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List of published/communicated papers:

1. Nath, R.K., Sharma, M., Dutta, P. and Shang, Y. On r-noncommuting graph of finite rings. *Axioms*, 10(3):233, 2021.

2. Sharma, M. , Nath, R. K. and Shang, Y. On g-noncommuting graph of a finite group relative to its subgroups. *Mathematics*, 9:3147-1–3147-13, 2021.

3. Sharma, M. and Nath, R. K. Relative g-noncommuting graph of finite groups. *Electronic Journal of Graph Theory and Applications*, 10(1):113-130, 2022.

4. Sharma, M. and Nath, R. K. Relative r-noncommuting graphs of finite rings, Submitted for Publication, 2022.

5. Sharma, M. and Nath, R. K. Laplacian spectrum and energy of non-commuting graphs of finite rings, Submitted for Publication, 2023.

6. Sharma, M. and Nath, R. K. Signless Laplacian energies of non-commuting graphs of finite groups and related results, Submitted for Publication, 2023.

List of conferences attended:

1. Participated and presented a paper in the National Conference on Recent Advancements in Science and Technology (RAST) organized by Union Christian College through the Science Society (UCC) in collaboration with NESAC, PA Sangma Foundation and College of Post-Graduate Studies (CAU), Umiam, Meghalaya, India, during 12th–14th June, 2019.

2. Participated and presented a paper in the International Conference on Analysis, Algebra, Combinatorics and their Application (ICAACA-2020) organized by Department of Mathematics, Jadavpur University, Kolkata-700032, India, during 20th–22nd January, 2020.

3. Participated and presented a paper in the 6th Biennial International Group Theory Conference - 2021 (6BIGTC-2021) organized by Department of Mathematics, Vellore Institute of Technology, Vellore, Tamil Nadu, India, during 4th–6th March, 2021.

4. Participated and presented a paper in the International Conference on Emerging trends in Pure and Applied Mathematics (Blended Mode) organized by Department of Applied Sciences in association with Department of Mathematical Sciences, Tezpur University, India, during 12th–13th March, 2022.

5. Participated and presented a paper in the International Conference on Graphs, Networks and Combinatorics (ICGNC 2023) organized by Department of Mathematics, Ramanujan College, University of Delhi, India, during 10th–12th January, 2023.