

Dr. Adrija Banerjee

Current Designation: State Aided College Teacher (Category-1)

Department: Electronics

Date of Joining: 05-04-2007

E-mail: adrija_bnrj@yahoo.co.in

Phone (Optional):



1. Academic Qualifications (Master's degree onwards)

Degree	Institution	Year	Subject/Discipline
M.Sc.	University of Calcutta	2006	Electronic Science
Ph.D.	IEST, Shibpur	2022	Physics

2. Thesis Title

Ph.D. Thesis Title: A Cellular Automata Model of Perturbed Magnetosphere to Study Geomagnetic Disturbances

3. Specialization and Area of Interests

Specialization: Geomagnetic Disturbances, Cellular Automata

Area of Interests: Data Science

4. Teaching Responsibilities

1. Fundamentals of circuit theory and electronic devices
2. Photonics
3. Semiconductor devices
4. Control and Instrumentation

5. Publications

a. Research Papers in Journals

1. Bej, A., Banerjee, A., Chatterjee, T. N., and Majumdar, A. (2022), One-hour ahead prediction of the Dst index based on the optimum state space reconstruction and pattern recognition, The European Physical Journal Plus, Vol. 137, Issue 4.
2. Bej, A., Banerjee, A., Chatterjee, T. N., and Majumdar, A. (2021), A comparative study between Dst and SYM-H indices based on pattern identification. IJTP, Vol 68 (13-26), ISBN: 0019-5693

3. Banerjee, A., Bej, A., Chatterjee, T. N., and Majumdar, A. (2021), A SOC based avalanche model to study the magnetosphere-ionosphere energy transfer and AE index fluctuations, NRIAG Journal of Astronomy and Geophysics, Vol. 11, Issue 1, pp. 33-47
4. Banerjee, A., Bej, A., Chatterjee, T. N., and Majumdar, A. (2019), An SOC Approach to Study the Solar Wind-Magnetosphere Energy Coupling, Earth and Space Science, Vol. 6, Issue 4, pp. 565-576, American Geophysical Union (AGU)
5. Banerjee, A., Bej, A., Chatterjee, T. N., Majumdar, A. (2018), On the threshold value of IMF B_z in relation with geomagnetic storm and Dst index, IJTP, vol 65 Nos 3&4. ISSN/ISBN: 0019-5693
6. Banerjee, A., Bej, A., and Chatterjee, T. N. (2015), A cellular automata-based model of Earth's magnetosphere in relation with Dst index, Space Weather, 13, 259-270
7. Banerjee, A., Bej, A., and Chatterjee, T. N. (2012), On the existence of a long-range correlation in the Geomagnetic Disturbance storm time (Dst) index, *Astrophys Space Sci*, 337, 23-32

b. Research Papers in Conferences

1. Banerjee, A., Bej, A., Chatterjee, T. N., and Majumdar, A., A sandpile model to study the dynamics of terrestrial magnetosphere (2019), 12th International Conference on Plasma Science and Applications, Asia African Association for Plasma Training, Lucknow University
2. Bej, A., Banerjee, A., Chatterjee, T. N., and Majumdar, A., An analytical study to find long-range correlation in SYM-H index (2019), 12th International Conference on Plasma Science and Applications, Asia African Association for Plasma Training, Lucknow University

6. Oral/Poster Presentations

Title	Event	Type (Oral/Poster)	Date	Venue
A sandpile model to study the dynamics of terrestrial magnetosphere	12 th International Conference on Plasma Science and Applications, Asia African Association for Plasma Training	Poster	13-11-2019	Lucknow University

7. Membership in Academic Bodies

1. Kanyasree Sub-Committee
2. Data Management Sub-Committee