

STAFF PROFILE

- 1) Name : **Dr.A.FRANCINA SHALINI**
- 2) Designation : Associate Professor
- 3) Department : Mathematics (Aided)
- 4) Qualification : M. Sc., M. Phil., B. Ed., Ph. D.,
- 5) Experience : 19 years Teaching :19 years Research : 12 years
- 6) Area of Specialization (s) : General Topology, Fuzzy Topology
- 7) E-mail : francshalu@gmail.com
- 8) Academic Qualifications : M. Sc., M. Phil., B. Ed., Ph. D.,
- 9) Research Guidance

Programme	No. of Scholars	
	Completed	Pursuing
Ph. D.	6	3
M. Phil.	5	-

- 10) Research Publications

International

- 1) G Angelin Tidy, **A. Francina Shalini**, On Soft SGB-Closed sets in soft topological spaces, *International Journal of Applied Research* (2017), Volume 3, Page No. 141 – 144
- 2) G. Angelin Tidy and **A. Francina Shalini**, On IF sgb – Closed Sets in Intuitionistic Fuzzy Topological Spaces, *International Journal for Research Trends and Innovation* (2018), Volume 3 (7), Page No. 62 – 66
- 3) G. Angelin Tidy and **A. Francina Shalini**, IFSGb-continuous mappings in intuitionistic fuzzy topological spaces, *International Journal of Innovative Research in Technology* (2018), Volume 5 (6), pp 380 - 387
- 4) G. Angelin Tidy and **A. Francina Shalini**, A Study of sgb-frontier in Intuitionistic Fuzzy Topological Spaces, *Nirmala Annual Research Congress* (2018), pp 85 – 92, ISBN-978- 93-5321-859-1

- 5) G. Angelin Tidy and **A. Francina Shalini**, On IFSGB – Connectedness in Intuitionistic Fuzzy Topological Spaces, *International Journal of Mathematical Archive* (2019), Volume 10 (1), pp 72 - 77
- 6) G. Angelin Tidy and **A. Francina Shalini**, VSGB – Closed Sets in Vague Topological Spaces, *International Journal For Scientific Research and Development* (2019), Volume 6 (11), pp 149 – 153
- 7) M. Avila Princy and **A. Francina Shalini**, Cech D – closed Sets in closure spaces, *International Journal of Innovative Research in Technology* (2018), Volume. 4 (9), Page No. 191 - 195
- 8) M. Avila Princy and **A. Francina Shalini**, N_β closed sets In Neutrosophic Topological Spaces, *Infokara Research* (2019), Volume 8 (8), Page No. 540 – 546
- 9) M. Avila Princy and **A. Francina Shalini**, Various distances on q^{th} rung orthopair Picture Fuzzy Set and MABAC method for multiple attribute group decision Making, *Infokara Research* (2019), Volume. 8 (10), Page No. 108 - 115
- 10) **A. Francina Shalini** and I. Arockiarani, Čech $\pi g\beta$ – closed sets in Biclosure Spaces, *Antartica. J. Math* (2011), Volume. 8(2), Page No. 153 - 58
- 11) M. Divya Bharathi, **A. Francina Shalini**, [sg \$\beta\$ -closed sets in Biclosure spaces.](#) *International Journal of Applied Research* (2017), Volume 3, Page No. 1188 – 1192
- 12) M. Divya Bharathi, **A. Francina Shalini**, [New functions in BiČech sg \$\beta\$ -Biclosure spaces.](#) *International Journal For Research In Applied Science and Engineering Technology* (2017), Volume 5, Page No. 1188-1192
- 13) Emimanimcy. M, **A. Francina Shalini**, Bipolar valued fuzzy BZMV algebra, *International Journal of Scientific Development and Research* (2019), Volume 4, Page No. 255 - 261
- 14) **A. Francina Shalini** and I. Arockiarani, i – Regular Generalized Closed Sets in Isotonic Spaces, *International Journal of Mathematical Archive* (2011), Volume. 2 (10), Page No. 1985 - 1991
- 15) **A. Francina Shalini** and I. Arockiarani, On Generalized β – connectedness in Isotonic Spaces, *International Journal of Engineering and Science* (2013), Volume. 2 (2), Page No. 30-34
- 16) **A. Francina Shalini** and I. Arockiarani, Čech $\pi g\beta$ – closed sets in closure Spaces, *Journal of Global Research in Mathematical Archives* (2013), Volume. 1 (4), Page No. 40 – 49
- 17) **A. Francina Shalini** and I. Arockiarani, Pairwise π -closed sets in Biclosure Spaces, *International Journal of Innovative Research and Studies* (2014), Volume. 3, Page No. 393 – 402

- 18) **A. Francina Shalini** and I. Arockiarani, π – Bicontinuous Maps in Biclosure Spaces, *International Journal of Innovative Research and Studies*, (2011)
- 19) **A. Francina Shalini** and I. Arockiarani, Δ - Čech fuzzy closed sets in closure spaces, *International Journal of Mathematical Research and Science* (2011).
- 20) **A. Francina Shalini** and I. Arockiarani, New Functions In Čech pGb - Closure Spaces, *International Journal of Recent Scientific Research* (2016), Volume. 7 (1), Page No. 8515-8517
- 21) **A. Francina Shalini**, I Arockiarani, [On Generalised \$\beta\$ -Connectedness In Isotonic Spaces.](#) *International Refereed Journal of Engineering and Science* (2013), Volume 2, Page No. 30 – 34
- 22) **A. Francina Shalini**, Neutrosophic Vague Soft Matrices in Decision Making Problems, *Strad Research Journal* (2020), Volume 7, Page No. 484 – 491
- 23) T. Muthu Priya and **A. Francina Shalini**, Čech MP – closed sets in closure spaces, *International Advanced Research Journal in Science, Engineering and Technology* (2016), Volume. 3 (8), Page No. 59-62
- 24) R. Lalitha, **A Francina Shalini**, On Nano generalized \wedge -closed and open sets in Nano topological spaces, *International Journal of Applied Research* (2017) Volume 3, Page No. 368 - 371
- 25) T. Muthu Priya and **A. Francina Shalini**, On Contra Čech MP –continuous function in Čech closure spaces, *International Journal of Applied Research* (2016), Volume. 2 (9), Page No. 781 – 788
- 26) T. Muthu Priya and **A. Francina Shalini**, Čech MP –continuous and Čech MP irresolute maps, *International Journal of Engineering Science and Computing* (2016), Volume. 6 (8)
- 27) T. Muthu Priya, **A. Francina Shalini**, On Soft Čech MP-closed sets and continuous functions in Soft Čech closure spaces, *International Journal of Applied Research* (2016) Volume 2, Page No. 451 – 456
- 28) P. B. Remya and **A. Francina Shalini**, Vague Binary Soft Sets and their Properties, *International Journal of Engineering, Science and Mathematics* (2018), Volume.7, Page No. 56-73
- 29) P. B. Remya and **A. Francina Shalini**, Vague Binary Soft Topological Spaces, *Compliance Engineering Journal* (2020), Volume. 11, Page No. 20 -30
- 30) P. B. Remya and **A. Francina Shalini**, On Various Distance Measures of Vague Binary Soft Sets, *Infokara Research* (2019) Volume 8, Page No. 472-482

- 31) P. B. Remya and **A. Francina Shalini**, Measures of Similarity between Vague Binary Soft Sets, *International Journal of Research in Advent Technology* (2019) Volume. 7, Page No. 254-259
- 32) P. B. Remya and **A. Francina Shalini**, Pythagorean Vague Binary Soft Sets, *The International Journal of Analytical and Experimental Modal analysis* (2019), Volume XI, Page No. 845-855
- 33) P. B. Remya and **A. Francina Shalini**, Neutrosophic Vague Binary Sets, *Neutrosophic Sets and Systems* (2019), Volume 29, Page No. 227 - 241
- 34) P. B. Remya and **A. Francina Shalini**, Neutrosophic Vague Binary BCK/BCI - algebra, *Neutrosophic Sets and Systems* (2020) Volume. 35, Page No. 45 – 67
- 35) P. B. Remya and **A. Francina Shalini**, Neutrosophic Vague Binary G- subalgebra of G - algebra, *Neutrosophic Sets and Systems* (2020) Volume. 38, Page No. 576 – 598
- 36) M. Salami Martina and **A. Francina Shalini**, A study on Neutrosophic sgp-closed set in Neutrosophic Topological Spaces, *Journal of Information and Computational Science* (2020), Volume 10 (2), Page No. 1283 – 1292
- 37) P. B. Remya, **A. Francina Shalini**, Trigonometric Normalized Euclidean Similarity Measure for Vague Binary Soft Sets, *International Journal of Humanities and Sciences*, 1 (1), 2021, 107 – 112
- 38) P. B. Remya, **A. Francina Shalini**, Vague Binary Soft Continuity, *Poincare Journal Of Analysis and Publications*, Vol. 8, No. 1 (I), 2021, Special Issue, 281 – 297
- 39) P. B. Remya, **A. Francina Shalini**, Neutrosophic Vague Binary $BZMV^{dM}$ – subalgebra of $BZMV^{dM}$ –algebra, *Neutrosophic Sets and Systems*, Volume 47,2021
- 40) P. B. Remya, **A. Francina Shalini**, Neutrosophic Vague Binary K – subalgebra of K - algebra, *Neutrosophic Sets and Systems*,
- 41) G. Ramya, **A. Francina Shalini**, Matrix Theory Operators on Pythagorean Neutrosophic Hypersoft Set and Applications, *International Journal of Creative Research Thoughts*, 10(11), (2022), c592-c602.
- 42) G. Ramya, **A. Francina Shalini**, Decision Making Method Related to Pythagorean Neutrosophic Hypersoft Sets, *Mathematical Statistician and Engineering Applications*, 71(3), (2022), 2068- 2081.
- 43) G. Ramya, **A. Francina Shalini**, Pythagorean Neutrosophic Hypersoft Relations and Some Properties, *Advanced Engineering Science*, 54(2), (2022), 7057-7064.

- 44) G. Ramya, **A. Francina Shalini**, An Introduction to Pythagorean Neutrosophic Hypersoft Topological Spaces, *Mukt Shabd Journal*, XII(VIII), (2023), 807-822.
- 45) G. Ramya, **A. Francina Shalini**, Basic Operations on Pythagorean Neutrosophic Hypersoft Matrices, *Eur. Chem. Bull*, 12(Special issue 10), (2023), 2748-2755.
- 46) G. Ramya, **A. Francina Shalini**, Pythagorean Neutrosophic Semi Open and Semi Closed Hypersoft Sets, *Indian Journal of Natural Sciences*, 14(77), (2023), 55740-55749.
- 47) G. Ramya, **A. Francina Shalini**, Generalized Pre Open Sets in Pythagorean Neutrosophic Hypersoft Topological Spaces, *Indian Journal of Natural Sciences*, 14(81), (2023), 66924-66931.
- 48) G. Ramya, **A. Francina Shalini**, Trigonometric Similarity Measures of Pythagorean Neutrosophic Hypersoft Sets, *Neutrosophic Systems with Applications*, 9, (2023), 91-100.
- 49) Anitha.S, **A. Francina Shalini**, Bipolar Pythagorean Neutrosophic Soft Generalized Pre-Closed & Open Sets, *Indian Journal of Natural Science*, Vol 14, Issue 79, 2023.
- 50) Anitha.S, **A. Francina Shalini**, Bipolar Pythagorean Neutrosophic Soft Extension of the MULTIMOORA Method for Solving Decision Making Problems, *European Chemical Bulletin*, Vol 12, Issue 12, 2372- 2382, 2023.
- 51) Anitha.S, **A. Francina Shalini**, Plithogenic Cubic Vague Sets, *Neutrosophic Sets and Systems* Vol 58, 109-124, 2023.
- 52) Anitha.S, **A. Francina Shalini**, Similarity Measure of Plithogenic Cubic Vague Sets, *Neutrosophic Systems with Applications*, Vol 11, 39-47, 2023.
- 53) Anitha.S, **A. Francina Shalini**, Entropy and Distance Measures of Bipolar Pythagorean Neutrosophic Soft Set, *Engineering, Science and Sustainability: Advancements in Technology and Techniques* (1st ed.), CRC Press, Taylor &. Francis, 182-188, 2023.
- 54) Anitha S, **A. Francina Shalini**, Bipolar Pythagorean Neutrosophic Soft Generalized Pre-Continuous Mappings, *Journal of Foundational Research*, Volume-136,XXXI, No. 2(F), 2023.
- 55) Anitha S, **A. Francina Shalini**, Bipolar Pythagorean Neutrosophic Soft Generalized Homeomorphism and Pre Homeomorphism, *Journal of Foundational Research*, Volume XXXI, No. 2(F), 2023.
- 56) A.Angel Marina and **A. Francina Shalini**, An Introduction to Neutrosophic Vague Refined Set, *Neutrosophic Sets and Systems*, 47, 610-619, 2021.
- 57) A.Angel Marina and **A. Francina Shalini**, Generalized Alpha Continuous Mappings in Neutrosophic Vague Refined Topological Spaces, *Stochastic Modelling and Applications*, 26(3), 610-618, 2022.

- 58) A. Angel Marina and **A. Francina Shalini**, On Neutrosophic Vague Refined Volterra Spaces, Mukta Shabd Journal, 11(11), 2022.
- 59) A. Angel Marina and **A. Francina Shalini**, Selection of Medical Waste Disposal Method using MCDM problems in Neutrosophic Vague Refined set, Indian Journal of Natural Sciences, 14(78), 56649- 56655, 2023.
- 60) A. Angel Marina, **A. Francina Shalini**, On Neutrosophic Vague Refined INK-ideals of INK-Algebra, AIP Conference Proceedings, 2945, 050003, 2024.
- 61) Emimanimcy.M, **A. Francina Shalini**, A Pythagorean Neutrosophic refined set on Dynamical Sets, European Chemical Bulletin, 1568-1580, Volume 12, Issue 2, 2023
- 62) Emimanimcy.M, **A. Francina Shalini**, A Pythagorean Neutrosophic refined Semi- Connected Space, Indian Journal of Natural Science, Volume 17, Issue 77, April -2023,
- 63) Emimanimcy.M **A. Francina Shalini**, A Fermitean Space on Pythagorean Neutrosophic refined set, Journal of Nambian Studies, Volume 23, Issue 18, 2024
- 64) Emimanimcy.M, **A. Francina Shalini**, An Introduction to Pythagorean Neutrosophic refined sets and its basic operations, International Journal of Creative Research and thoughts, Volume 10, issue-3, 2022
- 65) Emimanimcy.M **A. Francina Shalini**, New sets on Pythagorean Neutrosophic Refined Topological Spaces, International Journal of Creative Research and thoughts, Volume 10, issue-4, 2022

Presentations (International)

- 1) **A. Francina Shalini** and I. Arockiarani, On Generalized β closure spaces and Separations, Presented Paper in *International Conference in Islamiah College*, Vaniyambadi

National

- 1) C. Amala Kavya and **A. Francina Shalini**, Correlation Coefficients using Pythagorean Picture Fuzzy Sets, *Nirmala Annual Research Congress Proceedings* (2019), Page No 105 – 111, ISBN – 978 – 93 – 5391 – 196 - 6
- 2) T. Muthu Priya and **A. Francina Shalini**, On Supra MP – closed sets in Supra Topological Spaces on Nirmala and continuous function in Soft \check{C} ch closure Spaces, *Nirmala Annual Research Congress Proceedings* (2016)
- 3) A. Nancy Mary and **A. Francina Shalini**, Neutrosophic Vague Generalized β Closed Sets In Neutrosophic Vague Topological Spaces, *Nirmala Annual Research Proceedings* (2019), Page No 157 - 164, ISBN – 978 – 93 – 5391 – 196 - 6
- 4) P. B. Remya, **A. Francina Shalini**, Vague Soft Matrix in Decision Making, *Nirmala*

Annual Conference Proceedings (2018), Page. No. 80 – 84, ISBN-978-93-5321-859-1

- 5) P. B. Remya, **A. Francina Shalini**, Trigonometric Normalized Hamming Similarity Measure for Vague Binary Soft Sets, *Nirmala Annual Research Proceedings* (2019), Page No. 151 – 157, ISBN – 978 – 93 – 5391 – 196 - 6

11) Participation in Conferences

- 1.“Future Trends in Topology and its Applications” PSGR Krishnammal College for women, Coimbatore (UGC Sponsored National Seminar) on 07. 08. 2019 to 08. 08. 2019
- 2.Exploration of Research innovations its Trends and challenges, “ICSSR-Sponsored One day National Level Symposium” organized by IQAC of Nirmala College for Women, 10.01.2020 -11. 01. 2020.

12) Participation in Workshop

- Workshop on “Outcome based education “ Organized by IQAC on 24.03.2018 at Nirmala College.

13).Participation in Seminar

- UGC Sponsored Seminar on”Plagiarism detection tools and techniques” on 21.10.2017 at GVG College ,Udumalpet

14) Participation in Orientation Programme/ Induction Programme/ Short term Courses

- Attended 28 days 92nd Orientation Programme at Madras University HRDC from 03.11.2009 to 30.11.2009
- Attended 14 days Refresher Course in Mathematics Madras University HRDC from 11.11.2011 to 01.12.2011
- Attended 14 days Refresher Course in Mathematics Madurai Kamaraj University HRDC from 08.12.2020 to 23.12.2020.

15) Conference/ Seminar/ Workshop Organized

- Organized National Seminar on “Echo of Mathematics” on 12.02.2016.
- Organized One day seminar on “Fundamentals on Complex Analysis” on 10.10.2017.
- Organized Symposium on Analysis, on 06.12.2017.

- Organized A one day National Seminar “Trends and Challenges in Mathematical Modelling”, on 05.01.2018.
- Organized Symposium on Algebra, on 10.02.2018.
- Organized One day seminar on “Differential Equations” on 01.03.2018.
- Organized One day Symposium on Analysis, on 01.02.2019.
- Organized A one day National Seminar “Recent Trends in Graph Theory (RTGT 2019)”, on 21.02.2019.
- Organized National Seminar -a New Cognitive Approach to real life problems via Mathematics on 05.12.2019.
- Organized Symposium on Analysis on 27.02.2020.
- Organized One day Lecture Workshop on Differential Equations on 02.02.2019.
- Organized Lecture workshop on Complex Analysis on 02.03.2019.
- Organized Three days webinar on “Breaking Barriers through Brains” from 18.5.2020-20.05.2020

16) Participation in Faculty Development Programme

- 1.Participated in the Faculty Development Program on Environment Audit of Infrastructure,Extension Activity and Institutional Social Responsibility organized by IQAC,Nirmala College for Women on 30th october 2015
- 2.Participated in the Faculty Enrichment Program on Internet of things conducted by the Department of C.Sc,IT and BCA,Nirmala College for women on 24.02.2018
- 3.Participated in the Faculty Enrichment Program on Photoshop conducted by the Department of C.Sc,IT and BCA,Nirmala College for womenfrom 21.03.2018 – 22.03.2018
4. Participated in the five days online certificate course and assessment on “Strategies to address the soft skill gap” oorganized by International Journal of Advance Study and Research work from 27.04.2020-01.05.2020

5. Participated in the Online FDP on Educational Analytics conducted by School of Management, Kristu Jayanthi College, Bengaluru from 02.05.2020 to 09.05.2020
6. Participated in the Faculty Development Programme on Data science conducted by E & ICT Academy, IIT, Kanpur from 28.06.2021 to 03.07.2021
7. Participated in the Faculty Development Programme on LaTeX from 17.06.2020 to 21.06.2020 organized by Nirmala College for Women, Coimbatore.
8. Participated in the One Week FDP Workshop on e-content Skill Development Organized by Department of Mathematics, Coimbatore from 14.06.2021-19.06.2021
9. Participated in the Faculty Development Programme on Datascience conducted by E & ICT Academy, IIT, Kanpur from 28.06.2021 to 03.07.2021
10. Participated in the ten day National Level Virtual Faculty Development Program on Indian Knowledge System on the topic unveiling the Treasures – Vedic Mathematics organized by KG College of Arts and Science, Coimbatore from 20.05.2024 –31.05.2024
11. Participated in the Faculty Development Program on R Programming for Budding Data Analyst organized by Research Foundation of India and RFI-Care from 09.06.2024-18.06.2024
12. Participated in the one week Virtual Faculty Development Program on Transforming Education with Artificial Intelligence :A Faculty Development Journey organized by KG Collge of Arts and Science, Coimbatore from 22.07.2024 –26.07.2024