Dr. Rupali

Contact Information: Assistant Professor (Regular)

Department of Mathematics

Punjabi University, Patiala -147002.

Email: rupalimaths@pbi.ac.in, kaushalgrupali@gmail.com

Contact No. +91-7889111082

Personal Information:

Nationality : Indian.

Father's Name : Sh. Siri Ram.

Mother's Name : Smt. Gurbax Kaur.

Language skills : Punjabi, Hindi, English

Research Interests: Geometry of Submersions, Riemannian Maps, Harmonic Maps.

Career Objectives:

- > To perform at my level best.
- > To reach best heights in life by sincerity and hard work.
- > To serve a reputed institution with sincerity where efforts are recognized and opportunity to grow provided.

Educational Qualifications:

- ❖ 10th (C.B.S.E Board) in 1999 with 70.2% marks.
- **❖** 10+2 (C.B.S.E Board) in 2001 with 72% marks.
- ❖ B.Sc. (hons. school Maths) in 2004 from Panjab University, Chandigarh, with 57% marks.
- ❖ M.Sc. (hons. school Maths) in 2006 from Panjab University, Chandigarh, with 71% marks and 3rd position in University.
- ❖ M.Phil (correspondence) Madurai Kamaraj University in 2008.
- ❖ Qualified CSIR-U.G.C. NET in 2010.
- ❖ Ph.D (The Geometry of Lightlike Submersions) from Punjabi University , Patiala in 2020.

Technical Proficiency:

- ❖ Basic knowledge of computer.
- **\Lappa** Latex.



Experience(15 years)

- ❖ 2 years teaching experience (16/07/2007-31/07/2009) at Institute of Engineering and Technology, Bhaddal (Ropar) as an Assistant Professor (Lecturer).
- ❖ 3 years teaching experience (03/08/2009-01/08/2012) at Rayat & Bahra Institute of Engg. and Bio-Tech at mohali campus (Kharar) as an Assistant Professor (Lecturer).
- ❖ Working in the Department of Mathematics, Punjabi University, Patiala as an Assistant professor from August 2012 till date.

List of Papers published in SCI/ Scopus/ Referred journals:

- 1. Rupali Kaushal, Rakesh Kumar and R. K. Nagaich, "Lightlike submersions from totally umbilical semi-transversal lightlike submanifolds", Miskolc Mathematical Notes, {19} (2018), 953--968.
- 2. Rupali Kaushal, Rakesh Kumar, Rashmi Sachdeva and R. K. Nagaich, "Semi-invariant Riemannian submersions from nearly Kaehler manifolds", International Journal of Geometric Methods in Modern Physics, {17}(2020), 2050100(15 pages).
- 3. Rupali Kaushal, Rakesh Kumar and R. K. Nagaich, "On the geometry of screen conformal submersions of semi-transversal lightlike submanifolds", Asian-European Journal of Mathematics, {14}, (2021), 2150133(13 pages).
- 4. Garima Gupta, Rakesh Kumar, Rupali Kaushal and Rashmi Sachdeva, "Conformal slant submersions from nearly Kaehler manifolds", International Journal of Geometric Methods in Modern Physics, {18}(2021), 2150088(27 pages).
- 5. Rupali Kaushal, Rakesh Kumar, and R. K. Nagaich, "On geometry of pointwise slant lightlike submersions with totally umbilical fibers", Afrika Matematika.
- 6. Rupali Kaushal ,Garima Gupta, Rakesh Kumar ,and Rashmi Sachdeva, "Conformal Slant Riemannian Maps With Totally Umbilical Fibers", Mediterreanean Journal of Mathematics, {20:44}, (2022), (23 pages).

Other Publications:

- ❖ Rupali Kaushal, Rakesh Kumar, Rashmi Sachdeva and R. K. Nagaich, "Generic Riemannian Submersion from Nearly kaehler manifolds", Journal of Tensor Society (J.T.S), {13}(2019), 0974-5428(20 pages.)
- ❖ Rupali Kaushal, "Survey of Lightlike Submersions", An International Journal of Engineering Sciences, {24}(2017), 2320-0332 (112-122)

List of workshops/ short term courses/ Refresher courses

- ➤ Participated in 5 day(Oct 23-27,2013) National workshop on Differential Geometry at Banasthali under auspics of CMS.
- ➤ Participated in TEW on Finite Group Theory, supported by National Centre for Mathematics, held at Department of Mathematics, Punjabi University, Patiala(27th May to 2nd June, 2014)
- ➤ Attended UGC- Sponsored Orientation Programme by Academic Staff College Punjabi University, Patiala (09.06.2014- 05.07.2014).
- ➤ Participated in the ATM Workshop on Lattices Geometry and Dynamics at IISER Mohali, during 17th 22nd December 2014.(6 days).
- ➤ Participated in RMS-workshop, held at IISER Mohali, on 14 May, 2015.
- ➤ Attended UGC- Sponsored Refresher Course (01.12.2015- 21.12.2015)
- ➤ Participated in Regional Workshop on Indian Women and Mathematics: Research and career Opportunities, organized by Department of Mathematics, Punjabi University, Patiala. Feb 06-07,2017.
- ➤ Attended National Conference on Man and Environment in Punjabi University, Patiala from March 10 to March 11, 2017.
- Attended International Conference on Advancements and Science & Technology, organized by University School of Sciences, Rayat- Bahra University, Mohali(Punjab) on April 20-21,2017.
- ➤ Participated in Three Days National Workshop on LaTeX and Technical Writing PUNDABI UNTVERSTTY PATIALA, Organized by Department of Basic and Applied Sciences Punjabi University, Patiala 23-25 November, 2018.
- ➤ Participated in One day National Seminar on Usage and Prospects of Mathematics on March 07,2019
- Attended UGC-Sponsored workshop/short term course on Moocks e-content development and open Educational Resources from 15/01/2020 to 22/01/2020 organized by UGC-HRDC, Punjabi University, Patiala.
- ➤ Participated in National workshop (FDP) on Managing virtual classroom and open Educational Resources from June 24-29, 2020. Organized by Centre for Academic leadership and Education Management(CALEM) Panjab University, Chandigarh.
- ➤ Participated in One Week Online Short Term Course On Modern Tools and Techniques for Effective Research and Publications (MTTERP) (August 21, 2020 August 25, 2020) organized by Dr B R AMBEDKAR NATIONAL INSTITUTE OF TECHNOLOGY JALANDHAR, PUNJAB, INDIA-144011.
- ➤ Participated in UGC- Sponsored Refresher course organized by HRDC Punjabi University Patiala from November 16-28, 2020.
- Participated in National Seminar Virtual Teaching and Effective Communication: The Challenge of Balance(Through Online Mode) On February 25-26, 2021 Centre for Academic Leadership and Education Management (CALEM), Panjab University, Chandigarh.
- ➤ Participated in NASI-TMC Summer school on Differential Geometry July 05-24,2021.
- ➤ Attended lecture on Research in Higher Education in Perspective of NEP 2020 on May 25, 2021
- Attended one day webinar on An interaction with Pi : Its Transcendence from Mathematics to Computer Science on June 25, 2021.
- ➤ Participated in One week FDP on computing with Matlab and Latex software: Indispensable tools for Researchers , Jan 05-11, 2022, Jointly organized by Department of Mathematics,

- Mizan-Tepi University, Ethiopia in collaboration with Mathtech TThinking Foundation(MTTF), India
- Attended International webinar on Intelligent Optimization Techniques and their Real Life Applications on Feb 25-27, 2022

Conferences Attended and Paper Presented:

- 1. Attended Twenty-first International Conference of forum for Interdisciplinary Mathematics on Interdisciplinary Mathematics, Statistics and Computational Techniques. From Dec-15 to Dec-17, 2012.
- 2. Attended and presented paper, "Geometry and its Applications", in National Seminar On Mathematics and Its applications, Dec 20, 2012
- 3. Attended International Conference on Algebra, Geometry, Analysis and their Applications, Department of Mathematics, Jamia Millia Islamia, New Delhi, during Nov 27-29,2014.(3 days)
- 4. Attended National Conference on Differential Geometry and General Relativity(28-29 November, 2017).
- 5. Attended International Conference in Rayat Bahra University, Mohali from April 20 to April 21 , 2017.
- 6. Paper presentation :GCR-Lightlike submanifolds of an indefinite Kenmotsu Manifold, International Conference on Emerging areas of Mathematics for Science and Technology 31st Jan'15 to 2nd Feb'15, Punjabi University, Patiala.
- 7. Paper presentation: Submersions of Totally Umbilical Semi-Transversal Lightlike Submanifold at National Conference on Recent Developments in MATHEMATICAL MODELLING & FUZZIOLOGY.Oct. 28-29, 2015, Chandigarh University.
- 8. Paper presentation: Some more results on Submersions of Totally Umbilical Semi-Transversal Lightlike Submanifolds onto Hermitian Manifolds, International Conference on Mathematics For Brain Studies. Feb. 1-3, 2016, Noida International University.
- 9. Paper presentation: Screen Conformal Submersion, National Conference Recent Trends in Environment, Science & Technology-2016.March 11, 2016. Rayat-Bahara University.
- 10. Paper presentation: Lightlike Submersion and Curvature Relation. National Conference on Recent Advancement in Science, Commerce and Technology 2016. April 5th -6th, 2016, Mata Sahib Kaur Girls College, Bathinda.
- 11. Attended National Conference on Differential Geometry and General Relativity, Nov 28-29, 2017, organized by Department of Mathematics, Sardar Patel University, Vallabh Vidyanagar, Gujarat and Tensor Society.
- 12. Attended National Conference on Recent Developments in Mathematical Modelling and Fuzziology-II organized by Department of Mathematics(UIS), Chandigarh University, Mohali, Punjab, on 27-28 March, 2018
- 13. Participated and presented paper in International conference on Recent Advances in Computational Mathematics & Engineering March 19-21, 2021(online) B.K. Birla Institute of Engineering and technology.

14. Paper presentation: Harmonicity of slant conformal Riemannian maps in Two Days International Conference on Differential Geometry and its Applications on March 4-5, 2022, Kuvempu University.

Invited talks:

- 1. Invited Talk on Non-Existence of Totally Umbilical Radical Transversal Lightlike Submanifolds, Department of Mathematics, Shri Mata Vaishno Devi University, Katra, 7th -8th, March, 2017.
- 2. Invited talk on Functions of one real variable, Online National workshop on Preparation of IIT-JAM Exam in Mathematics, Department of Mathematics and Statistics, PSGVP Mandal's Art's, Science and Commerce College, Shahada (28/01/2021).
- 3. Invited talk on Sequence and Series of Real numbers, Online National workshop on Preparation of IIT-JAM Exam in Mathematics, Department of Mathematics and Statistics, PSGVP Mandal's Art's, Science and Commerce College, Shahada (31/01/2021).
- 4. Invited Lecture (08/10/2020, Online) on Functions of Several Variables, Department of Mathematics, SGTB Khalsa college, Anandpur Sahib, University Level.

Administrative and Academic responsibilities:

- 1. Acted as Superintendent and deputy supt. for end semester examinations.
- 2. Updated course contents of various subjects being member of Board of Studies post and under graduate classes. Worked on designing syllabus of Mathematics subjects in FYIP Mathematics and computing Sciences.
- 3. Acted as paper setter for various universities in India.
- 4. Acted as a member of academic visits/educational tour committee, cultural committee, sports committee.
- 5. Acted as ACD secretary for the session 2013-14, 2021-2022.
- 6. Member of Local organizing comm. of TEW held in May 2014 (Registration, Decoration, Hospitality).
- 7. Member of Admission Committee.
- 8. Member of Local organization committee, Decoration committee, Registration Committee of International Conference held in the Department of Mathematics, Punjabi University, Patiala.
- 9. Member of Inspection Committee at S.S.D College of Professional studies, Bathinda on 16/10/2015.
- 10. Member of Inspection Committee at S.S.D College of Prof. Studies, Bathinda on 28/11/2015.
- 11. Member of Inspection Committee at Vidya Sagar College of Mgt. & Tech. on 27.07.2015.
- 12. Organized National Science Day in the Department of Mathematics, Punjabi University, Patiala on 29.02.2016.
- 13. Performed duties of Time Table In-charge for B.Sc and M.Sc classes in Department of Mathematics.
- 14. Member of Local Organizing committee of IWM held in the Department in Feb 2017.
- 15. Performed duties of Class Counselor for B.Sc.(MCM), Class Counselor for B.Sc.(MC).

- 16. Life Member of Punjab Academy of Sciences, Membership No 1425.
- 17. Life Member of "The Tensor Society", India, Membership No.
- 18. Member faculty of physical sciences, Department of Mathematics, Punjabi University, Patiala.
- 19. Member of Governing body Aryabhtaa college Barnala(2019-2021).
- 20. Subject expert in selection committee University College, Moonak on Oct 25,2021 to appoint teachers under PTA fund.
- 21. Member of DRB, Department of Mathematics, Punjabi University, Patiala.
- 22. Organized online Lecture for students on "An Interaction with Pi", Department of Mathematics, Punjabi University, Patiala, March-23, 2022.

References for Recommendation:

1. Prof.(Ex) Dr. R.K. Nagaich

Department of Mathematics

Punjabi University, Patiala-147002

Email: nagaich58rakesh@gmail.com

Contact No. +91-94178-74900

2. Dr. Rakesh Kumar

(Professor)

Department of Mathematics

Punjabi University, Patiala-147002.

Email: rakesh_bas@pbi.ac.in
Contact No. +91-98154-30944

3. Dr. Shalini Gupta

(Professor)

Department of Mathematics

Punjabi University, Patiala-147002.

Email: shalini@pbi.ac.in

Contact No. +91-82646-60706