



## PROFILE

### I General Information

Name : Dr.(Tmty.)M.Uma Maheswari, M.Sc., M.Phil.,Ph.D.,  
Father's Name : P.Mariappan  
Age & Date of Birth : 37 years, 24.04.1984  
Designation : Assistant Professor  
Department : Mathematics  
Mobile No : 9443530468  
Email ID : [umamaheswarim@vvvcollege.org](mailto:umamaheswarim@vvvcollege.org)  
[umathiru84@gmail.com](mailto:umathiru84@gmail.com)  
Services in other colleges : 8 years  
Date of Appointment : 15.07.2019

### II Educational Qualification

Examination Passed	Board/University	Subject	Year of Passing	Class
SSLC	Board of Secondary Education	-----	1999	88.2
PUC/Higher Secondary	Board of Higher Secondary Education	Bio-Maths	2001	70.8
Bachelor's Degree.	Madurai Kamaraj University	Mathematics	2004	I
Master's Degree	Madurai Kamaraj University	Mathematics	2006	I
M.Phil.	Madurai Kamaraj University	Mathematics	2007	I
PhD	Madurai Kamaraj University	“ Iterative Solution of system of non-linear boundary value problems”	Awarded on 02.12.2013	Highly Commended

III Teaching Experience : UG : 10 years  
PG : 7 years

Field of Specialization : Differential Equations

#### IV Research Experience

No. of articles published in Journals

International: 4

National: 1

No. of papers presented in Seminars / Conferences:

International: 1

National: 4

No. of articles published in Books / Conference Proceedings: 1

Articles Published

Sl.no	TITLE OF THE PAPER	NAME OF THE JOURNAL
1.	Analytical solution of non-linear enzyme reaction equations arising in mathematical chemistry	Journal of Mathematical Chemistry, 49 (2011) 1713-1726. (Springer)
2.	Analytical solution of non-linear reaction diffusion equations in an amperometric immobilized enzyme electrode	Physical Chemistry an Indian Journal, 6(4) (2011) 1-9.
3.	Non-linear boundary value problem in irreversible second-order homogeneous reaction	International Journal of Mathematical Archive, 3(5) (2012), 1-10.
4.	Analytical expressions of concentrations of substrate and hydroquinone in an amperometric glucose biosensor.	ISRN: Physical chemistry, (2013), Article ID 143870, 13.
5.	A Theoretical model of Ph-based potentiometric biosensors based on Immobilized enzyme membrane.	American Journal of Analytical Chemistry, 2016, 7, 363-377.
6.	Fuzzy Interval Valued Fusion Technique for Multi-Modal 3D Face Recognition	IEEE Xplore Digital Library. DOI: 10.1109/CCST.2016.7815709 Electronic ISSN: 2153-0742

Papers presented

Date	Seminar / Conference	Level	Title of the paper	Venue
27.09.2007- 29.09.2007	National Conference on “Discrete Mathematics and its Application” (Sponsored by AICTE, CSIR, DST and TCS)	National	An Application of Fuzzy Clustering in Mutual Funds.	Thiagarajar College of Engineering, Madurai, Tamil Nadu
29.03.2010- 30.03.2010	National Conference on “Mathematical, Theoretical and Computational Chemistry” (Sponsored by DST)	National	A Study on Fuzzy Clustering of some aspects on stock exchange.	Madura College, Madurai, Tamil Nadu
07.10.2010- 08.10.2010	National Conference on “Advances in Differential Equations and Applications” (Sponsored by NBHM)	National	Approximate analytical solution of non-linear enzyme reaction equations arising in Mathematical Biology.	Periyar university, Salem, Tamil Nadu
20.01.2011- 21.01.2011	National Conference on “Mathematical modeling and applications to mathematical, Physical and Chemical Sciences” (Sponsored by CSIR)	National	Analytical solution of non-linear reaction diffusion equations in an amperometric immobilized enzyme electrodes.	Madura College, Madurai, Tamil Nadu

24.10.16 - 27.10.16	IEEE-International Carnahan Conference on Security Technology (Sponsored by IEEE.AESS)	International	A Fuzzy Interval Valued fusion technique for multi-modal 3D Face recognition	Orlando, Florida, USA
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Articles published in Books / Conference Proceedings

Year	Book Title/ Conference	ISSN	Article Title
2016	IEEE-International Carnahan Conference on Security Technology (Sponsored by IEEE.AESS)	IEEE Xplore Digital Library. DOI: 10.1109/CCST.2016.7815709 Electronic ISSN: 2153-0742	Fuzzy Interval Valued Fusion Technique for Multi-Modal 3D Face Recognition

V Seminars/Conferences/Workshops attended (Till June 2019)

.No.	NAME OF THE SEMINAR/WORKSHOP ATTENDED	NAME OF THE SPONSORING AGENCY	DURATION	PLACE
1.	National conference on “Recent Advancements in Algebraic Graph Theory”	UGC	29.03.2007 - 31.03.2007	Saraswathy Narayanan College, Madurai, Tamil Nadu,
2.	National Conference on “Discrete Mathematics and its Application” Topic Presented: An Application of Fuzzy Clustering in Mutual Funds.	AICTE, CSIR, DST and TCS	27.09.2007 - 29.09.2007	Thiagarajar College of Engineering, Madurai, Tamil Nadu
3.	National level seminar on “Coding and Cryptography”		20.03.2008	Thassim Beevi Abdul Kader College for Women, Kilakarai, Tamil Nadu
4.	ISO “Awareness Programme”		16.08.2008	Syed Ammal

				Engineering College, Ramanathapuram
5.	ISTE Staff Chapter “Self Awareness Programme”		08.10.2009	Syed Ammal Engineering College, Ramanathapuram
6.	National Conference on “Mathematical, Theoretical and Computational Chemistry” Topic Presented: A Study on Fuzzy Clustering of some aspects on stock exchange.	DST	29.03.2010 - 30.03.2010	Madura College, Madurai, Tamil Nadu
7.	State Level Conference on “Teaching for Technocrats-T4T- ‘10”		21.08.2010	Latha Madhavan Engineering College, Madurai, Tamil Nadu,
8.	National Conference on “Advances in Differential Equations and Applications” Topic Presented: Approximate analytical solution of non-linear enzyme reaction equations arising in Mathematical Biology.	NBHM	07.10.2010 - 08.10.2010	Periyar university, Salem, Tamil Nadu
9.	Regional Seminar on “Philosophical and Mathematical Interventions on Artificial Intelligence”		07.01.2011	Madura College, Madurai, Tamil Nadu
10.	National Conference on “Mathematical modeling and applications to mathematical, Physical and Chemical Sciences” Topic Presented: Analytical solution of non-linear reaction diffusion equations in an amperometric immobilized	CSIR	20.01.2011 - 21.01.2011	Madura College, Madurai, Tamil Nadu

	enzyme electrodes.			
11.	National Workshop on “Analytical & Numerical Solutions of Non-linear Differential Equations” organized by the Department of mathematics		18.03.2011 - 19.03.2011	Amrita School of Engineering, Bengaluru,
12.	National Conference on “Recent developments on mathematics and its applications” organized by the Department of mathematics,	DST	09.01.2015	The Madura College, Madurai
13.	National Workshop on Recent advances in numerical solution of differential equations	TEQIP II	02.02.2015 - 04.02.2015	Thiagarajar College of Engineering, Madurai
14.	Faculty training programme on “Funded research project proposal and thesis writing”		20.10.2015	Sethu Institute of Technology, Kariapatti.
15.	One day Technical Seminar on Advanced Data Structures and Algorithms		20.08.16	Kamaraj College of Engineering & Technology
16.	IEEE-International Carnahan Conference on Security Technology	IEEE, AESS	24.10.16 - 27.10.16	Orlando, Florida, USA
17.	Hands-on Training programme on Research based Statistical and Analytical Tools	TEQIP-II ACM	05.01.17 - 07.01.17	Thiagarajar College of Engineering
18.	National Seminar on Application of Fuzzy Mathematics in Engineering Studies	TEQIP II	09.03.2017 - 10.03.2017	Thiagarajar College of Engineering, Madurai
19.	Faculty Development Program on Active Learning	INFOSYS	15.04.17	Kamaraj College of Engineering & Technology
20.	Workshop on Statistics, Random processes and Queueing Theory”		10.05.18 -	MEPCO SCHLENK Engineering College

			11.05.18	
21.	Workshop on Linear Algebra		27.06.18 - 28.06.18	RAMCO Institute of Technology

### Seminars/Conferences/Workshops attended (From July 2019)

Sl.no	Date	Level	Name of the Seminar / Conference / Workshop	Venue
1.	20.09.2019		One day workshop on “ Delay Differential Equations”	V.V.Vanniaperumal College for Women, Virudhunagar.
2.	01.06.2020		Webinar on “OBE Assessment Tools and Methods”	IQAC, V.V.Vanniaperumal College for Women, Virudhunagar.
3.	04.06.2020		Tangible Teaching Techniques	Dr.M.G.R.Educational and Research Institute.
4.	05.06.2020	International	Webinar on” APPLICATIONS OF ENGINEERING MATHEMATICS”	Selvam College of Technology.
5.	07.06.2020	International	Faculty Development Programme on “Metacognitive Strategies : Constructive Teaching Learning Environment involving Constrictivism”	Hindusthan College of Arts and Science, Coimbatore, Tamilnadu.
6.	10.06.2020	National	Webinar on “Catalan Numbers and its Applications”	V.O.Chidhambaram College, Tuticorin.
7.	12.06.2020	National	Webinar on “Challenges of Working from Home”	RAI University, Gujarat.
8.	12.06.2020	National	Webinar on “Role of IQAC in Higher Educational Institutions”	Badruka College of Commerce and Arts, Telengana.
9.	15.06.2020	National	Webinar on “Applications of Linear Algebra in Science & Engineering	CSI College of Engineering, Ketti.
10.	16.06.2020		Faculty Development Program on “Simplified Pathway to implement OBE”	IQAC, V.V.Vanniaperumal College for Women, Virudhunagar.
11.	16.06.2020	National	Webinar on “The Role of Technology in Teaching–	Vidhyaa Arts and Science College

			Learning Mathematics”	
12.	16.06.2020-28.08.2020	National level-Summer Research Training program	CSIR-Summer Research Training Program(CSIR-SRTP Online 2020)	CSIR- North East Institute of Science and Technology, Jorhat, Assam.
13.	17.06.2020		Webinar on “Construction of Mathematical Modeling in Epidemiology”	Department of Mathematics, Government Arts College for Women, Nilakottai, Dindigul.
14.	18.06.2020		Webinar on “Tax planning for Salaried employees”	IQAC, V. V. Vanniaperumal College for Women, Virudhunagar.
15.	22.06.2020	International	Webinar on “Laplace transforms and its Applications”	Malla Reddy Institute of Technology and Science, Secunderabad.
16.	25.06.2020		Webinar on “Technological Tools for Teaching : TTT”	IQAC, V. V. Vanniaperumal College for Women, Virudhunagar.
17.	26.06.2020-27.06.2020	International	Faculty Development Programme on “Sustainable Development : A Biological and Socioeconomical Perspective' - Paper Presented : Impact and importance of Mental Health”	Government Vidhrbha Institute of Science and Humanities Amravati (MS),India.
18.	26.06.2020-02.07.2020		International Workshop on “Reinforcement of Quality Education”	Vellalar College for Women, Erode.
19.	27.06.2020	State	Workshop on “Recent Trends in Mathematical Modelling”	Mannar Thirumalai Naicker College, Madurai.
20.	29.06.2020-04.07.2020		Faculty Development Programme on “Effective e-Content Development Tools”	Internal Quality Assurance Cell & Department of Computer Applications (PG), V.V.Vanniaperumal College for Women, Virudhunagar.
21.	02.07.2020-17.07.2020	National	Faculty Development Programme on “Advanced concepts for developing MOOCS”	Ramanujan College, University of Delhi, Delhi.
22.	03.07.2020-04.07.2020	National	Faculty Development Programme on “Effective e-Content Development Tools”	IQAC, V. V. Vanniaperumal College for Women, Virudhunagar.

23.	03.07.2020-05.07.2020	International	Workshop on “Structural Equation Model and Confirmatory factor Analysis”	Institute for Statistics and Analytical Research, Chennai.
24.	04.07.2020		Webinar on “Qualitative analysis of Epidemic stochastic models”	Government Arts College for Women, Nilakottai.
25.	06.07.2020-10.07.2020	National	Webinar on “Mathematical perspectives on Computational Science and Engineering”	Ramaiah Institute of Technology, Bangalore.
26.	21.07.2020		Webinar on “Mathematical Models in Applied Sciences”	PSG College of Technology, Coimbatore
27.	24.07.2020-25.07.2020	National	Webinar on “Chemistry and Biology of Natural Products”	CSIR- North East Institute of Science and Technology, Jorhat, Assam.
28.	01.09.2020	National	Workshop on “Artificial Intelligence in Drug Discovery”	CSIR- North East Institute of Science and Technology, Jorhat, Assam.
29.	26.09.2020	International	Faculty Development Programme on : Leadership, Motivation and Change Management”	MTC Global Leadership Institution and Knowledge Café, Dhaka International University, Bangladesh.
30.	28.09.2020-29.09.2020	National	e-short term course on “Advanced Mathematical Techniques for Engineers & Scientists (AMTES20)”	TEQIP-III SPONSORED ESTC, National Institute of Technology, Rourkela.
31.	03.10.2020-04.10.2020	International	Faculty Development Programme on “Getting familiar with ArcGis”	Geospatial Maple, Lucknow, Uttar Pradesh.
32.	04.10.2020	National	Online orientation programme on “Google Family Applications for Teachers”	Tumkur University, Karnataka.
33.	05.10.2020	National	Webinar on “IPR – Patent Processing	Intellectual Property India, Government of India.
34.	08.10.2020		Webinar on “Applications of Nature Inspired Optimization Techniques for Solving Real life problems	KPR Institute of Engineering and Technology.
35.	09.10.2020		Webinar on “Software Reliability”	KPR Institute of Engineering and Technology.
36.	12.10.2020	National	Webinar on National Education Policy 2020 with a focus on Technology	Auxilium College, Vellore.
37.	19.10.2020		Faculty Training programme on “Interactive e-Teaching, Learning and Assessment Tools in Cyberspace”	IQAC, V. V. Vanniaperumal College for Women, Virudhunagar.
38.	22.10.2020	International	Conference on “INNOVATIONS,	IQAC, V. V. Vanniaperumal

			DISTINCTIVENESS AND BEST PRACTICES: BENCHMARKING IN HEIs”	College for Women, Virudhunagar.
39.	02.11.2020-07.11.2020		Workshop on “Applications of Operations Research”	Department of Mathematics, V.V.Vanniaperumal College for Women, Virudhunagar.
40.	01.02.2021	National	Outreach Programme for College Professors(Under DBT) on “Awareness on MOOCs”	Department of Mathematics, V. V. Vanniaperumal College for Women, Virudhunagar.
41.	16.02.2021		Guest Lecture(Under DBT) on “Applications of Stochastic Differential Equations”	Department of Mathematics, V. V. Vanniaperumal College for Women, Virudhunagar.
42.	28.02.2021		Webinar on “Moodle for Blended Teaching & Learning”	Ramco Institute of Technology, Rajapalayam.
43.	11.05.2021		Webinar on “Project Proposal”	IQAC, V. V. Vanniaperumal College for Women, Virudhunagar.
44.	12.05.2021	International	Online Seminar on “Mathematical & Medical Modelling and Forecasting the COVID-19 Pandemic”	Academy of Maritime Education and Training (AMET), Deemed to be University, Chennai.
45.	17.05.2021	National	Webinar on “Wealth Creation with Capital Market Investment ”	Badruka College of Commerce & Arts.
46.	13.05.2021-07.06.2021	International	Online Course on “Positive Psychology”	The University of North Carolina at Chapel Hill, United States.
47.	13.05.2021-17.06.2021	International	Online Course on “Creative Thinking: Techniques and Tools for Success”	Coursera, Imperial College, London.
48.	28.05.2021	National	Webinar on “Quality Enhancement in Higher Education in India: An Introspection”	Mahatma Education Society's Pillai HOC College of Arts, Science and Commerce (PHCASC), Rasayani, in collaboration with GURU ANGAD DEV TEACHING-LEARNING CENTRE OF MHRD (PMMMNMTT)-SGTB Khalsa College, Delhi University
49.	24.05.2021-30.05.2021	International	Online Workshop on “How to write a Quality Research Article”	Sri Vidya Mandir Arts & Science College, Uthangarai, Christ University, Bengaluru and Jyothi Engineering College,

				Thrissur.
50.	29.05.2021	Workshop	"Introduction to Computer Aided PCB Design"	Ramco Institute of Technology, Rajapalayam

Workshops organized/Guest Lectures delivered

S. No.	Name of the Programme	Title	Date	Organizing Institution	Participated/ Presented/Coordinator
1.	Workshop	Quantitative Aptitude	21.05.18 to 23.05.18	Kamaraj College of Engineering & Technology	Coordinator
2.	Guest lecture	NBA Criteria 10 lecture for Polytechnic staff	02.01.18	Kamaraj College of Engineering & Technology	Invited Speaker
3.	Guest lecture	Introduction to Quantitative Aptitude	21.06.18	Kamaraj College of Engineering & Technology	Invited Speaker
4.	Guest Lecture	Engineering Mathematics for GATE	08.02.18	Kamaraj College of Engineering & Technology	Invited Speaker
5.	Workshop	Quantitative Aptitude” for Faculty members	04.05.18	Kamaraj College of Engineering & Technology	Coordinator
6.	Workshop	Basic Science and its applications	11.10.18 to 12.10.18	Kamaraj College of Engineering & Technology	Coordinator
7.	PG Mathematical Society Celebrations	Cryptography and its applications	13.02.2020	Virudhunagar Hindu Nadars' Senthikumara Nadar College, Virudhunagar.	Invited Speaker
8.	Online Professional Development Programme for Non – Teaching Staff on “Knowledge of Common Digital Tools”	Introduction to Digital tools in Google workspace	03.06.2021	Academy of Maritime Education and Training (AMET), Deemed to be University, Chennai.	Invited Speaker

VI Course attended (Refresher / Orientation / any other)

NAME OF THE COURSE	TOPIC	VENUE	DURATION
Induction programme(AICTE-ISTE)	Teaching Methodologies for Budding Faculty of Technical Institution	MEPCO SCHLENK Engineering College	14.05.18 - 19.05.18
Induction/Orientation Programme	Induction/Orientation Programme for "Faculty in Universities/Colleges/Institutes of Higher Education	Ramanujan College, University of Delhi, Delhi.	26.06.2020- 24.07.2020

Value Added Courses attended

S. No.	Name of the Course	Organized by
1.	Value Added Course on ID and 2D Signal Processing using MATLAB and GUI	Department of ECE , KCET
2.	NPTEL (National Programme on Technology Enhanced Learning) Certificate Course on "Outcome based pedagogic principles for effective teaching"	Ministry of HRD, Govt. of India

Language Proficiency

S. No.	Name of the Course	Organized by
1.	Certificate course on Communicative English	Col's Caliber, Coimbatore.
2.	Business English Certification - B1 Level (BEC Vantage) - (Score: 159/200)	Cambridge English, Department of Cambridge University, United Kingdom.

Any other information

Membership in Professional bodies

S. No.	Professional Body/Society	Category/Grade of Membership	Membership No
1	ISTE	Lifetime	LM 104265

Other Academic/Research activities:

S. No.	Academic/Research activities	Details
1.	Ph.D Supervisor Recognition	Ref.no: 2870088, Anna University, Chennai
2.	External Expert nominated by the University	Research Advisory Committee (Doctoral Committee)

Question Paper Setting:

S.No	Academic Year	Month/Year	Colege Name	Subject	Sub Code	Class
1.	2019-2020	Apr-20	Madura College	Optimization Techniques	17U6MME2(D)	III B.Sc. Mathematics
2.		Apr-20	Devanga Arts College	Complex Analysis	17PM41	II M.Sc.Mathematics
3.		Apr-20		Partial Differential Equations	19PM23	I M.Sc.Mathematics
4.	2020-2021	Nov-20	Devanga Arts College	Complex Analysis	19PM33	II M.Sc.Mathematics
5.		Nov-20	Devanga Arts College	Statistics - I-Allied Paper	19MA3L	II B.Sc. Mathematics

Reviewer in International Journals:

S. No.	Title of the Journal	Publisher	Role
1.	International Journal of Engineering Research and Technology	ESRSA	Reviewer
2.	American Journal of Analytical Chemistry (AJAC).	SCIRP-Scientific Research Publishing	Reviewer
3.	Expert Systems with Applications	ELSEVIER	Reviewer
4.	Chemical Science International Journal	Hooghly: Sciencedomain International.	Reviewer

Educational Tour/Visit

S. No.	Venue	Date	Role
1.	Kennedy Space Centre, NASA	24.10.2016	Foreign visitor (As a part if IEEE ICCST)

Travel Grant Received:

S. No	Purpose	Travel Grant Amount	Funding Agency	Date	Sponsor
1.	For attending IEEE International Carnahan Conference on "Security Technology" at Orlando,	Rs. 25,000	Centre for International Cooperation in Science (CICS),	20.2.2017	Promoted by Indian National Science Academy, New Delhi,

	Florida, USA (From 24.10.2016 to 27.10.2017)		Chennai-600025.		(in Association with with Scientific Agencies and Departments)
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Other Technical Skills:

Microsoft Office Packages

: DCA, Tally.

Software Skills

: MAPLE, Scilab, MATLAB, Mathematica.

Modern Teaching learning tools

: Edmodo, Kahoot, Google Classroom, Myclassroom, Ziteboard.