

**Name** : Dr. Manimekalai S

**Designation** : Associate Professor

**Department** : Mathematics

**Qualification** : M.Sc., MBA., M.Phil., Ph.D

**Experience** : Teaching:15 Years Industry: 3 Years

Research: 3

**Area of Specialization(s)** : Graph Theory

**Email (Official ID)** : manimekalai@drngpasc.ac.in



#### Academic Qualifications

Degree	Branch	Institution / University Name	Year of Graduation
Ph.D.	Mathematics	Nirmala College for Women Coimbatore	2021
M.Phil.	Mathematics	Alagappa University. Karaikudi	2005
MBA	HRM	Alagappa University	2011
M.Sc	Mathematics	Maharaja College of arts and Science Perundurai.	2004
B.Sc	Mathematics	LRG Govt College,Tirupur	2002

#### Additional Qualifications

Diploma / Vocational / Certification	Area of Specialization	Institution / University / Agency Name	Year
Online Certification	Advanced Graph Theory	NPTEL	2018
Online Certification	Machine learning with Python	IBM	2020
Online Certification	Introduction to cloud	IBM	2020
Online Certification	Python 101 for Data Science	IBM	2020
Online Certification	Blockchain essentials	IBM	2020
Online course	Stress Management	AVS college of arts and science college, Salem	2020
Online course	Java	IIT Mumbai	2020

Online Course	Python	IIT Mumbai	2020
Online Course	LATEX	IIT Mumbai	2020
Online course	Online Teaching Methods	Farook Institute of Management Studies	2020
Certificate of completion	Applications of graph coloring and its algorithm	Infinity Education Solutions	2020
Certificate of appreciation	Social Awareness Campaign	Imperial college of Engineering and research, Pune	2020
Certification	Leadership Talk	MHRD	2020
Certificate of appreciation	Yoga Asanas and its Concepts	TJS Engineering College	2020
One week Training	One week Training 27 <sup>th</sup> July -1 <sup>st</sup> Aug2020	AICTE Sagar Institute of research and technology	2020
MOOC Online course	Inspiring and motivating individuals	University of Michigan Coursera	2020
MOOC Online course	Introduction to public speaking	University of Washington Coursera	2020
MOOC Online course	Introduction to Psychology	Yale University Coursera	2020
MOOC Online course	Qualitative research Methods	University of Amsterdam Coursera	2020
MOOC Online course	Introduction to Virtual reality	University of London	2020

		Coursera	
The Guinness word record event	Most users to take computer programming lesson in 24 hours	GUVI, National Educational Alliance for Technology	24-25 Apr 2021
Certificate of appreciation	Ethic and Responsibilities of Peer Reviewer	Elsevier research Academy	Oct 2021
Certificate of appreciation	Building Trust and engagement in Peer Review	Elsevier research Academy	2021
Certificate of appreciation	How to build empathy in Research	Elsevier research Academy	2021
Certificate of appreciation	How to prepare proposal for review article	Elsevier research Academy	19.10.2021
Certificate of Completion	How to Manage and Publish your Research data	Elsevier research Academy	19.02.2022
Certificate of Completion	Basics of Python	Infosys Spring board	03.11.2022
Certificate of Completion	Expert Insights on Time Management	Infosys Spring board	09.11.2022
Certificate of Completion	Introduction to Data Science	Infosys Spring board	21.11.2022
Certificate of Completion	Data Structures & Algorithms in Python: Fundamental Data Structures	Infosys Spring board	22.11.2022
Course Completion	Spring MVC	Infosys Spring Board	19.01.23
Course Completion	Database Management system part I	Infosys Spring Board	19.01.23
Online Certification	Advance course in Psychology	NPTEL	2023
Online Certification	Physics I & II	Infosys Spring Board	16.10.2023

Online Certification	Big Data 301	Infosys Spring Board	02.01.2025
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#### Research Guidance

Programme	No. of Scholars	
	Completed	Pursuing
Ph. D.	-	1

#### Research Publications (Indexed)

##### International

1. Dr. Manimekalai and M. Sandhya **Descriptors of lattices for nano particles using Python program**, AIP Conference Proceedings, Aug 2023, AIP Conf. Proc. 2852, 030001 (2023) <https://doi.org/10.1063/5.0164532>, . 978-0-7354-4626-7
2. Dr. Manimekalai, R.Ashwini, Amarendra Alluri S , **Automated Short Term Load Prediction in Power Systems using Collision Bodies Optimization with MultiHead Deep Learning Model**, IEEE Xplore, Special issue, Jan 2023, (WoS/Scopus/ESCI)(dOI: 10.1109/ICIRCA54612.2022.9985637)
3. Dr. Manimekalai S, Dr.C.Sharanya , Ms. Saniya Bhalerao , Javangula vamsinath **Mathematical Descriptors For Drug Design Using Python Program**, Journal of Pharmaceutical Negative Results, Volume 13 , Issue 9, Dec 2022 (WoS/Scopus/ESCI)(DOI: 10.47750/pnr.2022.13.S09.484)
4. Manimekalai.S. U.Mary, **Molecular Descriptors of lattices using python Program**, Jouranl of Fundamental and Comparative Research, Volume VII No 11(1), ISSN:2277 -7067, 2021
5. Dr. B.Leelavathi, Dr.Manimekalai.S. DR.D.Maheshwari, **A recent study on Molecular descriptors and deep learning perceptive in malware detection**, International Journal of multidisciplinary Educational research ,Volume 10(4),April 2021
6. Manimekalai.S. U.Mary, **Molecular descriptors of dodecagonal network with Python program and bounds based on new parameters for some topological indices**, American Institute of Physics Conference Proceedings,Volume 2261(1), ISSN:1551-7616, Oct 2020(Web of Science/ISI/Scopus Indexed)
7. Manimekalai.S. U.Mary, **Computation of Eccentricity associated topological descriptors through Python for Comb tree**, International Journal of Physics

Conference Series ,Volume 1597, ISSN:1742-6596(012019) ,Page:1-9, Aug 2020(ISI/Scopus Indexed)

8. Manimekalai S, Mary U, **On some neighbourhood eccentricity sum based indices**, NOVYIMIR research journal(International), Volume 5, Issue 8, August 2020. 75-86, ISSN:0130-7673(UGC Care Approved, Web of Science)
9. Manimekalai S, Mary U, **On molecular descriptors with Python of fullerene**, The international journal of Analytical and Experimental Modal Analysis, 11(12), 1791-1805, Dec 2019. ISSN: 0886-9367.(UGC CARE List)
10. Manimekalai S, Mary U, **Neighborhood degree based index for graph operations related to composition**, International journal of recent technology and Engineering, 8(4), 8723-8728, Nov 2019.(Scopus Indexed)
11. Manimekalai S, Mary U, Rajam K, **On molecular descriptors with Python of 3D Lattice**, The international journal of Analytical and Experimental Modal Analysis, 11(9), 740-757, Sep 2019. ISSN: 0886-9367. (UGC CARE List)
12. Manimekalai S. U. Mary, **Various Characteristics of Few topological indices for stable graphs**, International Journal of Engineering and Technology, Special issue ,Page:925-927, October 2018(ISI/Scopus Indexed)
13. Manimekalai S. U. Mary, **Computation of Total Eccentricity using Python Program**, **International Journal of Physics Conference Series** ,Volume 1139, ISSN:1742-6596(012070) ,Page:1-7, December 2018(ISI/Scopus Indexed)
14. Manimekalai S. U. Mary, M. Lavanaya, **Computation of Topological Indices using Python for Chemical Graph structure**, **International Journal of Physics Conference Series**, Volume 1139(012060), ISSN:1742-6596, December 2018(ISI/Scopus Indexed)
15. Manimekalai S. U. Mary, **Numerical Computation of Wiener Index for Bridge molecular structure in medicines**, International Journal of Advanced Research Trends in Engineering and Technology, Volume:5 Issue 12, Page:457-460, April 2018, ISSN:2394-3777.(UGC Approved)
16. Manimekalai S. U. Mary, **Computation of Zagreb Index for Complex Graph Theory**, International Journal of Creative Research Thoughts, Volume 6, Issue 2, Page:262-264, April 2018, ISSN:2320-2882 (UGC Approved)

17. Manimekalai.S. U.Mary, P.Yuvarani, **Characterization of the Wiener Index for Trees and Connected Graphs G with Equal Domination and a Cyclic Domination Number  $r(G) = r_a(G)$  Complement of Graphs**, International journal of pure and Applied Mathematics, Volume 117, ISSN challenges:1314-3395, ISSN:1311-8080., Page 441-446., December 2017, ISSN No 12, SCOPUS indexed 13118080
18. Manimekalai.S, M.Revathy, Gokilamani.S, **An advanced Method for solving fuzzy transportation problem with Minimum cost using Robust Ranking Techniques**, International Journal of Science and Research, Volume.4, Issue 4, ISSN:2319-7094, April 2015 (UGC Approved).
19. Manimekalai.S. Gokilamani.S, Anandhi.R, **Friendship two-graphs in Route Mapping Technology**, International Journal of Scientific Engineering and Research, Volume 2, Issue 9, ISSN:2347-3878, September 2014 (UGC Approved)
20. Manimekalai.S. Anandhi.R, **Advanced Techniques in Fuzzy  $\mu$ -open sets for Scientific Research**, IJSER, Vol.4, Issue 7, ISSN:2229-5518, June 2013 (UGC Approved)
21. Manimekalai.S. Anandhi.R, **Generalized  $\gamma$ -axiom for Advanced Engineering Applications**, IJERT, Vol.1, Issue 5, ISSN:2278-0181, Page:1-6, July 2012 (ELSEVIER SSRN)

#### National

22. Rajam K, Mary U, Manimekalai S, **Computation of Zagreb indices of Cationic Detrimer**, Journal of Information and Computational Science, 9(10), Oct 2019. (UGC CARE List)
23. Manimekalai.S. Gokilamani.S, Revathy.M, Anandhi.R, **Using Pde Mathematical Model for Airodynamics of Lifting Surfaces in Non – Uniform Motion**, International Journal of Science Research and Management, Volume 3, Issue:12, ISSN:2321-3418, page 3798 to 3805 Issue 12, December 2015 (UGC)

#### Book Publications

1. Book Chapter “Unlocking the Potential of Graph Theory in the Pharmaceutical Industry and AI”, *Interdisciplinary Insights: Exploring Diverse Academic Disciplines*, ISBN: 978-81-984077-9-5, Page: 99-110
2. Book Chapter “Graph-Theoretic Approaches to Optimizing Connectivity and Security in Ubiquitous Healthcare Systems”, *Ubiquitous Computing and Technological Innovation*

for Universal Health care, DOI: 10.4018/979-8-3693-2268-0.ch015, IGI Global Publishers, Page No: 327-351

3. Edited book “Paradigms of Fuzzy Mathematics and Computer Science”, Viruthunagar Hindu Nadar College, ISBN NO:978-81-967593-0-8, June 2024.
4. Book Chapter “predict biological and chemical properties of molecules in drug industry using index” in Paradigms of Fuzzy Mathematics and Computer Science, ISBN NO:978-81-967593-0-8 Page No:145-161, June 2024
5. Editor, Proceedings of Recent advancements in pure and Applied Mathematics, ISBN-978-81-971000-1-7 20<sup>th</sup> April 2024
6. Editor, Proceedings of Emerging trends in Physical Science and Mathematics, ISBN-978-81-962322-8-3 12<sup>th</sup> April 2023
7. Book Chapter “**Computation of Molecular Descriptors for Chemical Graph Structure Using Python**” in Theory and Practice of Mathematics and Computer Science, S.Manimekalai, Book Publishers International, 2021, ISBN 978-93-90888-20-7 (Print), ISBN 978-93-90888-28-3 (eBook), DOI: 10.9734/bpi/tpmcs/v9.
8. **Business Mathematics and Statistics**, R.Sowrirajan and S.Manimekalai, McGraw Hill Education India Pvt Ltd., Indian Branch, 2019, ISBN:93-5316-848-1

#### **Presentations in Conference**

1. **Enhancing Network Performance Through Graph theory Applications**, CSIR & TNSCST Sponsored International Conference on Applied Mathematics and Computing, Kongu Engineering College, 21<sup>st</sup> and 22<sup>nd</sup> Feb 2025.
2. **Application of Quantum Algorithm for the Dominating Set problem in Mobile Networks**, CSIR Sponsored National Seminar, PSG CAS, 13<sup>th</sup> and 14<sup>th</sup> Feb 2025.
3. **Centrality Measures for Biological Properties of Micro Organism** International Conference on Modeling Strategies in Mathematics, Nirmala College for Women 22<sup>nd</sup> & 23<sup>rd</sup> Oct 2024.
4. **Computing Biological and Chemical properties of Molecules using Topological Indices**, International conference in Science and Social Sciences, Pattaya 06-08 Nov 2023
5. **Predicting drug molecule properties using Mathematical index**, PSG College of Arts and Science college, 24<sup>th</sup> and 25<sup>th</sup> Jan 2023.

6. **Even edge coloring for network applications on International conference**, Nirmala College for Women , 2<sup>nd</sup> -3<sup>rd</sup> Feb 2023
7. **Descriptors of Lattices for Nano Particles using Python Program**, International Conference on Mathematical Techniques and Applications , SRM University, Chennai, 23.03.2022 to 25.03.2022.
8. **Molecular Descriptors of dodecagonal network with Python program and bounded on new parameters for some topological indices**, Bharathiar University , 21<sup>st</sup> and 22<sup>nd</sup> FEB 2020.
9. **The Eigen values for the path P<sub>5</sub>** , National conference on Emerging trends in Mathematics with Computer Applications, Dr.N.G.P. Arts and Science College 12-13 September 2019
10. **Computation of Topological indices for subdivision of C<sub>n</sub> and ring sum operation on graphs using Python Program**, Christ University ,Bangalore, 27-28 Feb 2019
11. **Computation of eccentricity associated topological indices using Python program for Comb tree**, Sri VidhyaMandir Arts and Science College, 29-30 July 2019.
12. **Computation of Wiener Index for Bridge Molecular Graphs**, National conference in the topic of Advances in Applicable Mathematics at P.A. College of Engineering and Technology, Pollachi 24& 25 Jan-2018
13. **General Formula for Numerical of W(G) of Bridge Molecular Graph**, International conference on Current scenario in pure and Applied Mathematics, Kongunadu Arts and Science College on 14& 16 Feb 2018
14. **Computation of Wiener for complex graph Structure**, International seminar on emerging trends in Mathematics ,VIT,Vellore 29 -31 March-2018
15. **Topological index for complex graph structure**, International conference on Applied and computational Mathematics , Erode Arts and Science College, 10 Aug 2018.
16. **Applications of PDE**, National Conference on Recent Advances in Theoretical and Computational Methods for PDE , Dr.N.G.P Arts and Science College, Coimbatore , 6&7 Jan 2017
17. **Applications of Graph theory in Computer Science and Engineering**, National Conference on Recent advances in Mathematics and its applications in Science and Engineering , Dr.N.G.P Arts and Science College, Coimbatore on 3 Feb 2017



18. **Network and its Applications in Graph Theory**, National Conference on Current Scenario in the Application of Mathematical Sciences , Vellalar college for Women , 9 February 2017
19. **Optimization Techniques and its Applications**, National conference at Bharathidasan College of Arts and science, Erode 17 & 18 Aug 2017
20. **Characteristics of Wiener Index For Complement of Graphs** , National seminar Karpagam University, 15 Sep-2017
21. **The Wiener Polynomials and Wiener Index of Graphs under some Graph Operations**, Inter National conference in at Vidya Academy of Science and Technology, Thrissur on 19 & 21 July 2017
22. **Windmill and Friendship Two Graph in Route Mapping**, Inter National Conference on Fuzzy Queing Theory and its Applications at Bharathidasan College of Arts and Science, 03 Sep-2016.
23. **Using PDE for Aerodynamics of lifting surfaces in non uniform motion**, National conference on emerging trends in Mathematical Sciences at KG College of Arts and Science, 20<sup>th</sup> Feb 2016
24. **Applications of Mechanics in Mathematics**, National Seminar on Emerging Trends in Fuzzy and its Applications at Kongu Arts and Science College on 30 Jan 2015 .
25. **Derivation of the Navier-Stokes equation**, SERB (DST) Sponsored International Conference on Mathematical Science and its Computational Applications ,Dr.N.G.P Arts and Science College, Coimbatore ,11<sup>th</sup>& 12<sup>th</sup> Aug 2014.
26. **Fuzzy gp-continous maps in Fuzzy Topological Spaces**, National Level Conference on Mathematical Science and its computational Aspects, Dr.N.G.P Arts and Science College, Coimbatore, 7 Feb- 2013.
27. **Applications of Algebra to Biological Sciences**, National Level Conference on Algebra and Analysis at P.S.G.R. Krishnammal College for Women, Coimbatore during 23&24Aug-2013
28. **An Queue with Bernoulli schedule, general vacation times, Random breakdowns, general delay times and general repair times**, National Level Conference on Optimization Techniques and Decision Making Analysis, Dr.N.G.P Arts and Science College, Coimbatore 25 Sep-2013.

29. **Applications of Fuzzy sets** , State level seminar on Advanced Trends in Mathematical Sciences , Dr.N.G.P Arts and Science College, Coimbatore, 17 Feb-2012.

30. **Higher Education Qualities**, NAAC Sponsered two day state level conference on Achieving Academic Excellence through IQAC, Dr.N.G.P Arts and Science College, Coimbatore , 9&10 Dec-2011

#### **Participation in Conference**

##### **International**

1. A Two days International Conference on Advanced Materials for Emerging Technologies , Sri Ramakrishna mission Vidhyalaya College of Arts and Science, 26<sup>th</sup>- 27<sup>th</sup> April 2021.
2. International Conference on New trends in differential equations and Applied Mathematics, Sri VidhyaMandir Arts and Science College, Krishnagiri 13-12- 2021.

##### **National**

3. Nirmala Annual Research Congress, Nirmala College for Women , 6 Dec-2017
4. National conference on Emerging Trends in Topology and Applications of Analysis, Kongu Arts and Science College, Erode, 10 Feb 2017
5. National Conference on Emerging Trends in Pure and Applied Mathematics, Dr.N.G.P Arts and Science College, Coimbatore, 14 &15 September 2015.
6. National Conference on Emerging education models for 21<sup>st</sup>centuary learner, Association of Principals of colleges of Bharathiar University, 1<sup>st</sup> Aug 2015.
7. National Conference on “Recent Advances in Graph Theory and Its Applications” Kongu Arts and Science College, Erode, 25 Jan-2014 .

#### **Participation in Seminars**

1. Test of Significance by SPSS at Vignan’s Foundation of Science, Technology and Research, 05<sup>th</sup> June 2021.
2. Implementation of Mathematics in Day to Day Life on Diversified Realms , PPG College of Arts and Science, 19.05.2021
3. Research and Innovation Driven, IPR & Patent Filing , Dr.T.Thimmaiah Research and innovation council, 11<sup>th</sup> Nov 2020.
4. One day National level symposium on Exploration of research Innovations: Its trends and challenges, Nirmala college for women on January 11<sup>th</sup> 2020

5. International Seminar in Graph spectra and topological indices, Arignaranna government arts college attur, 4<sup>th</sup> Oct 2019.
6. National Seminar in Recent trends in Graph Theory, Nirmala College for Women, 21<sup>st</sup> Feb 2019.
7. National seminar on New Horizons in Mathematics at Rathinam College of Arts and Science, 03 & 04 Jan 2018.
8. Neoteric Notion in Algebra (NNA), International Symposium at Nandha Arts and College, 21Sep 2016.
9. Placement Readiness organized, Bharathiar University and Dr.N.G.P.Arts and Science College , 10 & 12 Feb 2014

#### **Participation in Workshop**

1. **State level workshop on Advanced LATEX Techniques**, Kamadhenu Arts and Science College, Sathyamangalam, Feb 28 2024
2. **National Workshop on NEP 2020: Opportunities and challenges of HEIs in achieving cross enrollment ratio in creating human resources to the paradigm industry requirements** sponsored by ICSSR, Dr. N. G.P.ASC , 16.02.2024 .
3. **International level technical Symposium** , VIRTIT 2K22 by Bell Institute of Hotel Management & catering technology, 30.05.2022
4. **Two day Workshop on Functional Analysis and Abstract Algebra**, Vellore Institute of Technology, Chennai, 11<sup>th</sup> and 12<sup>th</sup> March 2022
5. **One day workshop on NPTEL E Awareness**, IIT Madras, 06.01.2022.
6. **National level webinar on National Education Policy Vision to action**, Sankara College of Science and Commerce, 31.12.2021.
7. **One day webinar on Role of Machine learning Application today and Tomorrow**, Dr. M.G.R. Educational and Research Institute, 12.11.2021.
8. **One day webinar on Learn Principles of Engineers**, Nehru Institute of Technology, 30.08.2021.
9. **Webinar on Graph Theoretical Concepts in Python Network**, KSG College of Arts and Science, 23.08.2021.

10. **Two days National webinar on Differential Equations and Applications of Mathematics** , Srinivasan College of Arts and Science , 16<sup>th</sup>-17<sup>th</sup> July 2021.
11. **Series of National Webinar**, Christian eminent College and SMT.K.G. Mittal College of Arts and Science, 2<sup>nd</sup> July 2021.
12. **Webinar on Operations research and Applications**,The Oxford College of Engineering, 30<sup>th</sup> June 2021
13. **National Webinar on Application of Statistics in Wildlife Sciences in connection with National Statistic day** , Auro's Degree and PG College , 29<sup>th</sup> June 2021
14. **Virtual workshop on Abstract and Linear Algebra**, Karpagam Academy of Higher Education , 21<sup>st</sup> to 26<sup>th</sup> June 2021
15. **National Workshop on How to write a research paper**, Vellore Institute of Technology , 22<sup>nd</sup> June 2021
16. **Webinar on build a Career in Management (CAT,MAT,XAT)** , Hindustan College of Engineering and technology , 19<sup>th</sup> June 2021
17. **National Level online Workshop on research Methodology** , Christian Eminent College, Indore , 14<sup>th</sup> to 16<sup>th</sup> June 2021
18. **National Webinar on Effective research writing in Mathematics**, Patrician College of Arts and Science ,12<sup>th</sup> June 2021
19. **Webinar on Fractals and their applications in Science and Engineering**, Sri Ram Institute of Technology, 18 June 2021.
20. **Webinar on Cosets and Lagrange's Theorem**,t K.R. College of Arts and Science, Kovilpatti , 09<sup>th</sup> June 2021.
21. **National Webinar on Applications of Graphs in Communication and Social Network**, Vignan's Foundation of Science, Technology and Research, 8<sup>th</sup> June 202.
22. **Six days STTP on Innovative Tools for Mathematics**, Hindustan College of Engineering and Technology, 03<sup>rd</sup> -8<sup>th</sup> May 2021.
23. **Two day virtual workshop on Research and related tools**, CMS College of Science and Commerce, 16-17 April 2021.
24. **Skill Development**, Bharathiar University workshop on "Enhancing the Life Skill of the Research Scholars in Bharathiar University" 27.01.2021- 02.02.2021
25. **Live workshop on Copyrights in India**, Turnip innovations 20<sup>th</sup> Nov 2020.

26. **International workshop on Numerical and Analytical Techniques in Engineering Problems**, SRM Institute of Science and Technology, 12-13 Nov 2020.
27. **One day national webinar on Innovation computational Techniques in Optimization Algorithms**, KSR College of Technology, 10<sup>th</sup> Nov 2020.
28. **Five day Webinar series on Online tools for innovative mathematical education and Research**, KSR College of Technology, Tiruchengode , 27-31, October 2020.
29. **Workshop on Software reliability**, KPR Institute of Engineering and Technology , 08<sup>th</sup> October 2020.
30. **Webinar on Applications of nature inspired optimization techniques for solving real life problems**, KPR Institute of Engineering and Technology, 08<sup>th</sup> October 2020.
31. **Workshop on Data Visualization in R** , MES College, Marampally, 23<sup>rd</sup>-25<sup>th</sup> July 2020.
32. **Lecture Series on Graph Theory and its applications**, MAR Thoma College, 19<sup>th</sup> -21<sup>st</sup> July 2020.
33. **Workshop on Mathematical Models in Applied Science**, PSG College of Technology, 21<sup>st</sup> July 2020.
34. **Webinar on Understanding phrase structure Grammers and Formal Languages with JFLAP Software** by SSKV College of arts and Science, 12<sup>th</sup> July 2020.
35. **Webinar on Introduction to Matlab** by Gobi arts and Science College, 26<sup>th</sup> June 2020.
36. **Webinar on An Introduction to domination in Graph theory** by KG college of Arts and Science, 05<sup>th</sup> June 2020.
37. **Two day Webinar on Distance in Graphs**, KPR Institute of Engineering and Technology , 03<sup>rd</sup> -04<sup>th</sup> June 2020
38. **Mathematical documentation and Computation using online tools**, St.Mary's College, Thoothukudi , 28<sup>th</sup>-30<sup>th</sup> May 2020
39. **Webinar on Importance of Biodiversity for the Welfare of Mankind**, Auro's Degree & PG College , 16<sup>th</sup> May 2020.
40. **Workshop on Applications of graph theory**, Shri Krishnaswamy College for women, Chennai, 15-05-2020.
41. **Webinar on Good teacher to Good teacher**, ICT Academy, 14<sup>th</sup> May 2020.
42. **International Webinar on Lead with emotional intelligence**, Nallamuthu Gounder Mahalingam College, 9<sup>th</sup> May 2020.

43. **One week Workshop on Mathematics for Gate/CSIR**, Shri Narayanaguru college of Arts and Science, 13<sup>th</sup>- 17<sup>th</sup> May 2020.
44. **CSIR Sponsored a Two day National level Workshop on Theoretical and Computational Fluid Dynamics**, Erode Sengunthar Engineering College ,Erode, 21<sup>st</sup> -22<sup>nd</sup> December 2018.
45. **Workshop on Creating Awareness on Menstrual health and Hygiene Management among rural and Tribal Adolescent girls in Pollachi**, Bharathidhasan University arts and Science College, Pollachi, 23 & 24 Feb 2018.
46. **State level Workshop on Applications of Statistical Tools Using R-Language- A Hands on Training**, Dr.N.G.P.Arts and Science College, 23<sup>rd</sup> to 24<sup>th</sup> September 2016
47. **Matlab workshop** , Dr.N.G.P.Arts and Science College, 20<sup>th</sup> December 2012.
48. **Mathematical Software Workshop**, Dr.N.G.P.Arts and Science College , 9<sup>th</sup> to 11<sup>th</sup> January 2014.

#### **Short term courses**

1. Refresher Course Malavia Teachers Training Program “Community Based Curriculum Pedagogy and Research”, IGNTU, Amargantak, 18<sup>th</sup>-31<sup>st</sup> Jan 2025.
2. NEP Orientation and Sensitization Program, Malavia Teachers Training Program, 19<sup>th</sup>-27<sup>th</sup> July 2024.
3. National Centre for Mathematics, Linear Algebra and calculus , Indian Institute of Information Technology Design and Manufacturing Kurnool, 29<sup>th</sup>-3<sup>rd</sup> Aug 2024.
4. Short term course on NAAC Documentation – A Key Insight, Feb 2024(6,13,20,27), IQAC Cluster India
5. Seven days short term course on Design thinking between 04.09.2023-13.09.2023 by Turnip Innovations

#### **Staff Recognition**

1. Resource Person in Seminar at Tiruppur Kumaran College for Women, 14<sup>th</sup> Feb 2024
2. Session Chair in international conference on recent trends in Mathematical Sciences, Pattaya 06-08<sup>th</sup> November 2023.

#### **Participation in Faculty Development Programme**

1. 12 weeks FDP on Advance course in Social Psychology, IIT Karagpoor.

2. Five days FDP on Mathematical Sciences for CSIR- UGC NET Aspirants between , Vellore Institute of Technology, 17.10.2023 to 21.10.2023
3. Recent trends in Mathematics, OP Jindal University, 09<sup>th</sup> October to 13<sup>th</sup> October 2023.
4. Data Science specialization using python, SNS Rajalakshmi College of Arts and Science, 19<sup>th</sup> to 23<sup>rd</sup> June 2023.
5. Outcome based Education faculty development program, Dr.N.G.P. ASC, 17<sup>th</sup> to 21<sup>st</sup> June 2023.
6. UGC Stride sponsored Five days FDP on Environmental Sustainability and Research Ethics, Avinasilingam Institute for Home Science and Higher Education for Women, 14<sup>th</sup> to 18<sup>th</sup> March 2022.
7. Two Days National Level online FDP on Plagiarism in Academic Research and Author Identifiers by Indian Institute of Management and Commerce, 11.04.2022 to 12.04.2022
8. Seven days national level FDP on Fundamentals of research and research methodology, IOT academy, 06.10.2022 to 14.10.2022.
9. One week national level FDP on recent research area and its applications in Mathematics, VELS Tech Multi Tech, 06.10.2022 to 14.10.2022.
10. Ten days Short term professional development programme, Indira Gandhi National Open University, 21-31 December 2022.
11. One week Faculty development Program on Digital Teaching Techniques by ICT Academy.
12. Online 10 days FDP for e-learning content, Scroll Well Ltd, Feb 26<sup>th</sup> to March 7<sup>th</sup>-2021.
13. Seven days International Faculty Development Program at PPG College of Arts and Science, Industrial revolution 4.0: Emerging Trends in Information Technology, 21<sup>st</sup> -28<sup>th</sup> May 2021.
14. One day FDP on IOT in Smart City Applications by Hindusthan College of Engineering and technology, 5<sup>th</sup> June 2021.
15. One day Professional development Program on Solving delay differential Equations using Numerical Methods, Hindusthan College of Engineering and technology, 9<sup>th</sup> June 2021

16. One week online Faculty development Program on MATLAB and its Applications, Dr.N.G.P. Institute of technology, 7<sup>th</sup> to 12<sup>th</sup> June 2021.
17. Online FDP on Research methodology and Pedagogy for Tertiary Education, Dr.N.G.P Arts and Science College, 15-21 June 2021.
18. Six days online Faculty development Program on Research and Application Perspectives of Artificial Intelligence, KPR Institute of Engineering and Technology with Sree Saraswathy Thiagaraja College, 16<sup>th</sup> to 21<sup>st</sup> June 2021.
19. Five days Faculty Development Program on Mathematical Tools, Hindustan College of Engineering and technology, 21<sup>st</sup> to 25<sup>th</sup> June 2021.
20. Six days online Faculty development Program on Application of Mathematics in Science and Technology, Narasu's Sarathy Institute of Technology, 21<sup>st</sup> to 26<sup>th</sup> June 2021.
21. Six days virtual Faculty development Program on Recent Trends in Data Science and Big data Analytics, KG College of Arts and science College, 28.06.2021 to 30.07.2020.
22. Two days virtual Faculty development Program on Teaching and Learning Process through Revised Blooms Taxonomy, Dr.N.G.P. Institute of Engineering and Technology, 1-2 July 2021.
23. Five days International Faculty Development Program on Research and Innovations, SRM Institute of Science and technology, 5<sup>th</sup>-9<sup>th</sup> July 2021
24. Seven days international Faculty development program on Research Methodology & Innovation, PPG College of Arts and Science, 5<sup>th</sup> -12<sup>th</sup> July 2021.
25. Five days International Professional Development Program on Research analysis for Social Sciences, SRM Institute of Science and Technology, 13<sup>th</sup> -17<sup>th</sup> July 2021.
26. Ten days FIP online short term course on Biostatistics and R programming, Rathinavel Subramaniam College of Arts and Science, 09.08.2021 to 19.08.2021.
27. Six days Virtual FDP on Recent Research Advances in Mathematics, St. Joseph College, Chennai, 04.10.2021 – 09.10.2021.
28. Seven days FDP on OBE road ahead to advance educational quality and enhance global mobility, Kongunadu Arts and Science College, 10.11.2021 to 17.11.2021



29. One day FDP on Introduction to Mutual Fund, Dr. N. G. P Arts and Science College, 27.12.2021
30. Online Faculty Development program on JAVA programming, IIT Bombay, January 2020
31. Online Faculty Development program on PYTHON programming, IIT Bombay January 2020
32. Faculty development Program on Quality initiatives in higher education, consortium of colleges, 13<sup>th</sup> –20<sup>th</sup> Apr 2020.
33. Online Faculty Development program on Cyber Forensic, Kalasalingam Academy of research and education, 18 Apr 2020.
34. Online Faculty Development program on Cyber Attack, CMR groups of Institutions , Hyderabad, 19 Apr 2020.
35. Online Faculty Development program on Cyber Security, Vels Institutes of Science Technology, 20 April 2020.
36. Online Faculty Development program on R programming, IIT Bombay, 19<sup>th</sup>-24<sup>th</sup> April 2020.
37. Live Online Faculty Development program on Virtual Teaching,CIT Coimbatore, 29<sup>th</sup> to 30<sup>th</sup> April 2020.
38. Online Faculty Development program on LATEX , AVIT (Group of Vinayaka Missions educational Foundation),20-24 April 2020.
39. Online Faculty Development program on Scilab, AVIT (Group of Vinayaka Missions educational Foundation),20-24 April 2020.
40. Online Faculty Development program on Digital Knowledge,ICT Academy from20-24<sup>th</sup> April 2020.
41. International Faculty Development program on Develop the ability to write research proposal at AIMIT, Bengaluru, 24<sup>th</sup> April 2020.
42. Faculty development Program on Documentation of graph using LaTeX, C Abdul Hakeem College of Engineering and Technology, Chennai,13<sup>th</sup> May 2020.
43. Faculty development Program on Innovative Approaches in Mathematics Series 2, Shree Saraswathi Thiyagaraja College on 13<sup>th</sup> to 14<sup>th</sup> May 2020

44. International Faculty development Program on AI based proctoring in next generation education, Shri Shankarlala Sundarbai Shasun Jain College for Women, Chennai 23<sup>rd</sup> May 2020.
45. Faculty development Program on Mathematical and Statistical modeling, Godavari Institute of Engineering and technology, 26<sup>th</sup>-30<sup>th</sup> May 2020.
46. Live online Faculty development Program on Applications of MOODLE LMS and earning competency of Gnomio Moodle Creation for OBE, Crescent Institute of technology, Chennai, 11<sup>th</sup> -25<sup>th</sup> July 2020
47. Two day international Faculty development Program on Fixed point theory and its applications, St. Joseph's College of Engineering, 08<sup>th</sup> -09<sup>th</sup> Aug 2020.
48. Three day National Faculty development Program on Data visualization In R, MES College Marampally, 23<sup>rd</sup> -25<sup>th</sup> Sep 2020.
49. International Faculty development Program on Fixed point theory, St.Josephs College of Engineering, 08-09<sup>th</sup> July 2020.
50. Faculty Development program on Algebra and Number Theory, Dr. N.G P. Institute of Technology, 18<sup>th</sup> May 2019.
51. Faculty Development program on NAAC revised accreditation frame work and OBE assessment Methodology, Dr.N.G.P. Arts and Science College, May 27-June 02-2019
52. TEQIP-II sponsored Faculty Development Programme on Evaluation and Relative Grading, P.S.G.College of Technology, Coimbatore, 28.12.2013.
53. Faculty Development program on Statistical modeling for Data Analysis, Vivekananda Institute of Management Studies, 18<sup>th</sup> to 19<sup>th</sup> June 2012.

#### Conference / Seminar / Workshop Organized

1. **Organizing Secretary**, National conference on Recent advancements in Pure and Applied Mathematics, Dr. N. G. P. Arts and Science College , 20<sup>th</sup> March 2024.
2. **Organizing committee member**, international conference on recent trends in Mathematical Sciences, Pattaya, 06-08<sup>th</sup> November 2023.
3. **Organizing committee member**, Workshop on Big data analytics in Clinical Lab Technology, Dr.N.G.P. Arts and Science College, 18-19 Mar 2021.

4. **Organizing Coordinator** , Event Management Lecture series in Health and safety Importance while Planning an event, Dr.N.G.P. Arts and Science College 27.05.2021.
5. **Organizing Coordinator** , Event Management Lecture series in Leadership Skills, Dr.N.G.P. Arts and Science College, 31.05.2021.
6. **Organizing Coordinator**, Event Management Lecture series in Personality Traits for successful Event Management, Dr.N.G.P. Arts and Science College 01.06.2021.
7. **Organizing Coordinator**, Event Management Lecture series in Planning and Memory management in an Event , Dr.N.G.P. Arts and Science College, 02.06.2021
8. **Organizing Coordinator** , Event Management Lecture series in Soft Skills for a Great Event Planner , Dr.N.G.P. Arts and Science College, 07.06.2021.
9. **Organizing Coordinator**, Event Management Lecture series in Communication Hashtags, Dr.N.G.P. Arts and Science College, 08.06.2021.
10. **Organizing committee member**, Second international conference on Recent trends in computing Technologies, 28-29 Feb 2020.
11. **Organizing secretary**, National conference Applications of Statistics in Biological Sciences, Dr.N.G.P. Arts and Science College, 07-08 Feb 2019.
12. **Organising member**, National Workshop on Data Analytics and its Applications in Biotechnology, Dr.N.G.P. Arts and Science College, 14-15 Feb 2019
13. **Organizing committee member**, 2<sup>nd</sup> National conference on Emerging trends in Mathematics with Computer Applications, Dr.N.G.P. Arts and Science College, 12-13 September 2019
14. **Organizing secretary** , National conference Stochastic Differential Equations and its applications , 7<sup>th</sup> December **2018**.
15. **Organizing member**, Faculty Development program on Quality measures in Higher education, Dr. N.G.P. Arts and Science College, 3-9 Dec-2018

#### Membership in Professional Bodies

Name of the Professional Body	Nature of membership	Duration
Board of Studies	Chairman	2016-2017

Dr.N.G.P.Arts and Science College		
Board of Studies Dr.N.G.P.Arts and Science College	BoS member	2017-2022
The Association of Mathematics Teachers of India (AMTI)".	Member	Life Time
Yavarum Kelir	Editorial Member	2020-present
Institute of Researchers	Life Member	June 2022- Present

#### Awards / Honors

Awards / Honors	Agency / Institute	Year of Award
Best Personality	Economic Growth foundation	2018
Best Work Paper	Sri Nalla goundar Awards	2020
Best Researcher	International Research Awards on Science Health and Engineering SHEN research Awards	2020
Certificate of excellence in Reviewing	Journal of Pharmaceutical Research International	Since 2021
Reviewer	Arabian Journal of Chemistry	Since Oct 2021
Certificate of excellence in Reviewing	Asian Research Journal of Mathematics	5.05.22
Certificate of excellence in Reviewing	Asian Journal of Mathematics and Computer Research	7.04.22, 26.05.2023
PAVAIASIRIAR	Yavarum kelir	27.03.2022
Research Excellence Award 2022	Institute of researchers	22.06.2022
Reviewer	Asian Journal of Pure and Applied Mathematics	20.08.2022,09.09.2022,19.09.2022
Reviewer	Asian Journal of Cardiology Research	23.08.2022,14.06.2024

Reviewer	Asian Journal of Medicine and Health	18.08.2022
Reviewer	Asian Research journal of Mathematics	08.05.2022,24.09.2022,28.10.2022,30.12.2022,10.08.2023,16.10.2023,13.02.2024,06.09.2024
Reviewer	Journal of Pharmaceutical Research International	01.04.2022
Reviewer	Journal of advances in Medicine and Medical Research	22.12.2022
Reviewer	BP International Book Chapter Reviewer	26.09.2023,09.09.2024
Reviewer	Advances in Mathematics and Computer Science	03.08.2024