

### Dr. Garima Gupta

Contact Information Assistant Professor (Regular) Department of Mathematics

Punjabi University, Patiala-147 002, India

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Personal Details • Father's Name: Sh. Madan Lal Gupta

• Mother's Name: Smt. Sita Gupta

• Marital Status: Married

### NATIONALITY

#### Indian

### RESEARCH INTERESTS

- Geometry of Lightlike Submanifolds
- Geometry of Riemannian Submersions and Riemannian Maps

### EDUCATION

- Ph.D. degree awarded from Punjabi University under the supervision of Dr. R. K. Nagaich, Mathematics Department, Punjabi University, Patiala and Dr. Rakesh Kumar, Department of Basic and Applied Sciences, Punjabi University, Patiala with title **The Geometry of Lightlike Submanifolds** in April 2019.
- Qualified UGC-CSIR (NET) with All India Rank 21.
- M.Sc. (Mathematics) from Punjab University, Chandigarh, India, in 2008.

### AWARDS

• Topper of the college in M.Sc. I (2007) and M.Sc II (2008).

### TEACHING EXPERIENCE

- Worked as an Assistant Professor (Mathematics) (Contractual) in the Department of Basic and Applied Sciences, Punjabi University, Patiala, from 27th July, 2011 to 26th July 2012.
- Worked as as an Assistant Professor (Mathematics) (Regular) in the Department of Basic and Applied Sciences, Punjabi University, Patiala, from 27th July, 2012 to 31st March, 2022.
- Worked as a Guest Faculty in Department of Statistics, Punjabi University Patiala for teaching Analyis, Linear Algebra to B.Sc. students from July 2020

to May 2021.

• Working as as an Assistant Professor (Mathematics) (Regular) in the Department of Mathematics, Punjabi University, Patiala, from 1st April, 2022 to till date.

## TECHNICAL Proficiency

- C language
- Latex

# AND ACADEMIC

- ADMINISTRATIVE Member of Faculty of Physical Sciences, Punjabi university, Patiala from 1st February, 2019 to 11th January, 2021.
- RESPONSIBILITIES Member, A.C.D., Department of Basic and Applied Sciences, Punjabi University, Patiala, from 11th June, 2018 to 30th April, 2019.
  - Worked as Course coordinator of subjects:

Applied Math- I Applied Math-II Numerical Methods Lab

- Worked as Time Table coordinator
- Duty in physical verification of original documents
- All other duties given by HOD

# **RECOMMENDATION** Department of Mathematics

References for • Prof. (Ex.) Dr. R. K. Nagaich

Punjabi University, Patiala-147002. Email: nagaich58rakesh@gmail.com Contact No. +91- 94178-74900

• Dr. Rakesh Kumar

Department of Mathematics Punjabi University, Patiala-147002.

Email: rakesh\_bas@pbi.ac.in Contact No.: +91-98154-30944

# Research BODIES

- MEMBERSHIP OF Life member of International Association of Engineers, Membership No. 174026.
  - Life member of The Tensor Society, India, Membership No. 1042.
  - Life member of Indian Mathematical Society, Membership No. 112021/112
  - Life member of Punjab Science Congress, Membership No. 1477.

## Referred JOURNAL **PUBLICATIONS**

1. Garima Gupta, Rakesh Kumar, Rachna Rani and Rashmi Sachdeva, Harmonicity of almost Norden submersions between almost Norden manifolds, Bull. Korean Math. Soc., **59**(2) (2022), 375–395. (SCI & SCOPUS Indexed). (March, 2022)

- 2. Garima Gupta, Rakesh Kumar and R. K. Nagaich, Chen-like inequalities on lightlike hypersurfaces of semi-Riemannian manifolds, *Tbilisi Mathematical Journal*, **14**(4) (2021), 97–110. (December, 2021)
- 3. Rashmi Sachdeva, Rupali Kaushal, Garima Gupta and Rakesh Kumar, Conformal slant submersions from nearly Kaehler manifolds, *Int. J. Geom. Methods Mod. Phys.*, Article Id. 2150088 (2021), 1–27. (SCI & SCOPUS Indexed). (May, 2021)
- 4. Garima Gupta, Rakesh Kumar and R. K. Nagaich, Geometry of semi-in variant lightlike product manifolds, *New York Journal of Mathematics*, **26** (2020), 1338–1354. (SCI & SCOPUS Indexed). (November, 2020)
- 5. Garima Gupta and Rakesh Kumar, Geometry of half lightlike submanifolds of indefinite Kaehler manifolds with a quarter-symmetric metric connection, Commun. Korean Math. Soc., **35**(3) (2020), 979–998. (SCOPUS Indexed). (July, 2020)
- 6. Rakesh Kumar, Garima Gupta and Rachna Rani, Adapted connections on Kaehler-Norden Golden manifolds and harmonicity, *Int. J. Geom. Methods Mod. Phys.*, **17**(2) (2020), 1–17. (SCI & SCOPUS Indexed). (February, 2020)
- 7. Garima Gupta, Rakesh Kumar and Rashmi Sachdeva, Geometry of lightlike submanifolds of golden semi-Riemannian manifolds, J. Int. Acad. Phys. Sci., 23(3) (2019), 211–227. (September, 2019)
- 8. Garima Gupta, Rashmi Sachdeva, Rakesh Kumar and R. K. Nagaich, Pointwise slant lightlike submanifolds of indefinite Kaehler manifolds, Mediterr. J. Math., **15**(3) (2018), 1–17. (SCI & SCOPUS Indexed). (June, 2018)
- 9. Garima Gupta, Rakesh Kumar and R. K. Nagaich, Radical screen transversal lightlike submanifolds of indefinite Kaehler manifolds admitting a quarter-symmetric non-metric connection, *Int. J. Geom. Methods Mod. Phys.*, **15** (2018), 1–21. (SCI & SCOPUS Indexed). (February, 2018)
- 10. Garima Gupta, Rakesh Kumar and R. K. Nagaich, Screen conformal lightlike submanifolds of semi-Riemannian manifolds, *J. Geometry*, **107** (2016), 635–655. (SCOPUS Indexed). (December, 2016)

# BOOK/CHAPTER PUBLICATIONS

 Published a Book Chapter entitled Slant Lightlike Submanifolds of Indefinite Kaehler Manifolds and their Warped Product Manifolds in the Book entitled "Complex Geometry of Slant Submanifolds", Springer Nature Singapore Pvt Ltd (2022). https://doi.org/10.1007/978-981-16-0021-0.12.

CITATIONS AS PER GOOGLE SCHOLAR

• Citations: 15

• h-index: 02

### Paper Presentations

- 1. Presented a paper in International conference on **Differential Geometry** and its Applications organized by Department of P.G. Studies and Research in Mathematics, Kuvempu University, Karnataka during 04-05 March, 2022.
- 2. Presented a paper in Punjab Science Congress on **Future Endeavours** of Science and Technology for Sustainable growth organized by Department of Mathematics, Sri Anandpur Sahib, Rupnagar, Punjab during 07-09 Feburary, 2022.
- 3. Presented a paper in 2nd International Conference on Functional Materials and Simulation Techniques jointly organized by UIS, Chandigarh University and Concordia University, Canada at Chandigarh University, Gharuan, Punjab(India) during 10-11 Jan, 2022.
- 4. Presented a paper in 87th Annual Conference of the Indian Mathematical Society organized by Department of Applied Sciences, JNEC, MGM University, Aurangabad during 4-7 December, 2021.
- Presented a paper in Recent Advances in Differential Geometry and Topology CONIAPS-XXVII organized by Department of Mathematics and Statistics, Central University of Punjab, Bathinda during 26-28 October, 2021.
- 6. Presented a paper in online National Conference on Recent Trends of Innovations in Basic and Applied Sciences, (NCRTIBAS-2021) organized by Department of School of Basic and Applied Sciences, IEC University, Baddi, Himachal Pradesh, India on 22 October, 2021.
- 7. Presented a paper in **CONIAPS-XXVI** organized by Department of Mathematics, Guru Ghasidas University, Bilaspur, India in association with International Academy of Physical Sciences, Prayagraj, India during 18–20 December, 2020.
- 8. Presented a paper in **One Day National Seminar on Usage and Prospects of Mathematics** organized by Multani Mal Modi College, Patiala on 7th March, 2019.
- 9. Presented a paper in National Conference on Recent Advancements in Science, Commerce and Technology organized by Mata Sahib Kaur Girls College, Talwandi Sabo, Bathinda during 5-6 April, 2016.
- Presented a paper in National Conference on Recent Trends in Environment,
   Science and Technology organized by University School of Sciences,
   Rayat Bahra University, Mohali on 11 March, 2016.
- 11. Presented a paper in National **Punjab Science Congress** organized by SUS Group of Institutions, Tangori during 7-9 February, 2016.
- 12. Presented a paper in International Conference on **Mathematics for Brain Studies** organized by Noida International University, Uttar Pradesh during 1-3 February, 2016.

- 13. Presented paper in International Conference on Emerging Areas of Mathematics for Science and Technology held at Punjabi University, Patiala during 30 January 1 Feburary, 2015.
- Presented paper in Conference on Exploring Basic and Applied Sciences for Next Generation Frontiers, Lovely Professional University, 14-15 November, 2014.
- 15. Presented a paper in International Conference on **Special Functions and their Applications** organized by School of Mathematics and Computer Applications, Thapar University, Patiala from 16-18 October, 2014.
- 16. Presented paper in International Conference on Recent Trends in Mathematical Modeling and Statistical Analysis held at Jagdish Chandra DAV College, Dasuya on 30 September, 2014.

## Conference/ Workshops Attended

- 1. Participated in international symposium on *Differential Geometry and its Applications* organized by department of Mathematics, Mulana University, Hyderabad during 30-31 March, 2022.
- 2. Participated in international webinar on Applications of Differential Geometry organized by department of Mathematics and Humanities, M.M University, Mullana, Ambala on 12 February, 2022.
- 3. Participated in Capacity Building Programme on Data collection and Compilation for NAAC SSR/AQAR organized by IQAC, Punjabi University, Patiala on 30 November, 2021.
- 4. Participated in NASI-TMC Summer school on differential Geometry organized by department of Mathematics and Statistics, Central University of Punjab, Bathinda from July 05-24, 2021.
- 5. Participated in short term course on *Modern tools and techniques for effective research and publication* organized by NIT, Jalandhar from 21-25 August, 2020.
- 6. Participated in online workshop on *Mathematica for beginners* organized by Chitkara University, Rajpura during 17-19 August, 2020.
- 7. Participated in faculty development program on *Latex for preparing manuscripts* organized by Chitkara University, Rajpura during 20-31 July 2020.
- 8. Participated in faculty development program on *Online Teaching Learning Practices* organized by Shri Guru Teg Bahadur Khalsa College, Anandpur Sahib during 7-13 July, 2020.
- 9. Participated in faculty development program on *Managing virtual classrooms* and open educational resources organized by Panjab University, Chandigarh from 24-29 June, 2020.

- 10. Participated in faculty development program on *Enhancing Research Capabilities* organized by Society of Materials and Mechanical Engineers, Bathinda from 1-5 June, 2020.
- 11. Participated in National webinar on *Covid-19: Lesson for Educators* organized by Punjabi University, Patiala on 25 May, 2020.
- 12. Participated in One week course on *Moodle learning management system* organized by Baba Banda Singh Bahadur Engineering College, FGS from 1-7 May, 2020.
- 13. Participated in webinar on *Teaching and Learning modes post Covid-19* organized by Punjabi University, Patiala on 29 April, 2020.
- 14. Participated in one day online workshop on *Book and Article publishing* and springerlink platform demonstration organized by Guru Nanak Dev University, Amritsar on 22 April, 2020.
- 15. Participated in faculty development program on *Smart Materials and Nano Technology* organized by Punjabi University ,Patiala from 2-6 December, 2019.
- 16. Participated in workshop on *Three Days National Workshop on LaTeX and Technical Writing* organized at Department of Basic and Applied Sciences, Punjabi University, Patiala from 23-25 November, 2018.
- 17. Participated in workshop on Financial, Legal and Social Awareness among teachers organized at Women Studies Centre, Punjabi University Patiala from 9-15 January, 2018.
- 18. Participated in national seminar on *Higher Education for development and role of Teachers* organized at GSSDGS Khalsa College, Patiala on 16 July, 2017.
- 19. Participated in workshop on Indian Women and Mathematics organized at Department of Mathematics, Punjabi University, Patiala from 6-7 February, 2017
- 20. Participated in winter school on *Relevance of Research for the Society* organized at Punjabi University, Patiala from 1-21 December, 2015.
- 21. Participated in workshop on *Lattices: Geometry and Dynamics* organized at Indian Institute of Science Education and Research, Mohali from 17-22 December, 2014.
- 22. Attended workshop on *Finite Group Theory* organized by Department of Mathematics, Punjabi University, Patiala from 27 May -2 June, 2014.
- 23. Participated in workshop on *Microsoft Product/Licensing Schemes* organized at Punjabi University, Patiala on 28 August, 2013.
- 24. Participated in 17th Orientation Programme organized at Punjabi University, Patiala from 10- 6 August, 2013.

- 25. Participated in workshop on *Practical Aspects on the importance of Patents in Research* organized at Punjabi University, Patiala on 12 February, 2013.
- 26. Participated in national seminar on *Mathematics and its Applications* organized at Punjabi University, Patiala on 20 December, 2012.
- 27. Participated in workshop on *National Competencies in Teaching* organized at L.C.E.T. , Ludhiana from 5-9July, 2010.
- 28. Participated in workshop on *Effective Classroom Management* organized at L.C.E.T., Ludhiana from 4-7 August, 2009.

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