

## **Murshidabad University**



## Dr Rajib Mukherjee Registrar (Acting), Murshidabad University

https://msduniv.ac.in/
(Since 1st March, 2024)

and

### Associate Professor, Department of Mathematics, Murshidabad University, Erstwhile Krishnath College

## **Academic Qualifications**

College/University	Degree
St Xavier's College, Kolkata	BSc
University of Kalyani, Kalyani	MSc
Joint csir-ugc (Dec. 2003 & Jun. 2004)	NET UGC JRF (2 times)
Department of Education, HRDG (2003)	GATE, 91.65 Percentile, AIR 109
University of Kalyani, Kalyani	PhD under supervision of Prof. (Dr) Indrajit Lahiri

## Positions held/holding

- 1 Registrar (Acting), Murshidabad University (since 1st March, 2024)
- 2 Deputy Registrar (Acting), Murshidabad University (08.01.2024 to 27.02.2024)
- 3 Associate Professor, Department of Mathematics, Erstwhile Krishnath College

#### **Research Interests**

Number Theory 
 • Complex Analysis 
 • General Mathematics

## **Research Guidance**

Have already guided/guiding successfully two scholars to publish their research papers in UGC-CARE enlisted journals.

## Projects

Not yet applied for any central/state funded projects.

#### Select List of Publications (only number)

Journals: 22 (UGC-CARE Enlisted, single authored 09) Books/Book Chapters: 00 Conference/Seminar Volumes: 00

#### **Membership of Learned Societies**

	Name of the Society	Membership Status
1	Indian Mathematical Society (імs)	Life member
2	Calcutta Mathematical Society (смs)	Life member

#### **Invited Lectures Delivered**

- 1 Delivered lecture at Kalyani Mahavidyalaya on Undergraduate Research in Mathematics to celebrate National Mathematic Day-2022 (Dec. 22, 2022)
- 2 Delivered lecture at Sundarban Mahavidyalaya on Higher Education in Basic Sciences and Practices (Feb. 21, 2014)

#### Award/Recognition

- 1 Recognition from a renowned Educational Research Centric YouTube Channel with more than 150K subscriber (<u>https://youtu.be/vc05pa7iZ0U?si=xRxv845cTseeU4vH</u>) have prepared an animation based on a visual proof from Dec. 2021 issue of **The Mathematical Intelligencer** (sci) (SPRINGER NATURE) (https://doi.org/10.1007/s00283-021-10087-5)
- 2 Runner Up in Kalyani University Chess Competition (Chhatra Utsav Mar. 16, 2002)
- 3 Stood First in Essay Competition on the occasion of Celebrating World Environment Day, 1997 organised by World Environment Celebration Day Committee, West Bengal in entire Birbhum district
- 4 **Stood Second** in Birbhum district in an essay competition organized by Birbhum District Cooperative Union (1994)

#### **Other Notable Activities**

#### 1. Academic activity

(a) Few students who have secured 1st/2nd/3rd rank in University examination:

	Name(s)	University Rank	Year
1	Ananya Choudhury	2nd	2015
2	Soumen Ghosh	2nd	2014
3 4	Arindam Mandal Santu Ghosh	2nd 3rd	2013
5 6 7	Banani Dutta Ayub Ali Sk. Debaprasad Pal	1st 2nd 3rd	2012
8	Debalina Bhattacharya	2nd	2011

П

п

(b) Few Notable Students

	Name(s)	Present designation
1	Dr Ali Hyder	Reader, TIFR Centre for Applicable Mathematics, Bangalore
2	Dr Kanailal Mahato	Assistant Professor, Benaras Hindu University
3	Dr Molla Basir Ahamed	Assistant Professor, Jadavpur University
4	Dr Sajjad Hossain	Assistant Professor, Aliah University
5	Dr Pradip Majhi	Assistant Professor, University of Calcutta
6	Dr Sangita Jha	Assistant Professor, אוד, Rourkela
7	Dr Sourav Das	Assistant Professor, NIT, Jamshedpur
8	Dr Arindam Mandal	Simons Instructorship at Stony Brook New York

#### 2. Administrative activity

- 1 Hostel Superintendent (New Kumar Hostel, K.N. College) for more than 10 years (w.e.f. 1 Aug., 2011)
- 2 Election Commissioner of K.N. College Students' Union Election for 2016-17 session
- 3 RUSA 2.0 Nodal officer, K.N. College

4 West Bengal Health Scheme related almost all online-based work from K.N. College End

5 Pension related various online-based work

- 6 Convenor, JSBSTS-NCSTC DST Govt of India Sponsored Science Teachers' Training Workshop, 18-20 Dec., 2017
- 7 Examination Procedure handling of JAGADIS BOSE NATIONAL SCIENCE TALENT SEARCH (2010-16)

8 Murshidabad District **Observer** for WBJEEB-2012, 2013, 2015

9 Incharge of Student Placement Committee (2010-17), K.N. College (Organized a recruitment drive with TCs Ltd at K.N. College on 5,6 Mar., 2009)

10 AISHE-DCF Preparation for K.N. College during 2014-20

#### 3. Social Activity

_		
	Blood Donated at	Date
1	Krishnath College Nss Unit	13 Jan., 2023
2	State Blood Transfusion Council, wB	1 Dec., 2015
3	Life Care	4 Nov., 2011
4	Association of Voluntary Blood Donors, wB	26 Jul., 2000
5	Association of Voluntary Blood Donors, wB	30 Nov., 1998

# List of Papers Presented in Conferences/Seminar

	Title of the Paper presented	Title of the Conference/Seminar	Organized by	Whether International/ Na- tional/State/Regional/ Col- lege or University Level
1	Meromorphic functions sharing three values and a result of G. Brosch	EMERGING ADVANCES IN MATHEMATICS	Sripat Singh College	National (Dec. 17, 2016)
2	Meromorphic functions sharing three values and a result of G. Brosch	RECENT DEVELOPMENT IN MATHEMATICS	Kalyani Mahavidyalaya	National (Dec. 15, 2016)
3	Meromorphic functions sharing three values and a result of G. Brosch	ICAMTPBCS 2016	Calcutta Mathematical Society	International (Dec. 9-11, 2016)
4	Meromorphic functions sharing three values and a result of G. Brosch	4th india biodiversity meet 2016	Indian Statistical Institute & Govt College of Engineering and Textile Technology	National (Oct. 24-27, 2016)
5	Value sharing by an entire functions with its derivatives	ICCDMMS 2014	Calcutta Mathematical Society	International (Dec. 19-21, 2014)
6	Entire functions sharing certain values with their derivatives	NSMA 2014	University of Kalyani	National (Mar. 4-5, 2014)
7	Paper presentation	NSRTM 2013 UGC-SAP	University of Kalyani	National (Mar. 8, 2013)
8	Seminar-Participation	NSAMGT 2012	ucc sponsored & University of Kalyani	National (Mar. 21-22, 2012)
9	Seminar-Participation	CCAA 2011	ucc sponsored & Sundarban Mahavidyalaya, wв	National (Nov. 24-25, 2011)

## Workshop

-				
	Title	Particulars	Organized by	Date
1	Refresher Course	Refreshers Course on Application of MATLAB in Engineering	NITTTR, Kolkata	(3-14 Sep., 2018)
2	Teacher's Enrichment Programme	Ecological & Environment Modelling	Indian Statistical Institute (ısı), Kolkata & ссетт, Berhampore	(Oct. 25, 2016)
3	Teacher's Enrichment Programme	National centre for Mathematics (www.ncmath.org)	In Collaboration with TIFR & 11T, Bombay	(Feb. 1-6, 2016)
4 Faculty Development Statistical Modelling & Data Programme Analysis: Its Engineering Application		ссетт, Berhampore	(Jan. 11-15, 2016)	
5	кмs-nсм Teacher's Enrichment Programme	National centre for Mathematics Advanced Training in Mathematics School (www.atmschools.com)	In Collaboration with tifr & 11T, Bombay	(Dec. 27-31, 2013)

# List of Journal Publication/Conference Papers

No.	Title	Journal Name	issn/ isbn No.	Whether Peer Reviewed. Impact Factor, if any	Name of author(s)	Year of Publication
1.	A visual proof: convergence of a hyper power sequence—a generalisation DOI: 10.1080/0020739X.2023.2220324	International Journal of Mathematical Education in Science and Technology (TAYLOR & FRANCIS)	0020-739X	Yes Peer Reviewed. (scopus) (esci)	Rajib Mukherjee	<b>July 2023</b> UGC CARE enlisted
2.	Extending Galileo's Ratio to Hex Numbers and Beyond DOI: 10.1080/0025570X.2023.2199704	Mathematics Magazine (Taylor & Francis )	0025-570X	Yes Peer Reviewed. (SCOPUS) (ESCI)	Rajib Mukherjee and Manishita Chakraborty	2023-04 UGC CARE enlisted
3.	Sums of Reciprocals of Powers of Two in $k$ -Dimension ( $k \ge 2$ ) DOI: 10.1007/S12045-023-1569-5	Resonance (Springer Nature)	0973-712X	Yes Peer Reviewed. (scopus) (esci)	Rajib Mukherjee and Manishita Chakraborty	2023-03 UGC CARE enlisted
4.	A geometric telescope revisited DOI: 10.1017/mag.2023.18	The Mathematical Gazette (CAMBRIDGE UNIVERSITY PRESS)	0025-5572	Yes Peer Reviewed. (scopus) (esci)	Rajib Mukherjee	2023-02 UGC CARE enlisted
5.	A New and Elementary Inequality Related to Riemann Zeta Function DOI: 10.1007/S12045-022-1492-1	Resonance (Springer Nature)	0973-712X	Yes Peer Reviewed. (scopus) (esci)	Rajib Mukherjee and Anuprava Biswas	2022-11 UGC CARE enlisted
6.	A Visual Tour to Kempner's Series DOI: 10.1007/S12045-022-1473-4	Resonance (Springer Nature)	0973-712X	Yes Peer Reviewed. (scopus) (esci)	Anuprava Biswas, Niladri Sarkar and Rajib Mukherjee	2022-10 UGC CARE enlisted
7.	A Note on Convergence of A Special Class of InfiniteContinued Fractions DOI: 10.1007/S12045-021-1264-3	Resonance (Springer Nature)	0973-712X	Yes Peer Reviewed. (scopus) (esci)	Rajib Mukherjee and Manishita Chakraborty	2021-11 UGC CARE enlisted
8.	Visual Estimation of Sum of First n Triangular, Tetrahedraland Pentatope Numbers DOI: 10.1007/S12045-021-1197-X	Resonance (Springer Nature)	0973-712X	Yes Peer Reviewed. (scopus) (esci)	Rajib Mukherjee and Manishita Chakraborty	2021-07 UGC CARE enlisted
9.	Proof Without Words: Sums of Powers of Eight DOI: 10.1007/S00283-021-10087-5	The Mathematical Intelligencer (Springer Nature)	0343-6993	Yes Peer Reviewed. (scopus) (sci)	Rajib Mukherjee	2021-06 UGC CARE enlisted
10.	Visual Evaluation of a Geometric Series: Sum of Reciprocals of Odd Powers of Two DOI: 10.1007/S00283-021-10090-W	The Mathematical Intelligencer (Springer Nature)	0343-6993	Yes Peer Reviewed. (scopus) (sci)	Rajib Mukherjee	2021-06 UGC CARE enlisted
11.	A short note on a curious convergent series DOI: 10.1142/\$1793557121501588	Asian-European Journal of Mathematics (World Scientific)	1793-7183	Yes Peer Reviewed. (scopus) (esci)	Rajib Mukherjee and Niladri Sarkar	2021-02 UGC CARE enlisted
12.	Beyond $\pi^e < e^{\pi}$ : Proof Without Words of $b^a < a^b$ ( $b > a \ge e$ ) DOI: 10.1007/S12045-020-1078-8	Resonance (Springer Nature)	0973-712X	Yes Peer Reviewed. (scopus) (esci)	Rajib Mukherjee and Manishita Chakraborty	2020-11 UGC CARE enlisted
13.	Meromorphic Functions Sharing Three Values and A Result of G. Brosch DOI: 10.37256/cm.00037.63-76	Contemporary Mathematics	2705-1064	Yes Peer Reviewed.	Indrajit Lahiri and Rajib Mukherjee	2020-03
14.	Entire Functions Sharing Polynomials with Derivatives VOL: 110, (6)	Bulletin of the Calcutta Mathematical Society	0008-0659	Yes Peer Reviewed.	Rajib Mukherjee	2018-12 UGC CARE enlisted
15.	Entire Functions Sharing Certain Values with their Derivatives VOL: 110, (4)	Bulletin of the Calcutta Mathematical Society	0008-0659	Yes Peer Reviewed.	Rajib Mukherjee	2018-08 UGC CARE enlisted
16.	Entire Functions Sharing Certain Values with their Derivatives vol: 109, (5)	Bulletin of the Calcutta Mathematical Society	0008-0659	Yes Peer Reviewed.	Rajib Mukherjee	2017-08 UGC CARE enlisted
17.	Value Sharing by an Entire Function with Its Derivatives DOI: 10.1007/\$40306-014-0107-7	Acta Mathematica Vietnamica (Springer Nature)	0251-4184	Yes Peer Reviewed. (scopus) (esci)	Indrajit Lahiri and Rajib Mukherjee	2016 UGC CARE enlisted
18.	Value distribution of the product of a meromorphic derivative and a power of the function DOI: 10.5666/KMJ.2015.55.2.335	Kyungpook Mathematical Journal	0454-8124	Yes Peer Reviewed. (scopus) (esci)	Indrajit Lahiri and Rajib Mukherjee	2015 UGC CARE enlisted
19.	Entire functions sharing certain values with their derivatives DOI: 10.1515/anly-2012-1224	Analysis (DE GRUYTER)	2196-6753	Yes Peer Reviewed. (scopus) (esci)	Indrajit Lahiri and Rajib Mukherjee	2014-01 UGC CARE enlisted
20.	Uniqueness of entire functions sharing a value with linear differential polynomials D01: 10.1017/S0004972711002966	Bulletin of the Australian Mathematical Society (CAMBRIDGE UNIVERSITY PRESS)	0004-9727	Yes Peer Reviewed. (scopus) (sci)	Indrajit Lahiri and Rajib Mukherjee	2012 UGC CARE enlisted

# List of Accepted Papers

No.	Title	Journal Name	issn/ isbn No.	Whether Peer Reviewed. Impact Factor, if any	Name of author(s)	Year of Publication
21.	Generalization of an algebraic inequality. ACCEPTED: To be published in the July 2025 issue.	The Mathematical Gazette (CAMBRIDGE UNIVERSITY PRESS)	0025-5572	Yes Peer Reviewed. (scopus) (esci)	Rajib Mukherjee	2023-09 UGC CARE enlisted
22.	Generalizing a limit involving iterated nth roots. Accepted: To be published.	Mathematics Magazine (Taylor & Francis )	0025-570X	Yes Peer Reviewed. (scopus) (esci)	Rajib Mukherjee	2024-04 UGC CARE enlisted