

**Bidhannagar College (Govt. of West Bengal)**  
**6.5.5: Activities conducted under collaborative Research**



Sl. No.	Name of the MoU / linkage	Name of the institution / industry with whom the MoU / linkage is made, with contact details	Year of signing MoU / linkage	Purpose of the MoU/Linkage (internship, on-the-job training, project work, student / faculty exchange and collaborative research)	Duration of the MoU / linkage	LIST OF activities under each MOU/ Linkage
1	Collaborative research for Ph.D of Sk.Asraf Ali	Dr. Mijanur Rahaman Molla of University of Calcutta	2018-19	Collaborative research	1year	Research
2	Collaborative research for Ph.D of Anirban Bera	Dr. Amit Saha of Jadavpur University	2018-19	Collaborative research	1year	Research
3	Collaborative research for Ph. D of Arup Kumar Adak	Dr. Chittaranjan Sinha of Jadavpur University	2018-19	Collaborative research	1year	Research
4	Collaborative Research for Ph.D of Kiranmoy Chatterjee	Dr. Diganta Mukherjee, Sampling and Official Statistics Unit, Indian Statistical Institute, Kolkata	2018-19	Collaborative research	1year	Research
5	Collaborative Research for Ph.D of Soumyadeep Das	Atanu Biswas and Samarjit Das of Indian Statistical Institute, Kolkata	2018-19	Collaborative research	1year	Research
6	Collaborative Research for Ph.D of Suryasish Chatterjee	Dr. Uttam Bandopadhyay of University of Calcutta	2018-19	Collaborative research	1year	Research
7	Collaborative research for Ph.D of Nibedita Rani Saraf	Dr. Parimal Karmakar of Jadavpur University	2018-19	Collaborative research	1year	Research
8	Collaborative Research for Ph.D of Kiranmoy Chatterjee	Dr. Prajamitra Bhuniya of Imperial College, UK	2019-20	Collaborative research	1year	Research

  
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9	Collaborative Research for Ph.D of Kiranmoy Chatterjee	Dr. Krishna Ray of WBSU	2019-20	Collaborative research	9months	Research
10	Faculty exchange programme of Dr. Tapas Pal	Kanyashree College, Kolkata	2020-21	Faculty Exchange	1year	Faculty exchange
11	Faculty exchange programme of Dr. Tapas Pal	Kanyashree College, Kolkata	2021-22	Faculty Exchange	1year	Faculty exchange
12	Faculty exchange programme of Dr. Tapas Pal	Kanyashree College, Kolkata	2022-23	Faculty Exchange	1year	Faculty exchange
13	Two-Days National Level Workshop on Herbarium methodology and Macrofungal Taxonomy Including Phylogenetic Analysis	CNH, EIACP, Botanical Survey of India, KOLKATA	2022-23	Training	2days	Workshop
14	TRANSLATION WORKSHOP ON DORIS LESSING	CENTRE FOR TRANSLATION OF INDIAN LITERATURES, JADAVPUR UNIVERSITY, AND CENTRE FOR STUDIES IN GENDER, CULTURE, AND MEDIA, WEST BENGAL STATE UNIVERSITY, & DORIS LESSING SOCIETY, SOUTH ASIA	2022-23	Training	2days	Workshop
15	MoU	Barasat Govt. College	2022-23	Academic exchange	5years	Faculty and student exchange

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16	MoU	Vital Waste	2022-23	Green campus	Untill terminated by either party	Dry recyclables and hazardous waste from the college premises
17	MoU	Nataji Subhas Open University	2022-23	Academic	Untill terminated by either party	To run PG study centre for theory and laboratory-based activities and to conduct exams as and when required in the College by providing necessary infrastructure.
18	MoU	We for All	2022-23	Academic	Untill terminated by either party	Develop communicating skills in English of the students of Bidhannagar College, organize debate/lectures

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# Collaborative Research

## On the estimation of population size from a dependent triple-record system

Kiranmoy Chatterjee

Indian Statistical Institute, and Bidhannagar College, Kolkata, India

and Prajamitra Bhuyan

Imperial College London, UK

[Received April 2018. Final revision April 2019]

**Summary.** Population size estimation based on a capture–recapture experiment under a triple-record system is an interesting problem in various fields including epidemiology and population studies. In many real life scenarios, there is inherent dependence between capture and recapture attempts. We propose a novel model that successfully incorporates the possible dependence and the associated parameters have nice interpretations. We provide estimation methodology for the population size and the associated model parameters based on the maximum likelihood method. The model proposed is applied to analyse real data sets from public health and census coverage evaluation studies. The performance of the estimate proposed is evaluated through extensive simulation study and the results are compared with existing competitors. The results exhibit superiority of the model over the existing competitors both in real data analysis and in a simulation study.

**Keywords:** Behavioural dependence; Disease surveillance; Maximum likelihood; Time-ordered capture; Trivariate Bernoulli model

### 1. Introduction

Estimation of population size or the number of vital events that have occurred, during a given time span, is a relevant statistical problem in various scientific disciplines including epidemiology, population studies and life sciences. Federal agencies are generally interested in such estimates for planning and policy formulation. In general, a census or any registration system often fails to capture all the individuals and that leads to undercoverage of the population under consideration. However, in some instances, duplicate records or members outside the target population are included in the census or any other registers because of erroneous enumeration. This issue is known as overcoverage, and it is a common practice to identify and remove the erroneous inclusions through administrative follow-up actions (Chipperfield *et al.*, 2017) or to adjust the census data on the basis of an estimate of the overcoverage rate (Zhang, 2015). In this paper, we focus only on the issues that are related to the commonly encountered problem of undercoverage, assuming that the available data are free from any erroneous inclusion. To reduce the undercoverage error, information from more than one attempt needs to be considered. The data that are obtained from various sources are summarized by matching the lists of captured individuals and analysed to obtain an estimate of the unknown population size (Rastogi and

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E-mail: bhuyan.prajamitra@gmail.com

*Effects of nutrient limitation, salinity increase, and associated stressors on mangrove forest cover, structure, and zonation across Indian Sundarbans*

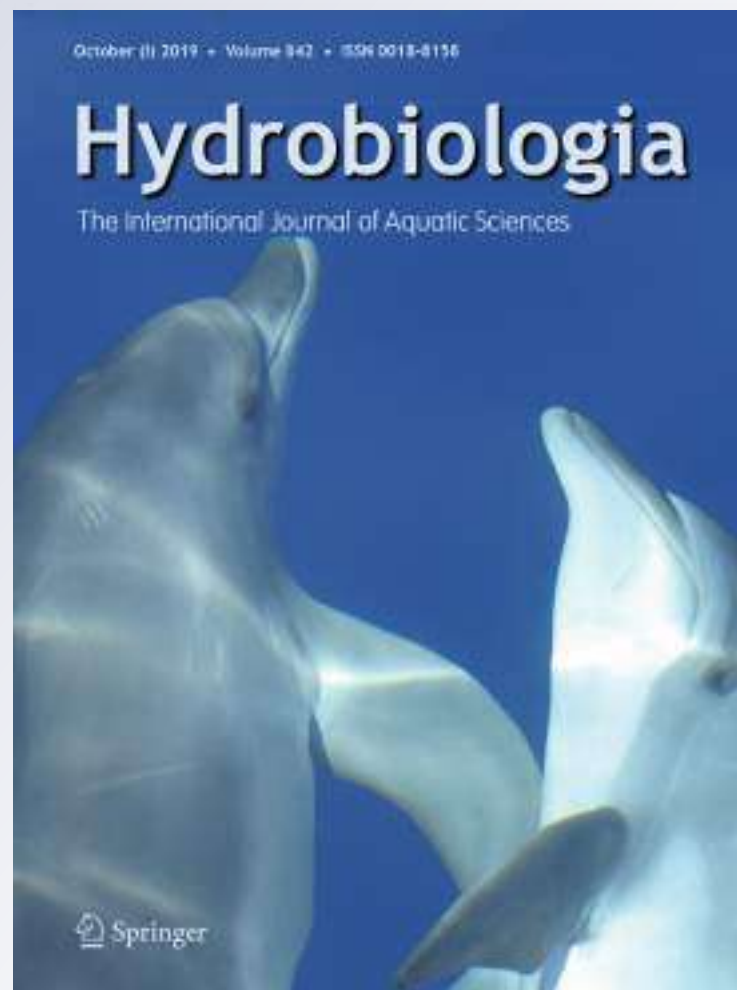
**Rajojit Chowdhury, Tapan Sutradhar,  
Mst. Momtaj Begam, Chandan  
Mukherjee, Kiranmoy Chatterjee,  
Sandip Kumar Basak & Krishna Ray**

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DOI 10.1007/s10750-019-04036-9



## Faculty Exchange

Government of West Bengal  
Higher Education Department,  
Appointment Branch  
Bikash Bhavan Salt Lake, Kolkata-91

No.994-Edn(A)/10M-36/20

Dated, Kolkata, 23<sup>rd</sup> December, 2020

### NOTIFICATION

The Governor is pleased, in the interest of public services, to entrust the following Assistant Professors / Associate Professors in Economics under the West Bengal Educational Service with the additional charge of teaching in newly established Kanyashree College, Behala along with their regular duties at their present place of posting, until further order.

1. Dr. Tapas Kumar Pal, Associate Professor of Economics, Bidhannagar College, Salt Lake, Kolkata.
2. Smt. Jayeeta Saha, Assistant Professor of Economics, Maulana Azad College, Kolkata.

*The above mentioned teachers shall report for their new assignment at the earliest.*

Sd/ S. Banerjee  
Assistant Secretary

No.994/1(10)-Edn(A)/10M-36/20

Dated, Kolkata, 23<sup>rd</sup> December, 2020

Copy forwarded for information and necessary action to:-

1. The Director of Public Instruction, West Bengal.
2. The Additional Director of Public Instruction (Administration), West Bengal.
3. The Principal/ Officer-in-charge, Bidhannagar College, Salt Lake, Kolkata. He is requested to continue to draw and disburse the salary of Dr. Tapas Kumar Pal as usual, until further order.
4. The Principal/ Officer-in-charge, Maulana Azad College, Kolkata. He is requested to continue to draw and disburse the salary of Smt. Jayeeta Saha as usual, until further order.
5. The Principal/ Officer-in-charge, Kanyashree College, Behala, Kolkata.
6. ~~Dr. Tapas Kumar Pal, Associate Professor of Economics, Bidhannagar College, Salt Lake, Kolkata.~~
7. Smt. Jayeeta Saha, Assistant Professor of Economics, Maulana Azad College, Kolkata.
8. The P.S. to the HMIC of this Department.
9. The Sr. P.A. to the Principal Secretary of this Department.
10. Guard file.

  
Assistant Secretary

No.994-Edn(A)/10M-36/20

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9. The Sr. P.A. to the Principal Secretary of this Department.
10. Guard file.

  
Assistant Secretary

# Faculty Exchange

Memo No. .... UCAC- CS / F-12 / GL / 013 / 2022, Dated 20/10/22



UNIVERSITY OF CALCUTTA  
FACULTY COUNCIL FOR POST GRADUATE STUDIES ARTS & COMMERCE,  
SOCIAL WELFARE & BUSINESS MANAGEMENT  
ASUTOSH BUILDING, CALCUTTA - 700 073

To

Sri Tapas Kumar Pal,

Sir/Madam

This is to inform you that under order of the Vice-Chancellor you have been appointed again purely on ad-hoc basis as **Guest Lecturer** in the Department of **MBM** under the faculty councils for P.G. Studies in Arts, Commerce & Business Studies, University of Calcutta. And honorarium of Rs. 20000/- per annum for delivering not more than 40 (forty) lectures in one year @ Rs. 500/- per lecture will be payable in every three months for one year with effect from **01.04.2023** till **31.03.24** or w.e.f. your date of joining till 31.03.24 or till the vacant post is filled in whichever is earlier. You are requested kindly to report to the Head/In-charge of the Department **MBM** for allotment of your duties if you are agreeable to accept the offer on the above terms and conditions. Date of Birth is required for regularizing the appointment and release of remuneration. The appointment will be subject to the existing rules and/or rules to be framed or adopted by the University from time to time. Please send your joining report to the Secretary, Faculty Councils for P.G. studies in Arts, Commerce & Business Studies through the Head of the Department concerned.

N.B. No person should be allowed to join the University Service in any capacity whether as Teachers, Officers or Employees of any category (whole time, part time, permanent or temporary, unless he submits at the time of joining proof of his/her age to the Accounts Section as Necessary under ordinance).

This has been approved under orders of the Vice-Chancellor, U.C. dated 28.10.2022

  
@ 10/11/2022

Secretary (Actg.)  
Faculty Councils for P.G. Studies  
in Arts, Commerce & Business Studies  
University of Calcutta

N.B. Guest lectures are requested to perform examination duties as and when required. Guest Lecturer As per Syndicate Resolution G.L will not be appointed after 65 years of age



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Government of West Bengal  
Higher Education Department,  
Appointment Branch  
Bikash Bhavan Salt Lake, Kolkata-91

No.993-Edn(A)/10M-36/20

Dated, Kolkata, 23<sup>rd</sup> December, 2020

**Faculty Exchange**

NOTIFICATION

The Governor is pleased, in the interest of public services, to entrust the following Assistant Professors / Associate Professors in Geography under the West Bengal Educational Service with the additional charge of teaching in newly established Kanyashree College, Behala along with their regular duties at their present place of posting, until further order.

1. Dr. Chandan Surabhi Das, Associate Professor of Geography, Barasat Government College.
2. Smt. Shewli Shabnam, Assistant Professor of Geography, Bidhannagar College, Salt Lake, Kolkata.

The above mentioned teachers shall report for their new assignment at the earliest.

Sd/ S. Banerjee  
Assistant Secretary

No.993/1(10)-Edn(A)/10M-36/20

Dated, Kolkata, 23<sup>rd</sup> December, 2020

Copy forwarded for information and necessary action to:-

1. The Director of Public Instruction, West Bengal.
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3. The Principal/ Officer-in-charge, Barasat Government College, District – North 24 Parganas. He is requested to continue to draw and disburse the salary of Dr. Chandan Surabhi Das as usual, until further order.
4. The Principal/ Officer-in-charge, Bidhannagar College, Salt Lake, Kolkata. He is requested to continue to draw and disburse the salary of Smt. Shewli Shabnam as usual, until further order.
5. The Principal/ Officer-in-charge, Kanyashree College, Behala, Kolkata.
6. Dr. Chandan Surabhi Das, Associate Professor of Geography, Barasat Government College, District – North 24 Parganas.
7. Smt. Shewli Shabnam, Assistant Professor of Geography, Bidhannagar College, Salt Lake, Kolkata.
8. The P.S. to the HMIC of this Department.
9. The Sr. P.A. to the Principal Secretary of this Department.
10. Guard file.

  
Assistant Secretary

Government of West Bengal  
Higher Education Department,  
Appointment Branch  
Bikash Bhavan Salt Lake, Kolkata-91

No.998-Edn(A)/10M-36/20

Dated, Kolkata, 23<sup>rd</sup> December, 2020

NOTIFICATION

The Governor is pleased, in the interest of public services, to entrust the following Assistant Professor in Mathematics under the West Bengal Educational Service with the additional charge of teaching in newly established Kanyashree College, Behala along with his regular duties at his present place of posting, until further order.

1. Shri Shib Sankar Giri, Assistant Professor of Mathematics, Bidhannagar College, Salt Lake, Kolkata.

The above mentioned teacher shall report for his new assignment at the earliest.

Sd/ S. Banerjee  
Assistant Secretary


No.998/1(8)-Edn(A)/10M-36/20

Dated, Kolkata, 23<sup>rd</sup> December, 2020

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1. The Director of Public Instruction, West Bengal.
2. The Additional Director of Public Instruction (Administration), West Bengal.
3. The Principal/ Officer-in-charge, Bidhannagar College, Salt Lake, Kolkata. He is requested to continue to draw and disburse the salary of Shri Shib Sankar Giri as usual, until further order.
4. The Principal/ Officer-in-charge, Kanyashree College, Behala, Kolkata.
5. Shri Shib Sankar Giri, Assistant Professor of Mathematics, Bidhannagar College, Salt Lake, Kolkata.
6. The P.S. to the HMIC of this Department.
7. The Sr. P.A. to the Principal Secretary of this Department.
8. Guard file.

  
Assistant Secretary

  
Officer-in-Charge  
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# Estimation of Population Size with Heterogeneous Catchability and Behavioural Dependence: Applications to Air and Water Borne Disease Surveillance

Kiranmoy Chatterjee\* Prajamitra Bhuyan†

\*Bidhannagar College Kolkata

†Department of Mathematics, Imperial College London, London

## Abstract

Population size estimation based on the capture-recapture experiment is an interesting problem in various fields including epidemiology, criminology, demography, etc. In many real-life scenarios, there exists inherent heterogeneity among the individuals and dependency between capture and recapture attempts. A novel trivariate Bernoulli model is considered to incorporate these features, and the Bayesian estimation of the model parameters is suggested using data augmentation. Simulation results show robustness under model misspecification and the superiority of the performance of the proposed method over existing competitors. The method is applied to analyse real case studies on epidemiological surveillance. The results provide interesting insight on the heterogeneity and dependence involved in the capture-recapture mechanism. The methodology proposed can assist in effective decision-making and policy formulation.

*Key words:* COVID-19, Gibbs sampling, Hepatitis A, List dependence, Multiple systems estimation.

## 1 Introduction

The knowledge about the true prevalence of a disease in a specified period is an essential requirement for surveillance and effective policy formulation regarding the healthcare system of a state (Bird and King, 2018). In general, the available data source fails to cover all the relevant events and that leads to an undercount of the target population suffering from the disease. Therefore, disease ascertainment data are accumulated from multiple sources to increase the coverage and for the estimation of the disease prevalence (Papoz et al., 1996). This method is

## Collaborative Research

The screenshot shows the top section of a journal article page. On the left, there is a logo for the Journal of Statistical Computation and Simulation. The main header includes the journal title, volume (91), issue (13), and year (2021). A search bar is located on the right. Below the header, there are two buttons: 'Submit an article' and 'journal homepage'. The article title is 'On the estimation of population size under dependent dual-record system: an adjusted profile-likelihood approach'. The authors are Kiranmoy Chatterjee and Diganta Mukherjee. The page number is 75. The article is categorized as a Research Article. The page includes a navigation bar with links for 'Full Article', 'Figures & data', 'References', 'Citations', 'Metrics', 'Reprints & Permissions', and 'Get access'. There are also social media icons for Twitter, Facebook, and LinkedIn.

Journal of Statistical Computation and Simulation  
Volume 91, 2021 - Issue 13

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### On the estimation of population size under dependent dual-record system: an adjusted profile-likelihood approach

Kiranmoy Chatterjee & Diganta Mukherjee

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Download citation | <https://doi.org/10.1080/10047605.2021.1908294>

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# An optimal multiarmed response adaptive design for survival outcome with independent censoring

Soumyadeep Das<sup>1</sup> | Rahul Bhattacharya<sup>2</sup> 

<sup>1</sup> Department of Statistics, Bidhannagar Government College, Kolkata, India

<sup>2</sup> Department of Statistics, University of Calcutta, Kolkata, India

## Correspondence

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## Abstract

Compromising ethics and precision in the context of a multiarmed clinical trial, an optimal order adjusted response adaptive design is proposed for survival outcomes subject to independent random censoring. The operating characteristics of the proposed design and the follow-up inference are studied both theoretically as well as empirically and are compared with those of the competitors. Applicability of the developed design is further illustrated through redesigning a real clinical trial with survival responses.



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# Multi-arm covariate adjusted response adaptive designs for ordinal outcome clinical trials

Statistical Methods in Medical Research  
1–12

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DOI: 10.1177/09622802221133558

[journals.sagepub.com/home/smm](https://journals.sagepub.com/home/smm)Soumyadeep Das<sup>1</sup> , Rahul Bhattacharya<sup>2</sup>  and Atanu Biswas<sup>3</sup> 

## Abstract

Covariate adjusted response adaptive designs are developed with ordinal categorical responses for phase III clinical trial involving multiple treatments. Stochastic ordering principle is used to order the treatments according to effectiveness and consequently allocation functions are developed by combining the cumulative odds ratios suitably. The performance of the proposed designs is investigated through relevant exact as well as large sample measures. To investigate the performance in a real situation, a real clinical trial involving lung cancer patients is further redesigned using the proposed allocation design.

## Keywords

Covariate adjusted response adaptive design, ordinal categorical responses, cumulative odds ratio, proportional odds model.

## 1 Introduction

Clinical trials are carefully conducted research studies to find out the treatments that work best on subjects with a certain disease. Among the several phases of a clinical trial, phase III comprises of the large scale evaluation of treatments and hence is a crucial phase. In phase III of the clinical trial, the patients enter sequentially into the trial and assigned one of the available treatments. Complete randomization (CR) is the widely used allocation design in this regard for its simplicity and statistical performance (e.g. higher power). But from a critic's viewpoint, CR lacks individual ethics as it is blind to treatment performances and hence does not skew the allocation towards the better performing treatments. On the other hand, response adaptive randomization (RAR) uses the available allocation and response information of the patients to update the allocation probabilities so that treatments doing better are used more often.<sup>1,2</sup> Thus a RAR is more desirable as it compromises collective ethics (identifying a true difference in treatment effectiveness with high statistical power) with individual ethics (maximum number of patients are treated by the superior treatments eventually).

Depending on the nature of the trial, often the responses of the patients are measured in ordinal categorical scale. For example, the response of a rheumatoid arthritis<sup>3</sup> patient can be any of the following: nil, mild, moderate, and severe. As another example, the responses in cancer trial may be either of the ordinal categories: death, progressive disease to complete remission. Ordinal responses are also reported in trauma<sup>4</sup> and sports related knee injury<sup>5</sup> trials. Another example of ordinal outcomes is the WHO Clinical Progression Scale, which is a 11-point scale (0: not infected to 10: dead) and is advantageous for the use in an emerging infectious disease epidemic. In a very recent article on the final report of the Remdesivir trial with Covid-19 patients,<sup>6</sup> though the primary outcome is length of recovery time, but the patient response was measured in an ordinal eight point scale. Although these real trials used fixed allocation designs, but development and advantage of RAR in this context can be found in the works of Bandyopadhyay and Biswas,<sup>7,8</sup> Biswas et al.,<sup>9</sup> Biswas et al.,<sup>10–12</sup> and Das et al.,<sup>13</sup> among others.

Although these developments assumed homogeneity of patients, but in reality, they may differ with respect to covariates like age, sex and health conditions. So, adapting covariate information into the design phase of the trial is desirable to

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## TWO-DAY NATIONAL LEVEL WORKSHOP ON HERBARIUM METHODOLOGY AND MACROFUNGAL TAXONOMY INCLUDING PHYLOGENETIC ANALYSIS

ORGANIZED BY  
THE PG DEPARTMENT OF BOTANY  
BIDHANNAGAR COLLEGE (BNC)

IN COLLABORATION WITH  
CENTRAL NATIONAL HERBARIUM (CNH),  
BOTANICAL SURVEY OF INDIA (BSI)  
AND  
ENVIRONMENTAL INFORMATION, AWARENESS,  
CAPACITY BUILDING AND LIVELIHOOD PROGRAMME  
(EIACP) PC-RP, BSI



25-26 APRIL  
2023



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SCIENTIST 'E' AND IN CHARGE, CNH, BSI

DR. K. KARTHIGEYAN  
SCIENTIST 'E', CNH, BSI AND SCIENTIST IN CHARGE, EIACP PC-RP, BSI

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DR. MOUSUMI MUKHOPADHYAY, BNC

ORGANIZING SECRETARY  
DR. SUBHADIPA SENGUPTA, BNC

TREASURER  
DR. KAUSIK MAJUMDER, BNC

### EXECUTIVE COMMITTEE

SRI BENUDHAR MANDAL, BNC

DR. BHARATI MUKHOPADHYAY, BNC

DR. KAJARI LAHIRI, BNC

REGISTRATION  
FEE - 700/-

### ELIGIBILITY FOR PARTICIPATION- POST GRADUATE STUDENTS OF BOTANY

REGISTRATION IS MANDATORY FOR PARTICIPATION  
LAST DATE OF REGISTRATION- 15.04.23  
INTIMATION TO THE SELECTED PARTICIPANTS- 20.04.23  
NUMBER OF SEATS LIMITED

### BANK DETAILS FOR PAYMENT OF REGISTRATION FEES-

NAME OF THE BANK - BANK OF BARODA  
SALT LAKE SECTOR 1 BRANCH  
ACCOUNT NUMBER - 34950100004875  
IFSC CODE- BARBOSALKOL (FIFTH CHARACTER IS ZERO)

### REGISTRATION LINK

<https://forms.gle/mWMKasmmSMM7WAJfA>

CONTACT PERSON- DR. MOUSUMI MUKHOPADHYAY (9434506048)

PARTICIPANTS WILL HAVE TO BRING THEIR OWN LAPTOPS

## Bidhannagar College

Bidhannagar College was established in 1984, with the aim of providing quality education to students. It is a Government Institution directly under the aegis of the Department of Higher Education, Government of West Bengal. The College plays a pivotal role as a premier educational institute for students pursuing higher studies. The Botany Under Graduate Department started in 1997 and subsequently Post Graduate Course was

## Bidhannagar College

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## About the Herbarium

A herbarium can be defined as a repository of dried plant collections which are poisoned, mounted, stitched, labelled and systematically arranged based on a recognized classification for reference and use in taxonomic research. Herbarium specimens are often used to verify the identity of the specimens collected. In recent times herbarium collections have become an important document to study the effect of climate change and species composition of an area and also helps to plan conservation strategies based on the data on the occurrence of the species in the past. The herbarium also plays an important role as a conservatory of dried plant material, archival record of a region's flora, source of botanical information and diversity. It thus aids in biological research and teaching.

## About Macrofungi

Macrofungi refers to all fungi that produce visible fruiting bodies. These fungi are evolutionarily and ecologically very divergent. The Kingdom Fungi - one of the oldest and largest groups of living organisms, is a monophyletic group, thereby meaning that all modern fungi can be traced back to a single ancestral organism. The phylogenetic classification of fungi is designed to group all the fungi on the basis of their ancestral relationships.

## How to get in

**Bidhannagar College**  
EB 2, Sector 1, Salt Lake  
Kolkata- 700064

- Nearest Railway Station - Bidhannagar Road
- Nearest Metro Station- City Centre
- Nearest Bus Stop- Vidyasagar Island



**Location link-** <https://goo.gl/maps/yhnBikAJCEwUVZNn8>





Two-Days National Level Workshop on  
Herbarium Methodology and Macrofungal Taxonomy Including Phylogenetic Analysis

organised by  
PG Department of Botany, Bidhannagar College, Kolkata  
in collaboration with  
Central National Herbarium  
&  
Environmental Information, Awareness, Capacity Building and Livelihood Programme (EIACP)  
Programme Centre- Resource Partner on Biodiversity (Flora)  
Botanical Survey of India  
on  
25<sup>th</sup> & 26<sup>th</sup> April, 2023 (Tuesday & Wednesday)  
at  
PG Department of Botany, Bidhannagar College, Kolkata

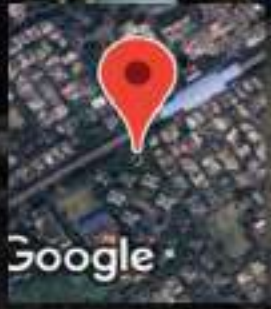
**PROGRAMME SCHEDULE**

Day I: 25.04.2023 (Tuesday)	
09.00 – 10.00 hrs	Registration
10.05 – 10.30 hrs	Inaugural Programme
10.35 – 11.00 hrs	High Tea Break
11.05 – 12.00 hrs	Lecture I: Herbarium Methodology By: Dr. K. Karthikeyan
12.05 – 13.00 hrs	Lecture II: Virtual Herbarium By: Dr. Kumar Avinash Bharati
13.05 – 14.00 hrs	Lunch Break
14.05 – 15.00 hrs	Lecture III: Different websites used in Plant Taxonomy By: Dr. Anand Kumar
15.05 – 17.00 hrs	Hands on Training on Herbarium Methodology By: Dr. Anand Kumar, Dr. Shyam Biswa, Ms. Ruma Bhadra, Mr. Sudipta Sarder
Day II : 26.04.2023 (Wednesday)	
10.00 – 11.00 hrs	Lecture I: Diversity, morphotaxonomy and molecular phylogeny of wild mushroom By: Dr. Kanad Das
11.00 – 13.00 hrs	Hands on Training on Macrofungal Identification By: Dr. Manoj Hembrom, Dr. Sudeehna Dutta & Dr. Aniket Ghosh
13.05 – 14.00 hrs	Lunch Break
14.05 – 16.30 hrs	Hands on Training on Phylogenetic analysis By: Dr. Aniket Ghosh
16.30 – 17.00 hrs	Valedictory Session

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## **Report of Two days National Level Workshop on Herbarium Methodology and Macrofungal Phylogenetic Analysis**

Post Graduate Department of Botany had organized 2 days National Level Workshop on Herbarium Methodology and Macrofungal Phylogenetic Analysis in collaboration with Central National Herbarium and EIACP PC RP of Botanical Survey of India on 25<sup>th</sup> and 26<sup>th</sup> April, 2023. The 1<sup>st</sup> day focused on herbarium methodology and the 2<sup>nd</sup> day was dedicated to Mycology.

On the 1<sup>st</sup> day a remarkable and valuable speech was delivered by Dr. K. Kartigeyan,, Scientist 'E' , of the Central National Herbarium, Botanical Survey of India, Howrah, in the context of Herbarium Methodology and it was followed by the resourceful deliver by Dr. Kumar Avinash Bharati , Scientist 'D', on Virtual Herbarium and the third lecture was by Dr. Anand Kumar on various websites used in plants which are very user friendly while dealing with plant materials. We gained a vast knowledge on herbarium methodology during our hands on training session by the experts of BSI.

On the 2<sup>nd</sup> day, lecture was given by Dr. Kanad Das, Scientist 'E', Botanical Survey of India, Central National Herbarium, Howrah on diversity, morphology and molecular- phylogeny of Wild Mushroom which has opened a new dimension on mycology. Hands on training on macro fungi identification and phylogenetic analysis was really impressive and a valuable resource to all of us both for our practical classes and field visit.

On these two days programme, there are 32 participants of which 30 are post graduate students of various colleges such as Bidhannagar College, Bethune College, Barasat College, Srirampur College , Rahara RKMVC College, besides two faculty members of Bethune College.

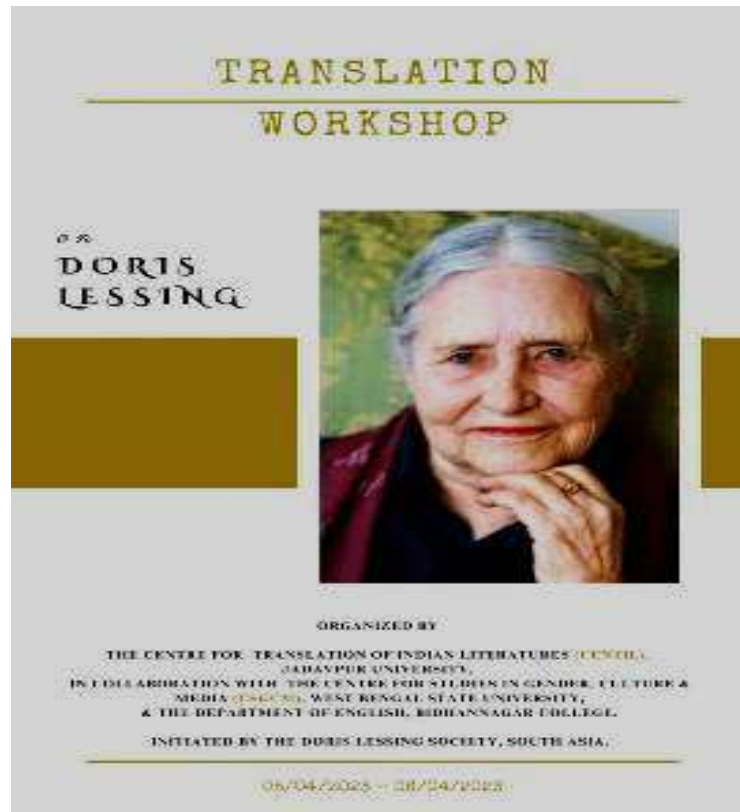


  
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A WORKSHOP INITIATED BY DLSSA

# TRANSLATING LESSING

A COLLABORATION OF 'CENTIL', JU, 'CSGCM' WBSU & BIDHANNAGAR COLLEGE,  
KOLKATA, April 5&6 2023



  
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## The Plan

At the time of its inception in 2022 Doris Lessing Society, South Asia had decided that it will promote Lessing studies through webinars, reading sessions and through translations into South Asian languages. The first year of the chapter was limited to virtual events as Covid continued in India. However, the plan for a physical event, to mark its presence and reach out more palpably to readers and scholars, was necessary. So when CENTIL agreed to a translation workshop, somewhat hesitantly, DLSSA and CSGCM (of West Bengal State University), that houses it, went full out to actualise the event *Translating Doris Lessing into Bengali*.

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The idea was to take up short stories of Lessing, in order to rope in more people in the project, thereby enlarging the readership. It was felt that the project will stand to gain greater access to modern readers, especially young readers. The short stories being academically less plumbed and possibly untranslated were additional encouragement. It was also decided that the project will be both product and process driven, hence it will spread over two days. Day One will be held at CENTIL, Jadavpur University, for the professional translators, selected from the Kolkata academe and with Professor Ahsanuzzaman, from Dhaka; unfortunately he couldn't join us in person. Day Two was planned for young scholars to be held in Bidhannagar College, to ensure the sustainability of the translation activity of Day One by sharing it with students and young scholars.

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## The Event



The workshop was conducted with more than expected success on April 5&6 2023. Fourteen short stories were chosen from Lessing's wide corpus: one for the young scholars' collaborative translation, and thirteen for the professionals. I am appending a list of the stories at the end for the record and for general interest. The discussion in the end was stimulating. Each translator pointed out their respective challenges and strategies.

The dominant points of the discussion were about Lessing's involved sentences and dense prose which posed a natural challenge. The circular nature of her narrative, that gives an impression of repetition till one recognises the trick of the pattern, often tempted the translators to edit and compress the passages, only to realise that by doing so they would go against the rules of translation. The nuances of the English language, at times untranslatable, and culture specific references were additional woes. The translators pointed out how the polyphonic nature of the texts required them to manoeuvre and employ different linguistic registers to faithfully represent the different voices. Use of pronouns and shifts in tenses between the diegetic and mimetic elements of a story required special attention. The 'you' of English was translated to its three Bengali synonyms based on the discretion of the



translator and matching the suitability of the context. Much discussion followed the question of tenses, and the differences between their application in English and Bengali usage. Some of the translator's were overwhelmed by her style and/or theme and felt somewhat out of their comfort zone of experiences. Then there were certain titles like 'A Story of a Non-Marrying Man' which is about a man who is married many times, but fails to stay in a relationship. It was difficult to capture the title in Bengali without disturbing the essence of the primary text and remained an unsolved problem.



The strategies adopted by the translators involved retaining English words which are natural loans in Bengali, while maintaining a parity of sorts. For instance, if 'drawing room' and 'perfume' were retained untranslated then there was no need to translate 'farm', 'flat', 'airport' or 'weekend', it was decided. The proficient translators offered interesting turns of phrases and compound words that brought out the power and beauty of Lessing's narratives and demonstrated the skill of the translator. It also promised to make the volume an enjoyable read.



Day Two was a big success. Professor Aveek Majumder, the 'Translation Resource Person' on both days was perspicacious with his comments, which added further worth to the workshop. In his plenary speech he outlined the tradition of translation into Bengali and the reasons why Doris Lessing's long and unconventional life and varied nature of her work would be both a delight and ordeal for the translator. The

story chosen was 'Storm' and the fifteen scholars were divided into three groups and the story was further divided within the groups. In a little over an



*Signature*

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hour the first draft was ready. Each translator read out their portion of the translated story followed by observations and rectifications.

The workshop was a success not just because it got the participants of the project, *Translating Lessing*, together to discuss the issues of the process. It was a success as it had over thirty people, people who were not familiar with Lessing before this, entrenched in the nitty-gritties of Lessing's works. Though it is going to be a long way to go, with much hard work, to make the product commendable. The happy takeaway is the promising commencement that has put Lessing on the academic map in this region.



  
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## Translators and the Stories

(Assigned by CSGCM)

Chaiti Mitra—To Room Nineteen

Saurabh Bhattacharyya—The Temptation of Jack Orkney

Mitali Ganguly—A Woman on a Roof

Tanmaoy Bhattacharya—An Old Woman and her Cat

Monami Mukharjee —The Black Madonna

(Assigned by CENTIL)

Rikdeb Bhattacharya: Debbie and Julie

Payel Basu: How I finally Lost my Heart (11)

Epsita Halder: The Trinket Box 8 pages

Dyuti Mukherjee: Little Tembi


(Assigned by BNC)

Ahmed Ahsanuzzaman -Lucy Grange

Dipankar Sen -The Habit of Loving

Samrat Laskar - The Old Chief Mshlanga

Debapratim Chakraborty - The Story of a Non-Marrying Man



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Memo No. ....UCAC- CS / F-12 / GL / 012 / 2022... Dated: 10/11/22...



UNIVERSITY OF CALCUTTA  
FACULTY COUNCIL FOR POST GRADUATE STUDIES ARTS & COMMERCE,  
SOCIAL WELFARE & BUSINESS MANAGEMENT  
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To


Sri Tapas Kumar Pal,


Sir/Madam

This is to inform you that under order of the Vice-Chancellor you have been appointed again purely on ad-hoc basis as **Guest Lecturer** in the Department of MBM under the faculty councils for P.G. Studies in Arts, Commerce & Business Studies, University of Calcutta. And honorarium of Rs. 20000/- per annum for delivering not more than 40 (forty) lectures in one year @ Rs. 500/- per lecture will be payable at every three months for one year with effect from **01.04.2023** till **31.03.24** or w.e.f. your date of joining till **31.03.24** or till the vacant post is filled in whichever is earlier. You are requested kindly to report to the Head /in charge of the Department **MBM** for allotment of your duties if you are agreeable to accept the offer on the above terms and conditions. Date of Birth is required for regularizing the appointment and release of remuneration. This appointment will be subject to the existing rules and/ or rules to be framed or adopted by the University from time to time. Please send your *joining report* to the Secretary, Faculty Councils for P.G. studies in Arts, Commerce & Business Studies through the Head of the Department concerned.

N.B. No person should be allowed to join the University Service in any capacity whether as Teachers, Officers or Employees of any category (whole time, part time, permanent or temporary, unless he submits at the time of joining proof of his/her age to the Accounts Section as Necessary under ordinance).

This has been approved under orders of the Vice-Chancellor, U.C. dated.....28.10.2022.....

  
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Bidhannagar College  
EB-2, Salt Lake, Kol.-64

  
Secretary (Actg.)  
Faculty Councils for P.G. Studies  
in Arts, Commerce & Business Studies  
University of Calcutta

N.B. Guest lectures are requested to perform examination duties as and when required. Guest Lecturer As per Syndicate Resolution G.L will not be appointed after 65 years of age.

# Fluorescence sensing and intracellular imaging of Pd<sup>2+</sup> ions by a novel coumarinyl-rhodamine Schiff base†

Arup Kumar Adak,<sup>a,b</sup> Rakesh Purkait,<sup>b</sup> Saikat Kumar Manna,<sup>c</sup> Bankim Chandra Ghosh,<sup>d</sup> Sudipta Pathak<sup>e</sup> and Chittaranjan Sinha<sup>a,\*</sup>

Coumarinyl-rhodamine, **HCR**, served as an extremely selective sensor for Pd<sup>2+</sup> ions in ethanol/H<sub>2</sub>O (8:2, v/v, HEPES buffer, pH 7.2) solution and the limit of detection (LOD) was 18.8 nM (3 $\sigma$  method). The free sensor, **HCR**, was weakly emissive and in the presence of Pd<sup>2+</sup>, the colour changed from straw to pink with very strong emission at 598 nm in the presence of eighteen other cations. A plausible mechanism involved opening of the spirolactam ring of rhodamine on interaction with Pd<sup>2+</sup>, which was justified by structure optimization and transition energy calculations using the DFT technique. **HCR** underwent 1:1 complexation with Pd<sup>2+</sup>, which was confirmed via the Job's plot, mass spectra and Benesi–Hildebrand plot (association constant  $K_a$ ,  $9.1 \times 10^4 \text{ M}^{-1}$ ). A separate *in vitro* experiment showed that **HCR** could specifically sense Pd<sup>2+</sup> in MCF7 (human breast adenocarcinoma) cell lines.

## 1 Introduction

In the last few years, the development of methods for the identification and sensing of platinum group metals (PGMs) has received considerable interest because of their enormous biological, environmental, industrial and chemical significance.<sup>1–4</sup> Among these, palladium, a precious metal, has become one of the most attractive sensing targets in recent years because of its wide catalytic use in the synthesis of organic and pharmaceutical molecules, fuel cells, dental appliances, medical devices, electrical equipments, etc.<sup>5,6</sup> In the Pd-catalysed reactions, either the Pd(0) may be temporarily oxidized or Pd(IV) may be reduced to Pd(II) during the reactions. The final product is often contaminated with a Pd(II) impurity even after rigorous purification. Such contamination at an ultratrace level in industrial products may cause serious health problems. Due to its thiophilic nature, palladium can bind with DNA, proteins and other macromolecules and disturb a variety of cellular processes.<sup>7,8</sup> Moreover, palladium also hinders the activity of many enzymatic reactions such as those

of alkaline phosphatase, creatine kinase and prolyl hydroxylase (hypoxia-inducible factor).<sup>9,10</sup> Therefore, various analytical techniques are used for the quantitative analysis of palladium. Popular techniques include inductively coupled plasma-mass spectrometry (ICP-MS), atomic absorption spectrometry (AAS), solid-phase micro-extraction high performance liquid chromatography (SPME-HPLC) and X-ray fluorescence spectroscopy.<sup>11–13</sup> However, these methods require sophisticated highly expensive equipments, extensive sample preparation steps, and time-consuming and high salaried experts. Among these different techniques used for the analysis of palladium ions, colorimetric and fluorometric techniques are more convenient and dependable for the rapid and sensitive detection of palladium both qualitatively and quantitatively because of their simplicity, selectivity and sensitivity. Hence, the development of palladium-selective fluorescent probes is extremely essential. Pd<sup>2+</sup>, being a heavy transition metal ion with open shell electronic configuration, is a typical fluorescence quencher.<sup>14</sup> Based on the ON–OFF<sup>15</sup> or OFF–ON<sup>16,17</sup> mechanism, some fluorescent chemosensors and chemodosimeters are synthesized for identifying palladium species. For the design of a sensor, the important objectives are long-wavelength emission and ecofriendly availability of fluorescent chemosensors. Thus, rhodamine-functionalized chemosensors are receiving considerable interest in current years.<sup>18</sup> For the last couple of years, we have considered a strategy to design rhodamine derivatives for the identification of trace levels of Pd; allyl ether Schiff base of rhodamine<sup>19</sup> was tested for the detection of total Pd at 50 nM, while allyl ether hydrazone rhodamine could detect as low as 95 nM concentration<sup>20</sup> at pH 7.2. The performance of rhodamine derivatives inspired us to synthesize newer

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<sup>d</sup>Department of Chemistry, Durgapur Govt. College, J. N. Avenue, Durgapur, Nadia District-713214, West Bengal, India

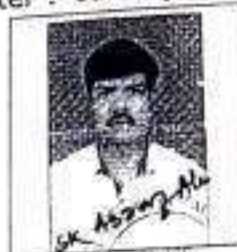
<sup>e</sup>Economic supplementary information (ESI) available. See DOI: 10.1039/C9NJ01011J



University of Calcutta  
Senate House, Kolkata - 700073

Date of Enrollment : 5th June 2018  
Registration Number : 04630/Ph.D.(Sc.)Proceed/2019  
Date of Registration : 4th July 2019  
(Please quote the above Number and Date in all future Correspondence)

Date of Letter : 5th July 2019



From:  
Deputy Registrar  
University of Calcutta  
To:  
Sri Sk Asraf Ali  
Vill- Machinan, P.O.- Gopalnagar,  
P.S.- Kolaghat, Dist.- Purba Medinipur,  
Pin-721130.

Dear Sir,

I am desired to inform you that you have been granted registration for the Ph.D. programme under this University in **Chemistry (Organic)** in terms of **6.6** of the Regulations for the Degree of Doctor of Philosophy (Ph.D.), C.U., framed under UGC Guidelines, **2016**.

This registration shall remain valid for next six years with effect from the date of enrolment as indicated above.

You are to comply with the usual rules of migration in case you have passed the qualifying examinations for the Ph.D. programme from a University/Institute other than the University of Calcutta.

Title of Thesis

"Synthetic Studies Towards Isoindolinones And Pyrrole Fused Heterocycles."

Name of the Supervisor : Dr. Mijanur Rahaman Molla

Name of the Joint Supervisor : Dr. Shubhankar Samanta ✓

Name of the Associate Supervisor : X

Self Attested  
SK Asraf Ali

Yours faithfully,

*[Signature]*  
05/07/19  
Deputy Registrar  
SKA

N.B. Please see the instructions overleaf.

**ATTESTED**  
*[Signature]*  
28/7/19  
Assistant Professor  
West Bengal Education  
Gopalnagar (P.O.)  
West Bengal

**Dr. Amit Saha**

Assistant Professor  
Organic Chemistry Section  
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Jadavpur University  
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**Dr. Shubhankar Samanta**

Assistant Professor  
Department of Chemistry  
Bidhannagar College  
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**TO WHOM IT MAY CONCERN**

This is to certify that the thesis entitled "*Environmentally benign synthetic routes to fused heterocycles and their photophysical studies*", submitted by **Mr. Anirban Bera** who got his name registered on 12-10-2018 (**Index No.- 235/18/Chem./26**) for the award of Ph.D. (Science) degree, Jadavpur University, is absolutely based upon his own research work under our supervision and that neither this thesis nor any part of it has been submitted for either any degree or diploma or other academic award anywhere else before.

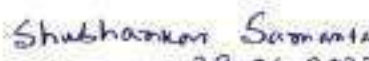
Research Supervisor (s)

  
28.06.2023

Dr. Amit Saha

Supervisor  
**Dr. Amit Saha**  
Assistant Professor  
Department of Chemistry  
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28.06.2023

Dr. Shubhankar Samanta

Joint-Supervisor  
**Dr. Shubhankar Samanta**  
Assistant Professor (WBES)  
Department of Chemistry  
Bidhannagar College  
Salt Lake, Kol-64

# OLS: Is That So Useless for Regression with Categorical Data?

Atanu Biswas, Samarjit Das and Soumyadeep Das

**Abstract** Binary/categorical response data abound in many application areas poses a unique problem; OLS-based model may lead to negative estimate for probability of a particular category and does not provide coherent forecast for the response variable. This unique and undesirable property of linear regression with categorical data impedes the use of OLS which otherwise is the simplest and distributionally robust method. The logit or probit kind of solution is heavily distribution dependent or link function dependent. Failure of such distributional assumption of the underlying latent variable model may cost the estimators heavily and may lead to biased and inconsistent estimates, in general. In this paper, we attempt to fix the inherent problem of linear regression by suggesting a simple manipulation which, in turn, leads to consistent estimates of probability of a category, and results in coherent forecasts for the response variable. We show that the proposed solution provides comparable estimates, and sometimes, with respect to some criterion, the proposed method is even slightly better than the logit kind of models. Here, we consider different underlying error distributions and compare the performances of the two models (in terms of their respective residual sum of squares and also in terms of relative entropy) based on simulated data. It is evidenced that the OLS performs better for many distributions, viz., Gamma, Laplace, and Uniform error distributions.

**Keywords** Logit model · Ordinary least square · Residual sum of squares  
Relative entropy

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in Business and Economics, [https://doi.org/10.1007/978-981-13-1208-3\\_18](https://doi.org/10.1007/978-981-13-1208-3_18)



## Nonparametric approaches for comparing three-period, two-treatment, four-sequence crossover designs

Suryakish Chatterjee<sup>a</sup> and Uttam Bandyopadhyay<sup>b</sup>

<sup>a</sup>Department of Statistics, Bidhannagar College, Kolkata, India; <sup>b</sup>Department of Statistics, University of Calcutta, Kolkata, India

### ABSTRACT

The paper describes nonparametric approaches for comparing three-period, two-treatment, four-sequence crossover designs through testing the hypothesis that the treatments are interchangeable. The proposed approaches are based on a model which incorporates, along with the direct treatment effects, self and mixed carryover effects. Related asymptotic results are obtained. Comparisons among the designs are made numerically with respect to type I error rate and power of the tests considering compound symmetry and autoregressive covariance structures of the response variables. Lengths of the confidence intervals of the treatment differences are also used to make comparative study among the designs.

### ARTICLE HISTORY

Received 18 January 2018  
 Accepted 24 January 2019

### KEYWORDS

Asymptotic distribution; asymptotically distribution-free; Balaam's design; crossover design; mixed carryover effect; self carryover effect; step-down approach

## 1. Introduction

In clinical research, where two or more treatments are under comparison, patients receive treatments in groups. Here it is important that single measurement from each patient is not appropriate in the statistical sense and it may produce bias due to his/her initial condition. This emerges the concept of repeated measurement studies by which subjects are given treatments more than once over time. Crossover and parallel group trials produce such studies in practice. In particular, when disease under study is chronic and stable (e.g. cancer, arthritis, obesity, asthma), clinical researchers are inclined to crossover trials as they possess certain medical ethics.

In crossover design with more than two periods, there should be a restriction to those designs in which the first two periods represent one of the basic crossover designs. Thus, for comparing two treatments, denoted by  $A$  and  $B$ , through crossover design, the first two periods should be  $\{AB, BA\}$  (usual crossover design) or  $\{AA, AB, BA, BB\}$  (Balaam's design). See, for example [1–3]. This is because of the fact that, if the extra treatment periods result in an excessive number of withdrawals, it will still be possible to carry out analysis with the first two periods in the usual way [4]. This leads us an approach to get a three-period design with a view to achieve higher efficiency than the corresponding two-period crossover design.

যাদবপুর বিশ্ববিদ্যালয়  
কলকাতা-৭০০০৩২, ভারত



\*JADAVPUR UNIVERSITY  
KOLKATA-700 032, INDIA

Ref. No: D-7/SC/1305/16

Dated: 09. 11. 2016

To,  
Smt. Nibedeeta Rani Sarraf  
C/O: - Prof. Parimal Karmakar  
Head  
Dept. of Life Sc. & Bio-technology  
Jadavpur University  
Kolkata-700032

INDEX No: 221/16/Life Sc./25

Dear Sir / Madam,

With reference to your application for the registration for Ph.D.(Science) degree of Jadavpur University, I am to inform you that you are permitted to register your name on payment of requisite fees for Ph.D. programme of Rs.22,000/- (Rupees Twenty-Two Thousands Only), payable in three semi annual installments (Rs.8000/- + Rs.8000/- + Rs.6000/-). It may be noted that this offer is provisional until all the documents mentioned below are submitted.

The registration will be valid from the date on which the fees are paid and shall remain valid for five years from that date. Subsequently the period of registration may be extended only for two consecutive one year terms if the grounds for extension satisfy the Doctorate Committee. An application requesting extension and citing the grounds for the same must be submitted each time, duly forwarded and recommended by the supervisor(s), before the date on which the validity of the registration expires.

The scheme of the work and title of the thesis, if not submitted along with the application, shall have to be submitted within one year from the date of registration of the candidate. Otherwise, the registration is liable to cancellation as per Regulations of the University.

If the registration fee is not paid within a month from the date of issue of this letter, your application stated above will be treated as cancelled. The registration is liable to cancellation if the progress of work is not satisfactory. It may be noted that you will have to fulfil the condition of residence requirement and have to complete the course work within two years from the date of registration as laid down in the Regulations of the University.


Mode of payment as follows:

- 1<sup>st</sup> instalment - within 30 days.
- 2<sup>nd</sup> instalment - within 180 days
- 3<sup>rd</sup> instalment - within 365 days.

List of required documents:

- ✓ (i). Original Migration Certificate. → Received on 23/11/16

Yours faithfully,

  
(Dr. Atiskumar Chattopadhyay)  
Secretary  
Faculty of Science.

Phone : (033) 2337-4761  
Fax : (033) 2337-4782

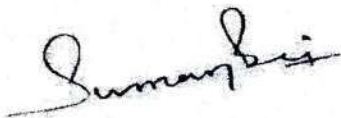
**NETAJI SUBHAS OPEN UNIVERSITY**  
**BIDHANNAGAR COLLEGE STUDY CENTRE**  
**EB-2, SALT LAKE, SECTOR - I, KOLKATA - 700 064**

Ref. No.....

Date.....20.....

**Report on MoU between Bidhannagar College and Netaji Subhas Open University**

The Memorandum of Understanding MoU was signed between Netaji Subhas Open University and Bidhannagar College on 27th December 2022. The event was taken place in the Netaji Subhas Open University main campus at Salt Lake Kolkata 64. The principal of Bidhannagar College, Dr. Saurabh Chakraborti and the Director of Study Centre, Netaji Subhas Open University, Dr. Asit Baran Aich signed this MoU. Assistant Director, Study Centre, NSOU and the Academic Coordinator, Bidhannagar College Study Centre were also present in the event. This MoU was the extension and revalidation of the previous MoU with the study centre for successful and smooth running of the PG courses of NSOU at Bidhannagar College. Bidhannagar College Study Centre also known as Bidhannagar College Learners Support Centre (LSC) will provide different logistics and infrastructural facilities, academic and research support to the learners for their academic and professional development. Present student strength of the LSC is 25 per batch.



Academic Coordinator

NSOU LSC (I-09)

Bidhannagar College

Salt Lake, Kolkata-64

ACADEMIC CO-ORDINATOR  
NSOU STUDY CENTRE  
BIDHANNAGAR COLLEGE  
EB-2, SECTOR - I  
SALT LAKE KOLKATA - 64

# Faculty Exchange with Barasat Govt. College



सत्यमेव जयते

GOVERNMENT OF WEST BENGAL

## BARASAT GOVERNMENT COLLEGE

NAAC ACCREDITED "A" GRADE & DST-FIST SPONSORED COLLEGE



10, K.N.C. Road, Barasat, Kolkata - 700124, West Bengal, India

Phone : (033) 2562 5053, Office : (033) 2552 3365, Fax : (033) 2562 5053, Website : [www.bgc.a.in](http://www.bgc.a.in), Email : [principal@bgc.ac.in](mailto:principal@bgc.ac.in)

Memo no .....

Date .....

The following collaborative activities have been completed in accordance with the Memorandum of Understanding signed by Barasat Government College, Barasat and Bidhannagar College, Salt Lake on 19<sup>th</sup> May 2023.

Activity Type	Date/ Duration	Faculty details	Activity details Syllabus/Paper code/ Topic Covered	Number of participants
1. Syllabus Oriented Class	24/05/2023	Ms. Rituparna Khan, Assistant Professor, Department of Geography, Bidhannagar College	UG Semester IV Topic: Growth and Development	51
2. Seminar Lecture	25/05/2023	Dr. Swaty Mitra Assistant Professor, Department of English, Bidhannagar College	UG Semester IV Topic: Representing the Partition	29
3. Seminar Lecture	25/05/2023	Dr. Swaty Mitra Assistant Professor, Department of English, Bidhannagar College	UG Semester II Topic: Towards the Enterprise on Two-inches of Ivory: The Early English Novel.	42
4. Seminar Lecture	25/05/2023	Dr. Tina Barma Assistant Professor, Department of Economics, Bidhannagar College	UG Semester II and IV Use of Software for Research in Economics	16
5. Syllabus Oriented Class	26/05/2023	Dr. Shrabana Mazumder, Assistant Professor, Department of Geography, Barasat Government College	UG Semester IV Topic: Environmental Pollution and Degradation	11



*Amatijje*

Principal

Barasat Government College

Dr. SAMAR CHATTOPADHYAY  
West Bengal Senior Education Service  
PRINCIPAL, Barasat Govt. College.  
Government of West Bengal.



*R*

Principal

Bidhannagar College  
Principal

Bidhannagar College  
Salt Lake, Kol-64



Signing of MoU with Barasat Government College




Signing of MoU with Vital waste

# Waste Disposal

## MoU Report of Vital waste



  
Officer-in-Charge  
Bidhannagar College  
EB-2, Salt Lake, Kol.-64

No.

2157



# VITAL WASTE

A RECYCLING AND WASTE MANAGEMENT COMPANY

(A BRAND OF REDIVIVUS RECYCLERS PVT.LTD.)

GSTIN : 19AAHCR7603N1ZT

54/7B, D.C. DEY ROAD, KOLKATA - 700015

Bill To : Bidhannagar College  
 Address : Sector 1, Block EB, Salt Lake, Kolkata Date: 13.06.2024

PARTICULARS	QNTY.	RATE	AMOUNT
Newspapers			
Books & Magazines			
Shredded Papers			
Mixed Papers			
✓ Low Grade Papers /Boards	35 KGR		
✓ Cardboards	6 KGR		
Plas c Pets			
✓ Plas c Others/ Rappers	7 KGR		
E-Waste			
Low Grade E-Waste			
✓ Glass Bo les	33 KGR		
Tin			
✓ Metal	3 KGR		
Lens Cu ng			
Burnt Oil			
✓ Hazardous Waste	22 KGR		
<b>TOTAL</b>	<b>106 KGR</b>		

Thank You For Using Vital Waste

R. Roy. 13/06/24

Client Signature With Stamp

K. Thapa

Vital Waste Representative Signature

PH NO - 9874481121

Mail Id - [vitalwaste@gmail.com](mailto:vitalwaste@gmail.com)

WEB - [www.vitalwaste.com](http://www.vitalwaste.com)

## Bidhannagar College

### MoU Report of Vital waste

A MoU was signed between Bidhannagar College and Vital Waste Company on 28<sup>th</sup> July 2022. They offered us to take paper waste, liquid waste and other types of wastes like metal and plastic wastes from the different departments of Bidhannagar College. They also provided containers for collecting hazardous liquid waste. Being a government College it was the duty of the college authority to provide the information to the Higher Education Department about the MoU. After sending a letter to the Higher authority, an initiative was taken from the college as well as from Vital Waste company for the collection of waste materials. Various items like wastepaper, broken bottles, cartoons, plastic wastes, and hazardous liquid were collected on 13th June 2024 by two persons reaching the College with the vehicle for waste collection. At least 10 departments both from Science and Humanities discipline as well as the College Office participated in this waste disposal process. About 106 kg was collected from these departments. This MoU ensures a cleaner environment for the College campus.



  
Officer-in-Charge  
Bidhannagar College  
EB-2, Salt Lake, Kol.-64



# Communication Skill Development




## COMMUNICATION SKILL IN ENGLISH

A Certificate Course of West Bengal State Council of Technical & Vocational Education & Skill Development  
 Conducted by: **WE FOR ALL** (A Non-Government Non-Profit Organization)  
 in collaboration with  
**BIDHANNAGAR COLLEGE**

**COURSE CO-ORDINATOR**  
**Dr. Srimanta Das, Department of English, Bidhannagar College**  
 (Contact no: 9830540259 E-mail id - [srimanta007@yahoo.com](mailto:srimanta007@yahoo.com))

**FACULTY MEMBERS**

<p><b>Chandana Chowdhury – M.A. (English)</b></p>  <p>Vast experience for over 40 years              IELTS teacher and examiner - British Council, Oman              Winner of An Inspiring Woman (2019)              Awarded best presenter at the International ELT Conference at Sultan Qaboos University, Muscat</p>	<p><b>Gargi Ghosh (M.A, B.Ed., M.B.A, TEFL)</b></p>  <p>An Educator with a quest for knowledge and passionate for various forms of arts              Top Educators of India (2020)              Top 100 Iconic Educators of India (2021)</p>
<p><b>Amit Das (B. Com.)</b></p>  <p>Corporate Trainer - Fidelity National              Personality Development Trainer - Frankfinn              Soft Skill Trainer - Vertex</p>	<p><b>Swamapi Biswas Das (B.Ed., B. Com., TEFL)</b></p>  <p>Business English - Goenka College of Commerce              TEFL Advanced Diploma - ACT              Spoken English Instructor – Iris World School, Telangana</p>


**Sucheta Dhar (M.A. in Psychology)**  
 Counsellor and co-ordinator  
 Former intern (Nil Ratan Sarkar Medical College)

Collaborative Certificate course in Communication skills in English for the Students of Bidhannagar College (MoU signed in 10.03.2023)



CSE PROGRAM 2024 - SEASON 1  

# DEBATE

## COMPETITION

CONDUCTED BY : ENGLISH DEPT & WE FOR ALL

  
 AGAINST

VS

  
 FOR

MARCH 07 2024 BEGINS AT 12 NOON

Topic:: Indian Style of Parenting is better than Western Style

VENUE: AUDITORIUM


BIDHANNAGAR COLLEGE, SALT LAKE

GPS Map Camera  
 Kolkata, West Bengal, India  
 ADMINISTRATIVE BUILDING, BIDHANNAGAR COLLEGE, 3rd Ave, EB Block, Sector 1, Bidhannagar,  
 Kolkata, West Bengal 700064, India  
 Lat 22.586306°  
 Long 88.405964°  
 07/03/24 01:47 PM GMT +05:30



**Kolkata, West Bengal, India**  
ADMINISTRATIVE BUILDING, BIDHANNAGAR COLLEGE, 3rd Ave, EB Block, Sector 1, Bidhannagar,  
Kolkata, West Bengal 700064, India  
Lat 22.585313°  
Long 88.405968°  
07/03/24 12:29 PM GMT +05:30



  
**Officer-In-Charge**  
**Bidhannagar College**  
**EB-2, Salt Lake, Kol.-64**