

RESUME

1. Name : **Dr. M. MEGANATHAN**
2. Permanent Address : S/o P. Murugesan,
Ravuthampatti (vill),
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Mobile : +91 7373914442, +91 7904882103
E-mail : meganathanmath@gmail.com
3. Date of Birth : 10 - 04 – 1993
4. Gender : Male
5. Educational qualifications : M.Sc., M.Phil., SET., Ph.D



Sl. No.	Examination Passed *	Name of the University/Board	Year of Passing	Subject/ Specialization	% of Marks	Division / Class
1	SSLC	Govt. Boys Higher Secondary School, Tirupattur.	2008	Maths, Science, Social Science	76.6	First Class
2	HSC	Govt. Boys Higher Secondary School, Tirupattur.	2010	Maths, Physics, Chemistry, Biology	74.1	First Class
3	B.Sc., Mathematics	Sacred Heart College (Autonomous), Tirupattur.	2013	Mathematics	85.1	First Class with Distinction
4	M. Sc., Mathematics	Sacred Heart College (Autonomous), Tirupattur.	2015	Mathematics	90.7	First Class Exemplary
5	M. Phil., Mathematics	Sacred Heart College (Autonomous), Tirupattur.	2016	Mathematics	92.0	First Class Exemplary
6	Tamil Nadu State Level Eligibility Test (TNSET)	Mother Teresa Women's University, Kodaikanal	2016	Mathematics	Qualified	
7	Ph.D	Thiruvalluvar University	2022	Fractional Difference Calculus		Highly Commended

6. Academic Experience:

- (i) Teaching : 3 Years and 3 Months
(ii) Period of Teaching : 2016-2018 and 2020 onwards
(iii) Subject taught in (UG) : Complex Analysis, Dynamics, Allied Maths,
Vector Analysis, Differential Equations,
Graph Theory, Mathematical Foundations
Subject taught in (PG) : Abstract Algebra, Linear Algebra, Real Analysis,
Discrete Mathematics, Partial Differential Equations

Positions held:

S.No	Designation and Office Address	From	To	Nature of duties/responsibilities
1.	Assistant Professor, Department of Mathematics, Sacred Heart College, Tirupattur.	16.06.2016	30.04.2018	Teaching, evaluation, question paper setting
2.	Assistant Professor, Department of Mathematics, Don Bosco College (Co- Ed), Yelagiri.	01.08.2020	03.08.2021	Teaching, evaluation, question paper setting
3.	Assistant Professor, Department of Science and Humanities (Mathematics), R.M.K. College of Engineering and Technology, Pudhuvoyal, Chennai.	04.08.2021	Till date	Teacher, evaluation, question paper setting

7. Research Experience : 6 Years

8. Ph.D Thesis Title : Modeling with fractional difference operators in transforms

9. Project :

1. Obtained Research Funding of amount **3 Lakhs** from **TNSCST** for the period of 2018-2020 under scholarship for Ph.D Scholars Scheme.
2. Guided M.Sc students under **Sacred Heart Fellowship** in the year 2017.

10. Professional recognitions, awards, fellowships received

S.No	Nominated to the award	Institution	Year
1	Proficiency in studies (in School)	Govt. Boys Higher Secondary School, Tirupattur	2006
2	Prize in elocution Competition	Anna NarpaniMatram, Vellore	2009
3	Prize in elocution Competition	Abdul Hakeem College, Vellore	2011
4	Best Paper Presentation Award	Auxilium College, Vellore	2015
5	Proficiency in studies	Sacred Heart College, Tirupattur	2016
6	Gold Medal in M.Phil Mathematics	Sacred Heart College, Tirupattur	2017
7	Best Research Scholar Award	Sacred Heart College, Tirupattur	2019

11. Invited Talks

1. Delivered an invited talk on “**Applications of Transforms**” at St.Francis de Sales College, Bangalore on 6th August 2019.
2. As a resource person for **Latex Training Programme** at Gonzaga College of Arts and Science for Women, Krishnagiri on 10th August 2019.
3. As a resource person for **Latex Training Programme** at Don Bosco College, Dharmapuri on 23rd January 2020.
4. Delivered a webinar on “**Research Techniques on Difference Operator**” at Immaculate College for Women, Viriyur on 20th May 2020.
5. Delivered a talk on “**Applications of Transforms using Difference Operators**” at Sacred Heart College(Autonomous), Tirupattur on January 24, 2021.
6. Delivered a talk on “**Overview of Differential and Integral Calculus in Engineering**” at PMC Engineering College, Hosur on March 3, 2021.
7. As a resource person for **Math in Latex Training Programme** at Sacred Heart College, Tirupattur on 10th October 2021.

12. Computer Skills :

Good Working Knowledge in

Computing softwares : Matlab and Mathematica.

Computer Packages : Latex and MS Office.

Operating Systems : Windows.

13. List of papers published in International Journals

1. G. Britto Antony Xavier, B.Govindan,S.John Borg and **M.Meganathan**, “Generalized Laplace Transform Arrived From an InverseDifference Operator”, Global Journal of Pure and Applied Mathematics,12(3), 2016, 661-666. – **Scopus**
2. G. Britto Antony Xavier, B.Govindan,S.John Borg and **M.Meganathan**, “Finite Fourier Decomposition of Functions UsingGeneralized Difference Operator”, Scientific Publications of the State University of Novipazar, 9(1), 2017, 47-57.- **UGC**
3. G. Britto Antony Xavier, B.Govindan, S.John Borg and **M.Meganathan**, “ α , k-Laplace Transform with Poly Binomial Numbers”, International Journal of Mathematics And its Applications,5(1-A), 2017, 37-43, ISSN: 2347-1557.– **UGC**
4. G. Britto Antony Xavier, B.Govindan,S.John Borg and **M.Meganathan**, “Discrete Fourier Transform Arising From GeneralizedDifference Operator”, Journal of Computational Mathematica,1(1), 2017, 104-111, ISSN: 2456-8686.
5. M. Maria Susai Manuel, G. Dominic Babu, G. Britto Antony Xavier and **M. Meganathan**, $m(\alpha_i)$ Series To Circular Functions Arising From Generalized Alpha Difference Equation, Int. Journal of Mathematics And its Applications, Volume 5, Issue 1-A (2017),17-23.– **UGC**
6. Sandra Pinelas, G. Britto Antony Xavier,S. U. Vasantha Kumar and **M. Meganathan**, Laplace - Fibonacci Transform By The Solution Of Second Order Generalized Difference Equation, Nonautonomous Dynamical Systems, 2017, 4: 22-30.– **UGC**
7. G. Britto Antony Xavier, S.John Borg and **M.Meganathan**, “Discrete Heat Equation Model with Shift Values”, Applied Mathematics, 2017, 8, 1343-1350.
8. G. Britto Antony Xavier, **M.Meganathan**and E.L. Gohila, “Finite Fourier Series Decomposition of Functions(Signals) of Two Variables”, Asian Journal of Mathematics and Computer Research, 2018, 24(3), 118-127.
9. G. Britto Antony Xavier, **M.Meganathan** and E.L. Gohila, “Finite Fourier Series Decomposition of Functions (Signals) of Three Variables”, Int. Journal of Mathematics And its Applications, 2018, 6(1-B)(Special Issue), 118-127.– **UGC**
10. G. Britto Antony Xavier, S.John Borg, B.Govindan and **M.Meganathan**, “Heat Equation Model for rod and thin Plate by Partial q-difference Operator”, The Journal of Analysis(Springer),2018, 1-12. – **Scopus**
11. G. Britto Antony Xavier, S.John Borgand **M.Meganathan**, “Discrete Heat Equation with Shift Values”, Springer Proceedings in Mathematics & Statistics, 2018, 13-19.

– **Scopus**

12. G. Britto Antony Xavier and M. **Meganathan**, “Analysis of Fractional Alpha Laplace and Extorial Transform Using $\alpha(h)$ –difference Operator”, Journal of Applied Science and Computations, Volume V, Issue XII, December/2018, 2295 – 2305. –**UGC**
13. Sandra Pinelas, **M. Meganathan** and G. Britto Antony Xavier, “Fractional Frequency Laplace Transform by Inverse Difference Operator with Shift Value”, Open Journal of Mathematical Sciences (OMS), 2019, 3, 121-128; doi:10.30538/oms2019.0055.– **UGC**
14. M. **Meganathan** and G. Britto Antony Xavier, “Fractional Order Alpha Laplace and Extorial Transform by Inverse difference Operator”, AIP Conference Proceedings **2095**, 030016 (2019); <https://doi.org/10.1063/1.5097527>. - **Scopus**
15. S. Vasuki, M. **Meganathan**, B. Chandrasekar and G. Britto Antony Xavier, “Modeling with Fractional Frequency Sumudu Transform by Inverse Difference Operator”, Online International Interdisciplinary Research Journal, Volume-09, Mar 2019 Special Issue (04). – **UGC**
16. Dumitru Baleanu, MaysaaAlqurashi, **Meganathan Murugesan** and Britto Antony Xavier Gnanaprakasam, “One dimensional fractional frequency Fourier transform by inverse difference operator”, Advances in difference equations, 2019-212, <https://doi.org/10.1186/s13662-019-2071-y>. - **SCI - A-I**
17. G. Britto Antony Xavier, S. U. Vasantha Kumar and **M. Meganathan**, “Laplace Time Tuning Transform in Digital Signal Processing”, International Journal of Engineering and Technology, Vol. 11 No 3 Jun-Jul 2019. – **Scopus**
18. **Meganathan M**, T.Abdeljawad, Fahd Jarad and G Britto Antony Xavier, Alpha Fractional Frequency Laplace Transform Through Multiseries, Advances in difference equations, (2020) 2020:234.- **SCI – A-I**
19. **MeganathanM**, T.Abdeljawad, Fahd Jarad and G Britto Antony Xavier, n-dimensional Fractional Frequency Laplace transform by Inverse Difference Operator, Mathematical Problems in Engineering, Volume 2020, Article ID 6529698.- **SCI – A-I**
20. **M. Meganathan**, G. Britto Antony Xavier and T. Abdeljawad, “Modeling with Fractional Laplace Transform by h –difference Operator”, Progress in Fractional Differentiation and Applications, 2020, 6(4). – **Scopus – IF – 5.1**
21. **M. Meganathan** and G. Britto Antony Xavier, Impulsive Fractional Difference Equation on hZ , Advances in Mathematics: Scientific Journal, 9 (2020), no.3, 1215–1224.- Scopus

22. B. Govindan, M. Nandhini, and **M. Meganathan**, Generalized Discrete Finite Half Range Fourier Series, *Advances in Mathematics: Scientific Journal* 9 (2020), no.3, 1225–1237. – Scopus
23. **M. Meganathan**, S. Vasuki, B. Chandrasekar and G. Britto Antony Xavier, One dimensional fractional frequency Sumudu transform by inverse alpha-difference operator, *Journal of Computational Mathematics*, Volume 4, Issue 1, 2020:137-152.
24. **Meganathan M**, T.Abdeljawad, Fahd Jarad and G Britto Antony Xavier, Numerical Analysis of Discrete Bagley Torvik Equation, *Advance in Difference Equations*, 2021, 222(2021). – A – I
25. **M. Meganathan**, S. Vasuki, B. Chandrasekar and G. Britto Antony Xavier, Discrete fractional Sumudu transform by inverse fractional difference operator, *Springer Proceedings*(accepted)
26. J. Leo Amalraj, M. Maria Susai Manuel, **M. Meganathan**, M. Syed Ali, Fractional Order Calculus, Generalized Laplace Transforms And Its Application Through Generalized Fractional Proportional Differences, *Mathematical Problems in Engineering* (accepted).

14. List of papers presented/attended in National/International Conferences

1. Presented the paper entitled **Generalized Partial Sums on Finite and Infinite Series on Closed Factorial Functions** in the State level Symposium on **Modern Trends in Discrete Mathematics** at AnnaiVelankanni College, Tholayavattam, during 12-13, August 2015.
2. Presented the paper entitled **Generalized Laplace Transform arrived from an Inverse Difference Operator** in the one day National Conference on **Pure and Applied Mathematics** at VIT University, Vellore on 12th March 2016.
3. Participated in the National Conference on **Emerging Trends and Applications of Mathematics to Science and Technology** held from August 6-7,2013 at the Department of Mathematics, Sacred Heart College, Tirupattur.
4. Participated in the National Seminar on **Advanced Trends in Mathematics** held on September 19, 2014 at the Department of Mathematics, Don Bosco College, Dharmapuri.
5. Participated in the National Conference on **Mathematical Applications in Engineering and Technology** held from February 11-12,2015 at the Department of Mathematics, Sacred Heart College, Tirupattur.

6. Attended state level workshop on **MATLAB** held in MarudharKesari Jain College for Women, Vaniyambadi. On 18th February 2015.
7. Attended state level workshop on **Discrete Mathematics and its Applications** held from January 29-30, 2016 at the Department of Mathematics, Sacred Heart College, Tirupattur.
8. Participated in the training programme **English Skills for Teachers** held from May 02-11, 2016 at Don Bosco Institute for Professional English, Thiruvannamalai.
9. Participated in the International Conference on **Mathematical Applications in Engineering and Technology** organized by Sacred Heart College, Tirupattur during 27th and 28th January 2017.
10. Participated in the NAAC Sponsored National Level Conference on **The Role of IQAC towards Quality Assurance in Autonomous Colleges** held from November 04-05, 2016 at Sacred Heart College, Tirupattur.
11. Participated in the National Conference on **Advanced Trends in Mathematics** held on 27th March 2017 at the Department of Mathematics, Thiruvalluvar University College of Arts and Science, Vandavasi, Thiruvannamalai.
12. Presented the paper entitled **Discrete Fourier Decomposition of Harmonic Signal of Two Variables** in the International Conference on **Analysis and its Applications (ICAA-2017)** at Aligarh Muslim University, Aligarh on 20-22nd November 2017.
13. Participated in the National Conference on **Intellectual Property Rights and Plagiarism** held on 22nd March 2018 organized by Sacred Heart College, Tirupattur.
14. Participated and presented in the “**State Level Seminar on Recent Mathematical Techniques and its Applications**” held during 30th, August 2018 at Don Bosco College, Sogathur, Dharmapuri.
15. Participated and presented in the “**State Level Seminar on Mathematical Analysis and Applications - 2018**” held during 24th, August 2018 at K.M.G College of Arts & Science College, Gudiyattam.
16. Participated and presented in the “**International Conference on Advances in Pure & Applied Mathematics 2018**” held during 06-08, September 2018 at School of Mathematics, Madurai Kamaraj University, Madurai.

17. Participated and presented in the “**National Seminar on Applied Mathematics (NSAM’18)**” held during 28th, September 2018 at Gonzaga College of Arts and Science for Women, Kathampallam, Elathagiri.
18. Participated and presented in the “**National Conference on Mathematical Analysis and Computing**” held during 13-14, December 2018 at SSN College of Engineering, Kalavakkam.
19. Presented the paper entitled **One dimensional fractional frequency Fourier transform** in the National Seminar on **Pure and Applied Mathematics** at AnnaiVelankanni College, Tholayavattam, during 21-22, January 2019.
20. Participated in the “**National Conference on Applied Mathematics and its Applications (NCAMA - 2019)**” held during 6-7th, February 2019 at Sacred Heart College (Autonomous), Tirupattur.
21. Participated in the “**One day Seminar on Current Trends in Difference and Differential Equations**” held on 22nd, February 2019 at Sacred Heart College (Autonomous), Tirupattur.
22. Participated in the “**One Day National Level Seminar on Applied and Pure Mathematics**” held on 5th, March 2019 at MazharulUloom College, Ambur.
23. Participated in the “**State Level Seminar on Mathematical Analysis and its Applications**” held on 7th, March 2019 at Sun Arts & Science College, Tiruvannamalai.
24. Participated and presented in the “**International Conference on New Trends in Mathematical Modeling with Applications**” held during 29-30th July 2019 at Sri Vidya Mandir Arts & Science College, Katteri, Uthangarai.
25. Participated in the “**State Level Seminar on Advanced Trends in Applied Mathematics**” held on 28th August 2019 at Don Bosco College, Dharmapuri.
26. Participated in the “**Intellectual Property Rights**” held on 19-20th September 2019 at Sacred Heart College, Tirupattur.
27. Participated in the “**Workshop on MATLAB**” held on 25th September 2019 at Sacred Heart College, Tirupattur.
28. Participated and presented in the “**National Seminar on Applied Mathematics**” held during 27th September 2019 at Gonzaga College of Arts and Science for Women, Kathapallam.

29. Participated and presented in the “**International Conference on Mathematical Analysis and Computing**” held during 23-24th December, 2019 at SSN College of Engineering, Kalavakkam, Chennai.
30. Participated in the International Conference on “**Mathematical Sciences and Applications**” held during 27-29th January 2020 at Sacred Heart College(Autonomous), Tirupattur.
31. Participated and presented in the “**International Conference on Innovations in Physical Sciences, Information Technology and Social Sciences**” held during 14-15th February 2020 at Sri Vidya Mandir Arts & Science College, Katteri, Uthangarai.
32. Participated in the International Conference on “**Mathematical Computer Engineering**” held during 21-22rd February 2020 at VIT, Chennai.

15. Conferences Organized:

1. Organizing Secretary in the International Conference on **Mathematical Applications in Engineering and Technology(ICMA-2017)** organized by Department of Mathematics, Sacred Heart College, Tirupattur during 27th and 28th January 2017.
2. Member of Organizing Committee in the Intra Department Competition **MATHEMA-2017** organized by Department of Mathematics, Sacred Heart College, Tirupattur during 20th December 2017.
3. Member of Organizing Committee in the National Conference on **Discrete Mathematics and its Applications(NCDMA-2018)** organized by Department of Mathematics, Sacred Heart College, Tirupattur during 9th and 10th February 2018.

16. Foreign Collaborative:

1. **Dr. SANDRA PINELAS,**
Academia Militar,
Departamento de Ciências Exactas e Naturais,
Av. Conde Castro Guimarães,
2720-113 Amadora, Portugal.
2. **Dr. THABET ABDELJAWAD**
Professor of Mathematics
Department of Mathematics and General Sciences,
Prince Sultan University, Riyadh, Saudi Arabia.
3. **Dr. FAHD JARAD**
Professor,
Department of Mathematics,
Çankaya University,
Yukariyurtcu Mahallesi Mimar Sinan Caddesi No: 4 06790,
Etimesgut/ANKARA/TURKEY.

4. Dr. LAMBERTO RONDONI

Professor of Mathematics

Dipartimento di Scienze Matematiche - Politecnico di Torino
corso Duca degli Abruzzi, 24 - 10129 Torino – Italy.

5. Dr. DUMITRU BALEANU

Department of Mathematics,

Cankaya University, Ankara, Turkey.

6. MAYSAA ALQURASHI

Mathematics Department,

College of Sciences, King Saud University,
Riyadh, Saudi Arabia.

17. References

1. Dr. E. Thandapani,

Emeritus Professor

Department of Mathematics,

Ramanujam Institute of Advanced Study in Mathematics,

University of Madras, Chennai – 600 005.

2. Dr. B. Chaluvvaraju,

Professor,

Department of Mathematics,

Bangalore University,

Bangalore.

Declaration

I certify that the information furnished above are true and correct to the best of my knowledge and belief.

M. Meganathan