

## **Dr. ALKA MARWAHA**

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**ASSOCIATE PROFESSOR | DEPARTMENT OF MATHEMATICS | JESUS & MARY COLLEGE, UNIVERSITY OF DELHI | NOV, 1987-PRESENT**

### **Objective**

To achieve excellence in academia with an orientation towards teaching mingled with research, supported by literary skills and an artistic temperament.

### **Education**

**PH.D. | 1996 | DALHOUSIE UNIVERSITY, HALIFAX, NOVA SCOTIA, CANADA**

- Major: Operator Theory, Functional Analysis
- Recipient of Canadian Commonwealth Scholarship

**M.PHIL | 1990 | ST. STEPHENS, UNIVERSITY OF DELHI**

- Major: Operator Theory

**M.A| 1986 | ST. STEPHENS, UNIVERSITY OF DELHI**

- Major: Mathematics

**B.A| 1984 | JANKI DEVI MEMORIAL, UNIVERSITY OF DELHI**

- Major: Mathematics (Honors)

**HIGH SCHOOL| 1981 | SALWAN PUBLIC SCHOOL, NEW DELHI**

- Major: Humanities with Mathematics

### **Skills & Abilities**

- Over 30 years of teaching experience in the field of Mathematics at the Under- Graduate and Post-Graduate level.
- Mentored post-graduate and doctoral students for research in the field of pure Mathematics.

### **Management and Leadership**

- Convener of IQAC (Internal Quality Assurance Cell).
- Staff Advisor to Student Council.
- Member of Time Table Committee.

### **Communication**

- Presented a paper titled, 10 unsolved problems of Mathematics, at the UGC sponsored Seminar, "From Pythagoras to Andrew Wiles: Tracing the path of mathematics", organized by the Dept. of Mathematics, Jesus and Mary College, 2008.

- Paper presented at International Conference of WSDC on 'Women Entrepreneurship' at Punjabi University, Patiala in 2010.
- Paper presented on 'Global Economization of Reproductive Health of Women' at International Conference of WSDC, Udaipur University in 2010.
- Paper presented on 'Women Mathematicians' at WSDC Conference organized by Benaras University in 2010.
- Paper presented titled Wheel of Dhamma at the conference of Indian Congress of Asian & Pacific Studies at Jaipur in 2011.
- Written a Mathematics Text- Book, "An Introduction to Linear Algebra".
- Written a book on 'Mathematics and Spirituality', titled the "Secret World of Vipassana and Mathematics- Zero to Infinity".
- Presented a paper on " Value Formation in Higher Education" at International Conference, organized by School of Human Excellence, Loyola College (Autonomous, Chennai), 2016.
- Was invited as a Resource Person to give lectures on Real Analysis at the Refresher Course of Mathematical Sciences organised by CPDHE in September, 2016.
- Was invited as a Resource Person to give lectures on Applications of Linear Algebra at the Interdisciplinary Refresher Course organised by Department of Mathematical Sciences for CPDHE.
- Presented a talk on History of Mathematics at Rukmini Devi Public School, Rohini in December, 2016

### **Teaching & Research Experience**

- Published paper titled, "Decomposability and Structure of Nonnegative Bands in Finite Dimensions", Journal of Linear Algebra and its Applications.
- Published paper titled, "Decomposability and Structure of Nonnegative Bands in Finite Dimensions", Journal of Operator Theory.
- Published paper titled, "A Geometric characterization of Maximal, Rank- One Nonnegative Bands in Infinite Dimensions", Journal of Operator Theory.
- Guided an M.Phil Student in the year 2015.
- Guided a Doctoral Student in 2016.
- Have been teaching papers on Functional Analysis, Measure Theory and Operator Theory at the post graduate level, Dept. of Mathematics, University of Delhi, since 1997 to present.
- Currently, guiding one M.Phil and one Ph.D student.