

# RESUME

Professor Haresh V. Dedania

## Educational Qualifications

1. **B. Sc.**, June, 1986 – May, 1989  
Mathematics [74.12%], Bahaudin Science College, Junagadh. (INDIA)
2. **M. Sc.**, July, 1989 – June, 1991  
Pure Mathematics [80.75%], Saurashtra University, Rajkot. (INDIA)
3. **Ph. D. (Incomplete)**, October, 1991 – June, 1994  
Sardar Patel University, Vallabh Vidyanagar. (INDIA)  
**Thesis Title:** Banach algebras with unique uniform norm  
(*Discontinued when I won Commonwealth Scholarship for Ph.D. study in UK*)
4. **Ph. D.**, October, 1994 - January, 1998  
University of Leeds, Leeds. (UK)  
**Thesis Title:** Weighted discrete semigroup algebras

## Employments

1. **July, 1994 – September, 1994:** Lecturer in Mathematics, Gujarat University, Ahmedabad. (INDIA)
2. **October, 1997 – December, 1997:** Tutor, University of Leeds, Leeds. (UK)
3. **September, 1998 – December, 2003:** Lecturer in Mathematics, Sardar Patel University, Vallabh Vidyanagar. (INDIA)
4. **January, 2004 – December 2009:** Reader in Mathematics, Sardar Patel University, Vallabh Vidyanagar. (INDIA)
5. **January, 2010 – Present:** Professor of Mathematics, Sardar Patel University, Vallabh Vidyanagar. (INDIA)

## Scholarships and Fellowships

1. **October, 1991 – May, 1994:** National Board for Higher Mathematics Scholarship, for Ph.D. study, Department of Atomic Energy, Bombay, INDIA.
2. **October, 1994 – December, 1997:** Commonwealth Scholarship, for Ph.D. study, Association of Commonwealth Universities, London, UK.
3. **March, 1998 – September, 1998:** Visiting Scientist Fellowship, for Post Doctorate, Indian Statistical Institute, New Delhi, INDIA.
4. **October, 2005 – March, 2006:** Commonwealth Academic Staff Fellowship, for Research, Association of Commonwealth Universities, London, UK.
5. **April, 2006 – May, 2006:** London Mathematical Society Short Visit Fellowship, for Research, London, UK.
6. **June, 2006 – 10<sup>th</sup> July, 2006:** Leeds University Fellowship for Research, University of Leeds, Leeds, UK

## **Ph.D. and M.Phil. Students Guided**

**(A) Ph.D. students:** I was recognized as a P. G. Teacher for Ph.D. degree with notification number D.E/10/7729 dated 15th March 2003.

1. **18-10-2008**, J. H. Shah, Vector-valued Weighted Discrete Semigroup Algebras, Part-time.
2. **14-09-2010**, P. A. Dabhi, Uniqueness Properties in Banach Algebras and Beurling Algebras, Part-time, Jointly with Prof. S. J. Bhatt.
3. **21-11-2014**, S. J. Ghevariya, BSM Formulas for ML and FP Payoff Functions, Part-time. (Reg. 4756; Date: 18-11-2008)
4. **20-01-2016**, Vipul R. Shah, Binomial Models, Fractional Brownian Motion, and Multi Attribute Decision Making in Mathematical Finance, Part-time. (Reg. 484; Date: 22-10-2010)
5. **30-09-2016**, Hiten J. Kanani, Spectral and Uniqueness Properties in Various Banach Algebra Products, Part-time. (Reg.-38; Date: 20-10-2010)
6. **14-12-2016**, Milan K. Kansagara, Uniqueness and Regularity Properties in Vector-valued Beurling Algebras on LCA Groups, Part-time. (Reg.-215; Date: 22-10-2010)
7. **22-09-2023**, Vaishali N. Goswami, Gel'fand Theory of Beurling Algebras on Subsemigroups of  $\mathbb{R}^2$ , (Reg.-1481; Date: 24-10-2017)
8. **22-09-2023**, Jatin G. Patel, A Study of Algebra Norms on Banach Algebras, (Reg.-181044; Date: 3-10-2018)
9. **22-09-2023**, Avadh B. Patel, Spatial Numerical Range and Spectral Theory in Non-unital Banach Algebras, (Reg.-181046; Date: 3-10-2018)
10. **19-09-2025**, Kamleshkumar Ratilal Baleviya, Compact Elements and Standard Closed Ideals in Weighted Discrete Semigroup Algebras, (Reg.-181043; Date: 3-10-2018)

**(B) M.Phil. students:** I was recognized as a P. G. Teacher for M. Phil. Degree with notification number D.E/10/8019 dated 9th March 2001.

1. **2004**, Prakash D. Patel, Applications of Complex Analysis in Banach Algebras.
2. **2005**, Kinnari A. Sutaria, Various Proofs of the Fundamental Theorem of Algebra.
3. **2008**, Sanjay J. Ghevariya, Amenable Banach Algebras.
4. **2008**, Chetan N. Patel, Weekly Amenable Banach Algebras.
5. **2008**, Prakash H. Patel, Some Results on Finite Groups.
6. **2008**, Bhavin M. Patel, Weights on Discrete Semigroups and Topological Groups.
7. **2008**, Mahendra A. Patel, Weights with some Specific Properties on Classical Semigroups.
8. **2010**, Jigna V. Panchal, Mathematics in Stock Market.
9. **2010**, Snehal D. Patel, Mathematics in Finance.
10. **2010**, Meena V. Mulchandani, \*-semisimplicity in Banach \*-algebras
11. **2010**, Trupti D. Shah, Semisimplicity in Banach Algebras

12. **2012**, Tejas S. Jani, Topological Groups, Haar Measure Construction, and Generalized Characters,
13. **2012**, Disha N. Pandya, Conditional Expectation, Stochastic Process, and Stochastic Calculus.
14. **2012**, Asmabanu H. Rajavada, The Beurling Algebra  $L^1(G, \omega)$ .
15. **2013**, Manish Kumar Pandey, Statistical Tools Used in Financial Market.
16. **2014**, Arun D. Chauhan, Unbounded Operators and its Applications in Financial Market.
17. **2016**, Mr Yuvraj D. Pipaliya, Spectral Theory, Semigroup Theory, and Abstract Cauchy Problem.
18. **2019**, Ms Shreema S. Bhatt, Weights on Groups and Semigroups and their relevance in Banach algebras. (Reg.-1311038; Date: 14-08-2018)

### **Member and Secretary**

1. Secretary of V.V.Nagar Society for Mathematical Sciences, Sardar Patel University, Vallabh Vidyanagar, 2002 – 2004.
2. Organizing Secretary of an international workshop on “Banach Algebras, Operators, and Harmonic Analysis”, Department of Mathematics, Sardar Patel University, 7<sup>th</sup> to 11<sup>th</sup> January, 2002.
3. Organizing Secretary of a conference on “Banach Algebras, Operators, and Harmonic Analysis”, Department of Mathematics, Sardar Patel University, 12<sup>th</sup> to 13<sup>th</sup> January, 2002.
4. Organizing Secretary of a conference on “Harmonic Analysis and Applications”, Department of Mathematics, S. P. University, 14<sup>th</sup> to 16<sup>th</sup> March, 2005.
5. Member of the Board of Studies in Mathematics, Sardar Patel University, Vallabh Vidyanagar, 18<sup>th</sup> July, 2005 to 18<sup>th</sup> July, 2008.
6. Member of the Editorial Board of “Banach Journal of Mathematical Analysis”, September-2006 to December-2007, Iran.
7. Member of the Board of Studies in Mathematics, Sardar Patel University, Vallabh Vidyanagar, 19<sup>th</sup> July, 2011 to 18<sup>th</sup> July, 2014.
8. Associate Editor of Mathematics Today, since April 2017.
9. Member of the Board of Studies in Mathematics, Faculty of Science, M. S. University, Baroda, Since 1st September 2017.
10. Member of the Board of Faculties in Faculty of Science, M. S. University, Baroda, Since 12th January 2018.
11. Member of the Board of Studies in Mathematics, Faculty of Technology & Engineering, M. S. University, Baroda, Since 1st September 2017.
12. Member of the Board of Faculties in Technology & Engineering, M. S. University, Baroda, Since 11th October 2017.
13. Co-Ordinator, UGC funded Special Assistant Programme – III, Rs. 1.16 crores, Department of Mathematics, Sardar Patel University, 2015 – 2020.

14. Organizing Secretary for an International Conference on “Banach Algebras, Harmonic Analysis, and Operator Theory”, 20<sup>th</sup> to 22<sup>nd</sup> November 2018, Sardar Patel University, Vallabh Vidyanagar.

### **Projects and New Courses**

1. UGC Sponsored Minor Research Project, 2000-01, Title: An Investigation in Harmonic Analysis on Abelian Groups with Weights.
2. UGC Sponsored Major Research Project for 3 years, 2004-07, (Co-investigator: Prof. S. J. Bhatt), Title: Beurling algebras and harmonic analysis on weighted groups.
3. Prof. S. J. Bhatt, Mr. S. J. Ghevariya, and I have started Financial Mathematics in the department since July 2008. Two M. Phil. students have written their dissertations under my guidance in the area of financial mathematics. Mr. Sanjay J. Ghevariya has registered his part-time Ph.D. under my supervision in Financial Mathematics.
4. I was a principle investigator in the project on “An Investigation into some Mathematical Aspects in Financial Derivatives”, (with co-investigator Sanjay J. Ghevariya) under the Interdisciplinary Studies in Sciences at Sardar Patel University, during 2012-2013.

### **Conferences, Seminars, and Workshops Attended**

#### **(A) Abroad:**

1. 12<sup>th</sup> International Conference on “Banach Algebras and Related Topics”, 17<sup>th</sup> to 28<sup>th</sup> July, 1995, Newcastle-upon-Tyne, UK.
2. 13<sup>th</sup> International Conference on “Banach Algebras and Related Topics”, 20<sup>th</sup> July to 3<sup>rd</sup> August, 1997, Heinrich Fabri Institute, Blaubeuren, GERMANY.
3. British Mathematics Colloculum, 3-7 April 2006, Newcastle-Upon-Tyne, UK.
4. London Mathematical Society Meeting, 3-7 July 2006, London.
5. 19<sup>th</sup> International Conference on “Banach Algebras and Related Topics, 14<sup>th</sup> to 24<sup>th</sup> July 2009, Steffan Banach International Center for Mathematics, Bedlewo, Poland.
6. Attended EPSRC-DST Scoping Meeting in Applied Mathematics, Edinburgh University, Edinburgh, UK, 11<sup>th</sup> to 13<sup>th</sup> July 2012.

#### **(B) In India:**

7. National Summer School for talented P.G. mathematics students, Gujarat University, 11<sup>th</sup> to 23<sup>rd</sup> June, 1990, Ahmedabad.
8. Summer School on Advanced Real Analysis and Applications to Partial Differential Equations, 18<sup>th</sup> May to 8<sup>th</sup> June, 1992, IISc, Bangalore.
9. 8<sup>th</sup> Gujarat Science Congress, January 1993, Saurashtra University, Rajkot.
10. Conference on “Harmonic Analysis and its Applications”, December 1993, IIT-Powai, Bombay.
11. Orientation Course for Computer Awareness, 9<sup>th</sup> August to 2<sup>nd</sup> September, 1999, G. H. Patel Computer Centre, Sardar Patel University, Vallabh Vidyanagar.

12. Conference on “Harmonic Analysis and its Applications”, December 1999, ISI, New Delhi.
13. Conference on “A Life of Mathematician”, 16<sup>th</sup> to 20<sup>th</sup> January, 2001, St. Stephen’s College, Delhi University, Delhi.
14. Conference on “Harmonic Analysis and its Applications”, 22<sup>nd</sup> to 24<sup>th</sup> December, 2006, IIT-Kanpur, Kanpur.
15. Workshop on “Problem Solving in Mathematics”, Dept of Mathematics, S. P. University, 26<sup>th</sup> Dec. 2006 to 1<sup>st</sup> Jan.2007.
16. Workshop on “Recent Advances in Fourier/Harmonic Analysis”, Dept of Mathematics, S. P. University, 24-27 March 2007
17. Seminar on “Mathematics Meet-2008”, 28<sup>th</sup> to 29<sup>th</sup> March, 2008, Gujarat University, Ahmedabad.
18. Compact Course on Analysis, 2<sup>nd</sup> to 7<sup>th</sup> January, 2009, IISc, Bangalore.
19. Seminar on “Analysis, Differential Equations, and Applications”, 30<sup>th</sup> to 31<sup>st</sup> January, 2009, M. S. University, Baroda.
20. International Conference for Mathematicians, 19-27 August 2010, Hyderabad.
21. An international conference on “Legacy of Ramanujan” was attended at Delhi University in December 2012.
22. National Seminar on Functional Analysis and Harmonic Analysis, Department of Mathematics, Sardar Patel University, Vallabh Vidyanagar, 16-18, January, 2017.
23. National Conference on Algebra, Analysis, and Graph Theory, Department of Mathematics, Saurashtra University, Rajkot, 9-11, February 2017.
24. International Conference on Mathematics & Applications, Ramjas College, University of Delhi, 26-28, April, 2017.
25. International Conference on Banach Algebras, Harmonic Analysis, and Operator Theory held at Department of Mathematics, Sardar Patel University, during 20-22nd November 2018.
26. 84<sup>th</sup> annual conference of Indian Mathematical Society (IMS), during 27-30, November, 2018 at Shri Mata Vaishnav Devi University, Kakryal-182320.

### **Published Research Papers**

1. “On a problem of H. G. Dales in Banach algebras”, (with S. J. Bhatt), Mathematics Today, 11(A) (1993) 29-34.
2. “Uniqueness of the supnorm on  $C(X)$  and a remark on  $C^*$ -algebras”, (with S.J. Bhatt and M. H. Vasavada), Jr. Math. and Phil. Sci., 28(2) (1994) 89-94.
3. “Banach algebras in which every element is a topological zero divisor”, (with S. J. Bhatt), Proc. American Math. Soc., 123(3) (1995) 735-737.
4. “Uniqueness of the uniform norm and adjoining identity in Banach algebras”, (with S.J. Bhatt), Proc. Indian Acad. Sci. (Math. Sci.), 105(4) (1995) 405-409.
5. “Banach algebras with unique uniform norm”, (with S.J. Bhatt) Proc. American Math. Soc., 124(2) (1996) 579-584.

6. "On seminorms, spectral radius and Ptak's spectral function in Banach algebras", (with S.J. Bhatt), *Indian Jr. Pure and Appl. Math.*, 26 (1996) 551-556.
7. "A seminorm with square property is automatically submultiplicative", *Proc. Indian Acad. Sci. (Math. Sci.)* 108(1) (1998) 51-53.
8. "Compact elements in weighted discrete semigroup algebras", *Banach Algebras'97*, Editors E. Albrecht and M. Mathieu, Walter De Gruyter, Berlin, (1998), 119-133.
9. "Banach algebras with unique uniform norm II", (with S.J. Bhatt), *Studia Mathematica*, 147 (3) (2001) 211-235.
10. "A note on weak amenability in Beurling algebras", *Prajna Jr. of Pure & Appl. Sci.*, Sardar Patel University, (2000-01) 69-71.
11. "On the Gelfand space of weighted discrete abelian semigroup algebras", *Mathematics Today*, 19(2)(2001) 15-24.
12. "Frechet algebras with a Laurent series generator and the annulus algebras", (with S. J. Bhatt and S. R. Patel), *Bull. Australian Math. Soc.*, 65(2002)371-383.
13. "A Beurling algebra is semisimple: an elementary proof", (with S. J. Bhatt), *Bull. Australian Math. Soc.*, 66 (2002) 91 - 93.
14. "Beurling algebra analogues of the Classical Theorems of Wiener and Levy on absolutely convergent Fourier series", (with S.J. Bhatt), *Proc. Indian Acad. Sci. (Math. Sci.)*, 113(2)(2003)179-182.
15. "Beurling algebras and uniform norms", (with S. J. Bhatt), *Studia Mathematica*, 160(2)(2004)179-183.
16. "On standard ideals in weighted convolution algebras on subsemigroups of  $\mathbb{R}^+$ ", *Indian Jr. Pure & Appl. Math.*, 35(11)(2004)1279-1284.
17. "A note on generalized characters", (with S.J. Bhatt), *Proc. Indian Acad. Sci. (Math. Sci.)*, 115(4)(2005) 437-444.
18. "Weighted measure algebras and uniform norms" (with S. J. Bhatt), *Studia Mathematica*, 177(2)(2006)133-139.
19. "Generalized semicharacters and weights on semigroups" (with J. H. Shah), *Prajna, Jr. of Pure & Appl. Sci.*, Sardar Patel University, 14(2006) 79-93.
20. "On the uniqueness of uniform norms and  $C^*$ -norms" (with P. A. Dabhi), *Studia Mathematica*, 191(3)(2009) 263-270.
21. "Weighted convolution algebras on subsemigroups of the real line" (with H. G. Dales), *Dissertationes Mathematicae*, Istitute of Mathematics, Polish Academy of Sciences, Volume 459, 2009.
22. "Beurling algebra analogues of theorems of Wiener-Levy-Zelazko and Zelazko" (with S. J. Bhatt and P. A. Dabhi), *Studia Mathematica*, 195(3)(2009) 219-225.
23. "Multipliers of weighted semigroups and associated Beurling Banach algebras" (S J Bhatt, and P A Dabhi), *Proc. Indian Acad. Sci. (Math. Sci.)*, 121(4)(2011)417-433.
24. "Option Pricing Formulas for Fractional Polynomial Payoff Functions", (with S. J. Ghevariya), *International Journal of Pure & Applied Mathematical Sciences*, 6(1)(2013) 43-48.

25. "From Binomial to Binary: A note on Multi-period Binomial Option Pricing Model" (with Vipul R. Shah), *International Journal of Mathematics and Computer Applications Research*, 3(2)(2013) 169-174.
26. "A non-unital \*-algebra has UC\*NP if and only if its unitization has UC\*NP", (with H. J. Kanani), *Proc. American Math. Soc.*, 141(11)(2013)3905-3909.
27. "Option Pricing Formulas for Modified Log-payoff Function", (with S. J. Ghevariya), *International Journal of Mathematics and Soft Computing*, 3(2)(2013) 129-140.
28. "On the \*-semisimplicity of the  $l^1$ -algebra on an Abelian \*-semigroup", (with S. J. Bhatt, P. A. Dabhi), *Bulletin of Australian Math Soc.*, 88(2013) 492-498.
29. "Fractional Brownian Motion and Predictability Index in Financial Market", (with S. J. Bhatt and Vipul R. Shah), *Global Journal of Mathematical Sciences: Theory and Practical*, 5(3)(2013) 197-203.
30. "Gel'fand Theory for Vector-valued Beurling Algebras", (with M. K. Kansagara), *Mathematics Today*, 29(June-Dec, 2013) 12-24.
31. "Some Banach Algebra Properties in the Cartesian Product of Banach Algebras", (with Hiten J. Kanani), *Annals of Functional Analysis*, 5(1)(2014)51-55.
32. "The Multiplier Algebra of a Beurling Algebra", (with S. J. Bhatt and P. A. Dabhi), *Bull. Australian Math. Soc.*, 90(1)(2014)113-120.
33. "A Note on Exponentially Generated Trinomial Tree", (with Vipul R. Shah), *Proceedings of International Conference on Mathematical Sciences*, (2014)517-520.
34. "Fractal Dimensional Analysis in Financial Time Series", (with S. J. Bhatt and Vipul R. Shah), *International Journal of Financial Management*, 5(3)(2015) 46-52.
35. "Portfolio Management: Stock Rankings by Multiple Attribute Decision Making Methods", (with Vipul R. Shah and R. C. Sanghavi), *Technology and Investment*, 6(2015) 141-150.
36. "On Spectral Properties in Vector-valued Beurling Algebras", (with Kansagara), *International Journal of Mathematics and Soft Computing*, 6(1)(1016) 153-162.
37. "Graphical Interpretation of Various BSM Formulas", (with S. J. Ghevariya), *Global Journal of Pure and Applied Mathematical Science*, 13(9)(2017)6107-6112.
38. "Characterization of Gelfand Space of the Banach Algebra  $A \times_d B$  with Direct-sum Product", (with H. J. Kanani), *Mathematics Today*, 34(A)(April 2018 – Special Issue)188-194.
39. "Some spectral properties of the Banach algebra  $A \times_d B$  with the direct-sum product", (with H. J. Kanani), *International Journal of Science and Research*, 8(8)(2019)318-323.
40. "Various Spectral Properties of the Banach algebra  $A \times_c I$  with the convolution product", (with H. J. Kanani), *International Journal of Mathematics and Its Applications*, 7(4)(2019)9-14.
41. "Gelfand Theory of Banach algebra  $A \times_c I$  with the convolution product", (with H. J. Kanani), *Inter. Journal of Mathematics and Its Applications*, 7(4)(2019)193-199.

42. "Holomorphic Analogues of Classical Theorems of Wiener, Levy and Domar in Fourier Series", (with S. S. Bhatt), *Mathematics Today*, 35(Dec-2019)19-25.
43. "On Metric Geometry of Weighted Groups", (with S. S. Bhatt), *IOSR Journal of Mathematics*, 17(2)(2021)1-9.
44. "The Gel'fand Spaces of the Beurling Algebras  $L^1(\mathbb{R}_+^2, \omega)$  and  $L^1(\mathbb{R}^2, \omega)$ ", (with V. N. Goswami), *Journal of the Calcutta Mathematical Society*, 17(1) (2021)9–20.
45. "The Operator Norms on Weighted Discrete Semigroup Algebras  $l^1(S, \omega)$ " (with J. G. Patel), *Proc. American Math. Soc.*, 149(12)(2021)5313-5319.
46. "Construction of Weights on the Semigroup  $(\mathbb{N}, +)$  using some Standard Functions", (with S. S. Bhatt), *Inter. Jr. Math. & Its Appl.*, 9(3)(2021)41-47.
47. "The Gel'fand Spaces of Discrete Beurling Algebras on  $\mathbb{Z}_+^2$  and  $\mathbb{Z}^2$ ", (with V. N. Goswami), *Italian Journal of Pure and Applied Mathematics*, 47(2022)1166-1182.
48. "Methods for Constructing Algebra Norms on Banach Algebras", (with J. G. Patel), *Bull. Calcutta Math. Soc.*, 114(3)(2022)587-596.
49. "Spatial Numerical Range in Non-unital, Normed Algebras II" (with A. B. Patel), *Inter. Jr. Math. and Its Appl*, 10(2)(2022)1-4.
50. "The Spectral Extension Property in the Unitization of Banach Algebras", (with A. B. Patel), *Bull. Calcutta Math. Soc.*, 114(5)(2022)759-766.
51. "The Shilov Boundaries of the Beurling Algebras  $L^1(\mathbb{R}_+^2, \omega)$  and  $L^1(\mathbb{R}^2, \omega)$ ", (with V. N. Goswami), *Bull. of the Calcutta Math. Soc.*, 115(4)(2023)485-494.
52. "Classification of Algebra Norms and Relations among Them" (with J. G. Patel), *Rend. Circ. Mat. Palermo*, <https://link.springer.com/article/10.1007/s12215-022-00841-9>.
53. "Existence of non-standard ideals in the formal power series algebra  $F(\mathbb{Z}_+^2 \mathbb{C})$ ", (with K. R. Baleviya) <https://link.springer.com/article/10.1007/s13226-023-00416-z>
54. "The Shilov Boundary and Peak Points of the Discrete Beurling Algebras on  $\mathbb{Z}_+^2$  and  $\mathbb{Z}^2$ ", (with V. N. Goswami), *Inter. Jr. Math. & Its Appl.*, 12(2)(2024) 133-140.
55. "A Note on Uniqueness of Uniform Norm Property in the Beurling Algebra  $L^1(G_1 \times G_2, \omega)$ ", (with V. N. Goswami), *Jr. Ramanujan Soc. of Math. and Mathematical Sciences (JRSMAMS)*, 12(1)(2024) 121-126.
56. "A Note on Standard Closed Ideals in Weighted Discrete Abelian Semigroup Algebras", (with K. R. Baleviya), *Inter. Jr. Math. & Its Appl.*, 12(4)(2024) 49-53.
57. "The Spatial Numerical Range in Non-unital, Normed Algebras and Their Unitization" (with A. B. Patel), *Sarajevo Journal of Mathematics*, 20(33) No.2 (2024) 255-262.
58. "On the Convexity of Spatial Numerical Range in Normed Algebras", (with A. B. Patel), *Indian Jr. Pure & Appl. Math.*, <https://doi.org/10.1007/s13226-024-00720-2>.
59. "Compact Elements in Weighted Discrete Abelian Semigroup Algebras", (with K. R. Baleviya), *Proc.-Math. Sci.*, 135(Article No 13) (2025), <https://doi.org/10.1007/s12044-025-00822-9>.

60. “Uniqueness of Norm and Faithfulness of Some Banach Algebras”, (with J. G. Patel), Analysis Mathematica, Accepted.
61. “Compact Elements in Weighted Discrete Abelian Semigroup Algebra  $l^1(S_1 \times S_2, \omega)$ ”, (with K. R. Baleviya), Communicated.

## Lectures Delivered

### (A) Abroad:

1. 20<sup>th</sup> July 1995, “Uniqueness of uniform norms in commutative Banach algebras”, 12<sup>th</sup> International Conference on “Banach algebras and Related Topics”, Newcastle-Upon-Tyne, UK.
2. 5<sup>th</sup> December 1995, “Uniqueness of uniform norm in Banach Algebras”, Yorkshire Functional Analysis Seminars, University of Leeds, Leeds, UK.
3. 9<sup>th</sup> April 1996, “Standard Closed Ideals in Weighted Convolution Banach Algebras on the Half-line”, University of Leeds, Leeds, UK.
4. 24<sup>th</sup> July 1997, “On compact elements in weighted discrete abelian semigroup algebras”, 13<sup>th</sup> International Conference on “Banach algebras and Related Topics”, Blaubeuren, GERMANY.
5. 17<sup>th</sup> January 2006, “Uniqueness Properties in Beurling Algebras”, Yorkshire Functional Analysis Seminars, University of Leeds, Leeds, UK.
6. 14<sup>th</sup> February, 2006, “Uniqueness properties in Commutative Banach Algebras”, Oxford University, Oxford, UK.
7. 19<sup>th</sup> May, 2006, “Uniqueness properties in Commutative Banach Algebras”, University of Lancaster, Lancaster, UK.
8. 20<sup>th</sup> April, 2006, “Uniqueness properties in Commutative Banach Algebras”, Glasgow University, Glasgow, UK.
9. 21<sup>st</sup> July, 2009, “Weighted Discrete Semigroup Algebras on Subsemigroups of the Real Line”, 19<sup>th</sup> International Conference on “Banach Algebras and Related Topics”, Bedlewo, POLAND.

### (B) In India but out of Gujarat:

10. 3<sup>rd</sup> August 1998, “UUNP in commutative Banach algebras”, Indian statistical Institute, New Delhi.
11. 6<sup>th</sup> January 1999, “UUNP in weighted Abelian Harmonic Analysis”, Conference on functional analysis and linear algebras, Indian Statistical Institute, New Delhi.
12. 5<sup>th</sup> January 2009, “Weighted Discrete Semigroup Algebras on Subsemigroup of the Real Line”, Compact course on Analysis, IISc, Bangalore.
13. “Weights on Semigroups and Their Applications”, International Conference on Mathematics & Applications, Ramjas College, University of Delhi, 26-28, April, 2017.

**(C) In Gujarat:**

14. 26<sup>th</sup> September 1998, “On Arens regularity of Banach algebras”, V.V.Nagar Society for Mathematical Sciences, Vallabh Vidyanagar.
15. 15<sup>th</sup> February 1999, “Weighted discrete semigroup algebras”, UGC sponsored research seminar in pure & applied mathematics, Vallabh Vidyanagar.
16. 25<sup>th</sup> September 1999, “Discrete Volterra algebra”, V.V.Nagar Society for Mathematical Sciences, Vallabh Vidyanagar.
17. 25<sup>th</sup> December 1999, “About weights on the set of integers” Gujarat Ganit Mandal, Palanpur.
18. 3<sup>rd</sup> March 2000, “A Beurling algebra analogue of wiener’s theorem on absolutely convergent Fourier series”, V.V.Nagar Society for Mathematical Sciences, Vallabh Vidyanagar.
19. 26<sup>th</sup> August 2000, “A note on weak amenability in Beurling algebras”, V.V.Nagar Society for Mathematical Sciences, Vallabh Vidyanagar.
20. 30<sup>th</sup> September 2000, “A note on weak amenability in Beurling algebra II”, V.V.Nagar Society for Mathematical Sciences, Vallabh Vidyanagar.
21. 4<sup>th</sup> March 2001, “On the Gelfand space of weighted discrete semigroup Banach algebras”, National level research seminar in mathematics 2001, Vallabh Vidyanagar.
22. 5<sup>th</sup> March 2001, “Uniqueness of the uniform norm and Harmonic Analysis on locally compact abelian groups with weights”, National level research seminar in mathematics 2001, Vallabh Vidyanagar.
23. 7<sup>th</sup> – 20<sup>th</sup> March 2001, A series of lectures were given on “UUNP in Banach Algebras”, UGC sponsored visiting fellow, Saurashtra University, Rajkot.
24. 7<sup>th</sup> to 11<sup>th</sup> August, 2001, A series of lectures on “Fast Fourier Transformations”, Department of Computer Science, S. P. University, Vallabh Vidyanagar.
25. 7<sup>th</sup> May 2002, “Weighted Discrete Semigroup Algebras”, UGC Sponsored refresher course in mathematics, Sardar Patel University, Vallabh Vidyanagar.
26. 30<sup>th</sup> August 2002, “Applications of Complex Analysis to Banach Algebras”, V.V.Nagar Society for Mathematical Sciences, Vallabh Vidyanagar.
27. 19<sup>th</sup> February 2005, “A note on the Gel’fand space of  $C_c(G)$ ”, 19<sup>th</sup> Gujarat Science Congress, Vallabh Vidyanagar.
28. 14<sup>th</sup> March 2005, “Uniqueness of Uniform Norm in Banach Algebras and Harmonic Analysis”, Conference on Functional Analysis and Applications, Sardar Patel University, Vallabh Vidyanagar.
29. 1<sup>st</sup> January 2007, Two invited lectures in workshop on “Problem Solving in Mathematics”, S. P. University, V. V. NAGAR.
30. 26<sup>th</sup> March 2007, One invited lecture in workshop on “Recent Advances in Harmonic Analysis”, S. P. University, V. V. NAGAR.
31. 26<sup>th</sup> February 2008, Two invited lectures in workshop on “Problem Solving in Mathematics”, S. P. University, V. V. NAGAR.

32. 28<sup>th</sup> March 2008, “Weighted Convolution Algebras on Rationales”, Mathematics Meet – 2008, Gujarat University, Ahmedabad.
33. 30<sup>th</sup> January 2009, “Weighted Convolution Algebras on Subsemigroup of the Real Line  $\mathbb{R}$ ”, National Seminar on Analysis, Differential Equations, and Applications”, M. S. University, Baroda.
34. 18<sup>th</sup> April 2009, Three invited lectures on “Time Value of Money”, Department of M.B.A., Sardar Patel University, Vallabh Vidyanagar.
35. 10<sup>th</sup> March 2013, One lecture was delivered on “\*-semisimplicity of  $l^1(S)$ ” in a national seminar in the Department of Mathematics, Sardar Patel University, V. V. Nagar.
36. August 2015, Weights on Semigroups, It was delivered in “Lectures on Analysis and Topology”, M. S. University, Baroda.
37. “Functions of Several Real Variables”, Six lectured delivered, Refresher Course at M. S. University, Baroda, July 2016.
38. “Uniqueness and Spectral Properties in Beurling Algebras”, National Seminar on Functional Analysis and Harmonic Analysis, Department of Mathematics, Sardar Patel University, Vallabh Vidyanagar, 16-18, January, 2017.
39. “Problems on Functions of Several Variables and Integral Equations”, 8th Workshop on Problem Solving in Mathematics, Department of Mathematics, Sardar Patel University, Vallabh Vidyanagar, 25-30, January 2017.
40. “Weights on Semigroups”, National Conference on Algebra, Analysis, and Graph Theory, Dept. of Mathematics, Saurashtra University, Rajkot, 9-11, February 2017.
41. “Problems on Functions of Several Variables and Integral Equations”, 8th Workshop on Problem Solving in Mathematics, Department of Mathematics, Sardar Patel University, Vallabh Vidyanagar, 25-30, January 2017.
42. “Uniform norms on Banach Algebras”, International Conference on Banach Algebras, Harmonic Analysis, and Operator Theory held at Department of Mathematics, Sardar Patel University, during 20-22nd November 2018.
43. “Real Analysis and Its Applications”, Refresher Course in Mathematics, Academic Staff College, Sardar Patel University, Vallabh Vidyanagar.

### **List of journals in which papers are published**

<b>No</b>	<b>Name of Journal</b>	<b>Number of Papers</b>
<b>1</b>	Proc. American Math. Soc.	<b>04</b>
<b>2</b>	Studia Mathematica	<b>05</b>
<b>3</b>	Bull. Australian Math. Soc.	<b>04</b>
<b>4</b>	Proc. Indian Acad. Sci. (Math. Sci.)	<b>06</b>
<b>5</b>	Indian Jr. Pure & Appl. Math.	<b>04</b>
<b>6</b>	Bull. of the Calcutta Math. Soc.	<b>04</b>
<b>7</b>	Mathematics Today	<b>05</b>
<b>8</b>	Inter. Jr. of Math. and Its Appl.	<b>06</b>
<b>9</b>	Prajna Jr. of Pure & Appl. Sci.	<b>02</b>
<b>10</b>	Banach Algebras '97, Walter De Gruyter	<b>01</b>
<b>11</b>	Jr. Math. and Phil. Sci.	<b>01</b>
<b>12</b>	Dissertationes Mathematicae	<b>01</b>
<b>13</b>	Annals of Functional Analysis	<b>01</b>
<b>14</b>	Inter. Jr. of Financial Management	<b>01</b>
<b>15</b>	Technology and Investment	<b>01</b>
<b>16</b>	Global Jr. of Pure & Appl. Math. Sci.	<b>01</b>
<b>17</b>	Italian Jr. of Pure & Appl. Math.	<b>01</b>
<b>18</b>	Rend. Circ. Mat. Palermo	<b>01</b>
<b>19</b>	Sarajevo Journal of Mathematics	<b>01</b>
<b>20</b>	Other Peer Reviewed Journals	<b>One in each journal</b>

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