

Amita Aggarwal

Hansraj College
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Current position

Associate Professor, Hansraj College

Areas of specialisation

Operator Theory (Functional Analysis)

Education

- PhD in Mathematics (2025), University of Delhi
- MPHIL in Mathematics (1997), University of Delhi
- MSc in Mathematics (1995), Kirori Mal College, University of Delhi
- BSc(H) Mathematics (1993), Kirori Mal College, University of Delhi

Teaching

- Hansraj College, University of Delhi (August 5, 1997- ongoing)
- Kirori Mal College, University of Delhi (October 25, 1996-April 30, 1997)
- Maitreyi College, University of Delhi (August 5, 1996-October 24, 1996)

COURSES TAUGHT

Real Analysis, Calculus, Metric Spaces, Complex Analysis, LaTeX, Analytical Geometry, Linear Algebra

ADMINISTRATIVE POSITIONS HELD

- NAAC Coordinator
- Secretary, Staff Council
- Member and Criterion Head, Internal Quality Assurance Cell
- Member, Ranking Committee
- Convenor, Internship Cell
- Member, Development Fund Committee
- Member, Finance Committee
- Convenor, Mentorship Programme
- Convenor, Women Development Cell

- Convenor, Environment Awareness Committee
- Convenor, Student's Welfare Society
- Convenor, Debating Society
- Convenor, Enactus
- Teacher in Charge, Department of Mathematics

Publications

- Hyponormality of quasi-homogeneous Toeplitz operators on the Fock space. *Journal of Mathematical Analysis and Applications*. 542, no.1 (2025) (with Professor Anuradha Gupta).
Indexed in Mathematical Reviews (MathSciNet), Zentralblatt MATH, **SCI Expanded, Scopus**.
- Hyponormality of the sum of Toeplitz operators with non-harmonic symbols on the Fock space. *Operators and Matrices*. 18, no.1, 147–162 (2024) (with Professor Anuradha Gupta).
Indexed in Mathematical Reviews (MathSciNet), Zentralblatt MATH, **SCI Expanded, Scopus**.
- Necessary conditions for hyponormality of Toeplitz operators on the Bergman space. *Mathematics for Applications*. 11, no.1, 13–19 (2022) (with Professor Anuradha Gupta).
Indexed in Mathematical Reviews (MathSciNet), Zentralblatt MATH, **Scopus**.

Conferences/Workshops organized

- Organized the webinar “Student Learning Centre: Objectives and Perspectives”, July 13, 2020, in association with IQAC, Hansraj College.
- Organized Internship Fair, February 19, 2020 for the under-graduate students.
- Organized Mentorship programme, February 12-13, 2020 for the students of the Hansraj College.
- Member - Organizing Team: "ICT in Education and Cyber Security", July 10-16, 2019, organized by Mahatma Hansraj Faculty Development Centre.
- Member- Organizing Committee: "Inspire Programme (DST)", December 12-16, 2017, Hansraj College, University of Delhi.
- Member - Organizing Team: "Excellence in Higher Education: Current Challenges and the Road Ahead", Dec 6-7, 2019, organized by Mahatma Hansraj Faculty Development Centre.
- Convenor- workshop on "LaTeX", April 9, 2016, organized by the Department of Mathematics, Hansraj College, University of Delhi.

Conferences/Workshops attended

- Participated in the "International Symposium on Recent Advances in Differential Equations and Applications (ISRADEA- 2024)", August 6, 2024.
- Participated in the "International Conference on Advances in Pure and Applied Mathematics (ICAPAM)", February 8-10, 2024.

- Participated in the "International Conference on Analysis and its Applications (ICAA-23)", February 27-28, 2023.
- Participated in the webinar "Quality Assurance in Higher Education : Practices And Issues", May 4-8 ,2020, organized by Paramarsh in collaboration with IQAC, Hansraj College.
- Participated in the webinar "Role of ICC and Prevention, Prohibition and Redressal of Sexual Harassment at Workplace", May 22, 2020, organized by Internal Complaints Committee in association with IQAC, Hansraj College.
- Participated in the webinar "Basic Documentation For Teachers" June 22, 2020, organized by Paramarsh in collaboration with IQAC, Hansraj College.
- Participated in the Faculty Development Programme on "Fundamentals of Intellectual Property Rights", January 23-25, 2020, organized by Department of Botany and IQAC in collaboration with Mahatma Hansraj Faculty Development Centre.
- Participated in the National Conference on "Advances in Mathematical Analysis and Its Applications", November 8-10, 2019, organized by Department of Mathematics, PGDAV, sponsored by SERB-DST, Govt of India.
- Participated in the seminar on "Radiation hazards and monitoring techniques and materials", April 10, 2017 organized at the Department of Physics and Electronics, Hansraj College.
- Participated in the National Conference on "Advances in Mathematics", March 7-8, 2014, sponsored by NBHM.
- Participated in the workshop on "Building Mathematical Ability", June 18-20,2013, organized by CPDHE.
- Participated in the workshop on Free/ Open Source Software "Maxima", August 17,2012, organized by Acharya Narendra Dev College, University of Delhi.
- Participated in the National Meet on "History of Mathematical Sciences" , January 7-9, 2010 organized by Department of Mathematics, University of Delhi.
- Participated in the workshop entitled "Applications of Mathematica at Undergraduate Level Mathematics", March 26-27, 2009, organized under the UGC DRS-SAP programme.
- Participated in the National Symposium on "Recent Advances in Optimization Theory and Applications", October 27-28, 2006, organized by Academic Research Center, University of Delhi.

Association with professional bodies/schools

- Life Member, Indian Mathematical Society.
- Member, Committee of Courses, Faculty of Mathematical Sciences, University of Delhi.
- Life Member, Indian Society for History of Mathematics.
- Member, Selection Committee for DAV Colleges (outside Delhi).
- Member, Selection Committee for DAV Schools for TGT appointments.

Academic awards

- Received the Lala Banarsi Das Charity Trust Prize for being the best candidate in the MSc Examination (1995), University of Delhi.

- Received the Kumar Rajeshwari Razdan Memorial Prize for the First position held in MSc Mathematics Examination (1995), University of Delhi.
- Awarded for outstanding performance in academics in MSc(P) 1994, University of Delhi.
- Junior Research Fellowship awardee under the CSIR Fellowship Schemes.