

NIRMALA COLLEGE FOR WOMEN (AUTONOMOUS)

COIMBATORE

STAFF PROFILE

NAME : Dr. K. VAIYOMATHI
DESIGNATION : ASSISTANT PROFESSOR
DEPARTMENT : MATHEMATICS(SF)
QUALIFICATION : M.Sc., M.Phil., B.Ed., PGDCA., Ph.D.
EXPERIENCE : 14 Years
AREAS OF SPECIALIZATION : Topology, Graph Theory
E-MAIL : vaiyomathi@gmail.com

ACADEMIC QUALIFICATIONS :

DEGREE	YEAR OF COMPLETION	NAME OF THE INSTITUTION	CLASS
B.Sc Mathematics	2005	Sree Narayana Guru College of Arts and Science	First Class with Distinction
M.Sc Mathematics	2007	Sree Narayana Guru College of Arts and Science	First Class with Distinction
M.Phil Mathematics	2009	Nirmala College for Women	First Class
B.Ed	2014	Kasturi College of Education	First Class with Distinction
Ph.D	2022	Nirmala College for Women	

ADDITIONAL QUALIFICATIONS:

DIPLOMA/ VOCATIONAL/ CERTIFICATION	AREA OF SPECIALIZATION	NAME OF THE INSTITUTION/ UNIVERSITY/ AGENCY	YEAR
PGDCA	Computer Application	Bharathiar University	2018-2019

RESEARCH GUIDANCE:

PROGRAMME	NO. OF SCHOLARS	
	COMPLETED	PURSUING
Ph.D	-	-
M.Phil	2	-

RESEARCH PUBLICATIONS:

INTERNATIONAL:

- [1] Vaiyomathi.K and F. Nirmala Irudayam, "A new forms of infra open sets in infra topological spaces" Mathematical Science international research journal, (2016) Vol 5, issue no 2, pp.191-194, ISSN NO:978-93-84124-93-9.
- [2] Vaiyomathi.K and F. Nirmala Irudayam, "Infra generalized b-closed sets in infra topological spaces", International journal of Mathematics trend and technology (UGC Approved Journal), (2017) Vol-47, issue 1, pp no.56-65, ISSN NO:2231-5373.
- [3] Vaiyomathi.K and F. Nirmala Irudayam," Infra generalized b-continuous functions in infra topological spaces", International journal of Mathematics trend and technology, (2017) Vol-7, issue no-1, pp no.14087-14090,
- [4] Vaiyomathi.K and F. Nirmala Irudayam, "Characterizations of infra b-separation axioms in infra topological spaces" Nirmala Annual research congress, (2017), pp no.162-167, ISBN No:978-93-5279-759-2.
- [5] Vaiyomathi.K and F. Nirmala Irudayam," A Basic structure of nearly open sets in neutrosophic crisp infra topological spaces", Mathematical Sciences international research journal, (2018), Vol-7, issue 2, pp no. 143 ISBN No: 978-93-5321-859-1.
- [6] Vaiyomathi.K and F. Nirmala Irudayam, "A new forms of neutrosophic infra open sets in neutrosophic infra topological spaces" Nirmala Annual research congress. (2018), p.no;108-115, ISBN NO:978-93-5321-859-1.
- [7] Vaiyomathi.K and F. Nirmala Irudayam, "A characterization of neutrosophic infra b-open sets in neutrosophic infra topological spaces", International journal of Scientific research and review (UGC CARE Journal), (2019), Vol-8, issue-4, pp no: 548-556, ISSN No:2279-543X.
- [8] Vaiyomathi.K and F. Nirmala Irudayam, "Bipolar Neutrosophic Cubic Graphs and Its Applications", Advanced Applications of Graph theory in Modern Society, IGI Global publisher of timely knowledge, (BOOK CHAPTER) (2019), ISBN 13:9781522593805
- [9] Vaiyomathi.K and F. Nirmala Irudayam, " Different classes of contra mappings in infra topological spaces", The international journal of Analytical

and Experimental Modal Analysis (UGC CARE Journal),2019, ISSN NO:0886-9367.

- [10] Vaiyomathi.K and F. Nirmala Irudayam, " On Neutrosophic infra generalized closed sets in Neutrosophic infra topological spaces", Alochana Chakra journal (UGC CARE Journal), (2020), Vol. IX, Issue VIII, pp no:467-475, ISSN NO:2231-3990.

PRESENTATIONS IN CONFERENCE:

INTERNATIONAL:

- [1] Vaiyomathi.K and F. Nirmala Irudayam, "A new forms of infra open sets in infra topological spaces" Mathematical Science international research journal, (2016) Vol 5, issue no 2, pp.191-194, ISSN NO:978-93-84124-93-9.
- [2] Vaiyomathi.K and F. Nirmala Irudayam, "Infra generalized b-closed sets in infra topological spaces", International journal of Mathematics trend and technology (UGC Approved Journal), (2017) Vol-47, issue 1, pp no.56-65, ISSN NO:2231-5373.
- [3] Vaiyomathi.K and F. Nirmala Irudayam," Infra generalized b-continuous functions in infra topological spaces", International journal of Mathematics trend and technology, (2017) Vol-7, issue no-1, pp no.14087-14090,
- [4] Vaiyomathi.K and F. Nirmala Irudayam, "Characterizations of infra b-separation axioms in infra topological spaces" Nirmala Annual research congress, (2017), pp no.162-167, ISBN No:978-93-5279-759-2.
- [5] Vaiyomathi.K and F. Nirmala Irudayam," A Basic structure of nearly open sets in neutrosophic crisp infra topological spaces", Mathematical Sciences international research journal, (2018), Vol-7, issue 2, pp no. 143 ISBN No: 978-93-5321-859-1.
- [6] Vaiyomathi.K and F. Nirmala Irudayam, "A new forms of neutrosophic infra open sets in neutrosophic infra topological spaces" Nirmala Annual research congress. (2018), p.no;108-115, ISBN NO:978-93-5321-859-1.

PARTICIPATION IN CONFERENCES:

- [1] Research Based pedagogical tools for teachers of undergraduate colleges, Indian institute of science education and research Pune 10/03/2016 to 12/03/2016
- [2] Plagiarism detection tools and reference management tools, Research cell and faculty development club, Sri G.V.G Visalakshi college for women (Autonomous), Udumalpet, 21/10/2017
- [3] International conference on computing science, Loyola research institute of mathematics and computing science, Loyola college Chennai, 08/01/2018 to 09/01/2018

PARTICIPATION IN WORKSHOPS:

- [1] Attended a workshop on the topic “NEP: Implementation Imperatives for Higher Education System” organized by the Internal Quality Assurance Cell (IQAC) , Nirmala College for Women, Coimbatore-18, under PARAMARSH Scheme on 24.04.2021
- [2] Attended a Virtual Workshop on Academic Publications and Bibliometrics organized by the department of Library, Nirmala College for Women, Coimbatore on 19.05.2021
- [3] Online Workshop on “Moodle Learning Management System” Spoken Tutorial, IIT Bombay, remotely at Hindusthan College of Arts and Science, Coimbatore, Tamilnadu
- [4] Online National Workshop on Basics of Documentation using Latex, Department of Mathematics, Stella Maris College (Autonomous), Chennai, Tamil Nadu, India.
- [5] Online Workshop and One Week National Faculty Development Programme on “Moodle Learning Management System” Spoken Tutorial, IIT Bombay, remotely at Hindusthan College of Arts and Science, Coimbatore, Tamilnadu
- [6] Online National Workshop on “Trends in Cyber Security”, “IQAC and Department of Information Technology” of MCT’s Rajiv Gandhi Institute of Technology, Mumbai

- [7] Online Workshop and National FDP on “Research Methodology and ICT based Teaching and Learning Tools”, Hindusthan College of Arts and Science, Coimbatore, Tamilnadu

PARTICIPATION IN ORIENTATION PROGRAMME/ INDUCTION PROGRAMME/ SHORT TERM COURSES:

- [1] LaTeX & X Fig (In Association with Spoken Tutorial, IIT Bombay) Department of Mathematics, Loyola College of Arts & Science, Namakkal
- [2] LaTeX & Scilab (In Association with Spoken Tutorial, IIT Bombay) Department of Mathematics, D.K.M College for Women, Vellore.
- [3] Moodle learning Management System (In Association with Spoken Tutorial, IIT Bombay) Department of Computer science, Kaypeeyes College of Arts & Science, Kotagiri, The Nilgiris.
- [4] “Webinar on Mathematical Models in Bio-Medical Applications” and Hands on training session on “How to generate E-certificates” Department of Mathematics, Rohini College of Engineering & Technology, Palkulam, Kanyakumari-629401.

PARTICIPATION IN FACULTY DEVELOPMENT PROGRAMMES:

- [1] FDP On LaTeX & X Fig (In Association with Spoken Tutorial, IIT Bombay), Department of Mathematics, Loyola College of Arts & Science, Namakkal 27/04/2020 to 01/05/2020
- [2] FDP On Moodle learning Management System (In Association with Spoken Tutorial, IIT Bombay) Department of Computer science, Kaypeeyes College of Arts & Science. Kotagiri, The Nilgiris 29/04/2020 to 01/05/2020
- [3] FDP On LaTeX & Scilab (In Association with Spoken Tutorial, IIT Bombay) Department of Mathematics, D.K.M College for Women Vellore 30/04/2020 to 04/05/2020
- [4] Industry 4.0: The New Normal, VET Institute of Arts and Science College, Thindal, Erode.
- [5] Fuzzy Sets and Systems, Department of mathematics, PATRICIAN COLLEGE OF ARTS AND SCIENCE, CHENNAI
- [6] Statistical Application Using SPSS, IQAC and Shasun Knowledge Centre (Shasun Jani College for Women)

- [7] Recent Advances in Science & technology, RPS Group of Institution of Science And Technology, Meerpur, Haryana
- [8] National level FDP on “BUILDING A PREDICTIVE UNDERSTANDING OF MICROBIAL COMMUNITIES” PG AND RESEARCH DEPARTMENT OF ZOOLOGY
NIRMALA COLLEGE FOR WOMEN (AUTONOMOUS)
Redfields, Coimbatore – 18, TN, India
- [9] Evolution from Offline to Online Teaching, IQAC and Faculty Development Programme Committee in Association with Department of Information technology, University of Mumbai, Mumbai Regional Centre & Microsoft
- [10] Faculty Development Program on “Engineering Education & the Industry: A Post COVID-19 Perspective”, MCT Rajiv Gandhi Institute of Technology, Mumbai
- [11] One Day International Faculty Development Programme on “Metacognitive Strategies : Constructive Teaching Learning Environment involving Constructivism” Hindusthan College of Arts and Science, Coimbatore, Tamilnadu
- [12] One Week National Faculty Development Programme on “Moodle Learning Management System” Spoken Tutorial, IIT Bombay, remotely at Hindusthan College of Arts and Science, Coimbatore, Tamilnadu
- [13] “Research Methodology and ICT based Teaching and Learning Tools” Hindusthan College of Arts and Science, Coimbatore, Tamilnadu
- [14] "Recent Trends in Fourier Transform & Machine Learning: A Mathematical Approach", Department of Science and Humanities, KGiSL INSTITUTE OF TECHNOLOGY
- [15] Online International FDP on E-Governance during Pandemic: Transformation in Higher education, Association of Principals of Colleges of Bharathiar University and Hindusthan College of Arts and Science, Coimbatore, Tamilnadu
- [16] International Online FDP On DIGITAL TOOLS FOR RESEARCHERS AND ICT ONLINE TOOLS IN TEACHING, Hindusthan College of Arts and Science, Coimbatore, Tamilnadu

CONFERENCE/ SEMINAR/ WORKSHOP ORGANIZED:

- [1] International Conference on Mathematics and Computer Science, Prof.Dr.Balagurusamy Ex-Vice-Chancellor of Anna University, Chennai, Dr.Gang Liu, Hengyang Normal University, China, Mr.S.Vibib Chandar Blue Crest University, Ghana, West Africa, Mr.Liu Zhihong, Hengyang Normal University, China on 15/12/2016 TO 17/12/2016
- [2] National Seminar on Recent Trends In Graph Theory, Dr.Sr.K.A.Germina, Associate Professor Department of Mathematics, Central University of Kerala. Kasaragott Dr.R.Kala, Professor Department of Mathematics, Manonmaniam Sundaranar University, Tirunelveli Dr.R.Radha Iyer, Assistant professor Department of Mathematics, Amrita School of Engineering, Coimbatore Ms.S.Manimekalai, Assistant professor Department of Mathematics, Dr.N.G.P College of Arts and Science, Coimbatore on 20/2/2019
- [3] National Seminar on Current Trends in Graph Theory, Dr.M.G.Karunambigai, Assistant Professor, Dept of Mathematics, Sri Vasavi College, Erode, Dr. S. Aparna Lakshmanan, Assistant Professor, Dept of Mathematics, St.Xavier's College for Women, Aluva, Kerala Dr.S.Uma Maheswari, Associate Professor, Dept of Mathematics, CMS College of Science and Commerce, Coimbatore on 11/1/2020
- [4] International Conference on Enactments of Mathematics in various Domains. Mr.Baskar Chinnusamy, Vice President, Cyber Security Services, Wilmington, Delaware, USA Mrs. Lakshmi Priya Handrasekaran, Medical Coder, Quality Diagnostic Lab, Abu Dhabi. Dr. Rayees Rafiq Sheikh, Post Doctoral Research Scholar, Dept. of Pharmacology, University of Illinois, Chicago, USA Mrs. Josy Praveena, JD consultant, Wipro Technologies, Germany. On 07/02/2020
- [5] National seminar on "Health and Hope during COVID-19" Acupuncturist R.Thangamani., B.Sc(psychology)., DAsc., MAC(Master in Acupuncture), Classical Acupuncturist & Yoga Master, Coimbatore. Dr.G.N.Shriraam., M.B.B.S, Dhanalakshmi Srinivasan Medical College and Hospital, Perambalur. Anitha.D., M.Sc., M.Phil., M.Ed., Coordinator, Chocolate buds academy, Coimbatore. On 30/04/2021

[6] Mastering Big Data in Mathematics, Ms. M. Lincy Jacqueline Assistant Professor and Head Department of Computer Science with AI Nirmala college for Women Coimbatore on 19.02.2025

BOOK PUBLICATIONS:

- [1] Question bank on classical algebra, ISBN-978-81-983219-8-5, Nov 2024
- [2] Mastering Geogebra: A comprehensive Guide for students and educators, ISBN-978-81-984653-4-4, Feb 2025
- [3] Mathematical Modelling and Visualization using SCILAB & GEOGEBRA, ISBN-978-81-993707-3-9 Nov 2025

MEMBER IN BOARD OF STUDIES:

- [1] BOS member of Mathematics, Nirmala College for Women.

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