

BOLPUR COLLEGE, BOLPUR, BIRBHUM-731204, W.B

DEPARTMENT OF - CHEMISTRY

TEACHERS' PROFILE

Name: Dr./Mr./Ms. Dr. Ruhi Das

Date of Birth: 19th January, 1978

Nationality: Indian

Sex: Male/ Female/Others-Male

Marital Status: Married/ Unmarried- Married

Current Academic Position: Associate Prof./ Assistant Prof./ SACT/ Guest-
Assistant Prof.

Email: rdas1192@gmail.com

Experience: a. In this Institution: 9 years

b. Total teaching experience in college:9 years

1. Academic Qualifications: (Starting from 10th Std.)

Name of Examination passed	Name of Board/University/ Institution	Division/class	Year of passing	% of Marks obtained	Subjects taken
1) M.P. (Secondary)	W.B.B.S.E.	1 st	1994	71.44 %	Beng, Eng, Hist.,Geo, P.Sc, L.Sc, Maths, Add- Physics
2) H.S. (Higher Secondary)	W.B.C.H.S.E.	1 st	1996	62.3 %	Beng, Eng, Chem, Phys, Maths, Add- Biology
3) B.Sc. (Hons. in Chemistry)	Visva Bharati University	1 st	1999	60.7 %	Chemistry (Hons) Maths & Phys (Gen)
4) M.Sc.	Visva Bharati University	1 st	2001	63.2 %	Chemistry (Specialization in Inorganic Chemistry)
5) Ph. D	Visva Bharati University	-	2010	-	Chemistry (Chemical kinetics field)
6) GATE	IIS, Bangalore	-	2002	Qualified All India Rank : 1188	Chemical kinetics

7) NET	CSIR-UGC, NEW DELHI	-	2012 (June)	Qualified All India Rank : 0069	Chemical Kinetics
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2. Research Experience:

a. Doctoral:

Degree	Name of University/ Institution	Subject	Year of award	Title of Thesis
Ph.D	Visva Bharati University	Chemistry	2010	“Studies on kinetics and mechanistic aspects of redox activity of higher valent metal ions in aqueous micellar media

b. Post-Doctoral: NA

Exp.	Name of University/ Institution	Duration	Title of the Project
Post-Doc			

3. Participation in Refresher Course, Orientation, Workshop, Short term course:

Sl. No	Name of the Programme	Venue/Description	Duration
1.	Workshop for “Activity Based Science Teaching”	Dept. of Education, Vinay-Bhavana, Visva-Bharati University	August 28 th to August 30 th , 2014
2.	DST INSPIRE Internship Winter Camp	Lipika Auditorium, Visva-Bharati University	December 12 th To 16 th 2011
3.	DST INSPIRE Internship Winter Camp	Lipika Auditorium, Visva-Bharati University	December 10 th To 14 th 2012
4	Orientation Programme	Ramkrishna Mission Ashram	December 15 th To 21 st 2013

5	Sports Camp	Non residential Students Sports Coaching Camp in athletics, Sports & Youth service Dept., Govt. Of India	May 3 rd To 25 th , 1990
6	Sports event	School More, Kotasur, Block-II, Block sports Association ;Volley Ball	January 1 st , 1995
7	Awareness Camp/Teachers Training Programme	Santipur, Nadia, Kalyamni People's Awareness Centre.	1 st & 2 nd August, 2003
8	i) Blood Donation, Motivation ii) Awareness camp. iii)Special Village camp iv) Special camp in Poush Mela at Santiniketa etc.	Visva-Bharati Campus & Goyalpara.	2013-2014; 23-29 March, 2015 & 23-26Dec. 2014
9	Vishakha Act	One day workshop, Bolpur College	January 28 th , 2016
10	Add-On Course	Library Building, 2 nd floor. A lecture delivered by me on the topic- " Anti-green house Effect Causing Global Cooling: An-Effect of Suspended Particulate Material (SPM) in Atmosphere "	22 & 23 Dec, 2015
11	Workshop on Youth Parliament competition 2016	Assembly House, at Syad Nauser Ali House, Kolkata	22 nd Aug, 2016
12	Orientation Course	Academic Staff College, Ranchi University	15/032017 to 11/04/2017
13	Workshop on Youth Parliament competition 2017	Assembly House, at Syad Nauser Ali House, Kolkata	16 june, 2016
14	Workshop on Recent Trends in Interdisciplinary Science	Lipika Auditorium, Visva-Bharati University	Feb 12-14, 2018
15	Workshop on Youth Parliament competition 2017	Assembly House, at Syad Nauser Ali House, Kolkata	30 th May, 2017
16	Workshop on Birbhum District Inter College Youth Parliament competition 2016-17	Suri, Birbhum	2016-17

17	Workshop of Syllabi (Semester with CBCS)	University of Burdwan	10/06/2017
18	Refresher Course in Chemistry	Academic Staff College, Calcutta University	30 Nov, 2018 to 20 Dec, 2018
19	National workshop on NAAC Awareness programme for Assessment and Accreditation	Bankura University in collaboration with Bankura Zilla Saradamani Mahila Mahavidyapith	28 th June 2020
20	Refresher Course in Chemistry	UGC-Human Resource Development centre, Guru Ghasidas Vishwa Vidyalyaya, Bilaspur	23 rd Aug, 2021 to 4 th Sep, 2021
21	International workshop on Post Covid-19 sanitation & hygiene, waste management, water management, energy management and Greenery.	Mahatma Gandhi National Council of Rural Education Department of Higher Education, Ministry of Human Resource Development, Government of India.	
22	UGC- Sponsored Online Short Term Course in Academic, Research & Publication Ethics	UGC-HRDC, Bharatidasan University	1 st March, 2023 to 7 th March, 2023

4. Detailed List of publication:

a) Research papers and Articles:

(1) “Oxidation of D-glucose in presence of 2,2'-Bipyridine by Cr(VI) in aqueous micellar media: A kinetic study”

Ruhi Das, Monirul Islam, Bidyut Saha and Asim K. Das*
Carbohydr. Res., 340, 2163-2170.

(2) “Studies on Characterisation of Kinetically Active Cerium(IV) Species in Oxidation of α - Hydroxy Acids in Aqueous Micellar Sulfuric Acid Media”

Ruhi Das, Monirul Islam, Asim K. Das*
Prog. React. Kinet. Mech., 33, 145-165.

(3) “Kinetics and Mechanism of Oxidation of D-galactose by Chromium (VI) in Presence of 2, 2'-Bipyridine Catalyst in Aqueous Micellar Media”

Ruhi Das, and Asim K. Das*
The Open Catal. J., 2, 71-78.

(4) “Studies on Kinetics and Mechanism of Oxidation of D-sorbitol and D- mannitol by Cerium(IV) in Aqueous Micellar Sulfuric Acid Media.”

Asim K. Das*, Monirul Islam, **Ruhi Das**

Int. J. Chem. Kinet., 40, 445-453.

(5) “1, 10-Phenanthroline Catalysed Chromium(VI) Oxidation of D-Sorbitol and D-Mannitol in Aqueous Micellar Media”

Ruhi Das, and Asim K. Das*

Prog. React. Kinet. Mech., 34, 185–201.

(6) “Micellar Effect on the Reaction of Chromium(VI) Oxidation of Some Representative α -Hydroxy Acids in the Presence and Absence of 2,2'-Bipyridyne in Aqueous acid Media: A Kinetic Study”

Ruhi Das, & Asim K Das* *Indian. J. Chem.*, 48A, 1055-1061.

(7) “Kinetic and Mechanistic Aspects of the Chromic Acid Oxidation of D- Galactose in the Presence and Absence of Picolinic Acid Catalyst in Aqueous Micellar Acid Media”

Das, Asim K.; Islam, Monirul; **Das, Ruhi**; Kar, Dalia

Prog. React. Kinet. Mech., 35, 387 -403.

b) **Books: NA**

i)

ii)

c) **Chapters Contribute in edited Volume:**

8. **List of Book chapters published by Dr. Das**

Topic- “Kinetics and Mechanism of Oxidation of D-fructose by Chromium (VI) in Presence of 2, 2'-Bipyridine Catalyst in Aqueous Micellar Media”

Published on national seminar at Saldiha College, Sep 1-2, 2016

9. Topic – “Heteroaromatic N-Base Ligands like 2,2'-Bipyridyl Assisted Cerium (IV) Oxidation of L(-)Sorbse in Aqueous Micellar Acid Media” Published on International Conference at Pingle Government College

ISBN No. 978-81-928314-8-0; 25-27 August, 2022, Warangal, India.

d) **Proceedings: NA**

i)

ii)

5. List of Papers presented in the Seminar/Conference

Sl.No	Topic	Organised By	Date	Title of the Paper
1.	Seminar on chemical kinetics and mechanistic aspects of metal	Department of Chemistry, The University of Visva-Bharati	June, 20, 2009	Studies on kinetics and mechanistic aspects of redox

				activity of higher valent metal ions in aqueous micellar media
2.	National Seminar on polymer chemistry	Professor Sukumar maiti polymer award foundation in collaboration with Department of Chemistry , Siksha Bhavana, Visva-Bharati	Feb,14-15 2015	The kinetics and mechanism of the chromic acid oxidation of some organic substrate in micellar media
3	Design, Synthesis, Interactions, Chemical And Biochemical Activities Of Different Functional Molecules	Department of Chemistry University of Burdwan	Feb, 4-6, 2016	Kinetics And Reaction Mechanism Of Chromium (VI) Oxidation Of Adipic Acids In The Presence And Absence Of 2, 2'-Bipyridyl In Aqueous Acid Media
4	UGC Sponsored National seminar- "Chemistry on Its Way: Impact on the Environment"	Department of Chemistry, Shaldiha College	Sep 1-2, 2016	Kinetics and Mechanism of Oxidation of D-fructose by Chromium (VI) in Presence of 2, 2'-Bipyridine Catalyst in Aqueous Micellar Media
5	Regional Science & Technology Congress-2016	Bankura Critian College, Bankura,	Nov, 7-8, 2016	Studies on Kinetics and Mechanism of 1, 10-Phenanthroline Catalysed Cr(VI) Oxidation of D-Xylose in Aqueous Micellar Media.
6	National Seminar on " Dr. Dr. B.R. Ambedkar and Social Engineering"	Lipika Auditorium, The University of Visva-Bharati	13-14 April, 2018	"Studies on Ambedkar ideas in the field of social Environmental science"
7	National Seminar on - Recent Trends Chemical Science Research and Application	Department of Chemistry, The University of Visva-Bharati	13 th Sep, 2019	Kinetics and mechanism of 2,2'-bipyridine-catalyzed cerium(IV) oxidation of propan-2-ol in the presence and absence of surfactants
8	International Seminar Topic-Elements of Periodic Table in Chemical Avenues of Biological World	Department of Chemistry, South Calcutta Girls' College	17 th Dec, 2019	"Kinetics and Mechanism of D-fructose by Cerium (IV) in the presence and absence of picolinic acid in Aqueous Micellar Media"

9	Virtual International Conference on Recent trends in Green Chemistry(ICRTGC-2021)	Akal University Talwandi Sabo, Bathinda, Punjab, India in collaboration with the Indian Chemical Society, Kolkata.	28 th -30 th September, 2021	Participated
10	DST-SERB sponsored International Conference on Chemistry and Allied Sciences(ICCAS-2022)	Conference Secretariat, ICCAS-2022 Department of Chemistry, Pingle Government College for women (Autonomous) Kakatiya University. Telagana State.	August 25-27, 2022	“Heteroaromatic N-Base Ligands like 2,2’-Bipyridyl Assisted Cerium(IV) Oxidation of L(-)Sorbosose in Aqueous Micellar Acid Media”

Seminar/Webinar Attended

Sl.No	Topic	Organised By	Date
1.	Chemistry How is it?	Organized by Royal Society of Chemistry, Physics Auditorium	September 27, 2013
2.	“Rabindrabitichitra”	Adhyapaka Sabha, Visva-Bharati	February, 11-12 2012
3	National Seminar on Tagore’s Patha-Bhavana: Experiments and Education	Patha-Bhavana, Visva-Bharati	February 21 To 23, 2013
4	National Seminar on Rabindranath Tagore: Humanity & Cultural Affinity	Organised by Bolpur College at Gitanjali Auditorium Hall, Bolpur	December 2 nd To 3 rd , 2015
5	“Mother Earth: Save Her”	Dept. of Chemistry, Bolpur College	October 13 th , 2015
6	International Project seminar cum meeting entitled arsenic induced toxicity	Organised by DST-UKIERI (UK –India Education and Research Initiative at Hotel Patliputra Continental, Anisabad, Patna	13 th April, 2017
7	Celebration of Biodiversity: Solutions are in nature & Celebration of world Environment Day	Sdho-Kanho Birsha University, Purulia, WB	5 th June,, 2020

8	State Level Webinar on “Nutrition and Health Problem in post pandemic period”	Dept. of Food & Nutrition and Chemistry in association with IQAC .Prasanta Chandra Mahalanobis Mahavidyalaya, Kolkata-108	16 th June 2020
9	“Recent trends in Chemical Science: Basics application and Prospects”	Dept. of Chemistry and the IQAC, Narasinha Dutta College	18 th June,, 2020
10	“Representations in Quantum Mechanics”	Dept. of Chemistry and the IQAC, Narasinha Dutta College	9 th July, 2020
11	Recent trends in Science and Technology	Dept. of Botany, Chemistry, Physiology & Zoology & Internal Quality Assurance Cell, Netaji Nagar Day college	17 th July, 2020
12	Swachhta Action Plan	Dept. of Higher Education, MHRD, Govt. of India	20 th July, 2020
13	“World in the Nano Regime” International Webinar	Dept. of Physics and Chemistry Bankura Zilla Saradamani Mahila Mahavidyapith	18 th July, 2020
14	International webinar on “Covid-19 Pandemic: IT’S COMPACT ON HIGHER EDUCATION AND FUTURE STRATEGIES”	Internal Quality Assurance Cell (IQAC) of Raja Narendralal Khan women’s College (Autonomous), Midnapore, West Bengal, India.	18 th -19 th July, 2020
15	“Current perspective of Chemical Sciences” National Webinar	Dept. of Chemistry, Batter College, Dantan in collaboration with Indian Chemical society	21 st July, 2020
16	National Webinar on “Hydrogen bonding- A sample solution to challenging problems”	Dept. of Chemistry and the IQAC, Narasinha Dutta College	22 nd July, 2020
17	Scanning Covid-19 Pandemic through Gender Lend	SAHELI, Women’s cell of Garbeta College & IQAC	20 th July, 2020

18	National Webinar on Scientific Approaches “ Towards Covid-19 Pandemic”	IQAC & Science Dept. of Chandidas Mahavidyalaya Khujutipara, Birbhum	2 nd August, 2020
19	National Webinar on Discipline Specific Elective (DSE) Topics of UG Chemistry (Hons), CBCS Syllabus, University of Calcutta	Dept. of Chemistry & IQAC, Maulana Azad College , Dept. of Chemistry & IQAC, Asutosh College in collaboration with UG Board of studies Univ. of Calcutta from 4 th – 7 th Aug, 2020.	5 th & 6 th Aug, 2020
20	International Webinar on “Covid-19 Pandemic: a search for Relief”	Dept. of Chemistry in association with IQAC, Charu chandra College	22 nd Aug, 2020
21	National Webinar on Strategies of survival: An overview of Healthcare during present pandemic situation	Aghorekamini Prakash Chandra Mahavidyalaya	11 th & 12 th Aug, 2020
22	Virtual International Conference	Akal University , Talwandi Sabo, Bathinda, Punjab, India in collaboration with the Indian Chemical Society, Kolkata	28 th & 30 th Sep, 2021

6. List of invited talk in the Seminar/Conference/Others

Sl.No	Topic	Organised By	Date	Title of the Paper
1	Invitee Speaker. Lecture on AIDS, Thalassemia And Hygiene habits.	Kandra Radha Kanta Kundu Mahavidyalaya, Kandra, Purba Bardhaman	02.03.2020	AIDS regarding National service scheme
2	Chairman of International Webinar	Dept. of Chemistry, Bolpur College	30 th Sept, 2020	“Recent trends in Scientific/Engineering and Industrial Research and Environmental concern”

7. Detail list of research Project completed/ongoing:NA

Sl. No	Type of the Project	Title of the Project	Funding agency	Amount	Year

8. Performed duty as Paper Setter/ Moderator/ Head Examiner

Sl.No	Course	University/Board	Subject	Paper
1	UG CBCS Sem/Part : V Examination, 2023 (Head Examiner)	Burdwan University	Analytical Method Chemistry	DSE-2
2	B.SC 3rd D.C. General Part-II Chemistry Practical Exam 2019 (Convener)	Burdwan University	Chemistry Practical	General Part-II Chemistry Practical

9. (a) Appointed as Coordinator/ BOS member/others

Sl.No	Nature of Duty	University/Board	Subject	Duration

(b) Position Hold (others)

Sl. No	Position Hold	Duration/Year	Description
1	Member of BOS	Academic Session 2011-2012 & 2012-2013	Five years Integrated M.Sc, Siksha Bhavana. Ref.No. 41/ISERC/2011-2012 dated 10.09.2011 & 41/ISERC/2012-2013 dated 04.10.2012
2	Programme Officer NSS, Visva-Bharati	March 2011 To April 20 th , 2015	Patha-Bhavana unit, Visva-Bharati
3	NSS Coordinator Visva-Bharati	March 20 th To 24 th , 2014	Teacher-In-Charge
4	NSS Coordinator Visva-Bharati	October 16 th To 25 th , 2014	Teacher-In-Charge
5	NSS Coordinator Visva-Bharati	Nov 3 rd To 21 th , 2014	Teacher-In-Charge
6	NSS Coordinator Visva-Bharati	Nov 27 th To 28 th , 2014	Teacher-In-Charge
7	Programme Coordinator	June 22 nd To 24 th , 2013	Certificate course on Social service- "Blood Donor Motivation

			& recruitment” organized by AVBD,WB
8	Guest Asst. Professor	2010 To 2015	Five Years Integrated M. Sc. Siksha-Bhavana, Visva-Bharati
9	Observer	In the year 2013 , 2014	Nehru Vidya Mandir High School, Burdwan on May 25, 2013 & BMBB Commerce College, Assam on 31 st May 2014
10	Nodal Officer	Sep 13 th , 2015 to till date	Kanyashree Prkalpa
11	Member of admission Committee	Academic session 2015-2016 dated 3/6/15	B.A., B. SC. & B.com-(Hons and Gen)
12	Internal Expert	August 12 th , 2015	For the selection of Guest Lecturer in Education Dept. at Bolpur College under Burdwan university.
13	HOD	June 24 th , 2015 To till date	Education Dept., Bolpur College.
14	Member of National Seminar Committee	December 2 nd To 3 rd , 2015	UGC Sponsored National Seminar on Rabindranath Tagore: Humanity & Cultural Affinity
15	Member of IQAC Committee	Academic session 2016-17	For NAAC of Bolpur College
16	Member of admission Committee	Academic session 2016-2017	B.A., B. SC. & B.com-(Hons and Gen)
17	Member of Library & Canteen Committee	Academic session 2016-2017 (From 04/07/16 to 04/07/17)	For the Development of Library & canteen of our College
18	Member of Academic Committee	Academic session 2016-2017 (From 21.04.16 to till date)	Academic Purpose
19	Member of IQAC Committee	Academic session 2017-2018(meeting held on 5/3/18)	For finalise AQARs as per UGC guideline
20	Member of admission Committee	Academic session 2017-2018	B.A., B. SC. & B.com-(Hons and Gen)
21	Programme officer of NSS	1 st April, 2018 to continue 3 years	Unit-1, Bolpur College
22	Member of Hostel Committee	Academic session 2016-2017	Letter no. nil dated 25/07/2016

23	Dept. in Charge/ HOD	From 1 st July 2019 to 30.06.2022	Dept. of Chemistry, Bolpur College
24	Chairman of International Webinar	30 th Sept, 2020	“Recent trends in Scientific/Engineering and Industrial Research and Environmental concern” organized by Dept. of Chemistry, Bolpur College
25	Dept. in Charge/ HOD	From 24.06.2015 to 30.06.2019	Dept. of Education, Bolpur College
26	Invitee Speaker. Lecture on AIDS, Thalassemia And Hygiene habits.	02.03.2020	Kandra Radha Kanta Kundu Mahavidyalaya, Kandra, Purba Bardhaman
27	Convener of Stock Maintenance Committee	From 29/12/2022 to till date	Bolpur College
28	Member of Sanitization Committee	Memo No. 1058 -Edn (cs) 10M-32/2021 dated 28/10/21. Committee form on 01/11/ 2021 by the principal	Sanitization at the college gate & management of sanitizer machines 1. R. Das 2. Koushik Pal
29	Admission (2021-2022) Committee Members	Ref. Notice No. Nil dated July 9, 2021	Dr. Ruhi Das & Twenty other Members

10. Experience as Ph.D/ MPhil Research Guide: NA

Sl. No	Nature of Research Degree	University/Board	Name of the Scholar	Degree award date

11. Research Citations/ Member of Editorial board of research journals

12. Development of Online courses/ ADD-ON courses: I have taken online classes in Covid-19 period. I have also teach the students by the help of smart board through online because online education and online education solutions has emerged as a flexible way to study and has really come into its own. Thanks to the meticulous development efforts of

course creators. In the digital age, the advantages of studying online are immense and speak for themselves.

13. Consultancy Given:

14. Membership of Organizations:

15. Experience of PG teaching/ Teaching in other Institute as guest faculty etc.: Five years as a Guest Teacher in five year Integrated M.Sc. Programme, Siksha-Bhavana, Visva-Bharat

16. Awards/ Recognitions etc: National Scholarship award

17. College/ Department additional duties performed (Co-ordinator/Bursar/ IQAC/ Governing Body member etc):

Dept. in Charge of Chemistry (1st July 2019 to 30.06.2022) & Education(24.06.2015 to 30.06.2019), IQAC (2016-2018) Member

18. Any other: Various Works Coordinated & participated by Dr. R. Das on and from 15th June, 2018 to 2023

Sl. No.	Programme/events/ Competition	Year/Duration	Venue	Participant details
1	Meeting in connection with Kanyshree Prakash	14/09/2015 at 2.30 pm onwards	Conference hall Prashasan Bhavana, Suri	Dr. Ruhi Das Nodal Officer
2	Career Counselling Cum Social evils	15/09/2015 at 3.00 pm onwards	Block Office Bolpur Sriniketan Development Block	Dr. Ruhi Das Nodal Officer & ten Girls students
3	Rabindranath Tagore:- "Humanity and Cultural affinity"	2 & 3 Dec, 2015	Lipika Auditorium Gitanjali	Dr. R. Das, Committee members of the seminar
4	Meeting in connection with Kanyshree Prakash	17/12/2015 at 11.00 am to 4.00 pm onwards	Conference hall Prashasan Bhavana, Suri	Dr. Ruhi Das Nodal Officer And Atanu mukherjee
5	College Level Youth Parliament competition:- quiz contest programme on character building of	10/12/2015	Turku Hansda Lepsa Hemram Mahavidyalaya	Dr. Ruhi Das (Prog. Coordinator), Dr. Aditi Ghosal, Dr. Mausumi Sen Bhattacharjee and Ten students

	students and extempore competition			
6	Campussing Programme for recruitment organized by Techno Bird Pvt. Ltd	22 nd Dec, 2015 at 11 am onward	Library Building, 2 nd floor , Bolpur College	Principal, Dr. R Das (Prog. Coordinator) , Other faculty members, staff members, outsiders and students outside and inside also present on that day
7	Law awareness Seminar organized by Law College, Durgapur	7 th January, 2016	Library Building, 2 nd floor , Bolpur College	Debkanta Bhattacharya, Asst. Prof. Of Law College, other two members of Law college, Principal, Students and teachers and staff members
8	“Science, Superstition and Integration of Human” organized by Paschim Banga Vigyan Mancha	21 st January, 2016	Room no. 205 Bolpur College	Prof. Shymal Chakraborty of Calcutta University & other members of Bigyan Manch, Principal and others members of our College
9	National harmony and National Integration	17 th Jan, 2016	Rabichhaya Lodge Bolpur	Dr. R. Das (coordinator), Dr. Mousumi Senbhattarjee and six girls students
10	MEGA TALENT HUNT COMPETITION-2016	27 th March, 2016	Bolpur College	Dr. Ruhi Das (Prog. Coordinator) Anindita Maitra, Director of Talent hunt
11	Mother Tongue Day	21 st February, 2016	Room No. 205 at 11 am	Participated though I have preparation day (P-DAY)
12	Get Together of our previous Colleague	5 th April, 2016	Room No. 205 at 11 am onwards	Principal & others
13	One Day Workshop on VISHAKHA GUIDELINE/ACT	28 th January, 2016	Room No. 205 at 11 am – 4pm	Dr. Mousumi Senbhattarjee as Convenor
14	Awareness Camp for enrolment of new Voters	21 st March, 2016	Room No. 205 at 11 am onwards	Dr. Ruhi Das, Prog. Coordinator, SDO-Sampa Hazra, PDDRDC, AngshumanBhattacharya
15	Seminar on “Rain Water Harvesting:	6 th June, 2016	Bolpur College	Dr. N. Ali, Bolpur College, Dr. Ruhi Das, Prog. Coordinator, Dr. M.

	A New Technology for Recharging the Aquifer”			Taparia, Dr. S. Pyne, Vivs-Bharati & others
16	Workshop on Youth Parliament competition 2016	22 nd Aug, 2016	Assembly House, at Syad Nausar Ali House, Kolkata	Dr. Ruhi Das, Professor – In-Charge & Dr. Mausumi Sen Bhattacharjee
17	Career Counseling programme jointly organized by Indian Air Force	23 th August, 2016 at 11am	2 nd floor of Library building	Dr. N. Ali, Principal Bolpur College, Dr. Ruhi Das, Prog. Coordinator, Sri Prodipta Biswas (Dy. Magistrate), Gyanendra Kumar-IAF, RS Choudhury-corporal (Baracpore) & students
18	Seminar on the prospects of jobs conducted by RICE	23 th August, 2016 at 1pm	2 nd floor of Library building	Dr. N. Ali, Principal Bolpur College, Dr. Ruhi Das, Prog. Coordinator, Team of RICE, Faculty members & students
19	Seminar/ Workshop on Professional Guidance for job. Pathfinder will conduct said seminar/workshop	29 th August, 2016 at 12 pm	2 nd floor of Library building	Dr. N. Ali, Principal Bolpur College, Dr. Ruhi Das, Prog. Coordinator, Team of Pathfinder, Faculty members & students
20	Awareness Programme organized by State Assembly Standing Committee, Goivt. of West Bengal	9 th Sep, 2016 at 10 am onwards	Room No. 205, Bolpur College	
21	State Level Essay Competition, 2016-17;	Ref No. 383(42)-PA/4C-03/2015 dated 13/06/2016 Last date of submission- 21.10.16	To be sent - The Dept. of Parliamentary affairs, G-block, 1st floor, writers building kolkata700001	Anwasha Sadhu, 1 st year Chem(H), Samata Das-3 rd year Zoology(H), Kinsuk Dhar -2 nd year Botany (H) & Krishnendu Acharyya-3 rd year Chem (H)
22	District Level Various Competition	16-18 November, 2016	Birbhum Mahavidyalay	Rituparna Ghosh & Bakul Bhattacharya- 1 st in Quiz, Puja Chattarjee-2 nd in Extempore/ declamation, Sk. Masum & Badrodoza Sk.- 3 rd in quiz, Bakul Bhattacharya- 2 nd in Debate.
23	Career opportunities Programme organized by Industry Institute Partnership Cell (IIPC) BU	26 November, 2016 & 03 December, 2016	MBA Dept, Golapbag, BU & DDE Building, Golapbag, The University of Burdwan	1 Shivam Pandit, B.com(hr) 2 nd yr 2 Sriman Das, B.com(hr) 2 nd yr 3 Suraj Paswan, B.com(hr) 2 nd yr

				4 Rajkiran kabiraj, B.com(hr) 2 nd yr 5 Srestancho Biswas, B.com(hr) 3 rd yr 6. Debesh Chaudhury- pass out in 2015 7. Vevek Gupta- B.com(hr) 2 nd yr
24	Attending the meeting regarding Youth Parliament & Science Fair-2016	30th Nov, 2016	ConferenceHall, Prasasinik Bhavan, Birbhum	Dr. Ruhi Das & Dr. Sabdar Aman Chaudhurey
25	Helping the customer for e-banking system	4 th Dec, 2016	Santiniketan Branch , State Bank of India,	Twenty Students
26	State Level Competition for 75 th Anniversary of Netaji's Escape	5-6 Dec, 2016	Vivekananda College,Thakurpukur, Kolkata	Dr. R. Das, Professor-In-Charge Rituparna Ghosh, Bakul Bhattacharya & Puja Chattarjee
27	Talent Search Examination	11 th Dec, 2016	Room No. 205 & 206 Bolpur College	155 candidates have appeared the exam out of 205 candidates
28	College Level Youth Parliament competition:- quiz and extempore competition	20-21 Dec, 2016	Vidyasagar College, Suri	Dr. Ruhi Das (Prog. Coordinator), Md. Masum and students
29	Talent Search Examination	11 th Dec, 2016	Room No. 205 & 206 Bolpur College	Name of the Selected Students for Merit Scholarship : BAKUL BHATTACHARYA, NIRUPAM GUPTA, SOUMITRA GHOSH, TILOTTAMA DAS & ANIRUDDHA THAKUR
30	Awareness programme regarding the responsibilities of elders persons	7 th Feb, 2017	Room No. 205 Bolpur College	Principal, Dr. Ruhi Das (Prog. Coordinator), Teams of the NGO, Teaching, Non-Teaching and students
31	State Student-Youth Science Fair 2016	15 th February, 2017 to 17 th February, 2017	Netaji Indoor Stadium, Kolkata	Dr. Ruhi Das, Professor-In-Charge Name of the Students: 1. Ayyan Ghosh 2. Abhijit Singha
32	Workshop on Youth Parliament competition 2017		Assembly House, at Syad Nauser Ali House, Kolkata	Dr. Ruhi Das, Professor – In-Charge & Sk golam Masum
33	Attending the meeting regarding Youth	6 th July, 2017	ConferenceHall, Prasasinik Bhavan, Birbhum	Dr. Ruhi Das

	Parliament & Science Fair-2017			& Prof. Sanku maharaj
34	Orientation programme	27-28 july, 2017	Room no. 205 & 209, Bolpur College	Dr. Ruhi Das, Dr. Debjani sengupta, Dr. Aditi Ghoshal etc
35	Seminar on MBA Course and Placement organized by IBS	17-18 Aug, 2017	Library Building, 2 nd floor , Bolpur College	Paramita Sinha and others of IBS , Students and teachers and staff members
36	College Level Youth Parliament competition:- quiz and extempore competition	29-30 Aug, 2017	Chandidas Mahavidyalaya, Khujutipara	Dr. Ruhi Das (Prog. Coordinator), Md. Masum and students
37	Career Counseling programme jointly organized by Indian Air Force	25 th Oct, 2017	Room no. 205, Bolpur College	Dr. Aditi Ghosal, TIC, Bolpur College, Dr. Ruhi Das, Prog. Coordinator, Gyanendra Kumar-IAF, RS Choudhury-corporal (Baracpore) & students
38	Seminar regarding job orientated organized by George Telegraph	31 st Oct, 2017	Library Building, 2 nd floor , Bolpur College	Tanmay Das and others of GT , Students and teachers and staff members
39	Workshop on importance of Village Camp	15/06/2018 to 16/06/2018 at 12 pm onwards	Room No. 205, Bolpur College	Dr. Ruhi Das, Shanku Maharaj Mondal & NSS volunteers
40	Tree Plantation Programme	8th Aug, 2018	In our College Campus	Dr. Ruhi Das, Dr. Mrinal Kanti Nayak, TIC & NSS volunteers
41	Participation of Cultural Programme & maintaining the discipline by our NSS volunteers	15th Aug, 2018	In our College Campus	Dr. Ruhi Das, Programme Officer & NSS volunteers
42	Campus Cleaning Programme	10th March, 2019	In our College Campus	Dr. Ruhi Das, Shanku Maharaj Mondal & NSS volunteers
43	Workshop on NSS (Programme officers meet of Birbhum District)	13/03/2019 to 14/03/2019	Rampurhat College	Dr. Ruhi Das, Shanku Maharaj Mondal

44	Awareness programme of TB and donation to BENGAL TUBERCULOSIS ASSOCIATION	3rd April, 2019	In our College Campus	Dr. Ruhi Das, Programme Officer , NSS (Unit-I) & NSS volunteers
45	Special Camp	23/03/2019 to 29/03/2019	Muluk and Bandanga (Adopted Village)	Dr. Ruhi Das, Shanku Maharaj Mondal & NSS volunteers
46	Awareness programme on Environment and some diseases	28th March, 2019	2nd floor of Library, Bolpur College	Dr. (Col) Monimukut Mitra, Ex-Registrar, Ex-Director of NSS of Visva-Bharati Central University, Dr. Nursadh Ali, Principal, Bolpur College, Dr. Ruhi Das, Shanku Maharaj Mondal (Programme Officer), Dr. Sabdar Aman Choudhury and Dr. Surya sekhar Das – Invite member for talk about said topic & NSS volunteers
47	Participation of Orientation Programme for Sem-I students	9th July 2019	2nd floor of Library, Bolpur College	Dr. Ruhi Das, Shanku Maharaj Mondal & NSS volunteers
48	Awareness programme of AIDS, Thalassemia and Hygienic habits	2 nd March, 2020	Organized by NSS unit of Kandra Radha kanta Kundu Mahavidyalaya, Purba Burdwan	Invitee lecture by Dr. Ruhi Das, NSS unit-I, Bolpur College
49	University level Pre-Republic Day Selection Camp, NSS	28 th Sep, 2021	The University of Burdwan, Mahunbagan Ground, Bardhaman	<ul style="list-style-type: none"> • Dr. Ruhi Das & Prof. Shanku M. Mondal (Programme Coordinated/ Participated) • Five NSS Volunteers has participated Bhaskar Karmakar, Ramij Raja Khan, Padmanabha Samanta, Sharmistha Bauri & Sumitra Tudu
50	Pre-Republic Day, Parade Camp, NSS , EAST Zone	25 th Oct, 2021 to 03 Nov, 2021	Central Institution of Technology, Kokrajhar, Assam	Dr. Ruhi Das & Prof. Shanku M. Mondal (Programme Coordinated/ Participated), Sharmistha Bauri, NSS, Volunteers- Participated.
51	AECC-1 ENVS Project Report. collection	27/04/23	Room No- 106	Sem-1 Students Bikash Saha , Bedjit Das &

		(2022-23)	Bolpr College	Myself
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19. Teaching and Research Statement:

Teaching statement:

It is very well thought out and connected. It has a theme. Early in my education, I became a keen observer of my teachers, comparing their different philosophies and approaches, thinking about their teaching methods, and assessing which methods enhanced my own learning. By continuing this analysis throughout high school, college, and graduate school, I slowly and deliberately amassed a collection of effective teaching techniques. The distillation of those years of observation and analysis, combined with the lessons I am still learning from my own teaching experience, yields the overriding principle that I strive for in the classroom: clarity – in presenting material, in detailing expectations, and in expressing educational goals.

My goal in all of the courses I teach is that each student develops a picture of the world at the atomic level and couples that picture to the mathematical language by which we study, explain, and predict chemical behavior. To accomplish this, the imagery and words I use to explain chemical phenomena must be clearly presented. This does not mean, however, that I equate clarity with simplicity; to the contrary, simplistic explanations often raise more questions and create more misunderstandings than do organized lectures that carefully present the subtleties, nuances, and complexities of most concepts. Thus, clarity manifests itself in my teaching by directing my selection of the most effective methods of teaching the various chemical concepts covered in my courses to the diverse range of students in my classes. Often, I find the most effective method of teaching is writing equations, reactions, and chemical processes on the board and explaining them to the class. However, lends itself to more complex modes of presentation. Certainly, chemical demonstrations are a powerful way to illustrate important principles, since they allow students to observe the physical reality and consequences of the mathematical and chemical equations used to describe, explain, and make predictions about the physical world. Still other material is more effectively presented using computer graphics and animations. When discussing how to visualize and interpret two-dimensional drawings of three-dimensional molecules, these resources are quite helpful, as are actual three-dimensional models that students can physically manipulate themselves. Finally, chemistry is fundamentally a problem-based discipline that requires students learn how to use chemical concepts to solve problems. Thus, a simple but valuable teaching instrument is allowing class time for students to work on problems related to the material just presented. This allows them an opportunity to apply what they have just learned and provides me immediate feedback as to how successful the presentation was. With this information, I can make real-time decisions as to whether or not the class is ready to move on to new information. In the laboratory, students must understand the chemical properties underlying the experiments. Too often, students perform laboratory manipulations and collect data which they can "number crunch" with little or no understanding of the chemical principles illustrated by the experiment. It was not until I had to repair a spectrometer in graduate school that I found I truly did not understand how chemical instrumentation worked in terms of collecting data and the relation of that data to chemical theories and equations. I also realized at that point that if I ever taught a course in chemical instrumentation, it would be necessary to have students work with the internal

operation of the instruments rather than just viewing them as "black boxes." Thus, based on this experience, I started collecting chemical instruments and components that the students can take apart and manipulate to better understand the instrumentation. The analogy I make is that someone can tell you how a car engine works, and you can understand the principles, but until you have to take one apart and rebuilt it, your knowledge of how the engine works is probably incomplete. Consistent with this philosophy, I design laboratory experiments where the focus is the phenomenon being studied and not merely the collection of a large amount of data. I also expect laboratory reports detailing the students' understanding of what the lab was about. After completing the experiments, writing the report, and revising it based on my suggestions, students should demonstrate a clear understanding of the connection between their physical manipulations of a chemical system and the fundamental chemical concepts those manipulations reveal. Thus, while my primary mode of teaching falls under the broad category of "lecturing," it is significantly augmented with a range of techniques specifically selected for each different topic taught – a selection based on the careful observation and analysis of a number of teachers. I feel that my class sessions must be highly organized. I must anticipate and address potential misunderstandings, and I must constantly check with my students to ensure that they understand the material.

My own experience, both as a student and as a teacher, suggests that students who are unclear about expectations often get frustrated and tend to resist learning. I strive to clarify, both in my syllabus and in what I say, that I have high expectations for my students. I want them to master the material so that when they take exams, they are confident they will do well. This was the standard set by my general chemistry professor in college and I have directly adopted it from him. This standard requires students to know not just the specific details of the chemistry we have covered, but also how those details connect to the broader chemical concepts we have studied. In other words, I expect them to see the forest and the trees. In order for them to obtain this kind of mastery, I make certain the students know that it will be necessary to ask questions and that I expect them to do so. I also expect and encourage them to take advantage of my office hours or to make appointments with me. I faithfully respond to e-mails on the day I receive them and also place a comment box at the back of the room each day so students can submit questions anonymously. I respond to any comments, questions, or suggestions in the next class session. In doing these things, I make it clear that I expect them to put the same effort into being a student that I put into being an effective teacher. Since exams are a main mode of evaluation, I clarify their content by distributing study guides outlining the specific equations and concepts as well as the broader chemical principles that the test will cover. I also recommend specific problems from the textbooks and provide a copy of the previous year's exam so students can gauge the level of difficulty of the exam. In the laboratory, students receive a three-page description of my expectations of the contents of laboratory reports. Furthermore, examples of previous students' work that I consider exemplary are available in my office. I expect laboratory reports to be an opportunity for the students to improve their writing skills, and I reinforce this by offering opportunities for resubmission after students talk to me about their original drafts. My fundamental philosophy is that the level of student performance is generally dictated by the level of expectations. We have all talked with graduates who say that they did not like a particular course because it was difficult at the time, but that, in retrospect, they realize the value of that course. If that is the response to my courses, I will be pleased. I know teaching is not a popularity contest, and that often students do not immediately reap the benefits or see the merit of our efforts. Therefore, I am content to receive students' comments about the level of difficulty of the course as long as I also continue to

receive favorable feedback from former students regarding the worth of my course and as long as I know my expectations are clear, my examinations are fair, and that I have given as much of myself as I can to assist them in their efforts to learn.

It is also important that my students clearly know my goals for their education. They need to know what I hope they get out of each interaction I have with them, and what I hope they get out of their overall education. In each interaction, inside or outside the classroom, I hope to expose the students to something they have not learned or thought about before. I challenge them to view both chemical systems and broader educational and world issues in new ways, thus expanding their knowledge base and providing them with new insights. I also want my students to see the course I am teaching in the broader context of their education. For example, since many of my general chemistry students are pursuing careers as physicians or pharmacists, I use medical and pharmaceutical examples to illustrate how chemistry is fundamental to those careers. I ardently advocate a liberal arts education and try to make it clear to my students that I expect them to pursue a broad education that demands they bring a variety of perspectives to a particular issue.

Conclusion:

In summary, my careful observations of the teaching styles, methods, and philosophies that I experienced throughout my education provide a valuable collection of effective teaching techniques from which I draw. The distillation of those varied approaches leads me to adhere to a principle of clarity which demands that my lectures, expectations of students, and educational goals for them be as clear as possible in the interest of maximizing their educations.

Research Statement:

I have always been fascinated about science, how new insights and accidents have turned out to be important discoveries. I believe that research in general, lives an era of big flow of information. In addition, we currently have a crisis of reproducibility, many articles have claims that cannot be duplicated. I have always been serious and detailist about my research. In this respect, I make efforts to reconcile my results with theory or with any other publication, and avoid explaining results which do not fit in current theories and leave them as open questions. My qualifications and experience are closely related to chemical science and renewable energy. I feel that I am proficient in these areas and always reading to keep myself up-to-date.