

Curriculum Vitae of Dr. Ushnish Sarkar



Faculty Profile:

Designation: Assistant Professor of Mathematics

Affiliation: School of Sciences, Netaji Subhas Open University, DD- 26, Sector I, Salt Lake City, Kolkata- 700064, India.

Presently posted at: School of Sciences, Netaji Subhas Open University, Jalpaiguri Regional Centre, Jalpaiguri- 735102, India.

Email: usarkar.sosci@wbnsou.ac.in

Education:

- Ph. D. awarded on 2017 from the Department of Pure Mathematics, University of Calcutta;
Title of thesis: *On Some Combinatorial Studies of Radio k -Coloring Problems Of Graphs And Related Issues.*
- M. Sc. in Mathematics on 2009 from The University of Burdwan.
- B. Sc. Mathematics (Hons.) on 2007 from J. K. College, Purulia under The University of Burdwan.

Fellowship Awarded: Qualified CSIR-UGC NET on December, 2008 and been awarded UGC Junior Research Fellowship.

Teaching interest:

I love teaching Abstract Algebra, Graph Theory and Theory of Computation.

Research interest:

My research interest mainly lies in Graph theory and Combinatorics. I take great interest in distance constrained coloring problems and extremal problems. I also enjoy problems related to hypergraph theory and combinatorial games.

List of Publications:

Papers:

- **Ushnish Sarkar**, Avishek Adhikari, On relationship between Hamiltonian path and holes in $L(3,2,1)$ -coloring of minimum span, **Discrete Applied Mathematics (Elsevier) SCI & SCOPUS** 222 (2017) 227-234; ISSN: 0166-218X
- **Ushnish Sarkar**, Avishek Adhikari, A new graph parameter and a construction of larger graph without increasing radio k -chromatic number, **Journal of Combinatorial Optimization (Springer) SCIE & SCOPUS**, 33 (2017) 1365-1377; ISSN: 1382-6905 (print)
- **Ushnish Sarkar**, Avishek Adhikari, On characterizing radio k -coloring problem by path covering problem, **Discrete Mathematics (Elsevier) SCI & SCOPUS**, 338 (2015) 615-620; ISSN: 0012-365X;

Book chapter:

Ushnish Sarkar, Avishek Adhikari, "Hole: an emerging character in the story of radio k -coloring problem" in book "**Mathematical and Statistical Applications in Life Sciences and Engineering**", A. Adhikari, M. Adhikari, Y. Chaubey (eds), pp 3- 41, **Springer (2017)**; ISBN: 978-981-10- 5369-6 (print); DOI 10.1007/978-981-10-5370-2

Conference/ Seminar/Symposium/ Workshop :

Presented paper in

- International Conference on Mathematical Sciences for Advancement of science and Technology (MSAST) 2016, IMBIC, Salt Lake, Kolkata. Title of the presentation: Hole: An Emerging Character in the Story of Radio k - Coloring Problem.

- International Conference on Mathematical Sciences for Advancement of science and Technology (MSAST) 2015, IMBIC, Salt Lake, Kolkata. Title of the presentation: On Characterization of $L(3,2,1)$ - coloring Problem in terms of holes.
- International Conference on Mathematical Sciences for Advancement of science and Technology (MSAST) 2013, IMBIC, Salt Lake, Kolkata. Title of the presentation: $L(3,2,1)$ Labelling and Hamiltonian Path.
- International Conference on Mathematical Sciences for Advancement of science and Technology (MSAST) 2010, IMBIC, Salt Lake, Kolkata. Title of the presentation: Some Results on Intersection Graphs of Ideals of Rings.

Attended

- National Webinar on **Mathematical Perspective of COVID-19 Outbreak: Predictions, Precautions & Preventive Measures (MPCOPPPM-2020)** organized by Department of Mathematics, Sidhu Kanhu Birsa University held on June 11-12, 2020
- National Webinar on **Covid 19: Challenges in Mathematical Modelling** organized by Department of Mathematics, N. R. Swamy College of Commerce and Economics & Smt. Thirumalai College of Science, Mumbai, on June 8, 2020.
- **2- day Capacity Building Programme for Academic Counsellors of NSOU on Counselling of ODL Learners** held on 7-8 March, 2020 organized by School of Vocational Studies, NSOU & COL- CEMCA.
- National Instructional Workshop On Graph Theory And Its Applications, 2011, DST- CIMS, Banaras Hindu University.
- Symposium On Recent Trends In Mathematical Analysis And Its Applications, 2011, Department of Pure Mathematics, University of Calcutta.
- National Seminar On Recent Trends In Mathematics And Its Applications (NSRTMA), 2010, Department of Pure Mathematics, University of Calcutta

Training Programs participated in:

- **Control of Queues And Other Networked Systems** from 10-12-2018 to 14-12-2018 organized by IIT, Kharagpur, sponsored by TEQIP III
- **Cryptology** from 12-11-2018 to 16-11-2018 organized by NIT, Durgapur, sponsored by TEQIP III
- **Student Mentorship** from 07-08-2017 to 11-08-2017 organized by NITTTR, Kolkata.
- **Compiler Design** from 19-09-2016 to 23-09-2016 organized by NITTTR, Kolkata.
- **Exposure on MATLAB** from 28-12-2015 to 08-01-2016 organized by NITTTR, Kolkata.
- **Faculty Development Program** from 04-02-2013 to 18-02-2013 organized by IIT, Kharagpur, supported by DST.

Other Academic Activities:

Acted as Organizing Secretary of NSOU Online Special Lecture Series in Mathematics OSLSM 2020 Phase I organized by Department of Mathematics, School of Sciences, NSOU.

Work Experience:

- Assistant Professor of Mathematics, School of Sciences, Netaji Subhas Open University, W. B., India since 2020.
- Lecturer in Mathematics, S. K. B. Polytechnic, Keshiary, Paschim Medinipur, W. B., India from 2012 to 2020.

Ushnish Sarkar

Date: 12/08/2020

Place: Kolkata