

## SPEAKERS

### Sri. Amiya Kumar Kalidaha

Senior Scientific Officer  
Dept. of Science & Technology and Biotechnology,  
Govt. of West Bengal

### Dr. Arun Kumar

Senior Scientist & Principal Investigator  
[ICMR Project, New Delhi (GoI)]  
[Indo-Japan Project, Govt. of Japan]  
[DST - SSTP Project, New Delhi (GoI)]  
[Co-Principal Investigator, ICMR Project, GoI]  
[Co-Principal Investigator, DST- NERC Project, GoI]  
Mahavir Cancer Sansthan & Research Centre  
Phulwarsharif Patna - 801505 Bihar, INDIA

### Dr. Zahed Hossain

Professor, Dept. of Botany, University of Kalyani

### Dr. Sudha Gupta

Associate Professor  
Department of Botany, University of Kalyani

### Dr. Debasis Jana

Former Associate Professor  
Department of Botany, Sripat Singh College

### Dr. Sukumar Mal

Former Associate Professor  
Department of Chemistry, Sripat Singh College

## ORGANIZING COMMITTEE CHAIRMAN

### Mr. Asis Kumar Sen, TIC

#### CONVENOR

### Dr. Suchetana Mukherjee

Assistant Professor, Department of Botany  
Contact No: 9735658709

#### JOINT CONVENOR

### Dr. Indranil Saha

Assistant Professor, Department of Chemistry  
Contact No: 9836243310

#### SECRETARY

### Mr. Sumit Bandopadhyay,

#### IQAC Co-ordinator

#### JOINT SECRETARY

### Dr. Sharmila Dutta Banik

#### Teacher Council Secretary

## MEMBERS:

DR ABDUL KADER AHAMMED, ABHISEK BAGDI, AJAY DEBNATH, DR. AMAL MODAK, AMRITENDU HALDAR, ARUNAVA KUMAR CHOUDHURY, ASHOK RAJ MAHALI, ASHOKE KUMAR BISWAS, DR. ASIT KUMAR MONDAL, ASOKE KUMAR MANDAL, DR. AMIT KUMAR KUNDU, DR. B. M. UZZAL AFSAN, BABIN KUMAR PATTANAIK, DR. BIBHAS BHATTACHARYA, CHOTTON GOSWAMI, DR. DEBI PRASAD DATTA, DR. DEBJANI BHOWMICK CHAKRABORTY, DEBJANI MANDAL, DEBRAJ ROY, DIBAKAR DAS, DILIP SARKAR, DR. ABHISHEK BASU, DR. MD. HABIB, DR. RAJA GHOSH, EMILI RUMI, ENAMUL KABIR PASA, FARUK ABDULLA, DR. GOBINDA PADA PAKIRA, GOPA CHANDA. DR. HIMADRI GUHATHAKURTA, ISHA THAPA, MITALI TIKADER, NILOFAR YASMIN, PABAN BITTAR, PARNAB BHATTACHARYA, DR. PRASENJIT NANDA, PROSANTA MANDAL, DR. RANABIR NATH, RANU SINGHA, DR. ROUSHAN ISLAM, SAGAR SIMLANDY, DR. SAJAL KUMAR DEY, SAKTI MANDAL, SASWATA CHAKRABORTY, SHAHNEWAZ MONDAL, SHIBU PAUL, SHUVASISH SARKAR, SUBRATA GHOSH, SUDHANSHU KUMAR BISWAS, SUJAN KUMAR DAS, SUNITA HANSDA, SURAIYA YEASMIN, SWAPAN KUMAR SARKAR, TUTAN BARMAN, UTTAM GHOSH, ABU RAIHAN, AMBALIKA SARKAR, AMITAVA KAR, BHASKAR BHATTACHERJEE, BHASWATI CHATTOPADHYAY, BISWAJIT CHOUDHURY, BIPLAB BISWAS, CHAITALI UPADHYAY, CHANDRAVAN SANYAL, DEBABRATA MANDAL, DEBLEENA, ISMAIL SHAIKH, MANIRUL MANDAL, MOUMITA SARKAR, MANALIBISWAS, NANDINI HALDER, NEHA SWARNAKAR, NIJAMUDDIN SARKAR, PRIYANKA DEY, RAKESH PAL, SABINA YEASMIN, Ananya Mukherjee, Tohidur Rahaman, Rajat Suvra Mandal, SANGITA BHATTA, SAYANTANI BASU, SHAMPA BISWAS, SHRABANI PAUL, SOMNATH BHATTACHARJEE, SUBRATA DAS, SUDIP BHATTACHARJEE, TANMOY, TOHIDA KHATUN, UTSAB DATTA.



TWO DAYS

## NATIONAL SEMINAR ON

## ENVIRONMENTAL SUSTAINABILITY: ISSUES AND CHALLENGES

18-19 NOV. 2022

SPONSORED BY

DEPARTMENT OF SCIENCE &  
TECHNOLOGY AND  
BIOTECHNOLOGY,  
GOVT. OF WEST BENGAL.

JOINTLY ORGANISED BY  
DEPT. OF BOTANY &  
CHEMISTRY



**SRIPAT SINGH COLLEGE**

Jiaganj, Murshidabad, West Bengal-742123

Website: [www.sripatsinghcollege.edu.in](http://www.sripatsinghcollege.edu.in)

Email: [sscollege2009@gmail.com](mailto:sscollege2009@gmail.com)

## AIMS AND SCOPES:

*We do not inherit earth from our ancestors; we borrow it from our children.*

Environmental sustainability is a responsible interaction with the environment to avoid depletion or degradation of natural resources and allow for long-term environmental quality. The practice of environmental sustainability helps to ensure that the needs of today's population are met without jeopardizing the ability of future generations to meet their needs. But, despite the increased popularity of the use of the term "Sustainability" the possibility has been and continues to be a question. With this background our Sripat Singh College is going to organize the seminar having the title: **Environmental Sustainability: Issue and Challenges**. It is our effort to create awareness and explore different strategies to promote economic, social and agricultural advancement in ways avoiding environmental degradation on 18 and 19 November, 2022.

## OUR COLLEGE:

Sripat Singh College, the first Govt. Sponsored co-educational degree college in West Bengal, started its journey in 1949 in the "Cutcheri Bari" of great Sripat Singh Doogar. Now, This Institution enriches youth and fulfils all-round socio-economic-educational-cultural needs of the mass of Murshidabad by virtue of its utmost sincerity and efficacy. It has now become an ideal centre of learning, education and research. Honours courses in almost all subjects of science and humanities including Biotechnology and Environmental Science, regular MA course in Bengali, different UG and PG courses under DODL, K.U., Rabindra Bharati University Distance Education centre and Netaji Open University are running successfully in this College with remedial coaching and tutorial classes. Besides, one-year certificate course in Biotechnology: Plant Tissue Culture affiliated to University of Kalyani is conducted by Department of Botany, spreading knowledge among the mass.

## PATRONS:

1. Mrs. Shaoni Singha Roy, Hon'ble President.
2. Sh. Asis Kr. Sen, TIC and Secretary, GB.
3. Sh. Prasenjit Ghosh, Chairman, J-A Municipality, Member (State Govt. Nominee)
4. Sh. Gour Gopal Chatterjee, Member (State Govt. Nominee)
5. Sh. Rajib Churoria, Member (WBSCHER Nominee)
6. Dr. Sujata Mukhopadhyay, Member (University Nominee)
7. Prof. Zahed Hossain, Member (University Nominee)
8. Sh. Sanjay Doogar (Donor Member)
9. Dr. Sukumar Mal, Member (Teachers' representative)
10. Dr. Himadri Guhathakurta, Member (Teachers' representative)
11. Sh. Swapan Kumar Sarkar, Member (Teachers' representative)
12. Sh. Saswata Chakraborty, Member (Non-teaching representative)

## REGISTRATION:

### Registration Fees

Faculty:	1000/-
Research Scholar:	750/-
Student:	100/-

Last date of Abstract submission: 14<sup>th</sup> Nov. 2022

Last date of Registration: On or before 18<sup>th</sup> Nov. 2022

Last date of full Paper submission: 18th Nov. 2022

### Online registration link:

<https://forms.gle/r2zrkqfHpY7FUj83A>

### Mode of Payment: Online

Name: PRINCIPAL SRIPAT SINGH COLLEGE  
(Project)

A/C No. 52560100000695

BANK OF BARODA, JIAGANJ BRANCH

RTGS/NEFT IFSC: BARB0JIAGAN, (Note; 0= zero)

**LAST DATE FOR ONLINE PAYMENT: 15/11/2022**

### VENUE:

SRIPAT SINGH COLLEGE, JIAGANJ, MURSHIDABAD.

### CALL FOR PAPER:

Soft copy of the abstract limited to 250 words (excluding title of the paper, name of author/s, and affiliations) prepared in MS Word format typed in Times New Roman with font size 12 and 1.5 line spacing and should be submitted through email to the following mail id

only: [sscseminar2020@gmail.com](mailto:sscseminar2020@gmail.com) & [indranilsaha2010@yahoo.com](mailto:indranilsaha2010@yahoo.com)

on or before: 14<sup>th</sup> Nov 2022.

Scanned or typed copy of registration form to be sent along with the abstract with email to the committee. Acceptance of the abstract will be communicated to the author.

For poster presentation the poster should be 90 cm X 120 cm in size in portrait mode. Co-author other than the presenting author will have to undergo the registration process separately if more than one author intends to attend the seminar.

### THRUST AREAS:

1. Green Chemistry
2. Groundwater management and sustainable development
3. Climate change and its impact on environment
4. Environmental chemistry
5. Sustainable agriculture techniques
6. Food security, Forestry & biotechnology
7. Urbanization, industrialization & environmental issues
8. Waste management-issue and remedies
9. Disaster management
10. Environmental impact on fluvial system
11. Environmental economics
12. Ecocriticism and Indian Literature
13. 'Environmental ethics': An Indian perspective
14. Biodiversity- its loss and conservation

## REGISTRATION FORM

# Two Days National level Seminar on Environmental Sustainability: Issues and Challenges

Nov. 18<sup>th</sup> & 19<sup>th</sup>, 2022

(Please type or fill up in block letters)

NAME.....

DESIGNATION.....

INSTITUTION.....

TITLE OF ABSTRACT

FULL MAILING ADDRESS

Email: .....

CONTACT NO. ....

ABSTRACT ATTACHED? (y/n) .....

FOOD HABIT (VEG/ NON VEG) .....

DETAILS OF REGISTRATION:

FEES DETAILS (OFFLINE MODE)

DATE .....

Signature

[Registration form can be downloaded from the college website [www.sripatsinghcollege.edu.in](http://www.sripatsinghcollege.edu.in) and send it in advance with fees.

Photo copy of the registration form can be used.]

## PROGRAMME SCHEDULE

TWO DAYS NATIONAL SEMINAR ON  
ENVIRONMENTAL SUSTAINABILITY: ISSUES AND CHALLENGES

18-19 NOV. 2022

SPONSORED BY

DEPARTMENT OF SCIENCE & TECHNOLOGY AND BIOTECHNOLOGY, GOVT. OF WEST BENGAL  
JOINTLY ORGANISED BY DEPARTMENT OF BOTANY & CHEMISTRY,  
SRIPAT SINGH COLLEGE.

### Day-1

Time	Session Details
10.00-11.00 AM	Registration
11.00-11.30 AM	Lighting of lamp and felicitation of dignitaries
11.30-11.45 AM	Welcome address by seminar convenor
11.45-12.00 AM	Address by the Teacher-in-charge Sri Asis Kumar Sen
12:00-12:15 PM	Address by Secretary and IQAC Co-ordinator Mr. Sumit Bandopadhyay
12:15-12:30 PM	Address by Teacher Council Secretary Dr. Sharmila Dutta Banik
12.30-1.30 PM	<b>Technical session 1:</b> I L-1: Dr. Arun Kumar, Senior Scientist & Principal Investigator, Mahavir Cancer Sansthan & Research Centre, Patna Bihar ( <b>Keynote speaker</b> )
1:30-2:30 PM	Lunch Break
2.30-3.30 PM	<b>Technical session 2:</b> IL-2: Dr. Sudha Gupta, Associate Professor, Department of Botany, University of Kalyani
3.30-4.15 PM	Oral presentation
4.15-4:30 PM	Valedictory Session

### Day-2

Time	Session Details
11.00-11.15 AM	Refreshment
11.15-11.30 AM	Welcome address by seminar joint-convenor
11.30-12.30 AM	<b>Technical session 3</b> I L-4: Dr. Debasis Jana, Former Associate Professor, Department of Botany, Sripat Singh College
12.30-1.30 PM	I L-5: Prof. Zahed Hossain, Department of Botany, University of Kalyani
1:30-2:15 PM	Lunch Break
2:15-3:15 PM	<b>Technical session 4</b> I L-6: Dr. Sukumar Mal, Former Associate Professor, Department of Chemistry, Sripat Singh College
3:15-4.15PM	Poster presentation
4:15-4:30 PM	Valedictory Session

**A REPORT ON  
DSTBT SPONSORED  
NATIONAL SEMINAR ON  
ENVIRONMENTAL SUSTAINABILITY: ISSUES AND CHALLENGES**

1. Title of the programme: Seminar on environmental sustainability: Issues and Challenges.
2. Level of Seminar: National.
3. Duration of Seminar: Two days.
4. Held on: 18-19 November, 2022.
5. Sanctioning authority: Science & Technology and Biotechnology.
6. Sanction Order No.: 1817(Sanc.)/STBT-11012(22)/34/2019-ST SEC dated 12/02/2020.
7. Sanctioned Amount: 40,000/-
8. Name of the Institute with postal address: Sripat Singh College, Jiaganj, Murshidabad, PIN- 742123.
9. Organised by: Department of Botany and Chemistry, Sripat Singh College.
10. Name of the Programme Convenor with designation, mobile no. and e-mail id: Dr. Suchetana Mukherjee, Assistant Professor, Department of Botany, Sripat Singh College, Jiaganj, Murshidabad, Mobile no. 9735658709, e-mail id: mukherjee.suchetana@gmail.com.
11. Name of the Programme Joint Convenor with designation, mobile no. and e-mail id: Dr. Indranil Saha, Assistant Professor, Department of Chemistry, Sripat Singh College, Jiaganj, Murshidabad, mobile no. 9836243310, e-mail id: [indranilsaha2010@yahoo.com](mailto:indranilsaha2010@yahoo.com).

## 12. Objective of the Seminar:

- i. To make the youth aware of the imbalance created between the three pillars (i.e. environment, economic and social) of sustainability and most important is to find out immediately a possible way-out.
- ii. The seminar focuses on identifying strategies to promote economic and social advancement in ways that avoid environmental degradation, over-exploitation or pollution. Population, food security, loss of species and genetic resources, energy, industry and human settlement are well connected and cannot be treated in isolation from one another.
- iii. The seminar aims at finding out sustainable agriculture techniques to meet the food supply to this huge population.

## **DETAILED ACTIVITIES OF THE SEMINAR:**

### **REGISTRATION:**

A registration desk was set up and faculty members of the Department of Botany, Smt. Bhaswati Chattopadhyay, Smt. Shraboni Paul, Miss Sabina Yeasmin, managed the entire process of registration.

### **INAGURATION:**

The students of Department of Botany performed an opening song to officially inaugurate the programme followed by the welcome address of the convenor, Dr. Suchetana Mukherjee; joint convenor, Dr. Indranil Saha; Teacher-in-charge, Sri Asis Kumar Sen; IQAC co-ordinator, Sri Sumit Bandopadhyay and Staff council secretary, Dr. Sharmila Dutta Banik. Volume 2 of the wall magazine named BOTANICA was also published in the inaugural session. The entire programme was well conducted by Dr. Roushan Islam, Assistant Professor, Department of Botany.







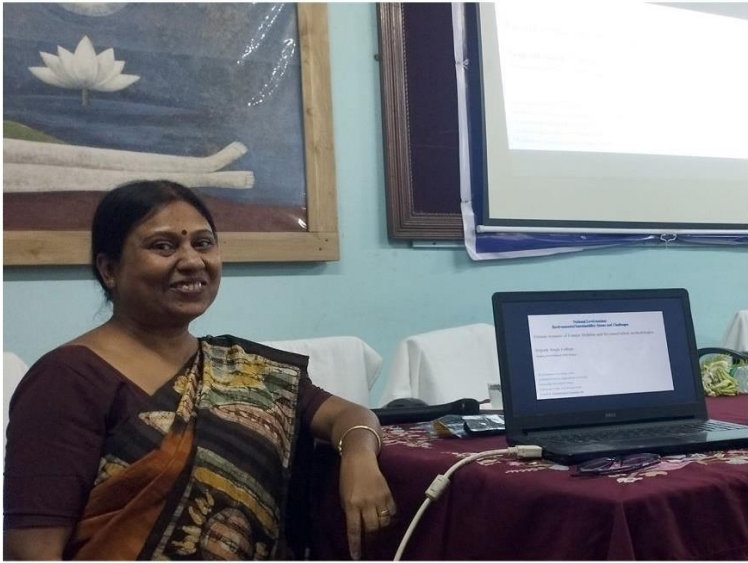
## **TECHNICAL SESSION OF DAY1:**

The technical session started with the invited lecture of the key note speaker Dr. Arun Kumar, Senior Scientist & Principal Investigator, Mahavir Cancer Sansthan & Research Centre, Patna Bihar. His talk focussed on arsenic poisoning in the Gangetic plains of Bihar causing an increased frequency in human cancer. Thus, emphasized on significant policy making which may ensure the control of the disease.

The second lecture of the technical session was delivered by Dr. Sudha Gupta, Associate Professor, Department of Botany, University of Kalyani. The topic of her talk was “ Urban beekeeping towards achieving environmental sustainability”. The topic was very interesting which emphasized on urban beekeeping using stingless bees. Urban beekeeping helps is pesticide free pollination of wild cultivars on one hand and on the other honey and other products obtained from bees ensured food security and nutrition. Hence, urban beekeeping is sustainable in many ways.

Technical session for the 1st day concluded with oral presentation of the registered delegates, research scholars and students both from colleges and university.





## **TECHNICAL SESSION OF DAY 2:**

The technical session for the second day started with the lecture of Dr. Debasis Jana, Former Associate Professor, Department of Botany, Sripat Singh College. His talk focused on “Rapid population as an environmental issue”. The topic dealt with major issues related to rapid surge of population and how it is affecting the environment. The different issues discussed included land degradation, ground water and surface water contamination, loss of floral species, air pollution and global warming.

The second lecture of the day was delivered by Prof. Zahed Hossain, Department of Botany, University of Kalyani. He is an eminent scientist, JSPS Invited Fellow (NICS, Japan), DST-BOYSCAST Fellow (NICS, Japan), Visiting Researcher (UJI, Spain), DST FAST TRACK Young Scientist and a recipient of Shiksharatna Award (2021). He discussed the role of microRNAs as key regulators of plant responses to Abiotic stress.

The concluding lecture of the day was delivered by Dr. Sukumar Mal, Former Associate Professor, Department of Chemistry, Sripat Singh College. His topic highlighted one of the burning issues i.e., the gases that causes Global Warming and the mechanism of conversion of light energy to heat energy.





## **CONCLUSION:**

Sripat Singh College, Jiaganj, Murshidabad organized **WBDSTBT SPONSORED NATIONAL SEMINAR ON ENVIRONMENTAL SUSTAINABILITY: ISSUES AND CHALLENGES** on 18-19 NOV, 2022 at Rabindra Sabhaghar. The proceedings were started by Dr Suchetana Mukherjee, Convener and Dr Indranil Saha, Joint Convener while Sri Asis Sen, Teacher-in-charge, Sripat Singh College delivered the welcome address along with Sri Sumit Bandopadhyay, Coordinator, IQAC and Dr Sharmila Dutta Banik, Teacher Council Secretary, expressed his heartfelt gratitude to all the participants who have come all the way to Murshidabad to take part in this seminar. The seminar hosted a galaxy of dignitaries to deliberate on the growing calamity that the environment is facing and varied ways to combat the problem. The inaugural session saw the presence of Dr. Arun Kumar, Senior Scientist & Principal Investigator, Mahavir Cancer Sansthan & Research Centre, Patna, Bihar who delivered the keynote address on Arsenic poisoning causing increased human cancer disease burden in the Gangetic plains of Bihar. In Technical session 2, Dr Sudha Gupta from Dept of Botany, University of Kalyani delivered her talk on urban beekeeping towards achieving environmental sustainability. On Day 2 the proceedings were started by Dr Debasis Jana, former Associate Professor, Dept of Botany, Sripat Singh College, who gave his talk on correlating rapid population with environmental issue while Prof. Zayed Hossain, Dept of Botany, University of Kalyani delivered his talk on microRNAs as key regulators of plant responses to Abiotic stress which was a very illuminating talk. Dr Sukumar Mal, former Associate Professor, Dept. of Chemistry, Sripat Singh College, deliberated on gases which cause global warming in the last session. This was followed by poster presentation by some of the delegates and students. The 2-day seminar drew to a close with valedictory session and photo sessions with the participants and students. Needless to say, that going by the response by the participants, the seminar was a grand success.

## **ACKNOWLEDGEMENT:**

First of all, I would like to thank the sanctioning authority (Science & Technology and Biotechnology) for the financial support. I would specially like to thank Sri Amiya Kumar Kalidaha for guiding us throughout the entire procedure. I would also like to thank our Teacher-in-Charge Sri Asis Kumar Sen, IQAC co-ordinator Sri Sumit Bandopadhyay and Teacher Council Secretary Dr. Sharmila Dutta Banik for their co-operation and constant support. I am thankful to the entire technical team, Mr. Debraj Roy, assistant professor, department of botany. Dr. Amit kumar Kundu and Dr. Raja Ghosh, assistant professor, department of chemistry, who smoothly tackled all the technical issues. I would like to thank the entire organising committee. Last but not the least, I am thankful to my dear students (department of botany) for their active participation and hard work. Without their help this would not have been possible.



UC

Standard Form - I

Utilisation Certificate (UC) in respect of Grant-In-Aid

No.

Date:

1. Name of the Grantee Institute (s) : SRIPAT SINGH COLLEGE  
[Attach separate list for more than one Grantee Institution]
2. Sanctioning Authority : SCIENCE & TECHNOLOGY AND BIOTECHNOLOGY
3. Sanction Order Number & Date : 1817(Sanc.)/STBT-11012(22)/34/2019-ST SEC; 12/02/2020
4. Amount Sanctioned : 40,000.00(Forty Thousand only)
5. Drawing & Disbursing Officer : Sec. Officer, Science & Technology & Biotechnology Department
6. Treasury/PAO : Pay & Accou8nts Officer-III, Calcutta PAO-III  
[From where the bill was drawn]
7. Bill No. & Date : -
8. T. V. No. & Date : -
9. Amount Drawn : 40,000.00(Forty Thousand only)
10. Unspent Balance of Previous year, if any: NA
11. Amount Utilised : 40,000.00(Forty Thousand only)
12. Unspent Balance, if any, in Current year : NIL
13. Purpose of Utilisation : Seminar on Environmental Sustainability: Issues and Challenges

CERTIFICATE

Certified that I have satisfied myself that the conditions on which the Grant-in-Aid was sanctioned have been duly fulfilled/are being fulfilled that I have exercised the following checks to see that the money was actually utilised for the purpose for which was sanctioned.

**[Applicable in case of unspent balance]** The unspent fund will be adjusted against the Grant-in-Aid to be sanctioned and paid in the Current Financial Year (applicable in case of recurring grant only).

Kinds of checks exercised

1. Cash Book
2. Registration sheet

*Shubhashish Sarkar*  
SHUBHASHISH SARKAR  
Chartered Accountants  
M. No. 065193 17/2/23



Date

*Green* 15/2/2023  
Signature with Official Stamp of Teacher-in-Charge  
Sripat Singh College  
Murshidabad

(IMPORTANT: UC must be completed in one single A4 page and not to split into more than one page)