

CURRICULUM VITAE

DR. RAIBATAK SEN GUPTA

M.Sc, Ph.D

Assistant Professor (Stage-II)
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Academic Positions held

Sl. No.	Position	Institute	Duration
1	Junior Research Fellow (UGC)	Jadavpur University, India	20.02.2012 - 19.02.2014
2	Senior Research Fellow (UGC)	Jadavpur University, India	20.02.2014 - 09.11.2016
3	Assistant Professor (Stage-I)	Bejoy Narayan Mahavidyalaya, (a Govt Sponsored College affiliated to The University of Burdwan), West Bengal, India	28.03.2017 – 04.10.2021
4	Assistant Professor (Stage-II)	Bejoy Narayan Mahavidyalaya	05.10.2021 – till date

Educational details

Name of the degree/examination	Institute/Board	Year of passing	Marks obtained
Secondary examination	West Bengal Board of Secondary Education	2004	90.25%
Higher Secondary (10+2) examination	West Bengal Council of Higher Secondary Education	2006	92.4 %
B.Sc (in Mathematics)	Jadavpur University	2009	91.8%
M.Sc (in Mathematics)	Indian Institute of Technology (IIT), Kanpur	2011	84%
Ph.D	Jadavpur University	2017	.

Awards received / Other academic achievements:

- 1) Awarded the **'University Gold Medal'** for standing first in B.Sc (Mathematics Hons.) in Jadavpur University (2009).
- 2) Awarded the **'Merit award'** by the Jawaharlal Nehru Memorial Fund, New Delhi for standing first in the B. Sc (Mathematics Hons.) examination, 2009.
- 3) Secured an **All-India rank 30 in JAM 2009** (admission examination for M.Sc program in the IITs)
- 4) Awarded the **'Academic Excellence Award'** at IIT Kanpur (2010).
- 5) Secured an **All-India rank 113 in the GATE** (Graduate Aptitude Test in Engineering) 2011.
- 6) Secured an **All-India rank 96** (and qualified for **Junior Research Fellowship**) in the **CSIR-UGC NET examination, (June) 2011.**

Scholarships awarded:

- 1) **'Junior Research Fellowship'** and **'Senior Research Fellowship'** (NET) awarded by University Grants Commission (UGC), Government of India (2012- 2016).
- 2) **'Suman Gupta Scholarship' (for academic achievement)** awarded by IIT Kanpur (2010-11).
- 3) **'Half-free studentship'** (for academic performance) awarded by IIT Kanpur (2009-2011).

Research Interest:

Graph Theory, Algebra.

Experience

Research Experience: 13 years

Teaching Experience: 8 years

List of Publications in Peer-reviewed International journals:

- 1) R. Sen Gupta, **The graph $\Gamma_2(R)$ over a ring R** , *International Journal of Pure and Applied Mathematics*, 86(6) (2013), 893-904.
- 2) S. Ghosh, R. Sen Gupta and M. K. Sen, **A Polynomial Representation and a Unique Code of a Simple Undirected Graph**, *ISRN Combinatorics*, Volume 2013, Article ID 703989, 4 pages.
- 3) R. Sen Gupta, M. K. Sen, and S. Ghosh, **A variation of zero-divisor graphs**, *Discussiones Mathematicae - General Algebra and Applications*, 35 (2015), 159-176.
- 4) R. Sen Gupta and M. K. Sen, **The Square Element Graph Over a Finite Commutative Ring**, *Southeast Asian Bulletin of Mathematics*, 39 (2015), 407-428.
- 5) R. Sen Gupta, **The Product square graph over a finite commutative ring**, *Indian Journal of Discrete Mathematics*, 1(2) (2015), 76-97.
- 6) R. Sen Gupta and M. K. Sen, **Some new results on the graph $\Gamma_1(R)$ over a ring R** , *Electronic Notes in Discrete Mathematics*, 53 (2016), 3-14.
- 7) S. Ghosh, R. Sen Gupta and M.K. Sen, **An Introduction to Coding Sequences of Graphs**, *Combinatorial Optimization and Applications, COCOA 2016, Lecture Notes in Computer Science*, Vol. 10043 (2016), 201-215.
- 8) R. Sen Gupta and M. K. Sen, **The Square Element Graph over a Ring**, *Southeast Asian Bulletin of Mathematics*, 41 (2017), 663-682.
- 9) R. Sen Gupta, S. K. Maity and M. K. Sen, **Leavitt path algebras with coefficients in a Clifford semifield**, *Communications in Algebra*, 47(2) (2019), 660-675, doi: <https://doi.org/10.1080/00927872.2018.1492589>
- 10) B. Biswas, R. Sen Gupta, M. K. Sen and S. Kar, **On the Connectedness of Square Element Graphs over Arbitrary Rings**, *Southeast Asian Bulletin of Mathematics*, 43 (2019), 153-164.
- 11) B. Biswas, R. Sen Gupta, M. K. Sen and S. Kar, **Some properties of Square element graphs over semigroups**, *AKCE International Journal of Graphs and Combinatorics*, (2019), doi: <https://doi.org/10.1016/j.akcej.2019.02.001>
- 12) R. Sen Gupta and M. K. Sen, **k-Simplicity of Leavitt Path Algebras with coefficients in a k-semifield**, *Discussiones Mathematicae – General Algebra and Applications*, 42(2) (2022), 241-253. Doi: <https://doi.org/10.7151/dmgaa.1388>
- 13) B. Biswas, R. Sen Gupta, M. K. Sen and S. Kar, **The zero-divisor associate graph over a finite commutative ring**, *Communications in Combinatorics and Optimizations*, 10(1) (2025), 232-243, Doi: [10.22049/cco.2023.28488.1577](https://doi.org/10.22049/cco.2023.28488.1577)

Conferences attended as a paper presenter:

- 1) **National Conference on Mathematical Sciences and Applications (NCMSA)**, held at Karunya University, Tamil Nadu, during March 14-15, 2013.
- 2) **National Workshop and Conference on Discrete Mathematics and its Applications (NWCDMA)**, organized at Jadavpur University, Kolkata, India, during March 10-14, 2014.
- 3) **Workshop on “Graph Theory, Coding Theory and Cryptography” (WGTCTC)**, held at National Institute of Technology, Durgapur, India, during April 7-13, 2014.
- 4) **International Conference on Revisiting Ancient Mathematics and Mathematical Sciences (ICRAMMS)**, held at The University of Burdwan, West Bengal, India, during February 18-20, 2015.
- 5) **International Conference on Graph Theory and its Applications (ICGTA)**, held at Amrita University, Tamil Nadu, India, during December 16-19, 2015.
- 6) **10th Annual International Conference on Combinatorial Optimizations and Applications (COCOA’2016)**, held at the City University of Hong Kong, Hong Kong SAR, China, during December 16-18, 2016.
- 7) **National Conference on Discrete Mathematics (NCDM)**, held at Savitribai Phule Pune University, Maharashtra, India, during Feb 20-22, 2017.
- 8) **International Conference on Algebra and Discrete Mathematics (ICADM)**, held at Madurai Kamaraj University, Tamil Nadu, India during Jan 8-10, 2018.
- 9) **National seminar entitled Visva-Bharati Meet on Algebra and its Applications (VBMAA)**, held at Visva-Bharati Central University, West Bengal, India, during March 24-25, 2018.
- 10) **National Conference on Ancient and Modern Mathematics (NCAMM 2019)**, held at Maharaja Bir Bikram University, Tripura, India during February 23-24, 2019.
- 11) **International Conference on Analysis, Algebra, Combinatorics and their Applications (ICAACA 2020)** held at Jadavpur University, Kolkata, India during January 20-22, 2020.
- 12) **International Web Conference on Advance Research in Science, Humanities and Social Science (IWCARSHSS 2020)** organized by MBB University, Tripura during July 9-10, 2020.
- 13) **International Conference in Algebraic Graph Theory and Applications (ICAGTA 2020)** organized by Presidency University, Kolkata, India during November 21-22, 2020.
- 14) **International Conference on Graphs, Networks and Combinatorics (ICGNC 2023)** organized by Ramanujan College, University of Delhi, New Delhi during January 10-12, 2023.

15) **International Conference on Mathematics and Applications-2024 (ICMA 2024)** organized by The University of Burdwan, West Bengal during March 05-06, 2024.

16) **National Seminar on Algebra, Analysis, Discrete Mathematics and their Applications (NSAADMA 2024)** organized by Sri Chaitanya College, Habra, West Bengal on April 03, 2024.

17) **International Conference on Recent Advances and Applications in Pure and Applied Mathematics-2025 (ICRAAPM 2025)** organized by Khalisani Mahavidyalaya, West Bengal during April 25-26, 2025.

Conferences organized as Convener:

1) Acted as the **Convener** of the **International Webinar on The Life and Works of P.C. Mahalanobis**, organized by Dept. of Mathematics, Bejoy Narayan Mahavidyalaya (in collaboration with Dept. of Mathematics, Balagarh Bijoy Krishna Mahavidyalaya) on 05.02.2021

Professional Courses attended:

1) Participated in the **1st Faculty Induction Programme (FIP) Guru-Dakshta** (of 170 hours) organized by UGC-HRDC, Ranchi University, Ranchi, India online during 26.11.2020 – 23.12.2020 (obtained grade A)

2) Participated in the **UGC-Sponsored Online Refresher Course on ICT for Teaching-learning and Research in Higher Education (Interdisciplinary)** organized by UGC-HRDC, Guru Ghasidas Vishwavidyalaya, Bilaspur, India during 20.09.2021-04.10.2021 (obtained grade A+)

Conferences/Workshops attended as a participant:

1) Participated in the **Conference in Number Theory** held at Jadavpur University, Kolkata, India during December 12-14, 2012

2) Participated in the **National Conference on Emerging Trends in Physics of Fluids and Solids** held at Jadavpur University, Kolkata, India during February 27-28, 2013

3) Participated in the **International Conference on Geometry and its Applications** held at Jadavpur University, Kolkata, India during October 16-18, 2014

4) Participated in the **International Conference on Dynamical Systems and Mathematical Biology** held at Jadavpur University, Kolkata, India during November 17-19, 2014

5) Participated in the **National Conference on Emerging Trends in Physics of Fluids and Solids (NCETPFS-2015)** held at Jadavpur University, Kolkata, India during February 24-25, 2015

6) Participated in the **Science Academies' Lecture Workshop on Frontiers of Chemistry: Fundamentals and Applications (Sponsored and supported by Indian Academy of Sciences, Indian National Science Academy, The National Academy of Sciences)** held at Bejoy Narayan Mahavidyalaya, West bengal, India during Dec 06-08, 2017.

7) Participated in the one-day **Workshop for Preparation of Syllabus (Semester with CBCS) of Mathematics Hons. Course of studies** organized by UG Board of Studies in Mathematics, The University of Burdwan, India on 26.04.2018

8) Participated in the one-day **NPTEL Awareness workshop (in collaboration with Indian Institute of Technology, Kharagpur)** held at Government Girls' General Degree College, Kolkata, India on 12.10.2018

9) Participated in **National Conference on Women's Capacity Building: Issues, Challenges and Policies (NCWCB 2019)** organized by and held at Bejoy Narayan Mahavidyalaya, West Bengal, India during March 25-26, 2019.

10) Participated in the BU (PG) Study-centre sponsored two-day **Workshop on Preparation of Academic Audit, Administrative Audit in Colleges and process and technique of Green Audit as per ISO new rules** held at Bankura Zilla Saradamani Mahila Mahavidyapith, India during June 18-19, 2019.

11) Participated in the **Workshop on Promotion under Career Advancement Scheme** organized by and held at Bejoy Narayan Mahavidyalaya, West Bengal, India on 19.07.2019

12) Participated in the one-day **Seminar on NAAC – Revised Accreditation Framework** organized by and held at Tarakeshwar Degree College, India on 21.12.2019

Membership

1. Life member of **Indian Mathematical Society** (Unique Memb No. **L/2023/027**)

2. Life Member of **Academy of Discrete Mathematics and Applications ADMA** (Membership Id **555**)

3. Member, Editorial Board, ***Orienteum-Occidentum*** (Journal of Bejoy Narayan Mahavidyalaya)

Courses/topics taught

- Linear Algebra
- Abstract Algebra
- Graph Theory
- Real Analysis
- Metric Spaces
- Probability theory
- Differential Equations
- Calculus
- Number Theory
- Set Theory and Logic

Administrative responsibilities:

- Nodal officer, Swami Vivekananda MCM scholarship, Bejoy Narayan Mahavidyalaya
- Member, Internal Quality Assurance Cell (IQAC), Bejoy Narayan Mahavidyalaya
- Member, Academic Sub-committee, Bejoy Narayan Mahavidyalaya
- Member, Seminar Sub-committee, Bejoy Narayan Mahavidyalaya
- Convener, Website Committee, Bejoy Narayan Mahavidyalaya
- Nodal Officer, NIRF, Bejoy Narayan Mahavidyalaya

Personal Details

- Name – **RAIBATAK SEN GUPTA**
- Nationality – **Indian**
- Gender – **Male**
- Religion – **Hinduism**
- Caste category – **General**