

<<Dr. N. ANBAZHAGAN>> << Professor and Head>>

Contact

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Academic Qualifications: M.Sc., M.Phil., Ph.D.,

Teaching Experience: 21 Years+

Designation	From	То
Professor of Mathematics	09.03.2013	Till date
Associate Professor of Mathematics	09.03.2010	08.03.2013
Reader in Mathematics	09.03.2007	08.03.2010

Research Experience: 21 Years+

Additional Academic / Administrative Responsibilities

S. No.	Position	Department/Universi ty	From	То
1.	Head	Department of Mathematics	June 05, 2015	Till date
2.	Chairperson	School of Mathematics	June 22, 2015	Till date
3.	Member	Senate, Alagappa University	June 05, 2015	Till date
4.	Member	Standing Committee on Academic Affairs	June 05, 2015	Till date
5.	Special Officer (projects)	Alagappa University	March 18, 2022	Till date
6.	Coordinator	University Business Collaboration Centre	August 07, 2019	Nov. 04, 2022
7.	Coordinator	UGC-SAP(DRS-I)	2016	2021
8.	Coordinator	DST-FIST(Level-I)	2022	2027
9.	Theme Coordinator	RUSA 2.0	2018	Till date

Areas of Research

Stochastic Inventory Modelling, Graph theory and Datamining

Research Supervision / Guidance

Progra	m of Study	Completed	Ongoing
Research	Ph. D.	09	05
	M.Phil.	50	
Project	PG	80	13
	UG / Others		

Publications

International			Nati	ional	Others
	Journals	Conferences	Journals Conference		Books / Chapters /
					Monographs /

				Manuals
104	09	02	-	Edited Book - 01
				Book Chapters - 04

Cumulative Impact Factor (as per JCR) : 37.991

h-index : 17 i10 index : 28 Total Citations : 884

(https://scholar.google.com/citations?hl=en&user=KvvVu6sAAAAJ)

Funded Research Projects

Completed Projects

S. Agency		Period			Budget
		From	То	Project Title	(Rs. In lakhs)
1	DST, New Delhi.	2005	2008	A Replacement and Substitutable Inventory Systems	3.77
2	NBHM, Mumbai.	2012	2015	Modelling and Analysis of Stochastic Retrial Inventory System	9.73
3	UGC, New Delhi	2014	2016	Analysis of Stochastic Inventory System with Server Vacation	33.00

Ongoing Projects

S.	S. Agency Period From To	Period		Project Title	Budget
No			(Rs. In lakhs)		

Consultancy Projects

S.	Period			Budget (Rs. In	
No	Agency	From	To	Project Title	(Rs. In lakhs)
1					
2					

Others

Note: Budget must be rounded to two decimal places

Patents

Distinctive Achievements / Awards

- 1. **Best Paper Presentation Award (2019)** in the International Conference on Mathematical Engineering Applications for Sustainable Development", held during August 16-18, 2019, University of Malaya, Meeting room 18-1, Wisma R&D, Kualalampur, Malaysia.
- 2. **Excellence Award (2018)** from Association of Inventory Academicians and Practitioners and Conferred in the First International Conference on Emerging Trends in Inventory, Supply Chain & Reliability Modeling, held during 21-23 December, 2018 at Department of Operational Research, University of Delhi.
- 3. **Tamilnadu Scientist Award (TANSA 2017)** from Tamilnadu State Council for Science and Technology, Chennai, INDIA.
- 4. **Research Award (2014)** from University Grants Commission (UGC), New Delhi, INDIA.
- 5. Shri P. K. Das Memorial **Best Faculty Award Senior (2013)** from Nehru Group of Institutions, Coimbatore, INDIA.
- 6. **Career Award for Young Teachers (2005)** from All India Council for Technical Education (AICTE), New Delhi, INDIA.
- 7. **Young Scientist Fellowship (2005)** from Tamilnadu State Councilfor Science and Technology, Chennai, INDIA.
- 8. **Young Scientist Award (2004)** from Department of Science and Technology (DST), New Delhi, INDIA.
- 9. **Project Fellow (1999)**, UGC funded Major Research Project entitled "Study of Coordinated Multi Commodity Inventory System" UGC-CSIR, New Delhi, INDIA: from 11th October 1999 to 25th September 2001.
- 10. **University Stipendiary Research Fellow (1997)** Madurai Kamaraj University, Madurai, Tamilnadu, INDIA: 27th March 1997 to 08th October 1999.

Events organized in leading roles

Number of Seminars / Conferences / Workshops / Events organized: 20.

International:

- 1. International Conference on Mathematical, Computational Intelligence and Engineering Approaches to Healthcare, Business and Tourism Analytics (ICMCIE-2020) through online held during December 20-22, 2020. (Convener)
- 2. International Webinar on Recent Advances in Graph Theory through online held during May 29-30, 2020. (Convener)
- 3. International Conference on Mathematical Modelling and Computational Methods in Science and Engineering (ICMMCMSE-2020) at Department of Mathematics, Alagappa University, Karaikudi, held during January 22-24, 2020. (Chairman)
- 4. International Conference on Mathematical Modelling and Computational Intelligence (ICMMCI-2019) at Department of Mathematics, Alagappa University, Karaikudi, held during September 03-04, 2019. (Convener)
- 5. International Conference on Discrete and Computational Mathematics(ICDCM2018) at Department of Mathematics, Alagappa University, Karaikudi, held during December 20-21, 2018. (Convener)
- 6. International Conference on Mathematical Modelling and Computational Methods in Science and Engineering (ICMMCMSE-2017) at Department of Mathematics, Alagappa University, Karaikudi, held during Febraury 20-22, 2017. (Chairman)
- 7. International Workshop on Data Analysis Using SPSS(IWDAUS-2016), at Department of Mathematics, Alagappa University, Karaikudi, held during December 15-19, 2016. (Convener)
- 8. International Workshop on Matrix Analytic Methods in Stochastic Models (IWMAM-2013) at Department of Mathematics, Alagappa University, Karaikudi, held during January 07-09, 2013. (Organizing Secretary)
- 9. International Conference on Stochastic Modeling(ICSM09), at Department of Mathematics, Alagappa University, Karaikudi, held during February 12-14, 2009.(Organizing Secretary)

National:

1. National Conference on Challenges in Mathematical Modelling(NC²M²-2020), at Department of Mathematics, Alagappa University, Karaikudi, held during February 20-21, 2020. (Organizing Secretary)

- 2. National Conference on "Recent Advances in Mathematical Modelling(NCRAMM19) at Department of Mathematics, Alagappa University, Karaikudi, held on September 23, 2019. (Convener)
- 3. National Conference on Mathematical and Computational Sciences(NCMCS18) at Department of Mathematics, Alagappa University, Karaikudi, held during October 23-24, 2018. (Convener)
- 4. Workshop on MATLAB at Department of Mathematics, Alagappa University, Karaikudi, held during March 26-27, 2018. (Organizing Secretary)
- 5. National Conference on Modern Trends in Pure and Applied Mathematics (NCMTPAM18) at Department of Mathematics, Alagappa University, Karaikudi, held on March 02, 2018. (Organizing Secretary)
- 6. National Conference on Pure and Applied Mathematics(NCPAM16) at Department of Mathematics, Alagappa University, Karaikudi, held during March 30-31, 2016. (Convener)
- 7. National Conference on Recent Advances in Computer and Mathematical Sciences(RACMS-2014), at Department of Mathematics and Computer Science, Dr. Umayal Ramanathan College for Women, Karaikudi, held during October 17-18, 2014. (Organizing Secretary)
- 8. National Conference on Challenges in Mathematical Modelling(CMM-2011), at Department of Mathematics, Alagappa University, Karaikudi, held on December 22, 2011. (Organizing Secretary)
- 9. National Conference on Recent Trends in Mathematics and Its Applications(RTMA-2010), at Department of Mathematics, Alagappa University, Karaikudi, held on December 22, 2010. (Organizing Secretary)
- 10. National Seminar on Analysis and Number Theory (NSANT-2010), at Department of Mathematics, Alagappa University, Karaikudi, held during January 21-22, 2010. (Organizing Secretary)
- 11. Symposium on Recent Advances in Mathematical Modeling in Engineering", at Department of Mathematics, Thiagarajar College of Engineering, Madurai during September 14-15, 2007, sponsored by TNSCST, Chennai. (Organizing Secretary)

Events Participated

Conferences / Seminars / Workshops: 65

Conferences:

International level:

- 1. Presented a paper at the "International Conference on Industrial and Applied Mathematics 2007 (ICIAM 2007)", July 16 20, 2007, University of Zurich, Zurich, Switzerland.
- 2. Presented a paper at the "International Conference on Modeling and Simulation 2006 (MS 2006)", April 03-05, 2006, Department of Mechanical Engineering, University of Malaya, Kulalampur, Malaysia.
- 3. Presented a paper at the "International Symposium on Advances in Statistical Methods and Applications", Dec 21-22, 2000, Department of Statistics, University of Madras, Chennai.
- 4. Presented a paper at the "International Conference on Stochastic processes and Their Applications" held at Cochin University of Science and Technology, Kochi, Kerala during 17-20 Dec 1999.

National level:

- 1. Presented a paper at the National level Seminar on "Operations Research and Its Applications", January 10, 2011, Department of Mathematics, Arulmigu Palaniandavar Arts College for Women, Palani.
- 2. Presented a paper at the "National Conference on Web and Computer Applications", March 07, 2008, Department of Computer Applications, RVS College of Engineering and Technology, Dindigul, Tamilnadu.
- 3. Presented a paper at the "Instructional Workshop on Matrix Analytic Methods and Conference on Queues, Inventory, Reliability, Maintenance and Replacement", 19-22, Feb.2004, Department of Mathematics, Cochin University of Science and Technology, Kochi, Kerala.
- 4. Presented a paper at the UGC Sponsored National Seminar on "Recent Advances in Pure and Applied Mathematics", August 23, 2003, Department of Mathematics, Kandarswami Kandar's College, Velur -638 182.
- 5. Presented a paper at the "National Conference on Mathematical and Computational Models, Dec 27-28, 2001, Department of Mathematics and Computer Applications, PSG College of Technology, Coimbatore.
- 6. Presented a paper at the "Seminar on Applications of Mathematics and Statistics", March 15-16, 2001, Department of Applied Mathematics and Statistics, School of Mathematics, Madurai Kamaraj University, Madurai 21.
- 7. Presented a paper in the "National Conference on Statistical Modeling", November 25-27, 1999, Department of Statistics, Shivaji University, Kolhapur.
- 8. Presented a paper at UGC Sponsored "National Conference on Statistics", March 18-20, 1999, St. Thomas College at Pala, Kerala.

- 9. Participated in the XVIII Ramanujan Symposium on "Recent Trends in Dynamical Systems and Mathematical Modelling", held during September 25-27, 2013, Ramanujan Institute for Advanced Study in Mathematics, University of Madras, Chennai.
- 10. Participated in the "Seminar on Recent Trends in Graph Theory", held on March 5, 2004, Department of Applied Mathematics and Statistics, School of Mathematics, Madurai Kamaraj University, Madurai 21.
- 11. Participated in the "Twenty second Annual Conference of the Association of Economists of Tamilnadu", Dec 15-16, 2001, Department of Economics, Arul Anandar College (Autonomous), Karumathur.
- 12. Participated in "One day Symposium on Mathematical Methods and Applications", 22 Dec, 1998, IIT Madras, Chennai 600 036.

Workshops:

- 1. Participated in the workshop on "Data Science and Analytics", held during September 27-28, 2016, Department of Computer Science, Alagappa University, Karaikudi.
- 2. Participated in the workshop on "R with Application to Quantitative Finance", held during August 26-28, 2016, Department of Mathematics, Birla Institute of Technology Pilani, K.K. Birla Campus, Goa.
- 3. Participated in the One day "User Awareness Programme on Accessing of Electronic Resources under UGC-INFONET Digital Library Consortium", held on July 25, 2014, Central Library, Alagappa University, Karaikudi.
- 4. Participated in the One day Workshop on "Financial Mathematics", held on March 27, 2013, School of Mathematics, Madurai Kamaraj University, Madurai 21.
- 5. Participated in the One day Workshop on "Data Analysis Using SPSS", held on August 30, 2013, School of Mathematics, Madurai Kamaraj University, Madurai 21.
- 6. Participated in the Two days National Workshop on "Recent Trends in Enterprise Information Systems", during April 27-28, 2006, Department of Computer Science and Engineering, Thiagarajar College of Engineering, Madurai.
- 7. Participated in the "National Instructional Workshop on Recent Trends and New Directions of Research in Cybernetics and Systems Theory", held from 28th January to 1st February, 2004, Institute of Advanced Study in Science and Technology, Khanapara, Guwahati 781 022, Assam, India, sponsored by Department of Science and Technology (DST), New Delhi.
- 8. Participated in the "Workshop on Applications of Mathematics in Engineering and Technology" held on 6th September, 2002, PSNA Engineering College, Dindigul.
- 9. Participated in the "Institutional and Instructional Workshop on Actuarial Mathematics", during March 18-23, 2002, Ramanujan Institute for Advanced Study in Mathematics, University of Madras, Chennai, sponsored by UGC-Special Assistance Programme.

Other Training Programs

Summer Schools:

- 1. Participated in the Winter School on "Modeling, Computing and Simulation in Engineering", during January 4-5, 2007, Department of Mathematics, IIT Madras, Chennai.
- 2. Participated in the "Second SERC School on Special functions and Functions of Matrix Argument", held from 29 th May, 2000 to 30th June 2000, Centre for Mathematical Sciences (CMS), Trivandrum-695 581, Kerala, Sponsored by Department of Science and Technology (DST).

Refresher Courses:

- 1. Participated in IAS sponsored "Refresher course in Probability, Stochastic Processes and Applications" held at Cochin University of Science and Technology, Kochi, during September 26 October 07, 2005.
- 2. Participated in UGC sponsored "Refresher course in Statistics" held at Annamalai University, Annamalai Nagar during 03 23 November, 2003.

Overseas Exposure / Visits

- 1. Malaysia (2019)
- 2. Singapore (2018)
- 3. Malaysia (2018)
- 4. Thailand (2017)
- 5. Switzerland (2007)
- 6. Germany (2006)
- 7. Malaysia (2006)

Membership in

Professional Bodies

- 1. Life Member: Indian Society for Probability and Statistics, India. (LM/2013/48/1040)
- 2. Life Member: Forum for Advanced Training Education and Research, FATER Academy of India, India.
- 3. Life Member: The Indian Science Congress Association, Kolkata, India. (L 14554)
- 4. Life Member: Indian Society of Technical Education, New Delhi, India. (LM 41851)
- 5. International Association of Engineers (IAENG), Hong Kong (Member No: 108515).

Editorial Board

1. **Editorial Board member**: Cogent Business & Management.

- 2. **Editorial Board member**: American Journal of Mathematics and Statistics.
- 3. **Cheif Editor**: Special Issue of Mathematical Modeling and Applied Computing, Vol.2(2), 2011.
- 4. **Guest Editor**: One of the Editors of the Special Issue in the "International Journal of Applied Mathematical Sciences", 9(1), 2016. (ISSN: 0973-0176)
- 5. **Guest Editor**: One of the Guest Editors of the Special Issue on "Discrete and Computational Mathematics" in the Journal of Discrete Mathematical Sciences & Cryptography, 22(5), 2019.(ISSN: 0972-0529)
- 6. **Reviewer:** Edited book "Enterprise Information Systems and Implementing IT Infrastructures: Challenges and Issues", IGI Global, USA, 2010.

7. Reviewer:

- (a) African Journal of Business Management.
- (b) American Journal of Mathematics and Statistics
- (c) Applications and Applied Mathematics, An International Journal.
- (d) Global Journal of Science Frontier Research(F).
- (e) International Journal of System Sciences.
- (f) Neural Computing and Applications.
- (g) Simulation Modeling and Practice.
- (h) International Journal of Applied and Computational Mathematics.
- (i) Communications in Statistics Theory and Methods.
- (j) International Journal of Systems Science: Operations & Logistics.
- (k) AMS Mathematical Reviews.
- (l) Int. J. of Mathematics in Operational Research.

Advisory Board

1.

Academic Bodies (such as Board of Studies etc.,)

- 1. Member of the Board of Studies for the Department of Mathematics, University of Kerala, Kariavattom, Thiruvananthapuram for a period of two years (2016-18).
- 2. Member of the Board of Studies in Mathematics of Karpagam Academy of Higher Education, Coimbatore for a period of two years (2016-2018).
- 3. University nominee of the Board of Studies for Department of Mathematics, Thassim Beevi Abdul Kader College for Women, for a period of two years (2015-2017).
- 4. Chairman of the Board of Studies in Mathematics of Directorate of Distance Education, Alagappa University for a period of three years (2015-2018).
- 5. Member of the Board of Studies for the Department of Mathematics, Sethu Institute of Technology, Kariapatti for a period of three years (2015-2018).
- 6. Member of the Board of Studies in M.Sc and M.Phil Mathematics of Department of Mathematics, Alagappa University for a period of three years (2014-2017).
- 7. Member of IX Academic Council of Tassim Beevi Abdul Kader College for Women, Kilakarai.(2013)
- 8. Member of the Board of Studies in M.Sc Applied Mathematics of Thiagarajar college of Engineering. (2011-14).
- 9. Member of the Board of Studies in M.Phil Mathematics of affiliated colleges of Alagappa University for a period of three years (2011-2014).

10. Member of the Board of Studies in M.Sc Mathematics of affiliated colleges of Alagappa University for a period of three years (2011-2014).

Others

1.

Resource persons in various capacities

Number of Invited / Special Lectures delivered: International - 24, National - 86.

Others

- 1. No. of PhD Thesis evaluated: 58
- 2. No. of PhD Public Viva Voce Examination conducted: 58.

Recent Publications

- 1. M. Nithya, Gyanendra Prasad Joshi, C. Sugapriya, S. Selvakumar, N. Anbazhagan, Eunmok Yang and Ill Chul Doo, Analysis of Stochastic State-Dependent Arrivals in a Queueing-Inventory System with Multiple Server Vacation and Retrial Facility, Mathematics, 10(17): 3041, 29 pages, August 2022, https://doi.org/10.3390/math10173041. (ISSN: 2227-7390, SCIE, Scopus and Web of Science indexed, Imapct factor 2.592.)
- 2. T. Harikrishnan, K. Jeganathan, S. Selvakumar, N. Anbazhagan, Woong Cho, Gyanendra Prasad Joshi and Kwang Chul Son, Analysis of Stochastic M/M/c/N Inventory System with Queue-Dependent Server Activation, Multi-Threshold Stages and Optional Retrial Facility, Mathematics, 10(15):2682, 37 pages, July 2022, https://doi.org/10.3390/math10152682. (ISSN: 2227-7390, SCIE, Scopus and Web of Science indexed, Imapct factor 2.592.)
- 3. V. Vinitha, N. Anbazhagan, S. Amutha, K. Jeganathan, Bhanu Shrestha, Hyoung-Kyu Song, Gyanendra Prasad Joshi and Hyeonjoon Moon, Analysis of a Stochastic Inventory Model on Random Environment with Two Classes of Suppliers and Impulse Customers, Mathematics, 10(13):2235, 22 pages, June 2022, ttps://doi.org/10.3390/math10132235. (ISSN: 2227-7390, SCIE, Scopus and Web of Science indexed, Imapct factor 2.258.)
- 4. N. Anbazhagan, Srijana Acharya, V. Vinitha, S. Amutha, K. Jeganathan, Changho Seo, and Hyun-Il Kim, The MAP/PH/N/1, Queueing-Inventory System With Demands From a Random Environment, IEEE Access, 10, pp:47371-47383, May 2022, https://doi.org/10.1109/ACCESS.2022.3170065.

 (ISSN: 2169-3536, SCIE, Scopus and Web of Science indexed, Imapct factor 3.367.)
- 5. C. Sugapriya, M. Nithya, K. Jeganathan, N. Anbazhagan, Gyanendra Prasad Joshi, Eunmok Yang and Suseok Seo, Analysis of Stock-Dependent Arrival Process in a Retrial Stochastic Inventory Sys-tem with Server Vacation, Processes, 10(1):176, 25 pages, January 2022, https://doi.org/10.3390/pr10010176.(ISSN: 2227-9717, SCIE, Scopus and Web of Science indexed, Imapct factor 2.847.)

- 6. Siva Kumar Pathuri, N. Anbazhagan, Gyanendra Prasad Joshi, and Jinsang You, Feature-Based Sentimental Analysis on Public Attention Towards COVID-19 Using CUDA-SADBM Classication Model, Sensors, 22(1):80, 17 pages, December 2021, https://doi.org/10.3390/s22010080.(ISSN: 1424-8220, SCIE, Scopus and Web of Science indexed, Imapct factor 3.576.)
- 7. P. Thanalakshmi, R. Anitha, N. Anbazhagan, Woong Cho, Gyanendra Prasad Joshi and Eunmok Yang, A Hash-Based Quantum-Resistant Chameleon Signature Scheme, Sensors, 21(24):8417, 15 pages, December 2021, https://doi.org/10.3390/s21248417. (ISSN: 1424-8220, SCIE, Scopus and Web of Science indexed, Imapet factor 3.576.)
- 8. V. Vinitha, N. Anbazhagan, S. Amutha, K. Jeganathan, Gyanendra Prasad Joshi, Woong Cho and Suseok Seo, Steady State Analysis of Impulse customers and Cancellation policy in Queueing-Inventory System, Processes, 9(12):2146, 16 pages, November 2021, https://doi.org/10.3390/pr9122146.(ISSN: 2227-9717, SCIE, Scopus and Web of Science indexed, Imapct factor 2.847.)
- 9. P. Mala, M. Palanivel, S. Priyan, N. Anbazhagan, Srijana Acharya, Gyanendra Prasad Joshi and Joohan Ryoo, Sustainable Decision-Making Approach for Dual-Channel Manufacturing Systems under Space Constraints, Sustainability, 13(20), 11456, 22 pages, October 2021, https://doi.org/10.3390/su132011456. (ISSN: 2071-1050, SCIE, Scopus and Web of Science indexed, Imapct factor 3.251.)
- 10. R. Suganya, Lewis Nkenyereye, N. Anbazhagan, S. Amutha, M. Kameswari, Srijana Acharya and Gyanendra Prasad Joshi, Perishable Inventory System with N-Policy, MAP Arrivals and Impatient Customers, Mathematics, 9(13), 1514, 14 pages, June 2021, https://doi.org/10.3390/math9131514 (Corresponding Author, ISSN: 2227-7390, SCIE, Scopus and Web of Science indexed, Imapct factor 2.258.)
- 11. Siva kumar Pathuri, N. Anbazhagan N. Sriman Narayana and W.Sridhar, A Novel Classication Model for Feature-Based Sentimental Analysis on Public Attention Towards COVID-19. Journal of Cardiovascular Disease Research, 12(3), 176-187, 2021, doi: 10.31838/jcdr.2021.12.03.25 (ISSN:0975-3583, 0976-2833, Scopus indexed)
- 12. K. Jeganathan, S. Selvakumar, N. Anbazhagan, S. Amutha, Porpattama Hammachukiattikul, Stochastic modeling on M/M/1/N inventory system with queue-dependent service rate and retrial facility. AIMS Mathematics, 6(7), 7386 7420, April 2021. doi: 10.3934/math.2021433 (SCIE, Scopus and Web of Science indexed, Imapet factor 1.427.)
- 13. K. Suriya Prabha, S. Amutha, N. Anbazhagan, and Ismail Naci Cangul, Bounds on Coindependent Liars Domination in Graphs, Journal of Mathematics, Volume 2021, Article ID 5544559, 6 pages,2021.(ISSN: 2314-4629 (Print), ISSN: 2314-4785 (Online), https://doi.org/10.1155/2021/5544559,SCIE and Scopus indexed, Imapct factor 0.971.)

- 14. K. Jeganathan, T. Harikrishnan, S. Selvakumar, N. Anbazhagan, S. Amutha, Srijana Acharya, Rajendra Dhakal, and Gyanendra Prasad Joshi, Analysis of Interconnected Arrivals on Queueing-Inventory System with Two Multi-Server Service Channels and Retrial facility. Electronics. 10(5), 576,2021. https://doi.org/10.3390/electronics10050576 (SCIE, Scopus and Web of Science indexed, Imapct factor 2.412.)
- 15. Neeraj Manhas and N. Anbazhagan, A mathematical model of intricate calcium dynamics and modulation of calcium signalling by mitochondria in pancreatic acinar cells. Chaos, Solitons and Fractals, 145, April 2021, 110741 (ISSN 0960-0779, https://doi.org/10.1016/j.chaos.2021.110741, SCI, Scopus and Web of Science indexed, Imapet factor 3.764.)