Mukund Madhav Mishra

Curriculum Vitae

Personal Details

- ❖ Father's Name : Vidhu Shekhar Mishra
- ❖ Date of Birth : 02-03-1981
- ❖ Nationality : Indian

Educatinal Qualifications

Level	Board/ University	Year of Passing	Subjects	Duivision	% of Marks
High School	U. P. Board of Secondary Education	1995	Sciences	I	67
B. Sc.	V. B. S. Purvanchal University	2000	Physics, Mathematics, Statistics	I	73
M. Sc.	Banaras Hindu University	2002	Mathematics	I	90
Ph. D	University of delhi	2011			

- ❖ Title of the Ph. D. Thesis : Potential Theory on Stratified Lie Groups
- ❖ NET/JRF : CSIR JRF June 2003 and CSIR JRF Dec 2005

Present Employment

- ❖ Present Employer : Hansraj College, University of Delhi
- ❖ Position held : Assistant Professor
- ❖ Duration : November 18, 2010 to date.
- ❖ Pay scale : UGC pay matrix level 10, basic ₹ 77,500.

Teaching

❖ Courses taught at Undergraduate Level : Real Analysis, Calculus, Business Mathematics, Analytical Geometry, Abstract Algebra, Differential Equations, Discrete Mathematics, Applications of Mathematica in Complex Analysis, Elementary Number Theory, Cryptography and Network Security.
❖ Courses taught at Postgraduate Level : Differential Geometry, Measure Theory.

Research Interests

Partial differential equations on Lie groups, Analysis of elliptic and sub-elliptic differential operators, Hyperbolic Geometry in non-commutative setup.

Research Supervision

S. No.	Name	Course	Date of Regn.	Title of the Thesis	Date of Submission	Date of Award
1.	Shivani Dubey	Ph. D.	18.10.2011	Boundary Value Problems for the Kohn-Laplacian on the Heisenberg Group $\mathbb{H}_n$	25.04.2016	17.02.2017
2.	Shweta Gupta	M. Phil.	23.01.2014	H-type Algebras and Their Classification	August 2016	21.04.2017
3.	Devendra Tiwari	Ph. D.	05.12.2014	Study of Discreteness of Subgroups and Operators on Rank One Spaces	July 2019	

Undergraduate Projects

1. Guided a project entitled "APPLICATION OF WAVELETS TO SOLUTION OF DIFFERENTIAL EQUATIONS" under Summer Research Fellowship Programme by Indian Academy of Sciences (May-June 2014).

2. Guided an undergraduate project entitled "Beyond Riemann with Volterra and Henstock and Kurzweil"(Feb-March 2018).

Conferences/Workshops Attended

1. Workshop on Euclidean Harmonic Analysis (From 11-12-2006 to 24-12-2006 at IIT Kanpur).

2. National Symposium on Functional Analysis, Optimization And Their Applications, Jan 19-20, 2007 at Deen Dayal Upadhayay College, University of Delhi.

3. National Workshop on Analysis, Sep 27-28, 2007 at Department of Mathematics, University of Delhi.

4. International Conference on Operator Theory and Related Areas,2007 Department of Mathematics, University of Delhi.

5. 10th Discussion Meeting in Harmonic Analysis, IISc Banglore(2008).

6. Pre ICM ICMS, 2008, Department of Mathematics, University of Delhi.

7. National Meet on History of Mathematics, 2009, Department of Mathematics, University of Delhi.

8. ICM 2010 at Hyderabad.

9. National Initiative in Mathematics Education: Northern Region Conference(2011).

10. 12th Discussion Meeting in Harmonic Analysis, ISI Calcutta(2011).
11. Instructional School for Lecturers in Real Analysis and Measure Theory funded by the National Board for Higher Mathematics(March 2012).
12. 13Th Discussion Meeting in Harmonic Analysis, IMSc (2013)
13. International Workshop on "Geometric and Analytic Aspects of Hyperbolic Spaces" during December 10-15, 2014, Department of Mathematics, DU.
14. 14th Discussion Meeting in Harmonic Analysis, University of Delhi, 2015.
15. Faculty Development Progamme on "Challenges before the academia in the era of gadgets, e-communication and artificial intelligence" at the Hansraj College, University of Delhi (December 2019).

Conferences/Workshops Organized

1. Worked as the local organizer for the "Science Academies' Lecture Workshop" at the Hansraj College, University of Delhi (August 2012).
2. Worked as Organizing Secretary for "The Legacy of Srinivasa Ramanujan: An International Conference" at the University of Delhi (December 2012).
3. Organized Instructional School for Teachers in Group Theory funded by the National Board for Higher Mathematics (June 2013).
4. Worked as the Organizing Secretary for the "National Conference on Advances in Mathematics" organized by the Hansraj College, University of Delhi (March 2014).

Publications

[1] Shivani Dubey, Ajay Kumar, and Mukund Madhav Mishra. Green's function for a slice of the Korányi ball in the Heisenberg group Hn. *International Journal of Mathematics and Mathematical Sciences*, 2015:1–8.

[2] Shivani Dubey, Ajay Kumar, and Mukund Madhav Mishra. The Neumann Problem for the Kohn-Laplacian on the Heisenberg Group Hn. *Potential Analysis*, 45(1):119–133, 2016.

[3] Shivani Dubey, Ajay Kumar, and Mukund Madhav Mishra. Polyharmonic Neumann and Mixed Boundary Value Problems in the Heisenberg Group Hn. *Complex Variables and Elliptic Equations*, 62(10):1506–1518, 2017.

[4] Krishnendu Gongopadhyay, Mukund Madhav Mishra, and Devendra tiwari. On discreteness of subgroups of quaternionic hyperbolic isometries. *Bull. Aus. Math. Soc.*, pages 1–11, 2019.

[5] Ajay Kumar and Mukund Madhav Mishra. Polyharmonic Dirichlet problem on the Heisenberg group. *Complex Variables and Elliptic Equations*, 53(12):1103–1110, December 2008.

[6] Ajay Kumar and Mukund Madhav Mishra. Green's functions on the Heisenberg group. *Analysis*, 30:147–155, 2010.

[7] Ajay Kumar and Mukund Madhav Mishra. Green function and related boundary value problems on the Heisenberg group. *Complex Variables and Elliptic Equations*, 58(4):547–556, 2013.

[8] Ajay Kumar and Mukund Madhav Mishra. Powers of Sub-Laplacian on step two nilpotent Lie groups. *Journal of Geometric Analysis*, 23(3):1559–1570, 2013.

[9] Mukund Madhav Mishra and Ved Prakash Gupta. On the topology of certain matrix groups. *The Mathematics Student*, 87(3–4):61–71, 2018.

[10] Mukund Madhav Mishra, Ajay Kumar, and Shivani Dubey. Green's function for certain domain in the Heisenberg group Hn. *Boundary Value Problems*, 2014:182:1–16, 2014.

[11] Mukund Madhav Mishra and Ashutosh Pandey. Well-posedness of a Neumann-type problem on a gauge ball in H-type groups . *Boundary Value Problems*, 2020(92):1–14, 2020.

[12] Mukund Madhav Mishra, Devendra Tiwari, and Krishnendu Gongopadhyay. On generalized Jorgensen inequality in SL(2, C). *Siberian Electronic Mathematical Reports*, 16:542–546, 2019.