C. ABDUL HAKEEM COLLEGE OF ENGINEERING AND TECHNOLOGY
Hakeem Nagar, Melvisharam-632 509

FACULTY PROFILE

Name	Dr. B. V. SENTHIL KUMAR				
Gender	Male				
Present Designation	PROFESSOR				
Date of Joining	20.01.2025				
Mobile No.	9566927114				
Faculty Code	Faculty Code: 5106316				
Highest Educational Qualification	M.Sc., M.Phil., Ph.D.				
Additional Qualification	GATE/NET/ SLET	NET			
Total working Experience	25 Years				
Publications	Journals	60			
	International Conferences	7	National Conferences	17	
No. of Patent	-				
No. of Workshops/ Seminars/Conferences/ FDP attended	FDP: 5 WORKSHOP: 15 SEMINAR: 5				
No. of Workshops/ Seminars/ Conferences/ FDP organized	FDP: 1 Seminar: 2				
No. of UG / PG / Ph.D. Guidance:	NIL				
Membership in Professional Bodies	NIL				
Awards / Recognition Received	--				
Other Responsibilities, if any	--				

Details of Peer Reviewed and Indexed Publications:

- **B.V. Senthil Kumar,** Hemen Dutta and S. Suresh, *Stability analysis of approximately multidimensional additive mappings on fuzzy spaces*, Applied Mathematics: A Journal of Chinese Universities, 39(2024), 700-720. (DOI.10.1007/s11766-024-5029-0) **(Scopus and SCIE Indexed, included in Anna University Annexure)**

- M. Sivashankar, S. Sabarinathan, K. S. Nisar, C. Ravichandran and **B.V. Senthil Kumar**, *Stability, numerical simulations, and applications of Helmholtz-duffing fractional differential equations*, Chaos, Solitons and Fractals, (2024), Article ID 100106 **(Scopus and SCIE Indexed)**

- Hemen Dutta, **B.V. Senthil Kumar** and S. Suresh, *Non-Archimedean stabilities of multiplicative inverse μ-functional inequalities*, Analele Stiintifice ale Universitatii Ovidius Constanta, 32(1) (2024), 141-154. **(SCIE Indexed)**

- A. Selvam, S. Sabarinathan, K. S. Nisar, C. Ravichandran and **B. V. Senthil Kumar**, *Results on Ulam-type stability of linear differential equation with integral transform*, Mathematical Methods in the Applied Sciences, 2023, 1-13. **(Scopus and SCIE Indexed)**

- A. Selvam, S. Sabarinathan, **B. V. Senthil Kumar**, H. Byeon, K. Guedri, S. M. Eldin, Muhammad Ijaz Khan and V. Govindan, *Ulam-Hyers stability of tuberculosis and COVID-19 co-infection model under Atangana-Baleanu fractal-fractional operator*, Scientific Reports, 13, Article ID 9012 (2013), 24 pages. **(Scopus and SCIE Indexed)**

- **B.V. Senthil Kumar**, Hemen Dutta, G. Shanmugam and N. Balamurugan, *Stabilities of multiplicative inverse quadratic functional equations arising from Pythagorean means*, Filomat, 37(19) (2023), 6345-6353. **(Scopus and SCIE Indexed, included in Anna University Annexure)**

- M. Sivashankar. S. Sabarinathan, K.S. Nisar, C. Ravichandran and **B.V. Senthil Kumar**, *Some properties and stability of Helmholtz model involved with nonlinear fractional difference equations and its relevance with quadcopter*, Chaos, Solitons and Fractals, 168 (2023), Article ID 113161, 6 pages. **(Scopus and SCIE Indexed)**

- **B. V. Senthil Kumar**, Hemen Dutta and S. Sabarinathan*, Approximating an advanced multi-dimensional reciprocal-quadratic mapping via a fixed point approach,* Boletim da Sociedade Paranaense de Matematica, 41 V (2023), 1-12. **(Scopus and ESCI Indexed)**

- **B.V. Senthil Kumar**, J. M. Rassias, S. Idir and S. Sabarinathan, *Stabilities and non-stabilities of a new reciprocal functional equation*, Tatra Mountains Mathematical Publications, 81 (2022), 81-88. **(Scopus indexed)**

- Hemen Dutta**, B.V. Senthil Kumar** and Khalifa Al-Shaqsi, *Approximation of Jensen type reciprocal mappings via fixed point technique*, Miskolc Mathematical Notes, 23(2) (2022), 607-619. **(Scopus and SCIE indexed)**

- Hemen Dutta, **B.V. Senthil Kumar** and S. Sabarinathan, *Fuzzy stabilities of a new hexic functional equation in various spaces*, Analele Stiintifice ale Universitatii Ovidius Constanta, Seria Matematica, 30(3) (2022), 143-171. **(Scopus and SCIE indexed)**

- **B. V. Senthil Kumar** and S. Sabarinathan, *A fixed point approach to non-Archimedean stabilities of IQD and IQA functional equations*, Thai Journal of Mathematics, 20(1) (2022), 69-78. **(Scopus Indexed)**

- **B. V. Senthil Kumar,** Khalifa Al-Shaqsi and S. Sabarinathan, *Dislocated quasi-metric stability of a multiplicative inverse functional equation*, Journal of Mathematics and Computer Science, 24 (2) (2022), 140-146. **(Scopus indexed)**

- **B. V. Senthil Kumar,** Khalifa Al-Shaqsi and Hemen Dutta, *Approximate reciprocal Lie *-derivations*, Soft Computing 25 (2021), 14969-14977. **(Scopus indexed)**

- S. Sabarinathan, Hemen Dutta and **B. V. Senthil Kumar**, *Approximation of a third root functional equation*, Proceedings of Indian National Science Academy, 87 (2021), 48-56. **(Scopus indexed)**

- **B. V. Senthil Kumar,** Khalifa Al-Shaqsi and Hemen Dutta, *Hyperstability of Rassias-Ravi reciprocal functional equation*, Miskolc Mathematical Notes, 22(1) (2021), 383-392. **(Scopus and SCIE indexed, included in Anna University Annexure)**

- **B. V. Senthil Kumar,** Hemen Dutta and S. Sabarinathan, *Stabilities and instabilities of an advanced quartic functional equation in various spaces*, Mathematical Methods in the Applied Sciences, 44(14) (2021), 11469-11481. **(Scopus and SCIE indexed, included in Anna University Annexure)**

- **B. V. Senthil Kumar,** Khalifa Al-Shaqsi and S. Sabarinathan, *Approximate multiplicative inverse quadratic mappings*, Advances in Mathematics: Scientific Journal, 10 (1) (2021), 199-209. **(Scopus indexed)**

- **B. V. Senthil Kumar**, Hemen Dutta and S. Sabarinathan, *Modular stabilities of a reciprocal second power functional equation,* European Journal of Pure and Applied Mathematics, 13(5) (2020), 1162-1175. **(Scopus and ESCI indexed)**

- **B.V. Senthil Kumar**, Hemen Dutta and S. Sabarinathan, *Fuzzy approximations of a multiplicative inverse cubic functional equation*, Soft Computing, 24 (2020), 13285-13292. **(Scopus and SCIE indexed)**

- **B. V. Senthil Kumar,** Khalifa Al-Shaqsi and Hemen Dutta, *Classical stabilities of multiplicative inverse difference and adjoint functional equations*, Advances in Difference Equations, 215 (2020), 1-9. **(Scopus and SCIE indexed, included in Anna University Annexure)**

- **B.V. Senthil Kumar**, Khalifa Al-Shaqsi and Hemen Dutta, *On new approximations and expositions of reciprocal third power mappings*, Information Sciences Letters, 9(2) (2020), 95-100. **(Scopus indexed)**

- Abasalt Bodaghi, **B.V. Senthil Kumar** and Ali Bagheri Vakilabad, *Various stabilities of reciprocal-septic and reciprocal-octic functional equations*, Asian-European Journal of Mathematics, 14(3) 2150034 (2021), 1-19. **(Scopus and ESCI indexed)**

- **B.V. Senthil Kumar** and Abasalt Bodaghi, *Approximation of the Jensen type rational functional equation by a fixed point technique*, Boletim da Sociedade Paranaense de Matematica, 38(3) (2020), 125-132. **(Scopus and ESCI indexed)**

- Abasalt Bodaghi, **B.V. Senthil Kumar** and J. M. Rassias, *Stabilities and non-stabilities of reciprocal-nonic and reciprocal-decic functional equations*, Boletim da Sociedade Paranaense de Matematica, 38(3) (2020), 9-22. **(Scopus and ESCI indexed)**

- Hemen Dutta and **B.V. Senthil Kumar**, C*lassical stabilities of an inverse fourth power functional equation*, Journal of Interdisciplinary Mathematics, 22(7) (2019), 1061-1070. **(Scopus and ESCI indexed)**

- **B. V. Senthil Kumar**, J. M. Rassias and S. Sabarinathan, *Stabilities of various multiplicative inverse functional equations*, Tbilisi Mathematical Journal, 12(4) (2019), 15-28. **(ESCI indexed)**

- Hemen Dutta and **B. V. Senthil Kumar**, *Geometrical elucidations and approximation of some functional equations in numerous variables*, Proceedings of Indian National Science Academy, 85(3), (2019), 603-611. **(Scopus and ESCI indexed)**

- **B. V. Senthil Kumar**, S. Sabarinathan and A. D. Chandrasekaran, *Stability of a mixed type additive and quartic functional equation*, AIP Conference Proceedings, 2112, 020041 (2019), 1-7. **(Scopus indexed)**

- **B.V. Senthil Kumar**, Hemen Dutta and S. Sabarinathan, *Approximation of a system of rational functional equations of three variables*, International Journal of Applied and Computational Mathematics, 5(2) (2019), Art No. 39, 16 pages. **(Scopus indexed)**

- **B.V. Senthil Kumar** and Hemen Dutta, *Approximation of reciprocal-undecic and reciprocal-duodecic functional equations by fixed point technique*, Mathematical Methods in the Applied Sciences, 42 (2019), 1073-1081. **(Scopus and SCIE indexed, included in Anna University Annexure)**

- **B.V. Senthil Kumar** and Hemen Dutta, *Fuzzy stability of a rational functional equation and its relevance to system design*, International Journal of General Systems, 48(2) (2019), 157-169. **(Scopus and SCIE indexed, included in Anna University Annexure)**

- **B.V. Senthil Kumar** and Hemen Dutta, *Non-Archimedean stability of a generalized reciprocal-quadratic functional equation in several variables by direct and fixed point methods*, Filomat, 32(9), (2018), 3199-3209. **(Scopus and SCIE indexed, included in Anna University Annexure)**

- Abasalt Bodaghi and **B.V. Senthil Kumar**, *Estimation of inexact reciprocal-quintic and reciprocal-sextic functional equations,* Mathematica, 59(82), No. 1-2 (2017), 3-14. **(Scopus indexed)**

- J.M. Rassias, K. Ravi and **B.V. Senthil Kumar**, *A fixed point approach to Ulam-Hyers stability of duodecic functional equation in quasi-β-normed spaces*, Tbilisi Mathematical Journal, 10(4) (2017), 83-101. **(ESCI indexed)**

- J.M. Rassias, K. Ravi and **B.V. Senthil Kumar**, *Generalized stabilities of Euler-Lagrange-Jensen (a; b)-sextic functional equations in quasi-β-normed spaces*, International Journal of Analysis and Applications, 14(2) (2017), 167-174. **(ESCI indexed)**

- S.O. Kim, **B.V. Senthil Kumar** and A. Bodaghi, *Approximation on the reciprocal-cubic and reciprocal-quartic functional equations in non-Archimedean fields,* Advances in Difference

Equations, 77 (2017), 12 pages. **(Scopus and SCIE indexed, included in Anna University Annexure)**

- **B.V. Senthil Kumar**, J.M. Rassias and K. Ravi, *Ulam stability of a bi-reciprocal functional equation in quasi-beta-normed spaces*, Novi Sad Journal of Mathematics, 46 (2) (2016), 1-11. **(Scopus indexed)**

- **B.V. Senthil Kumar**, Ashish Kumar and G. Suresh, *Functional equations related to spatial filtering in image enhancement*, International Journal of Control Theory and Applications, 9(28) (2016), 555-564. **(Scopus indexed)**

- K. Ravi, J.M. Rassias and **B.V. Senthil Kumar**, *Ulam-Hyers stability of undecic functional equation in quasi-β-normed spaces: Fixed point method*, Tbilisi Mathematical Journal, 9(2) (2016), 83-103. **(ESCI indexed)**

- **B.V. Senthil Kumar** and K. Ravi, *Ulam stability of a reciprocal functional equation in quasi-beta-normed spaces*, Global Journal of Pure and Applied Mathematics, Special Issue, 12(1) (2016), 125-128. **(Scopus indexed)**

- K. Ravi, J.M. Rassias and **B.V. Senthil Kumar**, *Ulam stability of a generalized reciprocal type functional equation in non-Archimedean fields*, Arabian Journal of Mathematics, 4 (2015), 117–126. **(Scopus and ESCI indexed)**

- K. Ravi and **B.V. Senthil Kumar**, *Fuzzy stability of generalized square root functional equation in several variables: a fixed point approach*, International Journal of Analysis and Applications, 5 (1) (2014), 10-19. **(ESCI indexed)**

- K. Ravi, J.M. Rassias and **B.V. Senthil Kumar**, *General stability of a reciprocal type functional equation in three variables*, International Journal of Analysis and Applications, 4 (2) (2014), 130-147. **(ESCI indexed)**

- K. Ravi, J.M. Rassias and **B.V. Senthil Kumar**, *Generalized Ulam-Hyers stability of the harmonic mean functional equation in two variables*, International Journal of Analysis and Applications, 1(1) (2013), 1-17. **(ESCI indexed)**

- K. Ravi, E. Thandapani and **B.V. Senthil Kumar**, *Stability of Reciprocal type functional equations*, PanAmerican Mathematical Journal, 21(1) (2011), 59-70. **(Scopus indexed)**

- K. Ravi, J.M. Rassias and **B.V. Senthil Kumar**, *Ulam stability of reciprocal difference and adjoint functional equations*, The Australian Journal of Mathematical Analysis and Applications, 8(1), Art. 13 (2011), 1-18. **(Scopus indexed)**

- K. Ravi, **B.V. Senthil Kumar**, E. Thandapani and Sandra Pinelas, *Solution and generalized Hyers-Ulam stability of a 2-variable cubic functional equation*, PanAmerican Mathematical Journal, 20(4) (2010), 15-30. **(Scopus indexed)**

- K. Ravi, J.M. Rassias and **B.V. Senthil Kumar**, *Ulam stability of generalized reciprocal functional equation in several variables*, International Journal of Applied Mathematics and Statistics, 19 (D10) (2010), 1-19. **(Scopus indexed)**

Details of Funded Research Projects completed

➢ Completed a minor research project entitled "**A Study on Ulam Stability of Functional Equations in rational type",** funded by UGC, SERO, Hyderabad, India. [Ref. No. F. MRP-6726/16 (SERO-UGC) and 30.06.2017, Project amount: Rs.1,85,000]

➢ Completed a funded research project entitled **"Applications and Stabilities of Various Multiplicative Inverse Functional Equations"**, funded by The Research Council, Oman. [Project proposal ID: BFP/RGP/CBS/18/099, Project amount: 1100 OMR]

Details of Publication of Textbooks

➢ Co-authored a book entitled **"Probability & Queueing Theory"**, published by KKS Publishers, Chennai, India, 2012.

➢ Co-authored a book entitled **"Functional Equations and Inequalities: Solutions and Stability results"**, published by World Scientific Publishing Company, Singapore, 2017. (ISBN:978-981-3147-60-7) **(Scopus indexed)**

➢ Co-authored a book entitled **"Various Stabilities of Rational Functional Equations"**, published by Lambert Academic Publishing (ISBN: 978-3-330-33252-2).

➢ Co-authored a book entitled **"Discrete Mathematical Structures-A Succinct Introduction",** published by CRC Group, CRC Press, Taylor & Francis Group, London, UK, 2019. (ISBN: 978-0-367-14869-0)

➢ Co-authored a book entitled **"Multiplicative Inverse Functional Equations: Theory and Applications"**, published by Springer, Cham, 2020. (ISBN: 978-3-030-45354-1) **(Scopus indexed)**

Details of Contribution of Book Chapters

• Contributed a Chapter entitled "*Solution and Ulam stability of a mixed type cubic and additive functional equation*, **Functional equations, Difference Inequalities and Ulam Stability Notions**", Nova Science Publishers, Chapter 13, 2010, 149-175. **(Scopus indexed)**

• Contributed a Chapter entitled "*Stabilities and Instabilities of Rational Functional Equations and Euler–Lagrange–Jensen (a, b) - Sextic Functional Equations*", in: Mathematical Analysis and Applications, Chapter 10, John Wiley & Sons, 2018 (ISBN: 9781119414308). **(Scopus indexed)**

• Contributed a Chapter entitled **"Stabilities of MIQD and MIQA Functional Equations via Fixed Point Technique"**, in: Frontiers in Functional Equations and Analytic Inequalities, Springer, New York, 2019, 143-152.

• Contributed a Chapter entitled **"Fundamental Stabilities of Various Forms of Complex Valued Functional Equations"**, in: Applied Mathematical Analysis: Theory, Methods and Applications, Springer Nature Switzerland AG, 2020, 29-59. **(Scopus indexed)**

• Contributed a Chapter entitled **"Significances and Relevance of Functional Equations in Various Fields"**, in: Topics in Contemporary Mathematical Analysis and Applications, CRC Press, Taylor & Francis Group, Chapter 11, 2021, 281-298.

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Scopus ID	https://www.scopus.com/authid/detail.uri?authorId=57203049520
Web of Science ID	ITT-3455-2023
Google Scholar Citations	838
Google Scholar H-index	18
Google Scholar i10-index	26
Scopus H-index	12
Web of Science H-index	9