


Curriculum Vitae

Title	Dr	First Name	Rashmi Sehgal	Last Name	Thukral	
Designation	Associate Professor					
Department	Mathematics					
Institutional Email Address	rthukral@jmc.du.ac.in					
EDUCATION						
Degree	Institution	Year	Details			
Ph.D.	University of Delhi	2016	<i>Decomposability of non-negative r potents, Theory of Operators</i>			
M.Phil.	University of Delhi	2007	<i>A study of Supercyclic Operators, Theory of Operators</i>			
CAREER PROFILE						
Organisation / Institution	Designation	Duration	Role			
Jesus and Mary College, University of Delhi	Assistant Professor (Levels 10, 11, 12)	July 2006 to Jan 2023	Teaching and Mentoring			
Jesus and Mary College, University of Delhi	Associate Professor (Level 13A)	Jan 2023 to present	Teaching and Mentoring			
AREA OF INTEREST						
Research Interest: Operator Theory, Functional Analysis and Artificial Intelligence						
Teaching: Algebra, Analysis (Real and Complex), Differential Equations (Ordinary and Partial Differential Equations), Probability Theory and Statistics, Calculus and Mathematical Modelling						

HONORS & AWARDS

- Rai Bahadur Brij Mohan Lal Saheb Memorial Gold Medal by the University of Delhi for being the best candidate in B.A. (Hons.) Examinations held in 2003.
- Ravi Kanta Devi Prize by University of Delhi for being the best woman candidate.
- J.N. Mitra Memorial Prize for being the best candidate in Mathematics and Physics (taken together).
- Shri Suresh Bhatia Memorial Gold Medal
- Balaji Gold Medal
- Smt. Velagalety Suvarchalamba Memorial prize,
- Bharatula Savitri Memorial prize,
- Sri Sundar Ayyar and Alamelu Memorial prize and
- Students Union Merit prize (SVC).

PUBLICATION DETAILS

Book Chapters:

1. Chapter: Image Compression Using Linear Algebra in the book Topics in Mathematical Sciences, CPDHE UGC-HRDC, University of Delhi, in the year 2017 (ISBN: 978-81-934519-6-0)
2. Chapter: Encouraging Women Mathematicians in India: A Five Pronged Approach in the book Dimensions of Higher Education, CPDHE, University of Delhi, in the year 2016 (ISBN: 978-93-85503-19-1)

Journal Papers:

1. Rashmi Sehgal Thukral and Alka Marwaha, Decomposability of non-negative r potent matrices, International Journal of Pure and Applied Mathematics, Volume 94, No.5, 2014, 705-724, ISSN:1311-8080, <http://dx.doi.org/10.12732/ijpam.94i5.9>
2. Rashmi Sehgal Thukral and Alka Marwaha, Decomposability of non-negative r potent operators on $L_2(X)$, International Journal of Pure and Applied Mathematics, Volume 100, No.1, 2015, 29-52, ISSN:1311-8080, <http://dx.doi.org/10.12732/ijpam.v100i1.4>
3. Alka Marwaha and Rashmi Sehgal Thukral, Structure of decomposable semigroups of nonnegative r -potent matrices in $M_n(\mathbb{R})$, International Journal of Statistics and Applied Mathematics, Volume 7, Issue 4, 2022, 215-225, ISSN 2456-1452.
4. Alka Marwaha and Rashmi Sehgal Thukral, A Canonical representation of maximal, indecomposable semi groups of constant rank non-negative r potent matrices in $M_n(\mathbb{R})$, International Journal of Statistics and Applied Mathematics, Volume 7, Issue 5, 2022, 103-107, ISSN 2456-1452, <https://doi.org/10.22271/math.2022.v7.i5b.886>
5. Rashmi Sehgal Thukral and Alka Marwaha, Decomposability and structure of semigroups of nonnegative r -potent operators on $L_2(X)$, Filomat38:11,2024, 3731-3738, ISSN 2406-0933, <https://doi.org/10.2298/FIL2411731T>

OTHER DETAILS

Membership in Professional Bodies:

1. Member, *Committee of Courses for Post Graduate Studies*, Department of Mathematics, University of Delhi, July 2022 onwards.
2. Member, *Departmental Research Committee*, Department of Mathematics, University of Delhi, Nov 2022 onwards.
3. Nodal Officer, *PMSSS at JMC*, October 2021 onwards.
4. Teacher in Charge, *Department of Mathematics*, May 2022-April 2024.
5. Association in Charge, *Department of Mathematics*, Dec 2020-April 2022.
6. Convenor/ Caretaker, NCC, 2007- Jan, 2017.

Orientation and Refresher Courses:

1. UGC-HRDC, CPDHE, UGC sponsored orientation program, Nov17, 2015 to Dec 15, 2015.
2. UGC-HRDC, CPDHE, UGC sponsored refresher course in Mathematical Science (Algebra), June 6,2017 to June 27,2017.
3. Faculty Development Program in Research Methodology, Teaching Learning Centre, Ramanujan College, University of Delhi, Jan 17, 2020 to Jan 28, 2020.
4. FDP (MHRD), Teaching Learning Centre, Ramanujan College, University of Delhi, Oct 1, 2020 to Oct 15, 2020.
5. Refresher Course in Mathematics and Python organized by Department of Mathematics, Teaching Learning Centre, Ramanujan College, University of Delhi, March 16, 2021 to March 30, 2021.

