

BIO-DATA

Name : **Dr. V. CHINNADURAI**

Father's name : Mr. K. Veerappagounder

Date of birth : 08. 06 1964

Nationality : Indian

Marital status : Married

Present Position : Professor

Office Address : Dept. of Mathematics, Faculty of Science, Annamalai University, Annamalainagar, 608002, Tamilnadu.

Mobile : 9443238743.

Email : kv.chinnadurai@yahoo.com,
kv.chinnaduraimaths@gmail.com,
chinnadurai@gmail.com.

Residence : F1, Balaji Darshan Apartments, 18-20, East car street, Chidambaram-. 608001

Phone : 04144 221541



1. Educational Qualifications:

Details	Field specialization of	Class/percentage/grade	Year of passing	University
S.S.L.C.	-	68.6	1979	Board
H.Sc.,	-	68.8	1981	Board
B.Sc.,	Mathematics	64.5	1984	Madurai Kamaraj University
M.Sc.,	Mathematics	64.6	1986	Annamalai University
Certificate Course in COBOL programming and Data Processing	-	60.8	1986	Annamalai University
Certificate Course in FORTRAN programming and its Applications	-	61.5	1987	Annamalai University
Diploma in	-	48.3	1987	Annamalai University

Labour Laws with administrative law				
M.Phil.	Mathematics	77	1988	Annamalai University
B.Ed.,	-	63.12	1988	Annamalai University
M.Ed.,	Mathematics I & Mathematics II	62.12	1998	Annamalai University
M.A.	Tamil	60	2004	Annamalai University
Ph.D.	Mathematics (Fuzzy Algebra)	-	2010	Annamalai University

M. Phil. Thesis Title: Some remarks on the covariance of Moore-Penrose inverse

Ph.D. Thesis Title: Contributions to the study of some fuzzy algebraic structures

Area of Specialization:

- Fuzzy sets and systems including fuzzy algebra.
- Rough set theory and its applications.
- Neutrosophic set theory and its applications.

2. Positions held:

Organization	From	To	Designation
Annamalai University	24.04.1988	24.09.1989	Resource person
Govt.Polytechnic (PIPMATE,Pondy), Karaikal	25.09.1989	24.02.1993	Lecturer
Muthiah Polytechnic Annamalainagar	17.08.1993	31.03.1998	Lecturer
Annamalai University	06.07.1998	06.07.2003	Lecturer
Annamalai University	07.07.2003	06.07.2008	Lecturer (Senior Scale)
Annamalai University	07.07.2008.	06.07.2011	Lecturer (Selection Grade)
Annamalai University	07.07.2011	06.07.2018	Associate Professor
Annamalai University	07.07.2018	30.06.2024	Professor

3. Ph.D. Guided: 14

S.No	Name of student	Title	Year
1.	C. Jenila	A Study on ideal theory in Near-semirings, Testing the minimality of Automata using ideal theory and p -regularity in Near-rings.	September 2014

2	K. Lenin Muthu Kumaran	Contributions to a study on fuzzy ideals in near-rings and ternary near-rings	April 2017
3	K. Bharathivelan	A study on Ideals of some Cubic Algebraic Structures	November 2017
4	S. Kadarasi	Contributions to a study on generalized fuzzy ideals in near-rings and near-subtraction semigroups	January 2018
5	S. Barkavi	A Study on Cubic Soft Matrices.	December 2018
6	K.Arulmozhi	Contributions to the study of ideals in some fuzzy soft gamma semigroups	August 2019
7	A. Swaminathan	Contributions to the study of cubic soft set and its applications	February 2021
8	A. Arulselvam	Contributions to the study of algebraic structures in some types of fuzzy sets with applications	November 2021
9	M. P. Sindhu	Contributions to the study of neutrosophic soft topologies and their applications	February 2022
10.	A. Bobin	Contributions to the study of neutrosophic theory and its applications	March 2022
11	V. Shakila	A study on different forms of fuzzy bi-ideals of gamma near-rings	July 2022
12	S. Thayalan	Contributions to the study of complex fuzzy sets and their applications	December 2022
13	G. Thirumurugan	Contributions to the study of bipolar Pythagorean, spherical and spherical cubic soft matrices with applications	December 2023

14	S. Madhan	A study on different types of picture fuzzy soft matrices	July 2024
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4. M. Phil. Guided: 31

S.No.	Name of student	Title	Year
1.	K. Eswari	A Study on idempotent matrix and its applications on projectors	Sep.2004
2.	L. Vasanthi	A Study on a revisitation of formulae for the Moore-Penrose inverse of modified matrices	Nov.2004
3.	R. Hema	A Study on some orthogonal systems based on Moore-Penrose generalized inverse.	Jan.2005
4.	V. Vanitha	A Study on some linear operators	Aug.2005
5.	K.S. Anisha	A Study on Moore-Penrose inverse of a factorization.	Dec.2007
6.	K.R. Neena	A Study on some partial orderings of matrices	Dec.2007
7.	K. Rema	A Study on Von-Neumann regular matrices	Dec.2007
8.	P. Sankari	A study on the general expression for the Moore-Penrose of a matrix	Jan.2008
9.	S. Nalini	The minus partial order and the shorted matrix	Apr.2008
10.	S.P.Vidya	A study on generalized inverses of bordered matrices	May.2008
11.	M. Shakira parveen	A study of fuzzy fractions	Dec.2008
12.	S. Punitha	A study on vague groups	Jan.2009
13.	R. Muralidharan	A study on characterization of classes of normal matrices and EP matrices	Dec.2009
14.	Maladevi	A Study on Some Characterization of Interval-Valued Fuzzy Ideals in Semigroup	Jan.2012
15.	G.Sampathkumar	A Study on Some Basic Properties of Fuzzy Matrices	Oct. 2012
16.	J. Radhadevi	A Study on Fuzzy Prime, Rough Prime and Rough Fuzzy Ideals in Gamma-Semigroups	Apr. 2013
17.	S. Kadarasi	A Study on Some Ideals of N-Rs	Apr. 2013
18.	K. Arulmozhi	Characterization of Fuzzy Ideals in Semigroups and Ordered Semigroups	Feb.2014
19.	V. Anitha	A Study on Fuzzy Bi-ideals and Quasi ideals in gamma semigroups	Mar.2014
20.	I. Silambarasan	A Study on Fuzzy ideals in gamma near rings	Mar.2014
21.	D. Lohanayaki	A Study on Fuzzy ideals in Subtraction Algebra	Aug.2014
22.	M. Aruna	A study on interval valued fuzzy ideals of semirings	Nov.2014

23.	V. Bavani	A study on fuzzy matrices and their applications	Nov.2014
24.	S. Karthikeyan	A study on Some fuzzy ideals of ternary semigroups	May.2016
25.	R. Suguna	A study on some fuzzy ideals of BCI-algebra	May.2016
26	B. Anu	A study on soft BCI-algebras with some ideals.	May.2016
27	K. Suganya	A study on some cubic ideals in semigroup.	May.2016
28	S. Thenmozhi	A study on structural properties of cubic sets in regular LA-semihypergroups	March 2018
29	S. M. Vidhyapriya	A study on cubic structure of BG-subalgebras of BG-algebras	March 2018
30	J. Girija	A study on cubic interval valued intuitionistic fuzzy sets and cubic soft ideals in BCK/BCI-Algebras	March 2019
31	B.Katharkani	A study on decision making problems under the environment of neutrosophic cubic soft matrices	Dec 2019
32	R.Selvakumar	A study on properties and application of picture fuzzy matrices	March 2021

5. List of research Publications

International journals:

1. A.R. Meenakshi and V. Chinnadurai, "Some remarks on the co variance of the Moore-Penrose inverse", Houston Journal of Mathematics, Vol.18 (2):1992, 167-174.
2. V. Chinnadurai, R. Kalyanaraman and C. Ayyappan, "A vacation queue with Balking and with state dependent service rate", Bulletin of pure and applied sciences, Vol. 21E, 2002, 51-57.
3. V. Chinnadurai, "Double integrated space", Bulletin of pure and applied sciences, Vol.22E, 2003, 13-18.
4. V. Chinnadurai, "On rate sequence spaces", Bulletin of pure and applied sciences, Vol.22E, 2003, 39-43.
5. V. Chinnadurai, T.M.Singaravel, K.Chandrasekhara Rao, "Some sequence spaces defined by Module", Bulletin of pure and applied sciences, Vol.25E (2): 2003, 39-43.
6. V. Chinnadurai, "On rate spaces", Bulletin of pure and applied sciences, Vol.32E(2): 2005, 42-45.

7. K.Chandrasekhara Rao and V.Chinnadurai, "On the rate space $l \pi$ ", Varahmihir Journal of Mathematical Sciences, Vol. 5 No. 1 (2005), 221-225.
8. N.Thillaigovindan and V.Chinnadurai, "On interval valued fuzzy quasi ideals of semi groups", East Asian Mathematical Journal 25(4), 2009, 449-467.
9. N. Thillaigovindan, V. Chinnadurai and V.S. Subha, "On Rough ideals in gamma semigroups", International Journal of Algebra, 6(2012) no.14, 651-661.
10. N. Thillaigovindan, V. Chinnadurai and S. Kadalarasi, "Interval valued fuzzy ideals of near-rings", Journal of Fuzzy Mathematics, 23(2015) no. 2, 471-484.
11. N. Thillaigovindan, V. Chinnadurai and S. Kadalarasi, "Simple and generalized T-fuzzy bi-ideals of Γ -semigroup", Annals of fuzzy mathematics and informatics, Volume 10, No. 3(2015), 413-422.
12. N.Thillaigovindan, V. Chinnadurai and S. Kadalarasi, "Characterization of near-rings by interval valued (α, β) -fuzzy ideals", Annals of fuzzy mathematics and informatics, Volume 11, No. 1, (2016), pp. 35-51.
13. N. Thillaigovindan, V. Chinnadurai and K. Lenin Muthu Kumaran, "Some remarks on interval valued anti-fuzzy ideals of near-rings", Annals of fuzzy mathematics and informatics, Vol. 11, No. 3(2016), 461-474.
14. V. Chinnadurai and S. Kadalarasi, "Interval valued fuzzy quasi-ideals of near-rings", Annals of fuzzy mathematics and informatics, Vol. 11, No. 4(2016), pp. 621-631
15. V. Chinnadurai and S. Kadalarasi, "Fuzzy weak bi-ideals of near-rings", Annals of fuzzy mathematics and informatics, Vol 11, No. 5(2016), 799-808.
16. V. Chinnadurai and S. Kadalarasi, "Fuzzy soft ideals of near subtraction semigroups", Journal of linear and topological algebra , Vol 5, No. 3(2016), pp. 175-186.
17. V. Chinnadurai, S. Barkavi and S. Vijayabalaji, "Determinant and adjoint of fuzzy soft square matrix", Mathematical sciences international research volume 5 issue 1(2016), 93-99.
18. N. Thillaigovindan, V. Chinnadurai and S. Coumaressane, "Characterization of regular semigroup through interval valued fuzzy ideals", Annals of fuzzy mathematics and informatics Vol.11 No.5, (2016) , 769-781.
19. N. Thillaigovindan, V. Chinnadurai and S. Coumaressane, "T-fuzzy subsemigroups and T-fuzzy ideals of regular Γ -semigroup", Annals of fuzzy mathematics and informatics Vol. 11, No. 4, (2016), pp. 669-680
20. V. Chinnadurai and S. Kadalarasi, "Direct product of fuzzy ideals of near-rings", Annals of fuzzy mathematics and informatics Volume 12, No. 2(2016), 193-204.
21. N. Thillaigovindan , V. Chinnadurai and K. Lenin Muthu Kumaran, "Generalized interval valued anti fuzzy ideals of near-rings", Annals of fuzzy mathematics and informatics Volume 12, No. 3,(2016), 319-333.
22. N. Thillaigovindan ,V. Chinnadurai and K. Lenin Muthu Kumaran, "Anti fuzzy quasi-ideals of near-rings", Annals of fuzzy mathematics and informatics , Volume 12, No. 2(2016), 309-318.

23. V. Chinnadurai and S. Kadalarasi, "Fuzzy bi-ideals of near-subtraction semigroups", *Annals of fuzzy mathematics and informatics* Volume 12, No. 6(2016), 781-790.
24. V.Chinnadurai and K. Arulmozhi, "On intuitionistic fuzzy soft gamma semigroups",*Advances in Natural and Applied Sciences* Vol 10, No. 7, (2016) 163-171.
25. V. Chinnadurai, K.Bharathivelan, S. Vijayabalaji and S. Sivaramakrishan "Cubic rings", *Global journal of pure and applied mathematics* Volume 12, No. 3(2016), 947-950.
26. V. Chinnadurai, K. Suganya and A. Swaminathan. Some Characterization on cubic sets, *International Journal of Multidisciplinary Research and Modern Education. Research*, Vol. 2. No.2, (2016) pp.258- 264.
27. V. Chinnadurai , A. Swaminathan and B. Anu " Some properties of cubic soft sets" *International Journal of Applied and Advanced Scientific Research*, Volume 1, No. 1 (2016), 145-153.
28. V. Chinnadurai, K. Bharathivelan, S.Vijayabalaji and S. Sivaramakrishana, "A cubic set theoretical approach to ideal of a rings", (proceedings) Vol. 7, (2016).
29. V. Chinnadurai and K. Lenin Muthu Kumaran, "Homomorphism and anti homomorphism of cubic ideals of near-rings, *Annals of fuzzy mathematics and informatics*, Volume 13, No. 4(2017),519–529.
30. V. Chinnadurai , A. Swaminathan and B. Anu " Some properties of Neutrosophic cubic soft sets" *International Journal of Computational Research and Development* , Volume 1, No. 1 (2016), 113-119.
31. V. Chinnadurai , B. Anu and A. Swaminathan " Some characterizations on Operations in soft sets" *International Journal of Multidisciplinary Research and Modern Education* , Volume 2, No. 2 (2016), 251-257.
32. V.Chinnadurai and K. Arulmozhi, "Fuzzy soft gamma regular semigroups", *International Journal of Multidisciplinary and Modern Education* Vol 2, No. 2 (September 2016) 238-250.
33. V. Chinnadurai, S. Barkavi , S. Vijayabalaji and J. Parthiban "Product operation on fuzzy transition matrices *International Journal of Multidisciplinary and Modern Education* Vol 2, No. 2 (September 2016) 281-289.
34. V. Chinnadurai and S. Kadalarasi, "Characaterizations of near-rings by interval valued (α, β) -fuzzy ideals", *International Journal of Algebra and Statistics* Vol 6, No. 1, 2, (2016), pp. 42-55.
35. V. Chinnadurai, K. Bharathivelan Cubic ideals of gamma semigroups, *International Journal of Current Research and modern Education*, Vol 1. No.2 ,(2016),138-150.
36. V. Chinnadurai, K. Bharathivelan Cubic ideals of po gamma semigroups, *International Journal of Applied and Advanced Scientific Research*, Vol.1,No.1,(2016),127-135.
37. V.Chinnadurai, K. Bharathivelan Cubic ideals in subtraction semigroups, *International Journal Interdisciplinary Research in Arts and Humanities* Vol. 1. No.1 ,(2016) pp.111- 118.
38. V.Chinnadurai, K. Bharathivelan Cubic ideals in near subtraction semigroups, *International Journal of modern science and technology* Vol 1. No.8 ,(2016) pp.276-282.

39. V. Chinnadurai, K. Bharathivelan Cubic bi-ideals in near-rings, International Journal Computer and Mathematical sciences, Vol 5. No.11 ,(2016) pp. 44-52.
40. V. Chinnadurai, K. Bharathivelan Cubic ideals of gamma near-rings, IOSR Journal of Mathematical, Vol 12. N0.6 ,(2016) pp. 25-37.
41. V. Chinnadurai, K. Bharathivelan Cubic lateral ideals in ternary near-rings, International Advanced Research Journal in Sciences, Engineering and Technology, Vol. 3. N0.11 ,(2016) pp.209-215.
42. V. Chinnadurai, K. Bharathivelan, Cubic weak bi-ideals of near-rings, Palestine journal of mathematics, Vol 6. No.1 ,(2017) ,1-12.
43. V. Chinnadurai and K. Bharathivelan, "Q-Cubic ideals of near-rings" International Journal of Pure and Applied Mathematics, 113(10) (2017), 56- 64.
44. V. Chinnadurai, A. Swaminathan and K. Bharathivelan, "Q-Cubic ideals of semigroups", International Journal of Mathematics And its Applications, 5(2-A) (2017), 163-173.
45. V. Chinnadurai, K. Barkavi , Cubic soft matrices, International Journal of Research in Mathematics and statistics. Vol.3. No.4 ,(2017) , 1- 22.
46. V. Chinnadurai, K. Barkavi , Operations on P-order and R-order of internal cubic soft matrices, International Journal of Scientific Research and Modern Education. Vol.2. No.1 ,(2017) pp.122-145.
47. V. Chinnadurai, K. Barkavi ,Operations on P-order and R-order of External cubic soft matrices, International Journal of Current Research and Modern Education. Vol.2. No.1 ,(2017) pp.132- 155.
48. V. Chinnadurai, K. Barkavi and S. Kadalarasi , Operations on internal and external cubic soft matrices, International Journal of Engineering Research and Modern Education. Vol.2. No.1 ,(2017) pp.121- 131.
49. V.Chinnadurai and K. Arulmozhi, Anti-fuzzy soft gamma regular semigroups, International Journal of Scientific Research and Modern Education, Volume 2, No. 1, (2017), 159-170.
50. V.Chinnadurai K. Arulmozhi and S. Kadalarasi, Interval valued fuzzy weak bi-ideals of gamma near-ring. Journal of Linear and Topological Algebra Volume 6, No. 3 (2017), 223-236.
51. S. Manimaran, V. Chinnadurai and A. Swaminathan, Majorization of Matrices, International Journal of Engineering Research and Modern Education , Volume 2, Issue 2, (2017) 65- 68.
52. V. Chinnadurai and K. Arulmozhi, Interval valued fuzzy ideals of gamma near-rings , Bulletin of the International Mathematical Virtual Institute,Volume 8, (2018), 301-314.
53. V. Chinnadurai and K. Arulmozhi, Characterization of Bipolar fuzzy ideals in ordered gamma semigroups, Bulletin of the International mathematical Virtual Institute Vol. 8(2018), 141-156.
54. V. Chinnadurai and K. Arulmozhi, Some Characterization of Fuzzy Soft Gamma-Semigroups, International Journal of Mathematics And its Applications 6 (2)(2018), 11-18.
55. K. Arulmozhi, V. Chinnadurai and A. Swaminathan, Intuitionistic fuzzy weak bi-ideals of γ -near-rings, Bulletin of the international mathematical virtual institute, Vol. 8(2018), 497-508.
56. K.Arulmozhi, V.Chinnadurai , Bipolar Fuzzy Soft Hyperideals and Homomorphism of Gamma-Hypersemigroups, International Journal of Engineering & Technology, 7 (4.10) (2018) 127-132.

57. K. Arulmozhi, V. Chinnadurai and A. Swaminathan, Interval valued bipolar fuzzy ideals in ordered Gamma-semigroups, *Journal of the international mathematical virtual institute*, Vol. 9 (2019), 1-17.
58. K. Arulmozhi, V. Chinnadurai and A. Swaminathan, Interval Valued Intuitionistic Fuzzy Weak Bi-Ideals of Gamma Near-Rings, *International Journal of Engineering & Technology*, 7 (4.10) (2018) 1100-1104.
59. V.S.Subha, N.Thillaigovindan, V. Chinnadurai and S.Sharmila, A study on fuzzy rough interior ideals in semigroups, *International Journal of Research and Analytical Reviews*. Vol.6. No.2, (2019) pp.854- 860.
60. V.S.Subha, N.Thillaigovindan, V. Chinnadurai and P.Dhanalakshmi, Characterization of semigroups by interval valued rough fuzzy weak bi-ideals, *International Journal of Research and Analytical Reviews*. Vol.6. No.2 ,(2019) pp 775- 783.
61. Chinnadurai V, Smarandache F and Bobin A, "Multi-Aspect Decision-Making Process in Equity Investment Using Neutrosophic Soft Matrices.", *Neutrosophic sets and systems*, Volume 31, Number 1, Jan 2020, pp. 224-241. 2020.
62. Chinnadurai V, and Bobin A, "Multiple-Criteria Decision Analysis Process By Using Prospect Decision Theory In Interval-Valued Neutrosophic Environment.", *CAAI Transactions on Intelligence Technology*, 2020, Vol. 5, Iss. 3, pp. 209–221.
63. V.S. Subha, N. Thillaigovindan, V. Chinnadurai and P. Dhanalakshmi, "Rough fuzzy bi-interiorideal (biquasi-ideal) of semigroup.", *Malaya Journal of Matematik*, Volume 8, Number 8, Mar 2020, pp. 517-521. 2020.
64. V. Chinnadurai and G. Thirumurugan, "Application of bipolar pythagorean fuzzy matrices in medical diagnosis.", *Alochana Chakra journal*, Volume 9, Number 6, Jun 2020, pp. 6285-6293. 2020.
65. V. Chinnadurai and M.P.Sindhu, "Generalization of level sets in neutrosophic soft sets and points : A new approach.", *Tathapi*, Volume 19, Number 50, Jun 2020, pp. 54-81. 2020.
66. V.Chinnadurai, G.Thirumurugan. Some Properties of Bipolar Pythagorean Fuzzy Matrices. *Journal of critical reviews*. 2020; 7(17): 335-346. doi:10.31838/jcr.07.17.47.
67. V.Chinnadurai, G.Thirumurugan and M.Umamaheswari, Novel Operations in Bipolar Pythagorean Fuzzy Matrices, *International Journal of Advanced Science and Technology* Vol. 29, No. 4, (2020), pp. 5387- 5401.
68. Chinnadurai, Swaminathan, Bobin, And Thillaigovindan, "Multi-Criteria Decision Making Process Using Cubic Soft Matrices .", *Poincare Journal of Analysis & Applications*, Volume 7, Number 1, Jul 2020, pp. 119-147. 2020.
69. Chinnadurai V and Sindhu M P, A Novel Approach for Pairwise Separation Axioms on Bi-Soft Topology Using Neutrosophic Sets and An Output Validation in Real Life Application, *Neutrosophic Sets and Systems*, vol. 35, 2020, pp. 435-463.
70. V.Chinnadurai, G.Thirumurugan and M.Umamaheswari, Some properties and arithmetic operations of spherical fuzzy matrices, *GIS Science Journal* Vol 7, issue no. 7, 2020,pp.508-519.

71. Chinnadurai V, Bobin A, Arulselvam A, "On spherical fuzzy quasi-ideals of semigroups.", *Mukt Shabd Journal*, Volume 9, Number 7, Jul 2020, pp. 1596-1618. 2020.
72. V.Chinnadurai, G.Thirumurugan and M.Umamaheswari, Spherical Fuzzy Matrix and its application. *High Technology Letters*, Vol.26. no. 9, 2020, pp. 216-234.
73. V.Chinnadurai and V.Sakila, CV-Algebra, *Strad Research*, Vol.7, No. 9, 2020, pp.360-367.
74. V. Chinnadurai And V. Shakila, Spherical Fuzzy Bi-Ideals Of Gamma Near-Rings, *Advances in Mathematics: Scientific Journal* 9 (2020), no.10, 7793–7802
75. V. Chinnadurai, S. Thayalan, And A. Bobin, Complex Cubic Intuitionistic Fuzzy Set And Its Decision Making, *Advances in Mathematics: Scientific Journal* 9 (2020), no.10, 7933–7946.
76. V. S. Subha, N. Thillaigovindan , V. Chinnadurai and S. Sharmila, "A short note on some of the fuzzy rough hyper-ideals in semihyper-groups.", *Malaya Journal of Matematik*, Volume 8, Number 2, Mar 2020, pp. 522-526. 2020.
77. V.S. Subha, V. Chinnadurai and S.Sharmila, "Application of Spherical Fuzzy Rough Set and alpha-Level Cut of Spherical Fuzzy Relation.", *Journal of Xi'an University of Architecture & Technology*, Volume 12, Number 10, Oct 2020, pp. 433-443. 2020.
78. V. Chinnadurai and A. Arulselvam, "On Pythagorean Fuzzy Ideals in Semigroups.", *Journal of Xi'an University of Architecture & Technology*, Volume 12, Number 10, Oct 2020, pp. 1005-1012. 2020.
79. V. Chinnadurai and A. Arulselvam, "On Pythagorean fuzzy ideal of subtraction semigroup and near subtraction semigroup.", *Annals of Communications in Mathematics*, Volume 3, Number 4, Dec 2020, pp. 261-272. 2020.
80. Chinnadurai V, and Bobin A, "Single-valued neutrosophic N -soft set and intertemporal single-valued neutrosophic N -soft set to assess and pre-assess the mental health of students amidst COVID-19.", *Neutrosophic sets and systems*, Volume 38, Number 1, Dec 2020, pp. 67-110. 2020.
81. Chinnadurai V, and Sindhu M.P, "A Novel Approach: Neutro-Spot Topology and Its Supra Topology With Separation Axioms and Computing the Impact on COVID-19.", *Neutrosophic sets and systems*, Volume 38, Number 1, Dec 2020, pp. 188-213. 2020.
82. Veerappan Chinnadurai; Arul Selvam, "Interval valued Pythagorean fuzzy ideals in semigroups.", *Journal of Fuzzy Extension and Applications*, Volume 1, Number 4, Dec 2020, pp. 315-324. 2020.
83. Chinnadurai V, Sindhu M P, Bharathivelan K, "An Introduction to Neutro-Prime Topology and Decision Making Problem.", *Neutrosophic Sets and Systems*, Volume 41, Number 1, Apr 2021, pp. 146-167. 2021.
84. Veerappan Chinnadurai and Albert Bobin, "Interval Valued Intuitionistic Neutrosophic Soft Set and its Application on Diagnosing Psychiatric Disorder by Using Similarity Measure.", *Neutrosophic Sets and Systems*, Volume 41, Number 1, Apr 2021, pp. 215-245. 2021.
85. V. Chinnadurai and A.Arulselvam, "Pythagorean Neutrosophic Ideals in Semigroups.", *Neutrosophic Sets and Systems*, Volume 41, Number 1, Apr 2021, pp. 258-269. 2021.
86. Chinnadurai V, and Bobin A, "Simplified Intuitionistic Neutrosophic Soft Set and its Application on Diagnosing Psychological Disorder by Using Similarity Measure.", *Applications and Applied*

- Mathematics: An International Journal (AAM), Volume 16, Number 1, Jun 2021, pp. 604-630. 2021.
87. V. Chinnadurai, G. Thirumurugan, M. Umamaheswari. A. Bobin, SPHERICAL CUBIC SOFT MATRICES AND ITS APPLICATION FOR DECISION MAKING IN MEDICAL FIELD European Journal of Molecular & Clinical Medicine, 2020, Volume 7, Issue 8, Pages 5766- 5780.
 88. V. Chinnadurai, S. Madhanraj, A. Bobin and A. Arulselvam, "Some Properties on Picture Fuzzy Bi-Matrix.", International Journal of Scientific Engineering and Applied Science (IJSEAS) , Volume 7, Number 9, Sep 2021, pp. 78-94. 2021.
 89. K. Arulmozhi, V. Chinnadurai, "(λ_1, λ_2) Q -Various fuzzy ideals in ordered Gamma -semigroups.", Nonlinear Studies, Volume 28, Number 3, Sep 2021, pp. 723-727. 2021.
 90. V. Chinnadurai, S. Thayalan, A. Bobin, "Multi-criteria decision-making in complex Fermatean fuzzy environment.", Journal of Mathematical and Computational Science, Volume 11, Number 6, Sep 2021, pp. 7209-7227. 2021.
 91. V. Chinnadurai And A. Bobin, "Picture Fuzzy Hypersoft Topsis Method Based On Correlation Coefficient.", Journal Of Hyperstructures, Volume 10, Number 2, Feb 2022, Pp. 86-107. 2021.
 92. V. Chinnadurai and V. Shakila, "Spherical Cubic Bi-Ideals of Gamma Near-Ring.", Communications in Mathematics and Applications, Volume 12, Number 4, Feb 2022, pp. 1025-1044. 2021.
 93. A. Bobin, P. Thangaraja, E. Prabu, V. Chinnadurai, "Interval-valued picture fuzzy hypersoft TOPSIS method based on correlation coefficient.", Journal of Mathematics and Computer Science- JMCS , Volume 27, Number 2, Apr 2022, pp. 142-163. 2022.
 94. V. Chinnadurai, A. Bobin, A. Arulselvam, "A STUDY ON SPHERICAL FUZZY IDEALS OF SEMIGROUP.", TWMS Journal of Applied and Engineering Mathematics, Volume 12, Number 4, Oct 2022, pp. 1202-1212. 2022.
 95. V.Chinnadurai A.Bobin and D.Cokilavany, "Simplified intuitionistic neutrosophic hyper soft TOPSIS method based on correlation coefficient.", Neutrosophic Sets and Systems, Volume 51, Number 1, Oct 2022, pp. 570-591. 2022.
 96. A.Bobin and V.Chinnadurai , "Interval-valued intuitionistic neutrosophic hypersoft TOPSIS method based on correlation coefficient.", Neutrosophic Sets and Systems, Volume 51, Number 1, 2022, pp. 592-618. 2022.
 97. Chinnadurai, V., & Arulselvam, A. (2023). Rough cubic Pythagorean fuzzy sets in semigroup. arXiv preprint arXiv:2302.01341.
 98. Chinnadurai, V., & Venkatesan, S. (2023). Double framed soft fuzzy bi-ideals of gamma near-rings. TWMS Journal of Applied and Engineering Mathematics.
 99. Chinnadurai, V., Thayalan, S., & Bobin, A. (2023). Distance measures of complex fermatean fuzzy number and their application to multi-criteria decision-making problem. Applications and Applied Mathematics: An International Journal (AAM), 18(1), 14.

100. Chinnadurai, V., & Shakila, V. (2022). Homomorphism and anti-homomorphism of spherical cubic bi-ideals of gamma near-rings. *South East Asian Journal of Mathematics & Mathematical Sciences*, 18(3).
101. Subha, V. S., Veerappan, C., & Dhanalakshmi, P. (2022). Characterization of semigroup by rough interval Pythagorean fuzzy set. Işık University Press.
102. Bobin, A., Thangaraja, P., Prabu, E., & Chinnadurai, V. (2022). Interval-valued picture fuzzy hypersoft TOPSIS method based on correlation coefficient. *Journal of Mathematics and Computer Science*, 27(2), 142-163.

National Journals:

1. V. Chinnadurai and K. Lenin muthu kumaran, "On α -Fuzzy lateral ideals of ternary near-rings", *Annamalai University Science Journal*, 50(2016), pp.45-56.
2. V. Chinnadurai and K. Arulmozhi, "Interval valued fuzzy soft semigroups", *Annamalai University Science Journal*, 50(2016), pp. 35-44.
3. V. Chinnadurai and S. Kadalarasi, "Soft near-subtraction semigroups and ideals", *Annamalai University Science Journal*, 50(2016), pp. 57-66.
4. V.Chinnadurai , "On Rate Spaces.", *Bulletin Of Pure And Applied Sciences*, Volume 32E, Number 2, 2005, Pp. 42-45. 2005.
5. V.Chinnadurai , "Double Integrated Space.", *Bulletin Of Pure And Applied Sciences*, Volume 22, Number E, 2003, Pp. 13-28. 2003.
6. V.Chinnadurai , "On Rate Sequence Spaces.", *Bulletin Of Pure And Applied Sciences*, Volume 22, Number E, 2003, Pp. 39-43. 2003.
7. V.Chinnadurai, T.M.Singaravel, and K.Chandrasekhara Rao, "Some Sequence Spaces Defined By Module.", *Bulletin Of Pure And Applied Sciences*, Volume 25E, Number 2, 2003, Pp. 39-43. 2003.
8. V.Chinnadurai R.Kalayanaraman and C.Ayyappan, "A Vacation Queue With Balking And With State Dependent Service Rate.", *Bulletin Of Pure And Applied Sciences*, Volume 21, Number E, 2002, Pp. 51-57. 2002.

International Conferences:

1. Attended and presented a paper entitled "Characterization of Rough Fuzzy ideals in Near-rings" in the Sixth International Conference on Dynamic Systems and Applications held at Moore House College, Atlanta, U.S.A during May 25-28, 2011.
2. Participated and presented a paper at the "International Conference on Mathematical Modeling and its Applications 2012" (ICMMA 2012), organized by the Department of Mathematics, Annamalai University during 22-24, December 2012.

3. N. Thillaigovindan, V. Chinnadurai and K. Lenin Muthu Kumaran, "Interval valued anti fuzzy ideals of Near-rings", Proceeding of the International Conference on Mathematical Sciences, published by Elsevier, July 2014, 422-425.
4. N. Thillaigovindan, V. Chinnadurai and S. Kadalarasi, "Interval valued $(\square, \square \square q)$
5. Fuzzy sub near-rings of Near-rings", Proceeding of the International Conference on Mathematical Sciences, published by Elsevier, July 2014, 426-429.
6. V. Chinnadurai and K. Lenin Muthu Kumaran, "Fuzzy lateral ideals in ternary near-rings", Proceeding of the International Conference on Mathematics and its Applications-2014, University college of Engineering Villupuram, Anna University, Chennai, India, 660-670.
7. V. Chinnadurai and S. Kadalarasi, "Characterizations of near-rings by their generalized fuzzy ideals", Proceeding of the International Conference on Mathematics and its Applications-2014, University college of Engineering Villupuram, Anna University, Chennai, India, 671-676.
8. V. Chinnadurai and K. Arulmozhi, "Interval valued fuzzy soft bi-ideals and quasi ideals of semigroups", (Proceedings of the third international conference on Mathematics. Melvisharam, vellore, India. pp 1-12 (2016).
9. V. Chinnadurai , A. Swaminathan, A. Bobin and B. Kathar Kani, "Generalised interval valued intuitionistic fuzzy soft matrices and their application to multicriteria decision making". AIP Conference Proceedings 2177, 020019 (2019).
10. K. Lenin Muthu Kumaran and V. Chinnadurai, Cubic ideals in near rings, AIP Conference Proceedings 2177, 020037 (2019). <https://doi.org/10.1063/1.5135212>.
11. V. Chinnadurai, S. Thayalan and A. Bobin, Complex Cubic Set And Their Properties, Advances in Mathematics: Scientific Journal 2020, Vol. 9, No. 4 <https://doi.org/10.37418/amsj.9.4.10>.
12. V. Chinnadurai, G. Thirumurugan and A. Arulselvam, Cubic vague soft set and its application, Advances in Mathematics: Scientific Journal 2020, Vol. 9, No. 4. <https://doi.org/10.37418/amsj.9.4.11>.
13. V Chinnadurai, S Thayalan and A Bobin (2021), Multi-criteria decision making process using complex cubic interval valued intuitionistic fuzzy set, J. Phys.: Conf. Ser. 1850 012094.
14. V. Chinnadurai and A. Arulselvam (2021) J. Phys.: Conf. Ser. Q-Pythagorean fuzzy soft expert set and its application in multi-criteria decision making process, J. Phys.: Conf. Ser. 1850 012114.
15. V S Subha, N Thillaigovindan, V Chinnadurai and S Sharmila (2021), An approach to the study of fuzzy rough prime ideal extensions of semigroups, J. Phys.: Conf. Ser. 1850 012105.
16. V S Subha, N Thillaigovindan, V Chinnadurai and P Dhanalakshmi (2021), Roughness of $(\epsilon^*, \epsilon^* q^*)$ -Fuzzy Ideals in Semigroup, J. Phys.: Conf. Ser. 1850 012106.

National Conferences:

1. Participated and presented a paper on Some remarks on the covariance of the Moore-

Penrose inverse at the “Fourth Annual Conference of Ramanuja Mathematical Society” during March 20 – 22 .1989 at Karaikudi

2. N.Thillaigovindan and V.Chinnadurai, “Interval valued fuzzy generalized bi- ideals”, Proc. Of the National conference on Algebra , Graph theory and their applications ,Dept. of Mathematics , Manomaniam Sundaranar University. Narosa (2009) : 85-98.
3. Participated in the “18th Annual Conference of the Ramanujam Mathematical Society” from on July 17th to 20th, 2004 at Department of Mathematics, Annamalai University.
4. Participated and presented a paper on Interval valued Fuzzy generalized bi –ideals at the “National conference on Algebra, Graph theory and their applications” during Feb. 4th to 6th ,2009 at Department of Mathematics, Manonmaniam Sundaranar University , Tirunelveli.
5. Participated in the “National Conference on Mathematical modeling”from March 26-28, 2009 at Department of Mathematics, Annamalai University.
6. Participated and presented a paper entitled Fuzzy ideals in subtraction semi groups at the “National Conference on Recent trends in Fuzzy Mathematics” from June 14 to 15th, 2010 at Department of Mathematics, Annamalai University.
7. Participated in the “National Conference on Mathematical Modeling 2012”, organized by the Department of Mathematics, Annamalai University during 23-24, February 2012.
8. Participated in the “National Conference on Mathematical Modelling 2014”(NCMM 2014) during 21-22, February, 2014 at Department of Mathematics, Annamalai University, Annamalainagar.
9. Participated in the “National Conference on Challenges and Applications of Computational Mechanics” (CACM 2014) during 21-22, March, 2014 at Department of Mathematics, Annamalai University, Annamalainagar.

National Seminars:

1. Participated in the “National Seminar on Recent trends in Algebra and its applications” organized during 9 -10, August 1999 by Department of Mathematics, Annamalai University, Annamalainagar.
2. Participated in the “94th Indian Science Congress” January 3-7, 2007 held at Annamalai University, Annamalainagar. Attended a “National Seminar on stochastic process and its applications” between Mar.15 and 16 ,2007 at Department of Mathematics, Annamalai University.
3. Participated in the “Professor P.Dheena commemorative National Seminar on Algebra and its applications” on Sep. 4th ,2009 at Department of Mathematics, Annamalai University.

International workshop:

1. Attended and presented a paper entitled “ On rough ideals in gamma groups” organized by Department of Mathematics, National Institute of Technology, Durgapur, West Bengal at an International Workshop on Fuzzy sets, Rough sets, Uncertainty Analysis and Applications, during November 21-25, 2011.

National workshop:

1. Participated in the “Instructional Workshop on Random Processes and their Applications” held at the Department of Mathematics, Annamalai University, during 10.11.2010 to 23.11.2010.
2. Attended a Workshop on “Empowering yourself through communication skills” organized by Computer Society of India, Chennai Chapter at Anna University, Chennai, from 29 – 30, October 2011

6. Book Published:

1. Fuzzy Ideals in Algebraic Structures, LAMBERT Academic Publishing, Germany 2013, ISBN NUMBER 978-3-659-41531-9.
2. Cubic Soft Matrices and its Operations, LAMBERT Academic Publishing, Germany 2022, ISBN NUMBER 978- 6-205-51686-7
3. Complex Hybrid Sets and their Applications in Decision Making, LAMBERT Academic Publishing, Germany 2023, ISBN NUMBER 978-6-206-15947-6
4. Cubic hybrid sets and their application in decision making, LAMBERT Academic Publishing, Germany 2022, ISBN NUMBER 978-6-200-28933-9
5. Neutrosophic Theory and its Applications, LAMBERT Academic Publishing, Germany 2023, ISBN NUMBER 978-6-139-45218-7

7. Trainings undergone

1. Attended a four week orientation course from 3.6.99 to 30.6.99 organized by the Academic staff college, Pondicherry University, Pondicherry.
2. Attended the UGC Refresher course in Mathematics organized by the Department of Mathematics, Annamalai University from 5.6.2002 to 25.2.2002.
3. Attended a Refresher course on ICT Applications (ID) organized by the Academic staff college, Pondicherry University, Pondicherry from 27.5.2009. to 16.6.2009.
4. Attended the Refresher course in Mathematics Batch XXV at the Academic staff college, University of Madras, Chennai from 5.11.2009 to 25.11.2009.
5. Attended the Instructional Workshop on Random Processes and their Applications organized by the Department of Mathematics, Annamalai University from 10.11.2010 to 23.11.2010.

8. Invited Talk

- An invited talk on **Cubic sets** at Department of Mathematics, Alagappa Govt. Arts college at Karaikudi on 12.12.2017.
- Acted as a resource person for the International conference on **Recent Trends in Mathematical Modeling** organized by Department of Mathematics, Bharathidasan college of Arts and Science, Ellispettai, Erode on 28.08.2017.

9. Abroad Visits:

- Visited Morehouse College, Atlanta, Georgia, U.S.A. to deliver an invited talk at the Sixth International Conference on Dynamic System and Application during May 25-28, 2011.

10. Membership in Academic Bodies:

- Board Member, UG&PG studies, Faculty of Science, Annamalai University.
- Board Member (Question paper setter) TNPSC, Chennai.
- Chairman (Question paper setter) University of Madras.
- Recommendation for awarding research guide ship to the applicant in Madurai Kamaraj University.

11. Patent Application Publication:

Title of the invention: A method to validate wireless security conventions by Ramesh. S, Rajaram. P, Chinnadurai. V, Mahendran. K, Suresh. S and Ravikumar. V.

12. Reviewer:

- Neutrosophic Sets and Systems.
- International Journal of Fuzzy Logic and Intelligent Systems.
- TWMS Journal of Applied and Engineering Mathematics (TWMS J. of Apl. & Eng. Math.).
- International Journal of Neutrosophic Science (IJNS).
- Annals of Fuzzy Mathematics and Informatics.
- Thai Journal of Mathematics