

2023-2024

To  
The Principal  
Katwa College  
Katwa, Purba Bardhaman

As per G.B.  
Resolution you  
are directed to  
make arrangements  
of PG and to T. Chatterjee  
amounting to Rs 2000/-  
N.B. 02/01/2024

Sub: Application for financial assistance for paper  
presentation in International Conference.

Respected sir,

I Taniya Chatterjee have presented a paper named " **State-of-the-Art  
in Feature Selection: Applications of the Slime Mould Algorithm**" in the  
**International Conference on Computational Technologies and Electronics**  
(ICCTE-2023) on 23<sup>rd</sup> – 25<sup>th</sup> November, 2023 Organized by Department of  
Computer Science & Technology, University of North Bengal, Siliguri, Darjeeling,  
W.B., India. As an author I have paid the registration fees Rs.4500/- .

I request you to kindly reimburse the registration fees at your earliest and oblige.

Thanking you.

Yours faithfully

*Taniya Chatterjee*

Taniya Chatterjee

Designation – SACT-I

Department of Physics

Katwa College

Dated – 01.12.2023

#### Documents Enclosed:

Certificate of Presentation

Money Receipt

*Seminar A/c*  
Passed for Payment of  
Rs 2000/- (Rupees Two  
Thousand) only  
Principal  
Katwa College  
02/01/2024

*As*  
Axis

*Seminar A/c*  
Passed for Payment of  
Rs 2000/- (Rupees Two Thousand) only  
Principal  
Katwa College

Janiya Chathya.  
Received. - 09/12/2024

CL. issued side  
no: 332299, dt. 02/01/24  
Amounting to Rs. 2,000/-  
Se.  
04/01/24

Date - 15/12/2023

**COLLEGE**

ON

2023)

mmilani College

.....only) as

er, 2023.

Silva  
Collector



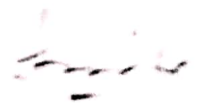


INTERNATIONAL CONFERENCE ON COMPUTATIONAL TECHNOLOGIES AND ELECTRONICS  
(ICCTE-2023)  
November 23-25, 2023

Organized by  
Department of Computer Science & Technology, University of North Bengal  
Technically Co-sponsored by:  
IEEE CIS (Computational Intelligence Society), Kolkata Chapter :: IEEE EDS (Electron Devices Society), Kolkata Chapter  
CSI (Computer Society of India), Siliguri Chapter

Certificate of Presentation

This is to certify that **MRS. TANIYA CHATTERJEE** of **North Bengal University** has presented a paper titled "State-of-the-Art in Feature Selection: Applications of the Slime Mould Algorithm" in the International Conference on Computational Technologies and Electronics (ICCTE-2023) held at University of North Bengal, Siliguri Darjeeling, W.B., India.

  
Dr. Sharad Sinha  
General Chair

  
Dr. Rakesh Kumar Mandal  
Convener



**Money Receipt**

**International Conference on Computational Technologies and Electronics (ICCTE-2023)**

On

**23<sup>rd</sup>-25<sup>th</sup> November, 2023**

Organized by

**Department of Computer Science & Technology, University of North Bengal**

Name of the Author: Sanjaya Chakraborty

Paper Id: 162

Amount: 1500/-

**NBU-CST-ICCTE**

Arul Tudu  
24/11/23  
Treasurer

Signature of the Treasurer





## Money Receipt

International Conference on Computational Technologies and Electronics (ICCTE-2023)

On

23<sup>rd</sup>-25<sup>th</sup> November, 2023

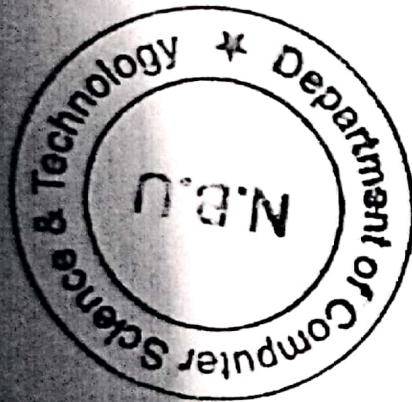
Organized by

Department of Computer Science & Technology, University of North Bengal

Name of the Author: Taniya Chakraborty.

Paper Id: 162

Amount: 4500/-



**NBU-CST-ICCTE**

Anil Tudu  
24/11/23  
TREASURER

Signature of the Treasurer



Extract from the proceedings of the meeting of the Governing Body in its meeting held on 21.07.2020 in the chamber of the Chairman, Katwa Municipality at 12Noon

Item No:11

The Principal proposes an incentive to the teachers for presentation of papers in National/International seminars/workshops/conferences. The GB discusses the matter and resolves that the Registration fee paid by the teachers for participating for paper presentation in such seminars/workshops/conferences may be born by the college upto a maximum of Rs.2000/- or actual whichever is lower. This may be provided to the teachers only once in an academic year (July to June). If more than the number of teachers applies for such incentive, the first ten presentations in order of the date of presentation would be considered.

Dr. Nirmalendu Sarkar  
Principal/Secretary  
Katwa College  
Governing Body

Prashant Raj Shukla, IAS  
President  
Katwa College  
Governing Body

*Attested*  
*16/8/2023*  
*27/12/2023*

No.

234

VR-475/2023-24

Date - 15/12/23

# BANKURA SAMMILANI COLLEGE

TWO-DAY INTERNATIONAL SEMINAR ON

"Microbes & Social Equity (ISMS-2023)"

ORGANISED BY: Dept. of Microbiology & IQAC, Bankura Sammilani College  
& Microbiologist Society, India

Pri/Pmt. Suvendu Pal  
of Ramchandrapur College  
Rs. 800 (Rupees) Eight Hundred only) as

Registration fee / Donation for the Seminar on 22-23 December, 2023.

Rs. 800/-

Sina  
Collector





10  
To The Principal,  
Katura College, Katura, Purba Bardhaman  
Through the co-ordinator, IGAC

Attn  
LB  
you are authorized  
to pay amount  
of Rs. 800/-  
22/12/23

Sub- Submission of necessary documents for substantiating  
my participation in International Seminar at Bankura  
Sammilani College.

Sir,

With due respect I beg to inform you that I am Suwendu  
Pal, a teaching faculty of your College, participated in  
an International Seminar, held at Bankura Sammilani College,  
Bankura on 22/12/2023. For your kind information I beg to  
inform you that I had to deposit Rs- 800/- (Eight hundred only)  
as the registration fee which I have come to learn to be  
provided to me with by the College.

Therefore, I request you please take necessary steps as to  
provide me with that amount and also sanction me the on-duty  
leave for that above mentioned date.

This is for your kind information and necessary steps to  
be taken in favour of me.

Thanking you.

Date - 22/12/2023

Yours faithfully,

Suwendu Pal  
SACT

Department of Botany  
Katura College

Seminar Fee

Passed for Payment of  
Rs. 800/- (Rupees Eight  
Hundred only)

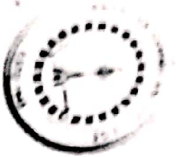
Principal  
Katura College

02/01/2024

Ch. issued vide  
No. 332298, dt 02/01/24  
Amounting to Rs. 800/-  
03/01/24

DoS  
Axis





INTERNATIONAL SEMINAR  
ON



"Microbes and Social Equity" (ISMS-2023)

Organised by

Department of Microbiology & IQAC  
Bankura Sammilani College

N/AAC Accredited B++

1<sup>st</sup> to 2<sup>nd</sup> October 27-28, 2023

Certificate

This is to certify that Sruvanta Pal  
of Kolara College  
has successfully participated/ presented paper/ poster/ model on  
Antimicrobial activity of some plant extracts against ... West Bengal ...  
India in ISMS-2023 at Bankura Sammilani College.

Dr. Samir Kumar Mukherjee

Dr. Swapna Mukhopadhyay

Dr. Swapna Mukherjee

Dr. Bipranish Kumar Tiwary

Dr. Arindam Choudhury

S. My

S. My

Bipranish

Arindam

**Antagonistic activity of *Burkholderia cepacia* P10 isolated from red lateritic soil of Birbhum district, West Bengal against phytopathogenic fungi**

Ranjan Ghosh<sup>1</sup>\*, Narayan Chandra Mandal<sup>2</sup>

<sup>1</sup>Department of Botany, Bankura Sammilani College, Kenduadihi, Bankura, 722102  
<sup>2</sup>Myecology and Plant Pathology Laboratory, Department of Botany, Vigna-Bharati, Santiniketan, 731235

\*E-mail: [ybranian@gmail.com](mailto:ybranian@gmail.com)

**Abstract**

One potent plant growth promoting rhizobacterial strain P10 isolated from the red lateritic soil of West Bengal showed very good antagonistic activity against number of phytopathogenic fungi. The strain was identified as *Burkholderia cepacia* on the basis of 16S rDNA sequence homology. The isolate can produce significant zones of inhibition against *Alternaria alternata*, *Rhizopus stolonifer*, *Helminthosporium compactum*, *Penicillium digitatum* and *Colletotrichum acutatum* when tested by dual culture overlay method. Production of zones of inhibition by heat killed cell free supernatant indicated the thermostable nature of the antifungal principle. Scanning Electron Microscopic observation revealed mycelial degradation of the pathogenic fungi upon treatment with P10. Hydroxamate type of siderophore production by the isolate was also noticed which may also be responsible for its antifungal potential. Sufficient root colonizing potential of the isolate will also be helpful for inhibiting the pathogenic growth in the plant rhizosphere. In addition to its antifungal activity and siderophore production, the isolate also showed other plant growth promoting attributes like phosphate solubilization, N<sub>2</sub> fixation and indole acetic acid production. Details investigations are still required for finding out the actual mechanism of antifungal activity and for its application as a biocontrol agent for improving crop plant growth.

**Key words:** Rhizobacteria; Antifungal activity; Siderophore; Root colonization; Biocontrol agent

**ISMSOP26**

✓ **Antimicrobial activity of some plant extracts against different bacterial strains causing livestock ailments in Purba Bardhaman district of West Bengal, India**

✓ Suvendu Pal, Dr. Asish Mondal\*

Post Graduate Department of Botany, Ramananda College, Bishnupur, Bankura-722122, West Bengal, India

Corresponding author's e-mail: [mandalasish71@gmail.com](mailto:mandalasish71@gmail.com)



### Abstract

Globally, livestock ailments caused by different bacterial strains are serious problem for livestock development. Nowadays rapid development of bacterial resistance against different antibiotics is a serious threat to global livestock health. To overcome this situation attention is being shifted towards bio-active ingredients isolated from ethno-herbal plants which may be potential source of alternative drugs in near future. The present study appreciates the antibacterial effects of four herbal plants; sojne (*Moringa oleifera*), thankuni (*Centella asiatica*), kathal (*Artocarpus heterophyllus*) and gholkhori (*Neptunia oliveracea*). These four plant extracts are used in three different solvents like ethanol, methanol and distilled water at different concentration. Antibacterial activity test of four plant extracts is elucidated against *Salmonella typhi*, *Staphylococcus aureus*, *Escherichia coli* and *Pseudomonas aeruginosa*. The agar well diffusion method is used to evaluate the antibacterial activity of each plant extract. Minimum inhibitory concentration (MIC) and minimum bactericidal concentration (MBC) of the extracts is determined through these assays. The effective plant extracts to be potentially used as natural alternative preventives of livestock ailments and may be the new field of veterinary medicine near future.

**Keyword:** Plant extract, livestock pathogen, antimicrobial activity, MIC, MBC

ISMSOP27

### Characterization of *Aeromonas*-infecting bacteriophage AHPMCC11, a new species of genus *Ahpunavirus*

<sup>1</sup>Smita Ghosh\* and <sup>2</sup>Kuntal Ghosh

<sup>1</sup>Department of Biological Sciences, Midnapore City College, Midnapore, West Bengal, India  
[\\*ghoshsmital4@gmail.com](mailto:*ghoshsmital4@gmail.com)

### Abstract

*Aeromonas hydrophila* is a major aquatic habitat pathogen responsible for large economic losses in the aquaculture and food industry sectors. To combat *A. hydrophila* infection many antibiotics are used but antibiotic resistance is a great threat to this world. In this study, we used bacteriophage to control *A. hydrophila* infection instead of antibiotic therapy. A lytic bacteriophage AHPMCC11 was isolated using from a sewage sample by using *A. hydrophila* MTCC1739. Bacteriophage AHPMCC11 showed a short latent period of 10 min and burst size was 22 PFU. Bacteriophage AHPMCC11 had potent bacteriolytic activity within 2 hours in liquid culture inhibition assay and film scavenging activity against *A. hydrophila* MTCC1739. It also had a

Extract from the proceedings of the meeting of the Governing Body in its meeting held on 21.07.2020 in the chamber of the Chairman, Katwa Municipality at 12Noon

**Item No:11**

The Principal proposes an incentive to the teachers for presentation of papers in National/International seminars/workshops/conferences. The GB discusses the matter and resolves that the Registration fee paid by the teachers for participating for paper presentation in such seminars/workshops/conferences may be born by the college upto a maximum of Rs.2000/- or actual whichever is lower. This may be provided to the teachers only once in an academic year (July to June). If more than the number of teachers applies for such incentive, the first ten presentations in order of the date of presentation would be considered.

Dr. Nirmalendu Sarkar  
Principal/Secretary  
Katwa College  
Governing Body

Prashant Raj Shukla, IAS  
President  
Katwa College  
Governing Body

*Attested*  
*27/12/2023*



**STATEMENT OF EXPENSES INCURRED FOR PARTICIPATION IN  
THE NATIONAL SEMINAR ON "LITERARY THEORY AND THE  
LINGUISTIC TURN" ORGANIZED BY DEPT. OF ENGLISH,  
PURBASTHALI COLLEGE HELD ON 15.09.22**

✓ 1. REGISTRATION FEES FOR FACULTY (02) bill 1 and 2	200 X 2 = Rs. 400
2. REGISTRATION FEES FOR STUDENTS (07) bill 3,4,5,6,7,8,9	150 x 7 = Rs 1050
3. TRAVEL EXPENSES (Train to and fro) bill 10,11,12	60 + 40 + 40 = Rs 140
4. TOTO FARE FOR 9 HEADS (from Purbasthali Station to College and return) bill 13	15x9 = Rs 135
	15X 9 = Rs 135

**TOTAL :**

**Rs 1860**

Seminar A/c

Passed for Payment of

Rs. 1860/ (Rupees One

Thousand eight Hundred Sixty

000)

*[Signature]*  
Principal  
Kalya College

15/11/22

*[Signature]*

07/12/2022

Assistant Professor  
Dept. of English

Axis

# PURBASTHALI COLLEGE

## REGISTRATION SLIP

INTERNATIONAL / NATIONAL / STATE LEVEL SEMINAR

Title of the seminar: Literary and the Linguistic Turn

Name: Tanmay Ray  
Designation: Assistant Professor  
Institution: Katwa College

Rs/- 200/-

Date: 15/09/22

Convener

Collector

No.- 13

# PURBASTHALI COLLEGE

## REGISTRATION SLIP

INTERNATIONAL / NATIONAL / STATE LEVEL SEMINAR

Title of the seminar: Literary

Name: Tanmay Ray  
Designation: SACT  
Institution: Katwa College

Rs/- 200/-

Date: 15/09/22

Convener

Collector

No.- 12

# PURBASTHALI COLLEGE

## REGISTRATION SLIP

INTERNATIONAL / NATIONAL / STATE LEVEL SEMINAR

Title of the seminar: Literary

Name: Sandip De  
Designation: Student  
Institution: Katwa College

Rs/- 150/-

Date: 15/09/22

Convener

Collector

No.- 007

# PURBASTHALI COLLEGE

## REGISTRATION SLIP

INTERNATIONAL / NATIONAL / STATE LEVEL SEMINAR

Title of the seminar: Literary and the Linguistic Turn

Name: Sandipta Bhattacharya  
Designation: Student  
Institution: Katwa College

Rs/- 150/-

Date: 15/09/22

Convener

Collector

No.- 11

# PURBASTHALI COLLEGE

## REGISTRATION SLIP

INTERNATIONAL / NATIONAL / STATE LEVEL SEMINAR

Title of the seminar: Literary and the Linguistic Turn

Name: Mr. Arjun Kumar  
Designation: Student  
Institution: Katwa College

Rs/- 150/-

Date: 15/09/22

Convener

Collector

No.- 6

# PURBASTHALI COLLEGE

## REGISTRATION SLIP

INTERNATIONAL / NATIONAL / STATE LEVEL SEMINAR

Title of the seminar: Literary and the Linguistic Turn

Name: Tithi Pal  
Designation: Student  
Institution: Katwa College

Rs/- 150/-

Date: 15/09/22

Convener

Collector

No.-

# PURBASTHALI COLLEGE

## REGISTRATION SLIP

INTERNATIONAL / NATIONAL / STATE LEVEL SEMINAR

Title of the seminar: Literary and the Linguistic Turn

Name: Tithi Pal  
Designation: Student  
Institution: Katwa College

Rs/- 150/-

Date: 15/09/22

Convener

Collector





No.-

7

# PURBASTHALI COLLEGE

## REGISTRATION SLIP

INTERNATIONAL / NATIONAL / STATE-LEVEL SEMINAR

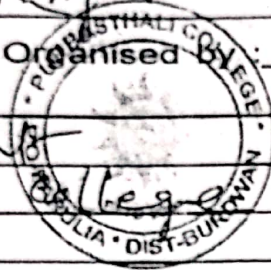
Title of the seminar : Literary

Organised by : Dpt. of English

Name : Jit Das

Designation : Student

Institution : Katwa



Rs/- 150/-

Date 15/09/22

Ghosh  
Convener

Man  
Collector

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No.-

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# PURBASTHALI COLLEGE

## REGISTRATION SLIP

INTERNATIONAL / NATIONAL / STATE LEVEL SEMINAR

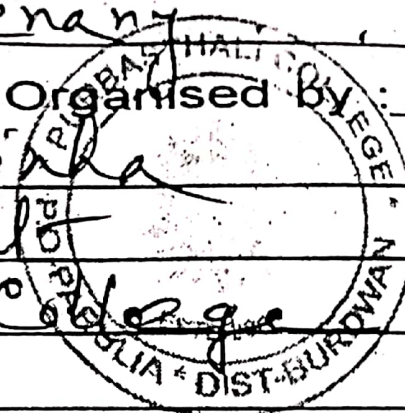
Title of the seminar : Literary

Organised by : Dpt. of English

Name : Debarati Sinha

Designation : Student

Institution : Katwa College



Rs/- 150/-

Date 15/09/22

Quosh  
Convener

[Signature]  
Collector



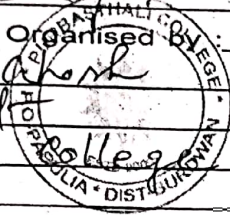


# 008 PURBASTHALI COLLEGE (8) REGISTRATION SLIP

INTERNATIONAL / NATIONAL / STATE LEVEL SEMINAR

Title of the seminar : Literary

Name : Sumedha Ghosh  
Designation : Student  
Institution : Katwa College

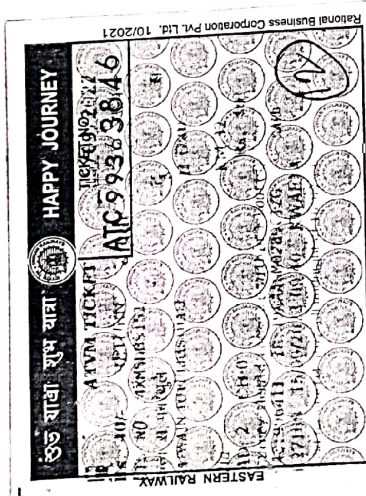
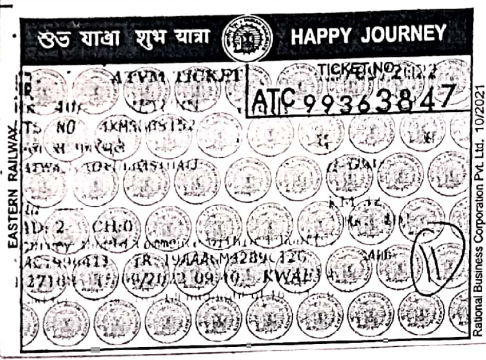
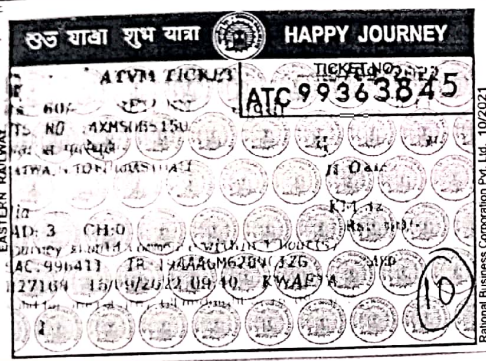


Rs/- 150/-

Date: 15/09/21

Ghosh  
Convener

Pran  
Collector



TOTO FARE FROM PURBASTHALI  
STATION TO PURBASTHALI  
COLLEGE & RETURN  
NO. OF HEADS - 09  
FARE (ONE WAY) PER HEAD - 15  
15 X 09 = Rs 135  
RETURN - Rs 135  
TOTAL Rs 270