

## **BIODATA**



**Name :** Dr. JASLEEN KAUR

**Designation :** Assistant Professor  
Department of Mathematics  
Punjabi University, Patiala.

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**Date of Birth:** 23-11-1981

### **ACADEMIC QUALIFICATION:**

<b>Sr. No.</b>	<b>Degree</b>	<b>Board/ University</b>	<b>Year</b>	<b>Subjects</b>	<b>Division</b>
1.	B.A.	Punjabi University, Patiala.	2002	Mathematics Statistics, Economics	1 <sup>st</sup>
2.	M.Sc. (Mathematics)	Punjabi University, Patiala.	2004	Mathematics	1 <sup>st</sup>
3.	Ph.D.	Punjabi University, Patiala.	2009	Mathematics (Manifolds with indefinite metrics)	Degree awarded

**Area of Research:** Differentiable Manifolds, Sampling theory

### **SCHOLARSHIPS :**

1. State merit scholarship on the basis of 10+2 Exam.
2. State merit scholarship on the basis of Graduation Exam.
3. Punjabi University scholarship in M. Sc.

## TEACHING EXPERIENCE :

Name of institution	Duration	Nature of Job
SLIET, Longowal.	Two Academic Semesters (From 20.01.05 to 03.06.05 and from 01.08.05 to 06.01.06)	Lecturer (Adhoc)
Caparo PTU School of Manufacturing & Materials Technology, PTU Jalandhar	1 year 1 month 21 days (11.07.07 to 31.8.08)	Lecturer (Regular)
Deptt. of Statistics, Punjabi University Patiala.	July 2009 to Dec.2011	Guest Faculty
Deptt. of Mathematics, Punjabi University, Patiala.	July 2010 to April 2011	Guest Faculty
Deptt. of Mathematics, Punjabi University, Patiala.	April 2011 to July 2012	Lecturer (Adhoc)
Deptt. of Mathematics, Punjabi University, Patiala.	July 27, 2012 to date	Assistant Professor
Deptt. of Mathematics, Punjabi University, Patiala.	July 27, 2016 to date	Assistant Professor (Second stage)
Deptt. of Mathematics, Punjabi University, Patiala	July 27, 2021 to date	Assistant Professor (Third stage)

## RESEARCH PUBLICATIONS:

- Indefinite Quasi-Kaehler manifolds.  
Rakesh Kumar, **Jasleen Kaur** and R. K. Nagaich  
*Bull. Cal. Math. Soc.*, **100 (2)** (177-184) 2008
- On a Characteristic property of indefinite Sasakian manifolds with constant  $\phi$ -holomorphic sectional curvature.  
**Jasleen Kaur**, Rachna Rani and R. K. Nagaich  
*Bull. Cal. Math. Soc.*, **100 (4)** (451-454) 2008
- A note on Quasi-Kaehler manifolds with constant holomorphic sectional curvature.

**Jasleen Kaur**, Rakesh Kumar, S. B. Singh and R.K.Nagaich  
*Int. J. Math. Anal.* **3 (24)** (1177-1182), 2009

- On CR-lightlike product of an indefinite Kaehler manifold.  
Rakesh Kumar , **Jasleen Kaur** and R. K .Nagaich  
*Int. J. Math. and Math. Sci.* doi:10.1155/2011/857953
- Effect of Change of Origin of Variables on Ratio Estimator of Population Mean  
Sarbjit S. Brar , **Jasleen Kaur**  
*Applied Mathematics* **6 (3)** (41-47), 2016
- A Review on CR Submanifolds of Kaehler Manifolds.  
**Jasleen Kaur**  
*Journal of Emerging trends in Engineering, Science and Technology*  
**4 (1)** (47-55), 2016
- Estimation of Median and Mode Using Ranked Set Sampling.  
Sarbjit S. Brar, S.C. Malik, **Jasleen Kaur**  
*International Journal of Statistics and Systems*  
**12 (3)** (525-533), 2017
- Some New Functional Forms of the Ratio and the Product Estimators of the Population Mean  
Sarbjit Singh Brar , Jagmeet Singh Bajwa , **Jasleen Kaur**  
*REVISTA INVESTIGACION OPERACIONAL*  
**41 (3)** (416-424), 2020
- Distributions in CR-lightlike submanifolds of an indefinite Kaehler statistical manifold.  
**Jasleen Kaur** ,Vandana Rani  
*Malaya Journal of Matematik* **8 (4 )** (1346-1353), 2020
- Cauchy Riemann-lightlike submanifolds in the aspect of an indefinite Kaehler statistical manifold.  
Vandana Rani, **Jasleen Kaur**  
*Malaya Journal of Matematik* **9 (1)** (136-143) , 2021
- On the structure of lightlike hypersurfaces of an indefinite Kaehler statistical manifold.  
Vandana Rani, **Jasleen Kaur**  
*Differential Geometry- Dynamical Systems* **23** (221-234), 2021
- Lightlike hypersurfaces of an indefinite statistical manifold.  
Vandana Rani, **Jasleen Kaur**  
*Advances and Applications in Mathematical Sciences* **20(9)** (1995-2013)  
, 2021

- Characterizations on geodesic GCR-lightlike submanifolds of an indefinite Kaehler statistical manifold.  
Vandana Rani, **Jasleen Kaur**  
*Honam Mathematical Journal* **44(3)** (432-446) 2022
- STCR-lightlike product manifolds of an indefinite Kaehler statistical manifold with a quarter symmetric non-metric connection.  
Vandana Rani, **Jasleen Kaur**  
*International Electronic Journal of Geometry* **15(2)** (230-242) 2022
- On contact CR-lightlike submanifolds of an indefinite Sasakian statistical manifold.  
Shagun, **Jasleen Kaur**  
(*Communicated*)
- Contact CR and SCR- lightlike submanifolds of an indefinite Kenmotsu statistical manifold.  
Shagun, **Jasleen Kaur**  
arXiv:2303.17194v1 [math.DG] 30 Mar 2023
- CR-product of a holomorphic statistical manifold.  
Vandana Rani, **Jasleen Kaur**  
(*Communicated*)
- On contact CR-product of Sasakian statistical manifold.  
Vandana Rani, **Jasleen Kaur**  
arXiv:2305.19790v1 [math.DG] 31 May 2023
- Invariant and screen semi-invariant lightlike submanifolds of a metallic semi-Riemannian manifold with a quarter symmetric non-metric connection.  
**Jasleen Kaur**, Rajinder Kaur  
arXiv:2310.11795v1 [math.DG] 18 Oct 2023

#### **PH.D. THESIS SUPERVISION:**

1. Vandana Rani  
Title: A Study of CR-Lightlike Submanifolds of Statistical Manifolds.  
(**Degree Awarded**) September 2023.
2. Shagun  
Title: On Structure of Lightlike Submanifolds of Contact Metric Statistical Manifolds.  
**UGC - SRF (Registered)**

3. Rajinder Kaur  
Title: Study of the Lightlike Geometry in Metallic Semi-Riemannian Manifolds.  
**UGC - JRF (Registered)**

#### **CONFERENCES / SEMINARS ATTENDED**

1. 11<sup>th</sup> Punjab Science Congress on Science & Technology (**Feb. 07-09, 2008**) held at Thapar University, Patiala. (Presented paper)
2. Instructional Workshop on Computational Aspects of Mathematics (IWCM-09) (**22-26 December 2008**), held at Sant Longowal Institute of Engineering and Technology, Longowal (Punjab).
3. National Symposium on Radiation Physics and Nanomaterials (NSRPN-11) (**Feb. 4-5, 2011**) held at Punjabi University, Patiala.
4. National Conference on Impact of Science and Technology on Societal Development (**November 3-5, 2011**) held at Shaheed Udham Singh Group of Institutions, Tangori, Mohali, Punjab.
5. A workshop on National e-Governance Plan (NeGP) (**Dec 22, 2011**) held at University Computer Centre, Punjabi University Patiala.
6. Twenty-first International Conference of Forum for Interdisciplinary Mathematics on Interdisciplinary Mathematics, Statistics and Computational Techniques (**Dec 15-17, 2012**) held at Panjab University, Chandigarh.
7. National Seminar on Mathematics and its Applications (**Dec 20, 2012**) held at Punjabi University, Patiala.
8. International Conference on Emerging Areas of Mathematics for Science and Technology in conjunction with 12<sup>th</sup> Annual Conference of The Indian Society of Industrial and Applied Mathematics (**30 Jan – 1 Feb, 2015**) held at Department of Mathematics, Punjabi University, Patiala. (**Presented paper**)
9. Regional Workshop on Indian Women and Mathematics, Research and Career Opportunities” (**Feb. 6-7, 2017**) held at Department of Mathematics, Punjabi University, Patiala.
10. Two-day National Workshop on data analysis Using SPSS (**March 20-21, 2017**) held at Department of Statistics and Operational research, Kurukshetra University, Kurukshetra.

11. International Conference on Emerging Innovations in Statistics & Operations Research (EISOR-2118) (**Dec.27-30, 2018**) held at Department of Statistics, M.D. University, Rohtak. (**Presented paper**).
12. Second International Conference on Algebra and Discrete Mathematics - ICADM 2020 (WEBINAR) (**June 24-26, 2020**) organized by Department of Mathematics, Madurai Kamaraj University, Madurai. (**Presented paper**)
13. International Conference on Recent Trends in Applied Mathematical Sciences -ICRTAMS 2020 (online) (**Sep. 26- 27, 2020**) jointly organized by Arunai International Research Foundation, Department of Mathematics, University of Kerala in association with (CERCOM) Universiti Tun Hussein Onn Malaysia. (**Presented paper**)
14. 25<sup>th</sup> Punjab Science Congress-2022 (**Feb.7- 9, 2022**) on Future Endeavours of Science and Technology for Sustainable Growth organized by Sri Guru Teg Bahadur Khalsa College, Sri Anandpur Sahib , Punjab. (**Presented Paper**)
15. International Webinar on Intelligent Optimization Techniques and Their Real Life Applications (**Feb. 25-27, 2022**) organized by Department of Mathematics, Punjabi University, Patiala, India, in collaboration with Mizan-Tepi University (Ethiopia) University of Wolverhampton (United Kingdom) and MathTech Thinking Foundation, (India).
16. One day training workshop on “Cross-discipline Platforms: Scopus, Science Direct and Mendeley” held on **11<sup>th</sup> March 2022**,(online) organized by MathTech Thinking Foundation, India, in collaboration with Punjabi University, Patiala (India), Poornima University, Jaipur (India) and Bahir Dar University, Bahir Dar (Ethiopia).
17. International Webinar on “Mathematics of Computer Vision” (**April 28, 2022**) organized by Department of Mathematics and Humanities, M. M. (Deemed to be University), Mullana-Ambala, India.
18. 26<sup>th</sup> Punjab Science Congress (PSC-2023) (**Feb.7- 9, 2023**) National Conference on “Environment, Food Security and Health with Reference to Climate Change” organized by Sri Guru Granth Sahib World University, Fatehgarh Sahib (Punjab) under the aegis of Punjab Academy of Sciences, Patiala. (online) (**Presented Paper**).
19. Five days International Faculty Development Program on “Unveiling Creative Applications of Mathematics in Practical, Applied and Emerging Environments” (**11<sup>th</sup> to 15<sup>th</sup> September, 2023**) organized by department of Applied Sciences, CUIET, Chitkara University, Punjab.

## **ORIENTATION/REFRESHER COURSES**

1. 23<sup>rd</sup> Orientation Programme held from **1-12-2014 to 27-12-2014** at Academic Staff College, Punjabi University, Patiala.
2. 56<sup>th</sup> Refresher Course in Physical Sciences held from **20-6-2016 to 9-7-2016** at Human Resource Development Centre, Punjabi University, Patiala.
3. "5<sup>th</sup> Winter School Course" held from **1-12-2017 to 21-12-2017** at the UGC-HRDC, Punjabi University, Patiala.
4. 44<sup>th</sup> Online Short-Term Course on E-Content Development held from **11-06-2020 to 17-06-2020**.
5. Online 1 Week Faculty Development Programme on Mentoring Pedagogy & Teaching for Higher Education held from **29-6-2020 to 6-7-2020**.
6. MOOC Course An online course of five weeks: "Introduction to Calculus" by the University of Sydney from **June 12, 2021 to July 15, 2021**.
7. Udemy MOOC Course of 3 hours : "Calculus in MATLAB" on **June 12, 2021**.

## **BOOKS:**

1. Jasleen Kaur, Rakesh Kumar, R.K.Nagaich , Manifolds with indefinite metrics, *Lambert Academic Publishing ISBN no. 978-3-659-63256-3* (2014).

## **ACHIEVEMENTS:**

1. 4<sup>th</sup> position in University in Graduation.
2. College Colour and Roll of Honour in Graduation.
3. Best Oral Presentation Award in 26<sup>th</sup> Punjab Science Congress (**Feb.7-9, 2023**) organized by Sri Guru Granth Sahib World University, Fatehgarh Sahib, Punjab.