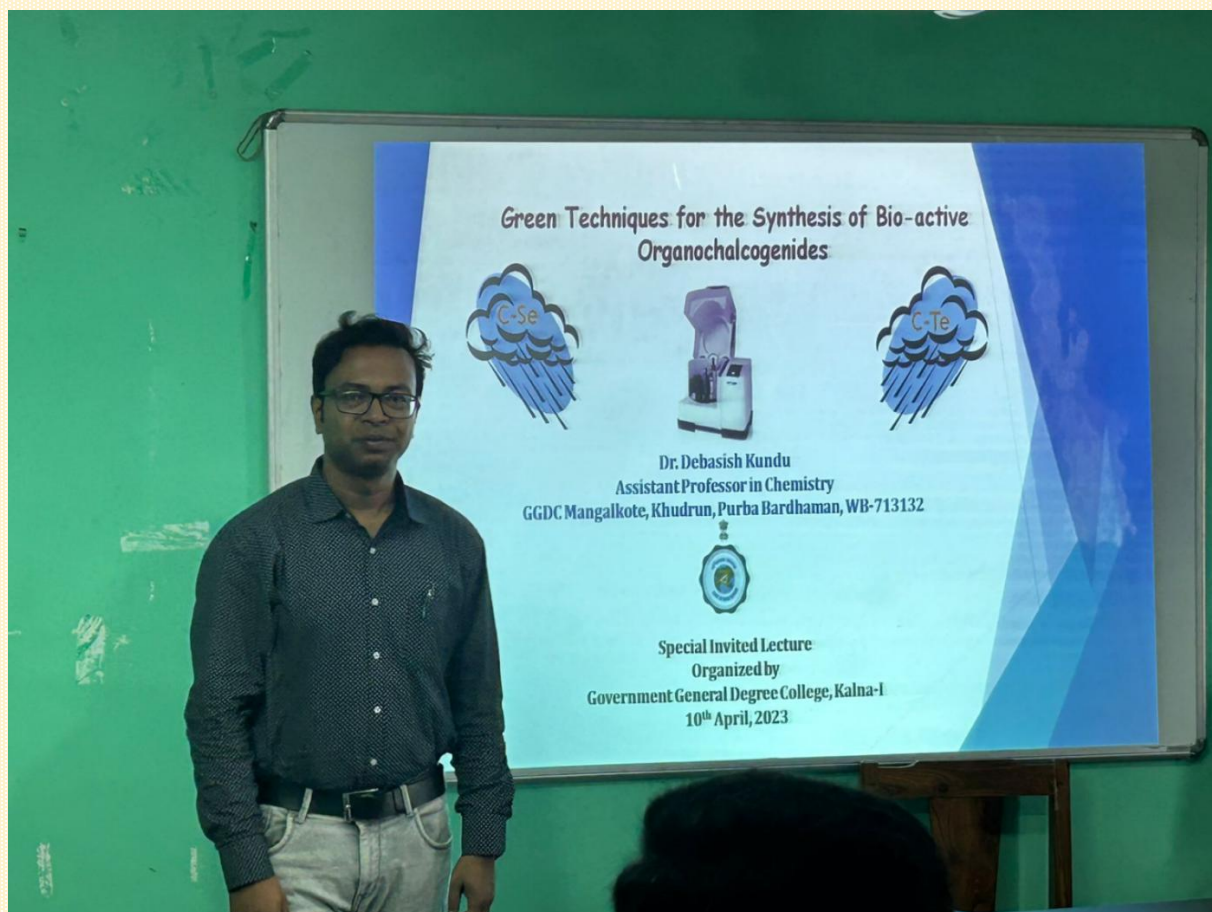
No. of students attended the seminar: 30

Outcome:

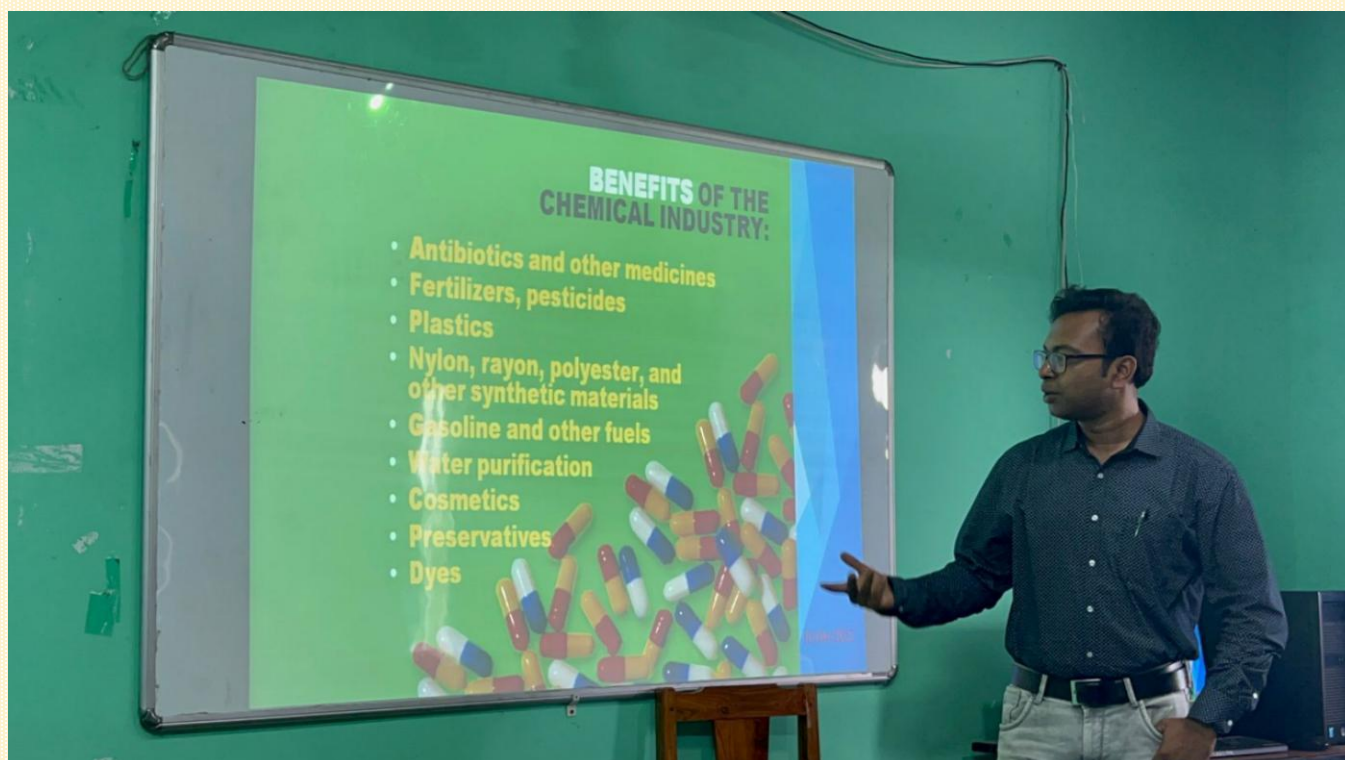
The seminar was highly successful in achieving its objectives. The students get a basic understanding of green chemistry concepts and also the applications of solvent free ball milling technique and visible light photocatalyzed protocol for the sustainable development of synthetic organic chemistry. They also understood the importance of energy saving protocols in modern era where energy is the biggest crisis in-front-of the whole earth. The comprehensive approach adapted by Dr. D. Kundu enriched the students' knowledge and inspired them to go for higher studies in the field of synthetic organic chemistry. The seminar significantly enhanced both theoretical and practical understanding of the students in the field of synthetic organic chemistry and green chemistry.

Glimpses of the Seminar:

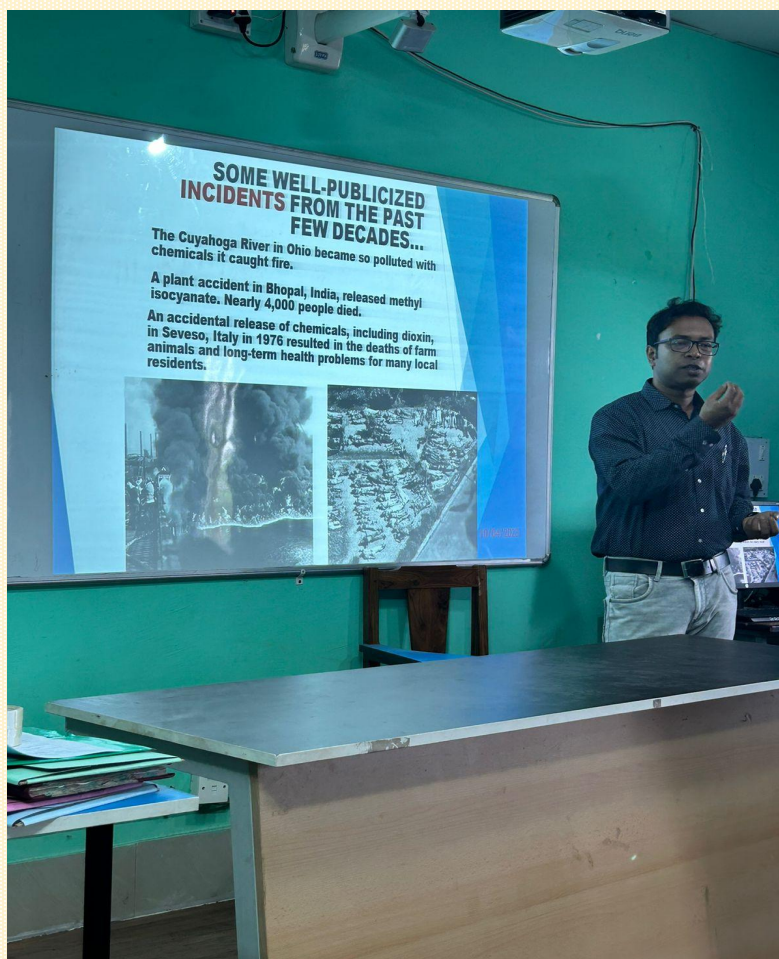




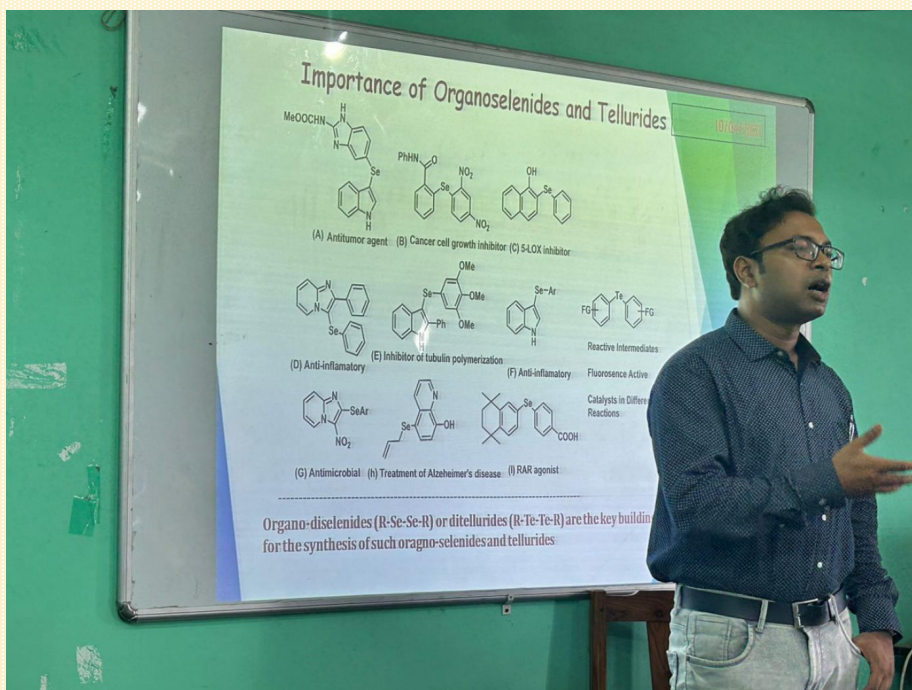
Dr. Kundu about to start of his lecture



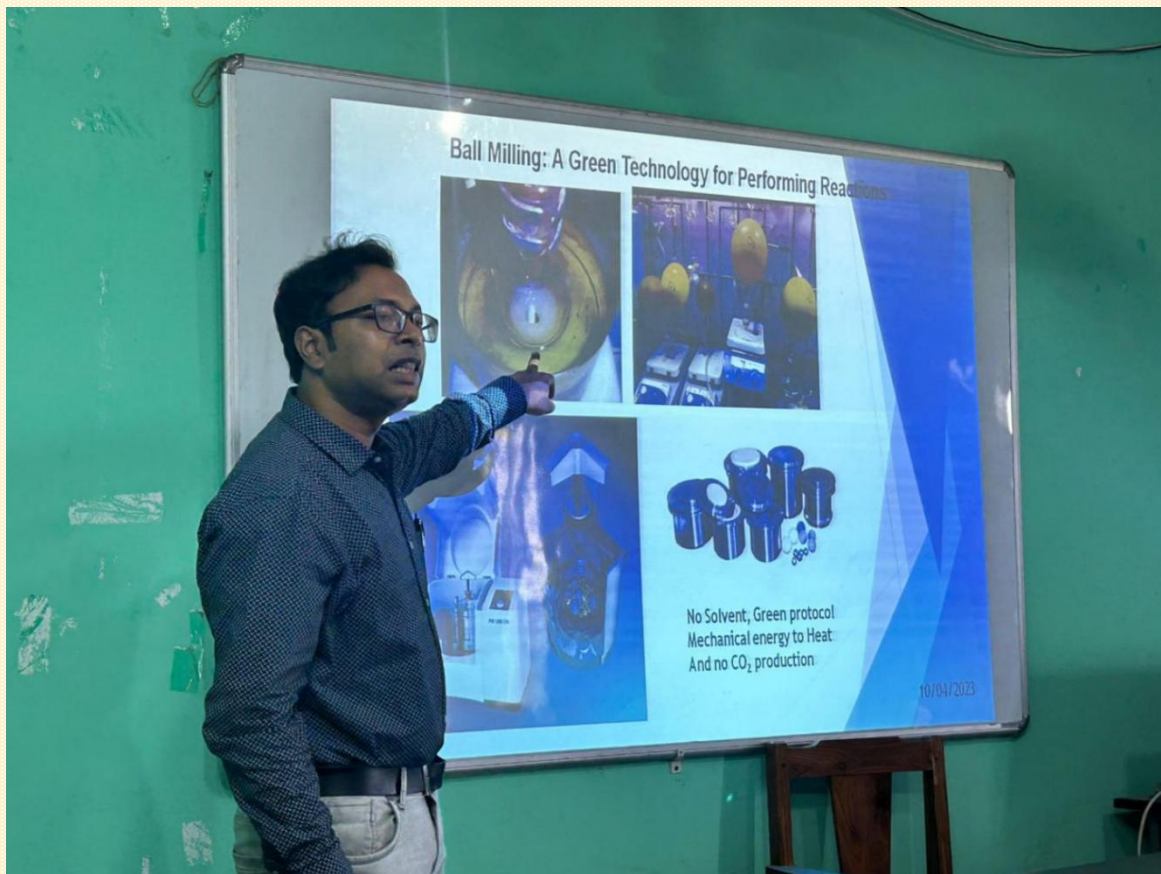
Dr. Kundu introducing importance of chemical industries



Speaker showing the disasters happened from the different industries



Speaker introducing important selenides



Speaker explaining difference between ball-milling and common heating protocol



Government General Degree College, Kalna-I

Muragacha, Medgachi, Purba Bardhaman-713405


DATE: 10/04/2023

SPECIAL LECTURE IN CHEMISTRY


Topic: Green Techniques for the Synthesis of Bio-active Organochalcogenides'

Speaker: Dr. Debasish Kundu, Asst. Professor of Chemistry (WBES)
Government General Degree College, Mangalkote

Sl. No.	Signature of the Student	Department	Semester
1	Reu Ghosh	Bengali	2
2	Purabi Samanta	Bengali	2
3	Moumida Pal	Sanskrit	2
4	Nabendu Ghosh	Education	2
5	MUSOFFER MONDAL	Education	2nd
6	Abdullah Munshi	Education	2nd
7	Hena Sk	Education	2nd
8	Mauka Mandi	Sanskrit	2nd
9	Moumida Pal	Sanskrit	2nd
10	Taniya Parvin	Education (H)	2nd
11	Koyel Mondal	Education (H)	2nd
12	Purabi Pal	Education (H)	2nd
13	Simita Harida	Education (H)	4th
14	Debelina Kar	Education (H)	4th
15	Bikash Bag	Education (H)	2nd
16	Afsana Khatun	English (H)	1st
17	Sabna Khatun	English (H)	1st
18	Debi Chak	English (H)	1st
19	Sweyang Ghosh	(B.A) General	2nd
20	Ramtanu Biswas	BA (Hons)	4th


Dr. Pradipta Kumar Basu
OFFICER IN CHARGE, W.B.E.S.
Government General Degree College, Mangalkote
Dr. Purba Bardhaman, West Bengal- 713132




Principal
Govt. General Degree College, Kalna-I
Principal
Government General Degree College
Kalna-I

Sl. No.	Signature of the Student	Department	Semester
21	Jesmin Khalun	Education	2nd
22	Laboni Biswas	Education	2nd
23	Kuyasha Ta	Education	2nd
24	Abhisikta Mukherjee	Chemistry	4 th
25	Amit Majder	Chemistry	4th
26	Dipanswita Biswas	Chem	4 th
27	Sayan Mandal	Physics	4th
28	Sougata Chatterjee	Math	4th
29	Rohit Mondal	Chemistry	2nd
30	Majumdar Mondal	Bio Chem	2nd
31			
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Date: 10/04/2023

Dr. Pradipta Kumar Basu
Principal

Govt. General Degree College, Kalna-I

Principal
Government General Degree College
Kalna-I

Dr. Pradipta Kumar Basu

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Office of the Principal

No. :

Date : 10/03/2022

MEMORANDUM OF UNDERSTANDING
BY AND BETWEEN

GOVERNMENT GENERAL DEGREE COLLEGE, KALNA-I
PURBA BARDHAMAN – 713405

AND

GOVERNMENT GENERAL DEGREE COLLEGE,
MANGALKOTE
PURBA BARDHAMAN -713132



Dr. Pradipta Kumar Basu
OFFICER IN CHARGE, W.B.E.S.
Government General Degree College, Mangalkota
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Office of the Principal

No. :

Date : 10/03/2022

The Memorandum of Understanding (hereinafter called the MOU) is entered into on this the 10th Day of March 2022 (Two Thousand Twenty Two)

By and Between

GOVERNMENT GENERAL DEGREE COLLEGE, KALNA-I, The First Party represented herein by its Principal as Representative and Competent Authority (Hereinafter referred as "First Party", the institution which expression, unless excluded by or repugnant to the subject or context shall include its successors – in office, administrators and assigns)

GOVERNMENT GENERAL DEGREE COLLEGE, MANGALKOTE The Second party and represented herein by the Officer-in-Charge/Principal as Representative and Competent Authority (Hereinafter represented as "Second Party", the institution which expression, unless excluded by or repugnant to the subject or context shall include its successors – in office, administrators and assigns)

(First Party and Second Party are hereinafter jointly referred to as 'Parties' and individually as 'Party')

WHEREAS

A) FIRST PARTY is a Government Higher Educational Institution named:

i) Government General Degree college, Kalna-I, Purba Bardhaman-713405

B) First Party and Second Party believe that collaboration and cooperation between themselves will promote more effective use of each of their resources, and provide each of them with enhanced opportunities.

C) The parties intent to cooperate and focus their efforts in cooperation within the area of Higher Education, Research and Development, provide opportunity for global experience, and to facilitate advancement of knowledge on the basis of reciprocity, best effort, mutual benefit, and frequent interactions.

D) Both Parties being legal entities in themselves desire to sign this MOU for advancing their mutual interests.

E) Government General Degree College, Mangalkote, Block Mangalkote, Katwa, Purba Bardhaman 713132, the Second Party is a Government Higher educational Institute of West Bengal under the aegis of the Department of Higher Education, Government of West Bengal and is engaged in imparting higher education by running under graduate Honours programmes in various Biological Sciences and Arts streams along General programme in Arts at present with rights, possibility and extension thereafter.

F) The Second Party presently functions from its own campus at Panchanantala, Khudrun Dighi, P.O. Majhigram, Block Mangalkote, Sub Division Katwa, Purba Bardhaman, West Bengal, PIN -713132 and will continue to do so until further order from the Department of Higher Education, Government of West Bengal. It has no other branch, wing, subsidiaries or extensions existing at present.



Dr. Pradipta Kumar Basu
OFFICER IN CHARGE, W.B.E.S.
Government General Degree College, Mangalkote
Dr. Purba Bardhaman, West Bengal- 713132



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No. :

Date : 10/03/2022

NOW THEREFORE, IN CONSIDERATION OF THE MUTUAL PROMISE SET FORTH IN THIS MOU, THE PARTIES HERE TO AGREE AS FOLLOWS:

Clause-I
CO-OPERATION

1.1 Both the Parties are united by common interest and objectives, and they shall establish channels of communication and co-operation that will promote and advance -

- Joint research projects and publications, including work by undergraduate and post graduate students at the partner institutions;
- Faculty and student exchanges based on reciprocity;
- Reciprocal placement of students and co-ops, when possible;
- Team taught courses, including online courses;
- Visits by faculty, professional staff and students;
- Exchange of information on teaching, learning material and other literature relevant to their educational and research programmes;
- Joint organization of short-term continuing education programmes on topics of mutual interest and to invite each other's faculty to participate therein;
- Joint organization of seminars, conferences, or workshops on topics of mutual interest and to invite each other's faculty to participate therein; and
- Any other joint venture for academic enrichment of both the colleges on prior agreement of the Principals of both the Colleges;
within the Institution and its related wings.

1.2 Both the Parties shall keep each other informed of potential opportunities and shall share all information that may be relevant to secure additional opportunities for one another.

1.3 First Party and Second Party must respect each other's to intellectual property and the disputes if any, relating to any aspect of academic cooperation, Principals of both the College will jointly resolve the dispute in a spirit of independence, mutual respect, and shared responsibility.

1.5 Both the Parties mutually agreed not to include any financial transaction during the execution of this MOU.

1.6 Neither Party shall be held responsible for non-fulfillment of their respective obligation under this MOU due to circumstances beyond their control but not limited to pandemic, war, flood etc. If such condition continues beyond six months, the parties shall then mutually decide about the future course of action.



Dr. Pradipta Kumar Basu
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Government General Degree College, Muragacha
D. Purba Bardhaman, West Bengal- 713132



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Office of the Principal

No. :

Date : 10/03/2022

1.7 Nothing in this MOU shall be constructed to make either party a partner, an agent or legal representative of the other for any purpose. Now onwards both the party may mention the name and LOGO of the other in their documents as "COLLABORATOR" for purpose as may be required subject to communication by the user to the other party in writing beforehand.


1.8 This MOU unless terminated by mutual written agreement will continue for 5 years after the effective date specified in the opening paragraph and can be renewed through mutual interest. Either Party shall have the right to unilaterally terminate this MOU upon 90 days prior written notice to the other party.

Agreed:

For
Government General Degree College, Kalna-I
Purba Bardhaman-713405

For
Government General Degree College, Mangalkote
Mangalkote, West Bengal-713132



Principal
Government General Degree College
Kalna-I
Authorized Signatory
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E-mail: ggdc Mangalkote@gmail.com
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Witness - 1


Rakhi Bhattacharya
Assistant Professor
Govt. General Degree College, Kalna-I

Witness - 2


Pinaki Roy
Assistant Professor, (WBES)
Department of Sociology
Govt. Gen. Degree College
Panchantala, Khudrun Digh
Mangalkote Burdwa - 713143




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No. :

Date : 05.04.2023

To
Dr. Debasish Kundu
Assistant Professor in Chemistry (W. B. E. S)
Government General Degree College, Mangalkote

Sub: Invitation to deliver a special lecture in the Departmental Seminar organized by the Department of Chemistry, GGDC Kalna-I

Respected Sir,

Greetings from Government General degree college, Kalna-I


We are proud to announce that the Department of Chemistry is going to organize a special lecture to instill beyond the scholar activities of the students of this department. It would be our pleasure if you would kindly give your consent to deliver a lecture on the topic of your choice at college auditorium on 10th April, 2023 from 1:00 pm to 2:00 pm. The gathering comprised of students at the level of Undergraduate Programme.

We earnestly hope that you would accord your kind approval in this matter and spare some of your valuable time for the above mentioned programme. You are requested to intimate us the name of the topic of your valued lecture so as to enable the department to organize the programme in a befitting manner.


Principal

Government General degree college, Kalna-I

Principal
Government General Degree College
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Dr. Pradipta Kumar Basu
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No. :

Date :

TO WHOM IT MAY CONCERN

This is to certify that Dr. Debasish Kundu, Assistant Professor in Chemistry (W. B. E. S) Government General Degree College, Mangalkote took a special class on "Green Techniques for the Synthesis of Bio-active Organochalcogenides" at Government General Degree College, Kalna-I on 10/04/2023. The Faculty Exchange Program was conducted under the Memorandum of Understanding (MoU) between Government General Degree College Kalna-I and Government General Degree College, Mangalkote.

We sincerely appreciate his effort to share his valuable knowledge with our students and wish him success in life.

Dr. Pradipta
Principal

Government General Degree College Kalna-I

Principal
**Government General Degree College
Kalna-I**

