

BIO-DATA

1. Name : **Dr. Mridul Kumar Gupta**
2. Father's Name : Shri Shiv Prakash Gupta
3. Office Address : Department of Mathematics, C.C.S. University, Meerut
: e-mail: mkgupta2002@hotmail.com
4. Residential Address : 527/5, Jagriti Vihar, Meerut
Telephone / Mobile : 0121-2767113 / 09411619236
5. Present Designation : Professor
6. Date of Birth : 12-10-1963
7. **Academic Qualifications:**

Examination	Year	Division	% of Marks
High School	1978	I	69.0 %
Intermediate	1980	I	62.8 %
B.Sc.	1982	I	68.2 %
M.Sc.	1984	I	86.2 %
M.Phil.	1985	I	87.2 %
Ph.D.	1998		

8. **Research Fellowships / Awards:**
 - Received Merit Certificate for obtaining first position in M.Sc.(Mathematics) 1984
 - Received Chancellor's medal for securing highest marks in all subjects in M.Phil. Examinations 1985
 - JRF (NET) of CSIR in 1986
 - JRF (NET) of UGC in 1986
 - Joint CSIR-UGC (NET) in 1989
 - **Consulting Editor** of *the Contemporary Who's Who* published by American Biographical Institute, USA
 - **Associate Editor**, Journal of Mathematical Analysis and Approximation theory
9. **Teaching Experience:**
 - Under-graduate Classes : 5 years (July 1986 to February 1991)
 - Post- graduate Classes : 1987 to till date
 - Total Teaching Experience : 22years
10. **Research Experience:**
 - Guided five students for Ph. D. Degree
 - Supervised 24 students for M.Phil. Degree
 - Six students are working for Ph.D. under my supervision
 - One student has submitted thesis for Ph.D. Degree

11. *Conferences / Seminars / Workshops / Symposia attended:*

- Participated in the 61st annual Conference of National Academy of Science, India held at Meerut during Dec.19 - 21, 1991.
- Participated and presented a paper entitled “Pre- T_2 , Pre - R_0 and Pre- R_1 spaces” in the 61st annual conference of IMS held at Aligarh from Dec. 27- 30,1995.
- Participated in the 62nd annual conference of IMS held at IIT Kanpur from Dec. 22-25, 1996.
- Participated and presented a paper entitled “Generalizations of compactness modulo an ideal” in the 63rd annual Conference of IMS held at Ahmednagar from Dec. 27-30, 1997.
- Attended 84th Session of *ISCA* held at Delhi from Jan. 3 - 4, 1997.
- Participated and presented a paper entitled “ I-open sets and I-continuous mappings in Bitopological spaces” in the 64th annual Conference of IMS held at Gurukul Kangari University, Hardwar, 1998.
- Participated and organized two days Seminar on “Mathematics in 21st Century” sponsored by UGC held at C.C.S.University on 26-27 March, 2000.
- Attended 88th Session of *ISCA* held at IARI, Delhi,2001.
- Participated in the National Seminar on “e-Learning and e-Learning Technologies” organized by C-DAC at Hyderabad on 7-8 August, 2001.
- Attending “ A date with Mathematicians” function organized by IMS on 13th April every year at Delhi University regularly since 1985.
- Attended a Symposium on “Recent advances in General Topology” held at Delhi University sponsored by UGC from March 22 - 25, 1987.
- Attended and participated in the Workshop for the development of problem book in Mathematics for Class 7th from Sep. 12 - 16, 1988 at NCERT,New Delhi.
- Attended and participated in the seventh Workshop on “Automation and Networking of University Libraries” held at INFLIBNET(AIUC of UGC) Centre at Ahmedabad from 25th June to 1st July, 2001.
- Participated and presented a paper entitled “ On the linear combinations of a new sequence of Linear Positive Operators” in the joint 9th National Conference of Vijnana Parisad of India and 5th Annual Conference of Indian Society of Information Theory and Applications held at NSIT, New Delhi from Feb. 22-24,2002
- Participated and presented a paper entitled “ Direct results for a certain family of summation integral type operators” in the *international* conference on Analysis and Applications held at BHU, Varanasi from Dec. 22-25, 2003
- Participated and presented a paper entitled “ An Error estimate for Durrmeyer type Beta-Szasz operators” in the 19th annual conference of Ramanujan Mathematical Society held at Agra from July 21–24, 2004.

12. *Lectures Delivered:*

- Delivered 10 Lectures on *Discrete Mathematics* at DN(PG) College, Meerut from 12 - 2 - 2001 to 23 -2- 2001 to Faculty members of Mathematics Deptt.
- Under the Institute of Correspondence Courses and Continuing Education, I delivered Lectures on Topology and Boolean Algebra to M.A. / M.Sc. students.
- Delivered an invited talk on *Role of Ideals in General Topology* in the National Seminar on *Analysis and Applications* held at Jammu University, Jammu from Feb. 20-21,2003.
- Delivered three lectures on *Planar Graphs and its Applications* to the Participants of Refresher Course (24 Nov. to 14 Dec. 2003) at Department of Mathematics, CCS University, Meerut.
- Delivered an invited talk on ‘*Cryptology and Network Security*’ in the National

Conference on Computer Science & Information Technology held at Krishna Institute of Engineering and Technology, Muradnagar during Nov. 11-12, 2006.

13. **Memberships:**

- Life member of Indian Mathematical Society, India.
- Life member of Indian Science Congress Association.
- Life member of Jammu Mathematical Society.
- Life member of Deen Dayal Sewa Sansthan, Meerut
- Life member of Bharata Ganita Parisad, Lucknow
- Life member of Ramanujan Mathematical Society
- Life member of Forum for Interdisciplinary Mathematics

14. **Teaching Material Produced:**

- Written 8 lessons (articles) on Metric Spaces (Analysis I) Course of M.A./M.Sc. students of Correspondence Courses & Continuing Education, Meerut.
- Written a Book on Discrete Mathematics for PG students.
- Written a Book on Numerical Analysis and Boolean Algebra jointly with Mr. A.R.Vasishtha.

15. **Research Publications:**

- Published : 31
- Communicated 05

16. **Refresher Courses Attended:**

- Attended and successfully completed **two** refresher courses from Aug. 30 to Sep. 19, 1993 at Roorkee University and from Dec. 20 1994 to Jan. 13, 1995 at Allahabad University, Allahabad sponsored under the Academic Staff College programme of UGC.
- Attended and participated “All India Refresher Course in Coding Theory, Cryptography and Discrete Mathematics” from Dec. 2 -14, 2002 at Panjab University, Chandigarh organized by *Indian Academy of Science, Bangalore*.

17. **Extension Services / Administrative Assignments:**

- Warden, New Boy’s Hostel from 11-6-93 to 10-6-94.
- Warden, New Boy’s Hostel from 01-8-97 to 11-1-99.
- Acted as Assistant Controller Marks-sheet writing for 1996 and 1997 annual Examinations, CCS University, Meerut.
- Member of the Committee for disposal of used Answer-books and pulp 1998-99.
- Member of the Committee for Automation and Networking of University Library.
- Conducted Remedial Coaching in the Department of Mathematics for the upliftment of SC/ST Students from 1999 to 2002.
- Organized “Mathematics Exhibition” on Science Day in the Department of Mathematics in the years 2000, 2001.
- Member of the Board of Studies for preparing and updating Syllabi for M.Sc. (Mathematics), M.Sc. (Computer Science), M.Sc. (Polymer and Chemical Technology),

- M.Sc. (Ceramic Science and Technology) and M.Sc. (Printing and Packaging Technology)
- **Recorder** of the Section of Information and Communication Science & Technology for the years 2004-2005 and 2005-2006 of the *Indian Science Congress Association*.
- **Associate Editor**, *J. of Mathematical Analysis and Approximation Theory*.
- **Assistant Proctor**, from 01.07.05 to 31.03.07.
- **Proctor** from 01.04.07 to till date.
- **Co-ordinator**, UGC NET Examinations, December 2007 & June 2008.
- **Assist. Director**, Sir chhotu Ram Institute of Engineering & Technology, CCS University Campus, Meerut
- **Director**(Officiating) from 03-09-2008 to 03-12-2008, Sir chhotu Ram Institute of Engineering & Technology, CCS University Campus, Meerut
- **Dean**, Faculty of Engineering & Technology, CCS University, Meerut

18. **List of M.Phil. Students Supervised:**

The following Students have completed their M.Phil. Project Report under my supervision

Name	Year	Topic
1. Mr. Sanjeev Kumar	1996	Some new separation axioms in topological spaces.
2. Mr. Shiv Kumar	1997	Some new covering axioms in topological spaces.
3. Mr. Suresh Pal	1997	Some weaker forms of continuous mappings in topological spaces.
4. Mr. Subhash Chand	1997	Some recent mapping in bitopological spaces.
5. Ms. Sunita Singh	1998	Some weaker forms of fuzzy topological spaces.
6. Mr. P.B. Singh	2000	Some covering axioms in fuzzy topological spaces.
7. Mr. Harendra Singh	2001	Some separation axioms in fuzzy topological spaces.
8. Mr. Anand Swaroop	2001	Some weak forms of continuous functions in topological spaces.
9. Mr. Sanjay Kumar	2001	Some covering axioms in Bitopological spaces.
10. Ms Sarika Gupta	2001	Some covering axioms using generalized open sets in topological spaces.
11. Mr. Manoj Kumar	2002	Linear positive operators in approximation theory
12. Mr. Rupen Pratap Singh	2002	Fuzzy Bitopological Spaces
13. Mr. Yogesh Sharma	2002	Hyperspaces of a Bitopological Space
14. Mr. Ajay Kumar	2004	Role of Ideals in General Topology
15. Ms Saru Kumari	2005	Some Proxy Signature Schemes and its Security Analysis
16. Mr. Amit Saini	2005	Spectra of Some Graphs

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|---------------------------|------|---|
| 17. Ms Somya | 2005 | Some Summation Integral Type Operators in Approximation Theory |
| 18. Mr. Asad | 2005 | Nonexistence and Optimality of Some Ternary Linear Codes |
| 19. Mr. Vikas Kumar | 2005 | Some Group Signature Schemes |
| 20. Mr. Pankaj Aggarwal | 2006 | Study of Some Directed Signature Schemes |
| 21. Mr. Lalit Mohan | 2006 | Divisible Codes and its Applications |
| 22. Mr. Sudesh Kumar Garg | 2006 | Coloring of Hyper Graphs |
| 23. Mr. Sudhir Kumar | 2007 | Certificate less Public Key Cryptography |
| 24. Mr. Susheel Kumar | 2008 | Rate of Convergence of Sequences of Linear Positive Operators in Approximation Theory |

19. **Projects Completed / On going:**

Sl. No.	Title of the Project	Funding Agency	Amount	Duration
1	The role of ideals in general topology	U.G.C	20,000/-	1998-2000
2	Covering axioms in topological Structures	U.G.C.	20,000/-	2001-2003

20. **List of Publications:**

1. On some separation properties on bitopological spaces, *Mathematics Student*, **68**(1999), 175-183.
2. Pairwise compactness modulo an ideal, *Indian J. of Math.* **42** (2000), 241-251.
3. Pairwise fuzzy compactness modulo an ideal, *Fuzzy Set Theory, Its Mathematical Aspects and Applications*, Allied Publishers Private Limited, Delhi, 2002
4. On the iterative combinations of a new sequence of linear positive operators, *Math. Computer Modelling* **39** (2004) 521-527. (*Elsevier Science Pub.*) (USA)
5. On some weak separation axioms, *Mathematics Student* **71**(1- 4) (2002), 83-89.
6. A note on mappings on topological spaces via ideals (Submitted).
7. Rate of convergence of the Szasz-Kantorovitch-Bezier operators for bounded variation functions, *Publications de l' Inst. Math.* **72**(86) (2002), 137-143. (*Yugoslavia*).
8. Rate of convergence of summation-integral type operators with derivatives of bounded variation, *J. Inequalities in Pure and Applied Mathematics* **4**(2) (2003), Art.34. (*Australia*)
9. An estimate on the rate of convergence of Bezier type summation integral operators, *Kyungpook Math. J.* **43** (2003), 345-354. (*Korea*)
10. Simultaneous approximation by summation integral type operators, *J. Nonlinear Functional Analysis and Applications*, **8**(3) (2003), 399-412. (*Korea*)
11. On the linear combinations of a new sequence of linear positive operators, *Mathematics and Information Theory: Recent topics and applications*, Anamaya Publishers, New

Delhi, 2004

12. Direct results for a certain family of summation integral type operators, Proceedings of the International Conference on *Analysis and Applications*, Allied Publishers Private Limited, Delhi, 2004
13. Rate of convergence for certain families of summation-integral type operators, *J. Math. Anal. Appl* **296**(2) (2004) 608-618. (*Elsevier Science Pub.*) (USA)
14. Improved AIMD- A Mathematical Study, *J. Comp. Sci.* **1**(4) (2005) 514-519.(*Science Publication, USA*)
15. A note on the Bezier variant of certain Bernstein Durrmeyer operators, *J. Inequalities in Pure and Applied Mathematics* **6**(3) (2005),Art. 74. (*Australia*)
16. Linear combinations of certain family of linear positive operators, *Ind. J. Pure and Applied Math.* **36**(9) (2005), 479-492.
17. On fuzzy pairwise s-continuous and fuzzy pairwise s-open mappings, *International J. of Pure and Applied Math. Sci.* **1**(1) (2004), 101-109.
18. On some generalizations of continuous functions, *Bull. Pure and Applied Sciences*, (2005).
19. On Demand bandwidth based routing algorithm for ad hoc wireless networks, *J. of Math. and System Sciences*, **1**(2)(2005), 62-67
20. An error estimate for certain Durrmeyer type summation-integral operators, *Ganita*, **56**(2) (2005), 145-152.
21. C-compactness modulo an ideal, *International J. Math. Math. Sciences*, (2006) Article ID 78135, 1-12 (U S A).
22. I-open sets and I-continuous mappings in bitopological spaces, *J. Math. Anal. Approx. Theory*, Vol.1 (2) (2006), 189-200.
23. On Simultaneous Approximation for Certain Baskakov Durrmeyer Type Operators, *J. Inequalities in Pure and Applied Mathematics* **7**(4) (2006), Art. 125. (*Australia*)
24. Direct and inverse estimates for a new family of linear positive operators in simultaneous approximation, *J. Math. Anal. Appl* **3306**(2) (2007), 799-816. (*Elsevier Science Pub.*) (USA)
25. On b-I-open sets and a new decomposition of semi-I-continuity via ideals, *Bull. Allahabad Math. Soc. Vol.* **32**, (2007), 59 -68.
26. Connectedness in fuzzy bitopological spaces, *Cubo J. Mathematics*, **9**(1) (2007), 1-12. (*Brazil*).
27. Rate of Approximation of Derivatives for Durrmeyer type Operators, *Southeast Asian Bull. Math.* Vol.32 (2007), 79-88.
28. A note on Mixed Summation-integral type Operators, *Ukrainian Mathematical Journal* (Springer Verlag), Vol. **59**(8) (2007), 1258-1263.
29. On Weakly α -I-Open sets and a New Decomposition of Continuity via Ideals, to appear in *Southeast Asian Bull. Math.* (2008).
30. On the Efficiency and Fairness of Congestion Control Algorithms, *Innovative Algorithms and Techniques in Automation, Industrial Electronics and Telecommunications*, T. Sobh et al. (eds), 2007 Springer, 405-407.
31. Rate of convergence for Szasz- Mirakyan- Durrmeyer operators with derivatives of bounded variation. *Applied Mathematics and Computation*, **199** (2008), 828-832. (*Elsevier Science Pub.*).

M.K. Gupta

Date:24-12-2008

