Faculty Profile

Name	: Dr K KALIDASS
Designation	: ASSISTANT PROFESSOR(TEMP)
Address	: DEPARTMENT OF MATHEMATICS,
	CHIKKANNA GOVERNMENT ARTS COLLEGE,
	TIRUPUR - 641602.
Contact Number	: 9790554902
Email ID	: dassmaths@gmail.com
Date of Joining in Collegiate Education	: 03.06.2004
Date of Joining in the Present College	: 23.01.2023
Date of Joining in Government Service	: 23.01.2023

Academic Profile:

Degree /Qualification	Institute / College	University	Period
B. Sc	Sri S R N M College, Sattur	Madurai Kamaraj University	1997-2000
M. Sc	Sri S R N M College, Sattur	Madurai Kamaraj University	2001-2003
M. Phil	Alagappa University, Karaikudi	Alagappa University, Karaikudi	
Ph. D.	Madurai Kamaraj University	Madurai Kamaraj University	2008-2013
SET	Mother Teresa Women's University, Kodaikanal	April 2017	

Teaching Experience:

i)	**Total**	:	19 Years 04 Months
ii)	**UG**	:	17 Years 10 Months
iii)	**PG**	:	17 Years 10 Months

Name of the college	Position held	Period
M S P V L Polytechnic College, Pavoorchatram	Lecturer in Mathematics	03.06.2004 to 12.04.2006.
Sri Kaliswari College, Sivakasi	Lecturer in Mathematics	05.06.2006 to 05.11.2008.
P. S. R. Engineering College, Sivakasi	Assistant Professor of Mathematics	01.06.2012 to 23.04.2013.
VV college of Engineering, Tisaiyanvilai,	Assistant Professor of Mathematics	12.06.2013 to 08.06.2015.
Karpagam Academy of Higher Education,	Professor of Mathematics	15.06.2015 to 21.01.2023.
Chikkanna Government Arts College, Tirupur	Assistant Professor of Mathematics	23.01.2023 to till date.

Achievements:

1. **TNSET** qualified in 2017 with 190 marks
2. **UGC meritorious Scholarship for Science students** from 03.02.2009 to 08.11.2011.

Field of Interest:

i)   Teaching   : Pure Mathematics
ii) Research   : Queueing theory
iii) Proficiency in instrumentation   : Nil
iv) Area of Interest   : Stochastic Processes, Real Analysis, Topology,

Research Guidance   :   **Yes**
Guidance Number   : R/IG/R4/08/2015/170

S. No	M.Phil/ Ph.D	Name of the Student	Thesis Title	Completed/ ongoing
1	Ph. D.	P.Sudharani	Stochastic Models For The Mean Time To Recruitment Of Manpower	Completed
2	Ph. D.	M. Santhi	Discussion On Total Signed Product Cordial Labeling Graphs	Completed
3	M. Phil.	K. Pavithra	A Mathematical Study On Markovian Queues With Working Breakdwons	Completed
4	M. Phil.	R. Saranya	Mathematical analysis of Markovian queues with title a waiting server	Completed
5	Ph. D.	V. Vijayalakshmi	Mathematical studies on Markovian queueing models with working breakdowns	Completed
6	Ph.D.	B. Deepa	Some Mathematical Discussions on Single Server Queues with Working Breakdowns	Completed
7	Ph.D.	M. Vadivukarasi	A Mathematical study on some queueing models with differentiated vacations	Completed.
8	Ph. D.	Ajiethkumar U.S	Topological Credibility Forensics and Authentication of Digital Images	Completed

Research Publications

1 An M/G/1 retrial queue with nonpersistent customers, a second optional service and different vacation policies (with Kasturi Ramanath), Applied mathematical sciences, Vol. 4, No. 40, 1967-1974, 2010.

2 A two phase service M/G/1 vacation queue with general retrial times and nonpersistent customers (with Kasturi Ramanath), International Journal of Open Problems in Computer science and mathematics, Vol. 3, No. 2, 175-185, 2010.

3 An M/G/1 queue with a second optional service and impatient customers (with Kasturi Ramanath), Proceedings of Second National Conference on Mathematical Modelling in Global Perspective, Velammal Engineering College, Chennai-66, 36-40, 2010.

4 Vacation queues with impatient customers and a waiting server(with R.Padmavathy and Kasturi Ramanath), International Journal of Latest trends in Software Engineering.10-19, 2011.

5 Time dependent analysis of M/M/1 queue with server vacations and a waiting server(with Kasturi Ramanath), Proceedings of the 6th International Conference on Queueing Theory and Network Applications, Korea University, South Korea. 77-83, 2011.

6 A priority retrial queue with second multi optional service and m immediate Bernoulli feedbacks(with Kasturi Ramanath), Proceedings of the 6th International Conference on Queueing Theory and Network Applications, Korea University, South Korea. 67-76, 2011.

7 Time dependent analysis of an M/M/1 queue with single vacations and negative arrivals (with J. Gnanaraj, S.Gopinath and Kasturi Ramanath). OPSEARCH. Vol 49, 39-41, 2012. (Springer.)

8 Time dependent analysis of an M/M/1 queue with single vacations and negative arrivals (with J. Gnanaraj, S. Gopinath) International Conference on Mathematics in Engineering & Business Man agement, Stella Maris College, Chennai 600 086, 9 - 10, March 2012

9 Time dependent analysis of an M/M/1 queue with Multiple vacations and catastrophes, (with J. Gna naraj, S. Gopinath) International Conference on Mathematics in Engineering & Business Management, Stella Maris College, Chennai 600 086, 9 - 10, March 2012.

10 A queue with working breakdowns (With Kasturi Ramanath) Computers & Industrial Engineering. Volume 63(4), 779-783, 2012. (Elsevier, Impact factor 1.84.)

11 Transient analysis of an M/M/1 queue with a repairable server and multiple vacations(with J. Gna naraj, S.Gopinath and Kasturi Ramanath), International Journal of Mathematics in Operations Research. Vol. 6 No. 2, 193-216, 2014.

12 A two phase service M/G/1 queue with a finite number of immediate Bernoulli feedbacks (with Kasturi Ramanath), OPSEARCH (Springer.) Vol. 51 No. 2,201-218, 2014

13 Transient analysis of an M/M/1 queue with multiple vacations (with Kasturi Ramanath), Pakistan Journal of Statistics and Operation Research, Vol. 10 No. 1, 121-130, 2014

14 Stochastic model for a single grade system with three components of threshold and correlated inter decision times (with P. Sudharani and K.P. Uma) International Journal of Mathematics and Computer Applications Research, Vol. 6. No. 1, 7-16,2016

15 Some Graph operations on signed product cordial labeling graphs (with M. Santhi) International Journal of Mathematics Trends and Technology, Vol. 39 No. 1, 42-52, 2016

16 Time dependent analysis of an M/M/1 queue (with K. Pavithra and Kasturi Ramanath), International Jorunal of Applied Mathematics, 6(2),113-118,2016

17 An M/M/1/N queue with working breakdowns and Bernoulli feedbacks (with K. Pavithra), International Jorunal of Applied Mathematics, 6(2), 64-71,2016

18 Signed Product Cordial Labelling Of Some Graphs(With Santhi), International Journal of Applied Mathematics, 7(1) : 34-48, 2017

19 A Two Phase Service Retrail Queue With General Retrial Times, A Single Vacation Sceme And A Waiting Server (with N.Radha and Kasturi Ramanath), International Journal of Applied Mathematics, 7(1): 49-61, 2017

20 Topological credibility analysis of digital images a locally finite spaces (with U. S. Ajiethkumar and K. Bhuvaneswari), International Journal of Pure and Applied Mathematics, 116(23),707-717, 2017.

21 Finite topology bases image analysis(with U. S. Ajiethkumar and K. Bhuvaneswari), International Journal of Pure and Applied Mathematics, 116(23), 685-705, 2017.

22 An M/M/1/N Queue with Working Breakdowns and Vacations (With B. Deepa) International Journal of Pure and Applied Mathematics, 119(10), 859-873,2018.

23 The Markovian Vacation Queues with a Waiting Server and Geometric Abandonments (With B. Deepa), International Journal of Pure and Applied Mathematics, 118(20), 1903-1910, 2018.

24 The single server vacation queue with geometric abandonments and Bernoulli's feedbacks(with V. Vijayalakshmi), International Journal of Engineering & Technology, 7(2.21), 172-179, 2018.

25 An M/M/1/N queue with working breakdowns and a two phase service(with V. Vijayalakshmi and K. Pavithra) International Journal of Pure and Applied Mathematics 119(15) 2285-2297.

26 A Finite Capacity Markovian Queueing System With Catastrophic Effects And Bernoulli Feedbacks(with S.Muthukumaran and M.Thiagarajan) International Journal of Computational Engineering Research, Volume, 09, Issue, 5. 27 Performance Analysis of a Single Server Finite Capacity Markovian Vacation Queue With Two Types Of Arrivals (with S.Muthukumaran and M.Thiagarajan),The International journal of analytical and experimental modal analysis, Volume XI, Issue VII, 662-675.

28 Transient analysis of a repairable single server queue with working vacations and system disasters(with M.I.G.S. Sampath), International Conference on Distributed Computer and Communication Networks, Moscow, Russia 23-27 September 2019.

29 Transient Analysis of an M/M/1 Queueing System subjected to multiple differentiated vacations, impatient customers and a waiting server with application to IEEE 80.16E power saving Mechanism, (with Suranga Sampath, M.I.G.,& Jicheng Liu) Indian Journal Pure and Applied Mathematics(Springer.), 51(1),297- 320,2020.

30 Discussion on the transient behaviour of single server Markovian multiple variant vacation queues, (with M. Vadivukarasi) Operations research and decisions, 1,123-145,2021.

31 Discussion on the Optimization of Finite Buffer Markovian Queue with Differentiated Vacations, (with M. Vadivukarasi and R. Jayaraman)Soft Computing: Theories and Applications (Springer.) (Accepted.)

32 Cost Analysis of M/M/1/N queue with working breakdowns and a twophase services, (with V. Vijayalakshmi and B. Deepa), J. Phys.: Conf. Ser. 1850 012026, 2021.

33 An M/M/1/N queue with working breakdowns and vacations-An approach to cost analysis, (with V. Vijayalakshmi and B. Deepa), J. Phys.: Conf. Ser. 1850 012069, 2021.

34 Discussion on the transient solution of single server Markovian multiple variant vacation queues with disasters(with M. Vadivukarasi)OPSEARCH, 1-25, 2022.

35 A discussion on the optimality of bulk entry queue with differentiated hiatuses (with M. Vadivukarasi) Operations Research and Decisions, Vol. 32, No. 2, 137-150, 2022.

36 Queuing system with customers' impatience, retention, and feedback (with Rakesh Kumar, Bhupender Kumar Som, and M.I.G. Suranga Sampath) Applications of Mathematical Modeling, Machine Learning, and Intelligent Computing for Industrial Development49-59, 2023.

National and International Conferences:

i) **Participated** :

1 National Conference on Mathematical Modelling in Global Perspective, **Velammal Engineering College, Chennai**. 19th February, 2010.

2 ORSI 2010-ORURD, **Thiagarajar College of Engineering, Madurai**. India. December 15-17, 2010.

3 National Conference on Recent Trends in Mathematics and Its Applications, **Alagappa University, Karaikudi**. Tamil Nadu. India. December 22, 2010.

4 International Conference on Mathematics in Engineering & Business Management, **Stella Maris College, Chennai 600 086**, 9 - 10 March 2012

5 International Conference on Mathematics in Engineering & Business Management, **Stella Maris College, Chennai 600 086**, 9 - 10 March 2012

ii) **Paper Presented** :

1. An M/G/1 queue with second optional service and impatient customers, National Conference on Math ematical Modelling in Global Perspective, Velammal Engineering College, Chennai. 19th February, 2010.

2. A single server Poisson input queue with two optional services, ORSI 2010-ORURD, Thiagarajar Col lege of Engineering Madurai. India. December 15-17, 2010.

3. An M/G/1 retrial queue with nonpersistent customers, a second optional service and different vaca tion policies National Conference on Recent Trends in Mathematics and Its Applications, Alagappa University, Karaikudi. Tamil Nadu. India. December 22, 2010.

4. Time dependent analysis of an M/M/1 queue with single vacations and negative arrivals International Conference on Mathematics in Engineering & Business Management, Stella Maris College, Chennai 600 086, 9 - 10 March 2012

5. Time dependent analysis of an M/M/1 queue with Multiple vacations and catastrophes, International Conference on Mathematics in Engineering & Business Management, Stella Maris College, Chennai 600 086, 9 - 10 March 2012

iii) **Poster Presented** : Nil

Conference/Seminars Organized :

Workshop attended :

1. National Workshop in Mathematical Modeling, Apaji Institute of Mathematics and Applied Computer Technology, Banasthali University-304022. Rajasthan. December 15-19, 2009.

2. Summer training program on Adavnced Stochastic Models and their Applications, Sri Venkateswara Uni versity, Triupati. Andra Pradesh. June 29th to July 4th, 2010

3. Instructional Workshop on Mathematical Modeling and Simulation, Kalasalingam University, Krishnankovil. July 07-14, 2010.

4. Instructional Workshop on Random processes and their Applications, Annamalai University, Chidamparam. November 10th to November 23rd, 2010.

Resource Person/Invited Lectures :

1.For guest lecture on Graph labellings organized by Department of Mathematics, **KG College of Arts and Science, Coimbatore** (6th May 2022).
2. For guest lecture on Beauty of numbers organized by Department of Mathematics, **V.V. Vanniaperumal College for Women, Virudhunagar-626001** (22nd December 2021).
3.For guest lecture on Applications of Mathematics by using MAPLE organized by Department of Mathematics **Little Flower Degree College, Hyderabad** (6th December 2021).
4.For guest lecture on Stochastic matrices organized by Department of Mathematics, **Shrimati Indira Gandhi College,Trichy** (2nd August 2021).
4.For guest lecture on Stochastic Graphs organized by Department of Mathematics **KG College of Arts and Science, Coimbatore** (28th August 2020).
5.For guest lecture on Linear algebra with MAPLE organized by Department of Mathematics, (PG & UG-SF) **PSGR Krishnammal College for Women**, **Coimbatore** (19th February 2020).
6. For guest lecture on Magic labelling of graphs organized by Department of Mathematics, **Sree Saraswathy Thygaraja College, Pollachi.** (30th September 2019).
7.For guest lecture on Mathematical- Analysis organized by Department of Mathematics (PG & UG-SF) **PSGR Krishnammal College for Women, Coimbatore** (21st August 2019).
8.For Faculty Development Programme organized by Department of Mathematics, **Sree Saraswathy Thygaraja College, Pollachi.** (17th, August, 2019)
9.For Young Student Scientist Programme(YSSP-May 2019) conducted at **Karpagam Academy of Higher Education, Coimbatore**. (2-16, May, 2019).
10.For National conference on Recent trends in Applied Mathematics organized by Department of Mathematics, **V.H.N.S.N College, Virudhunagar**-626001(26th September 2018).
11. For International Seminar on Applied Mathematics organized by PG and Research Department of Mathematics, **Saiva Bhanu Kshatriya College, Aruppukottai** (2nd August 2018).
12.For guest lecture on Applications of Analysis organized Department of Mathematics (PG & UG-SF) **PSGR Krishnammal College for Women, Coimbatore** (30th July 2018).
13. For Inauguration of Mathematics Association organized by Department of Mathematics, **Loyola College, Mettala** (4th August 2017).
14. For One day State Level Seminar on Latest developments in Mathematics organized by Department of Mathematics, **Wavoo Wajeeha Women's College, Kayalpatnam**. (27th January 2014).

Professional Activities:

  i)   Ph. D. adjudicator
  ii) Reviewer
  iii) BOS member
  iv) Academic council member
  v)   Examiner/Scrutiny