

## STAFF PROFILE



- 1) Name : Dr. F. Nirmala Irudayam
- 2) Designation : Assistant Professor
- 3) Department : Mathematics
- 4) Qualification : M.Sc, M.Phil, Ph.D
- 5) Experience : Teaching : 18                      Research : 10
- 6) Area of Specialization (s) : Topology
- 7) E-mail : nirmalairudayam@ymail.com
- 8) Academic Qualifications : M.Sc, M.Phil, Ph.D
- 9) Additional Qualifications :

Diploma/ Vocational/ Certification	Area of Specialization	Institution/ University/ Agency Name	Year
PGDCA		Bharathiar University	2010
E Content Development and MOOC course (Short term course)		UGC Human Resource Development Bharathiar University	04.12.2019- 10.12.2019

### 10) Research Guidance

Programme	No. of Scholars	
	Completed	Pursuing
Ph. D.	1	4
M. Phil.	3	-

### 11) Research Publications

#### International

- 1) F. Nirmala Irudayam and Sr.I Arokiarani, "On  $\tau_p^+g$  closed sets,  $\tau_p^+g$  regular and  $\tau_p^+g$  normal spaces", International journal of mathematical archive, (2011),2(8),1405-1410, ISBN (2249-9954)
- 2) F. Nirmala Irudayam and Sr.I Arokiarani, "On  $\Omega_p$  and  $\omega_p$  sets and maps in Cech closure spaces", Antarctica Journal of Mathematics, (2011),8(3), 179-189.

- 3) F. Nirmala Irudayam and Sr.I Arokiarani, "On  $\tau_{\beta}^{+g}$  closed sets and  $\tau_{\beta}^{+g}$  regular spaces", International Journal of Advanced Scientific and Technical Research, (2012) 2(1), 41-51.
- 4) F. Nirmala Irudayam and Sr.I Arokiarani, "A note on the weaker form of bI sets and its generalization on SEITS", International Journal of Computer Application, (2012),2(4), 42-54. ISBN 2250-1797.
- 5) F. Nirmala Irudayam, Noiri T., and Sr. I Arokiarani , "On some topologies induced by bI open sets in simple extension ideal topology", International Journal of Mathematical Archive,(2013), 4(1), 130-135,
- 6) F. Nirmala Irudayam and Sr.I Arokiarani, "On fuzzy bI<sup>+</sup> sets and its continuous functions", International Journal of Mathematical Archive, (2013), 4(4), 170-178.
- 7) F. Nirmala Irudayam and Sr.I Arokiarani, "A note on various mappings in simple extension topology", Asian Journal of Current Engineering and Maths,(2013), 2(3), 201-204.
- 8) F. Nirmala Irudayam and Sr. I. Arokiarani, "Pre-generalized closed maps and homeomorphisms in extended topological spaces", International Journal of Innovative Research in Science, Engineering and Technology, (2015) ,vol 4 issue 12,11806-11812.
- 9) F.Nirmala Irudayam and Kanchana B., "New forms of continuous and closed maps via b-open sets in SETS ", International Journal of Applied Research, (2016),2(9), 436-442.
- 10) F. Nirmala Irudayam and Kanchana B., "On a weaker form of b-open sets in extended topological spaces", International Journal of Innovative Research in Science, Engineering and Technology, (2016), Vol.5, Issue.5, 6919-6926.
- 11) F. Nirmala Irudayam and Kanchana B., "On the generalization of \*+ b sets in simple extended topological spaces", International Journal of Innovative Research in Science, Engineering and Technology, (2016), Vol.5, Issue.5, 7107-7114.
- 12) F. Nirmala Irudayam, "A novel form of  $\pi_{gb}$ -closed sets in extended topological spaces, International Journal of Innovative Research in Science, Engineering and Technology", (2016),Vol.5, Issue.5, ,8668-8675.
- 13) F. Nirmala Irudayam and Reena S, "A new Weaker form of  $\pi_{gb}$ -continuity", International Journal of Innovative Research in Science, Engineering and Technology,(2016),Vol.5, Issue.5, 8676-8682.
- 14) F. Nirmala Irudayam,  $\tau^{**}$  generalized closed sets in simple extended topological spaces, Elixir Applied Math International Journal. 96 (2016) ,41563-41566

- 15) F. Nirmala Irudayam and Kanchana B., "On generalized  $*_+ b$ -continuous and irresolute maps", International Journal of Engineering Science and Computing,( 2016),Vol.6, Issue.7, 1667-1671.
- 16) F. Nirmala Irudayam and Madhumathi T, "On  $\Omega_{gb}^+$  and  $\bar{O}_{gb}^+$  sets in simple Extension Ideal topological spaces", Mathematical Sciences International Research Journal,(2016) Vol 5, Issue 2,187-190.
- 17) F. Nirmala Irudayam and Kanchana B., " A new class of contra continuous Functions via b-open sets in SETS", International Journal of Science and Research, (2016),Vol.5, Issue.8, 1240-1245.
- 18) F. Nirmala Irudayam and Vaiyomathi, "A New Form of infra open Sets in infra topological space", International conference on Mathematics and computer science ICMCS 2016 ,Vol 5, Issue 2, Page No. 191 -194 .
- 19) F. Nirmala Irudayam and Vaiyomathi, "A New Form of b-open Sets in infra topological space", Mathematical Sciences International Research Journal,(2016) ,5(2) , 191-194.
- 20) F. Nirmala Irudayam and T. Madhumathi, On  $\Omega_{gb}^+$ -closed sets in simple extension topological spaces, "Elixir Appl.Math.(2017),105,46305-46307.
- 21) F. Nirmala Irudayam and Madhumathi T, "On certain forms of contra continuity in simple extension topological spaces", International Journal of Applied Research,(2017),3(5),1117-1122.
- 22) F. Nirmala Irudayam and Anitha Cruz , "Neutrosophic soft cubic set, International journal of mathematics trends and technology",(2017 ),46(2) , 88-94.
- 23) F. Nirmala Irudayam and Anitha Cruz, "More on P-union and P-intersection of neutrosophic soft cubic set", Neutrosophic Sets and System ,(2017) ,17, 74-87.
- 24) F. Nirmala Irudayam and Vaiyomathi, "Infra generalized b-closed sets in infra topological space, International Journal of Mathematics Trends and Technology, (2017),47(1) ,56-65.
- 25) F. Nirmala Irudayam and Vaiyomathi, "Infra generalized b-continuous functions in infra topological space, International Journal of Engineering Science and Computing, (2017), 7(7),14087-14090.
- 26) F. Nirmala Irudayam and Madhumathi T, "Different forms of  $\Omega_{gb} + -$  continuity in simple extension topological spaces", International Journal for Research Trends and Innovation, (2017),volume 2, Issue 10 , 82-87.
- 27) F. Nirmala Irudayam and Anitha Cruz, "More on R-union and R-intersection of neutrosophic soft cubic set", Mathematics Journal of Interdisciplinary Sciences,( 2018)6(2), 93-117.
- 28) F. Nirmala Irudayam and S.Vinnarasi , "Various distance measures on Pythagorean

- vague sets”, International Journal of Scientific Research in Mathematical and Statistical Sciences, (2018),vol 5, Issue 6, 244-247.
- 29) F. Nirmala Irudayam and Vaiyomathi .K, “A basic structure of nearly open sets in neutrosophic crisp infra topological space”, International Conference on Computing science, ICCS 2018, pg no 143 - 149
  - 30) F. Nirmala Irudayam and Anitha Cruz, “Neutrosophic soft cubic set on BCK/BCI Algebra”, Elixir international Journal, (2018),117, 50360-50369.
  - 31) F. Nirmala Irudayam and Anitha Cruz, “Neutrosophic soft cubic topological space”, Neutrosophic Sets and System, (2018),23, 23-44.
  - 32) F. Nirmala Irudayam and T. Madhumathi, “On neutrosophic orbit co-kernal spaces”, International Journal of Research and Analytical Reviews, (2019),Vol 6, Issue 1, 903-910.
  - 33) F.Nirmala Irudayam and T. Madhumathi, “Neutrosophic pre-open set in simple extended neutrosophic topology”, International Journal of Research in Advent Technology, ( 2019),Vol.7, No. 4, 383-388.
  - 34) F Nirmala Irudayam and Vaiyomathi, “Neutrosophic Infra semi closed sets in Neutrosophic infra topological spaces”, International journal of Analytical and experimental modal analysis, ( 2019) ,Vol XI, Issue X, 2871- 2876.
  - 35) F Nirmala Irudayam and Diana, “ Intuitionistic fuzzy orbit topological spaces”, Infokara research Journal,(2019) ,Vol XI, Issue I , 251- 266.
  - 36) F Nirmala Irudayam and Sneha” Pythagorean Neutrosophic b-open sets and semi-open sets in Pythagorean Neutrosophic topology” Infokara research Journal, (2019)Vol XI, Issue I ,860- 872.
  - 37) F.Nirmala Irudayam and Elekiah ,”Neutrosophic generalised  $b^+$  closed sets in simple extended neutrosophic topological spaces”, Infokara research journal, (2019),Vol XI, Issue I , 725- 735.
  - 38) F Nirmala Irudayam and Vaiyomathi, “A characterization of neutrosophic infra b open sets in neutrosophic infra topological spaces”, International Journal of Scientific Research and Review ,Vol 8 ,Issue 4, 548-556.
  - 39) F Nirmala Irudayam , Madhumathi and F.Smarandache , ” A Note on Neutrosophic Chaotic Continuous Function “ ,Neutrosophic Sets and Systems ,(2019)Vol 25,Pg No.76-84.
  - 40) F Nirmala Irudayam and Vaiyomathi, ”On Neutrosophic infra generalized closed sets in Neutrosophic topological Spaces”,Alochanan Chakra Journal,2020,Vol IX,Issue VIII,PP 467-475.

- 41) F Nirmala Irudayam, "Applications of a new form of  $\beta$  open sets in simple extension topological Space" *Strad Research Journal*, (2020), Vol 7, Issue 8, 452-463
- 42) F Nirmala Irudayam, S.P.Priyadharshini and F.Smarandache, "Plithogenic Cubic sets" , *International Journal of Neutrosophic Science* ,(2020), Vol 11, No 1, PP30-38.
- 43) F Nirmala Irudayam, S.P.Priyadharshini, "A novel Approach of Refined plithogenic neutrosophic sets in Multi criteria decision making" *International research journal of Modernization in Engineering Technology and Science* , (2021) Vol 3, Issue 4, pp. 407-412

### Proceedings:

- 1) F. Nirmala Irudayam and Anitha Cruz, "Applications of Neutrosophic soft cubic set", *Nirmala Annual research congress 2017*.
- 2) F. Nirmala Irudayam and Vaiyomathi.K, "Characterizations of infra  $\beta$ -separations axioms in infra topological space", *Nirmala Annual research congress ,2017*, pg no 162-167.
- 3) F. Nirmala Irudayam and Madhumathi. T, "Application of neutrosophic chaotic continuous function", *Nirmala Annual Research Congress, 2018*, pp-168, 2017
- 4) T. Madhumathi ,F. Nirmala Irudayam,"  $\beta$ -Regular and Normal Spaces in Simple Extension Topological Spaces, *Nirmala Annual Research Congress, 2018*. pp-173,2017.
- 5) F. Nirmala Irudayam and Vaiyomathi.K, "New forms of neutrosophic infra open sets in neutrosophic infra topological spaces", *Nirmala Annual research congress 2018*, pg no 108-115.
- 6) M.Gokilalakshmi, F.Nirmala Irudayam," A New Form of  $\beta$ -closed sets in Simple Extended Ideal Topological Spaces" pp-100,2018
- 7) S.Vinnarasi,, F.Nirmala Irudayam ," A study on difference measures between Pythagorean vague sets", pp-116,2018
- 8) F Nirmala Irudayam and Diana, "Intuitionistic fuzzy orbit\* continuous mapping ", *Nirmala Annual Research Congress ,2019*,
- 9) F Nirmala Irudayam and Elekiah ," On Neutrosophic  $\beta$  + open and  $\beta$ + closed sets in simple extended neutrosophic topological spaces", *Nirmala Annual research congress 2019*, ISBN NO 978-93-5391-196-6 , 211-217
- 10) F Nirmala Irudayam and Lavanya ," On generalised  $\beta$ + closed sets in Vague topological spaces", *Nirmala Annual Research Congress 2019*, ISBN NO 978-93-5391-196-6 , 142-146.

- 11) F Nirmala Irudayam and Sneha” Pythagorean Neutrosophic topological Spaces ”  
Nirmala Annual Research Congress, 2019, ISBN NO 978-93-5391-196-6 ,PP 189-196.

## **12) Book Publications**

1. F Nirmala Irudayam and Vaiyomathi,” Bipolar Neutrosophic Cubic Graphs and its Applications” (BOOK CHAPTER) Advanced Applications of Graph Theory in Modern Society, IGI Publishers ,ISBN 13:9781522593805(2019)

## **13) Participation in Conference**

- 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) 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

## **14) Participation in Seminar**

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

## **15) Participation in Workshop:**

- 1) Workshop on “E Content Development and MOOC course” Conducted by UGC Human Resource Development Bharathiar University from 04.12.2019 to 10.12.2019.
- 2) Workshop on “Patent Search and analytics” on 22-05-2020 Conducted by ”Internal Quality Assurance Cell”.
- 3) Workshop on Mathematical Analysis held from 08.06.2020 to 13.07.2020 conducted by Loyola College, Chennai.

## **16) Participation in Orientation Programme/ Induction Programme/ Short term**

### **Courses**

- 118<sup>th</sup> Orientation Programme conducted by Bharathiar University from 17.11.2017-14.12.2017
- R - SWAYAM Tutorial (IIT Bombay), Conducted by Sri Ramakrishna College of Arts and Science (Autonomous), Coimbatore in Jan 2020.

- Online Training Program on “E learning through Powerpoint ” conducted by Vivekanandha College of Arts and Science, Nammakal on 26.05.2020.
- Course on COGNITIVE PSYCHOLOGY conducted by Anugraha Capuchin Institute of Counselling, Psychotherapy & Research, Dindugal. From 29.06.2020 to 03.07.2020.
- Short term course on “MATLAB and MATHEMATICA for Scientific Research” conducted by Arul Anandar College, Karumathur from 27.07.2020 to 29.07.2020.
- Attended 14 days Refresher Course in Mathematical Sciences at HRDC ,Punjab University from 15. 01. 2021 to 28. 01. 2021

### **17) Participation in Faculty Development Programme**

- FDP on” Internet of Things” on 24.02.2018 at Nirmala college
- FDP ”Photoshop” on 22.03.2018 and 23.08.2018 at Nirmala College
- FDP on “National level Faculty development program on Online College Management and Content creation tool” organised by BMM & BAMMC Department of Lala Lajpat Rai College of Commerce and Economics and University of Mumbai with North Storm Academy from 30-04-2020 to 02-05-2020.
- National Level online Interdisciplinary Faculty Development Program on "Inclusive Indian Tradition for a Holistic Global Education" PSGR Krishnammal College for Women, Coimbatore 03-05-2020 09-05-2020
- One Week Online International Faculty Development Program on "Recent Advances in Mathematics and Statistics" Department of Mathematics, Institute of science and Center for Learning and Sustainibility, GITAM (Deemed to be University) Visakhapatnam, Andhra Padesh 03-08-2020 08-08-2020
- One Week FDP on ” Empowering Teachers for smart teaching”, St.Joseph's PU College, Bengaluru from 05.05.2020 to 11.05.2020
- One week online FDP on”Open Source tools for Research“ Ramanujan College (MHRD) ,University of Delhi, from 08.06.2020 to 14.07.2020
- One day FDP on “Fuzzy Sets and Systems” conducted by Patrician College of Arts and Science, Chennai. from 16.05.2020 to 16.05.2020

- One week International FDP on “Recent Trends in Computer Science” Thiruvalluvar University, Model Constituent College, Titaguddi, Cuddalore from 22.7.2020 to 28.07.2020
- Five Day FDP on “Evolution from offline to Online Teaching” organised jointly by Satish Pradhan Dnyanasadhana College, Thane and Microsoft from 30.05.2020 To 03.06.2020
- FDP on “The Future Technology: Artificial Intelligence”, Kings Engineering College, Irungattukottai, Sriperumbudur, Chennai from 24.05.2021-28.05.2021

### **18) Conference/ Seminar/ Workshop Organized**

- Organized National Seminar on “Echo of Mathematics” on 12.02.2016.
- Organized an International Conference on Mathematics and Computer Science from 15.12.2016 to 18.12.2016
- 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 Lecture workshop on Complex Analysis on 02.03.2019.
- Organized Symposium on Analysis on 27.02.2020.
- Organized One day Lecture Workshop on Differential Equations on 02.02.2019
- Organised Three days webinar on “Breaking Barriers through Brains” from 18.5.2020-20.05.2020
- Organised a webinar on “Health and Hygiene” on 02.06.2021
- Organised a 15 day certificate course on “Astronomy” from 22.09.2021-12.10.2021
- Organized a Hands on training on “Geogebra” on 09.11.2021

### **19) Invited Speaker/ Session Chair – Conference/ Seminar/ Workshop**



- Delivered a guest lecture in a webinar conducted by PSG college of Arts and science,,Coimbatore on “A Fascinating Dimension of Fractals” on 19.07.2021

## **20) Membership in Professional Bodies**

- Life Member of the Ramanujan Mathematical Society from 2021 onwards.