

# **RESUME** (as on 03.07.2023)

# **Department of Mathematics (Aided)**

1. Name : Dr. N. MOHAMED THOIYAB 2. Gender : Male 3. Designation : Assistant Professor 4. Date of Birth : 24-05-1989 5. Address : **Residential** Office 1 west, PG & Research Department of Mathematics, Shanmuga Nagar, Jamal Mohamed College (Autonomous), Kulapatty road, Airport, Tiruchirappalli – 620 020. Tiruchirappalli – 620 007. Tamil Nadu, India. e-mail: jmcthoiyab@gmail.com, nmt@jmc.edu Tamil Nadu, India. Contact Number: 8122291037 9787077744.

6. Educational Qualifications:

S.No.	Examination Passed	University / College	Year of	Division/
			Passing	Grade
1.	B.Sc. Mathematics	Jamal Mohamed College,	2009	I Class with
		Bharathidasan University, Trichy.		Distinction
2.	B.Ed.	Institute of Advanced Study in	2010	I Class with
		Education, Chennai.		Distinction
3.	M.Sc. Mathematics	Jamal Mohamed College,	2012	I Class with
		Bharathidasan University, Trichy.		Distinction
4.	SET (Mathematics)	Bharathiar University, Coimbatore.	2012	-
5.	M.Phil. Mathematics	Thanthai Periyar Government Arts &	2015	I Class with
		Science College,		Distinction
		Bharathidasan University, Trichy.		
6.	Ph.D. Mathematics	Jamal Mohamed College,	2023	Commended
		Bharathidasan University, Trichy.		

Ph.D. Thesis Title: "A Study on Robust Stability of Dynamical Delayed Neural Networks".

## 7. Teaching Experience: (as on 03.07.2023)

Under Graduate: 11years

Post Graduate: 11years

## 8. Languages Known: Tamil, English.

## 9. Area of Specialization: Algebra, Analysis, Dynamical System.

#### **10. Courses taught:**

#### Under Graduate:

- 1. Basic Mathematics
- 2. Calculus
- 3. Sequences and series
- 4. Algebra
- 5. Linear Algebra
- 6. Real analysis
- 7. Number Theory

### Post Graduate:

- 1. Algebra
- 2. Linear Algebra

### 11. SWAYAM/ NPTEL COURSES:

- 1. Completed **8 weeks NPTEL** online course on "Introduction to Abstract and Linear Algebra" organized by **IIT Kharagpur** and secured **Elite Silver** grade.
- 2. Completed **8 weeks NPTEL** online course on "Introduction to Rings and Fields" organized by **Chennai Mathematical Institute** (**CMI**) and secured **Elite** grade.
- 3. Received Certificate of Appreciation from **E&ICT Academy, IIT Kanpur** for completing the Faculty Development Program on **Data Science** from 19. 04.2021 to 30.04.2021.

#### 12. Publications:

Papers published in Science Citation Indexed (SCI) journals with JCR impact factors 2022 :

1."New Global Asymptotic Robust Stability of Dynamical Delayed Neural Networks via Intervalized Interconnection Matrices", N Gunasekaran, N. Mohamed Thoiyab, Q Zhu, J Cao, P. Muruganantham, IEEE Transactions on Cybernetics. DOI:10.1109/TCYB.2021.3079423. [JCR Impact Factor: 19.118].

2. "Novel results on global stability analysis for multiple time-delayed BAM neural networks under parameter uncertainties", **N. Mohamed Thoiyab**, P. Muruganantham, Q Zhu, N Gunasekaran, **Elsevier, Chaos, Solitons & Fractals** 152, 111441, (2021) DOI:10.1016/j.chaos.2021.111441. [JCR Impact Factor: 9.922].

3. "Novel results on global robust stability analysis for dynamical delayed neural networks under parameter uncertainties", N Gunasekaran, N. Mohamed Thoiyab, P. Muruganantham, G Rajchakit, B Unyong, IEEE Access, 8, 178108-178116,(2020). DOI: 10.1109/ACCESS.2020.3016743. [JCR Impact Factor: 3.476]

4. "Global Stability Analysis of Neural Networks with Constant Time Delay via Frobenius Norm", NM Thoiyab, P Muruganantham, G Rajchakit, N Gunasekaran, B Unyong, ...Mathematical Problems in Engineering 2020, DOI:10.1155/2020/4321312.[JCR Impact Factor: 1.430]

#### 13. International Conference attended with presenting papers:

 "Global Robust Stability Analysis for Hybrid BAM Neural Networks", N. Mohamed Thoiyab, P Muruganantham, N Gunasekaran, 2021 IEEE Second International Conference on Control, Measurement and Instrumentation (CMI), held at Calcutta University, 93-98, Publisher: IEEE. DOI:10.1109/CMI50323.2021.9362980.

2. "A new upper bound for global asymptotic robust stability of BAM neural networks under multiple time-delays", P Muruganantham, N. Mohamed Thoiyab, N Gunasekaran, 2022
First International Conference on Electrical, Electronics, Information and Communication
Technologies (ICEEICT), Publisher: IEEE, 1-6, (2022).
DOI:10.1109/ICEEICT53079.2022.9768421.

#### 14. Resource Person:

- 1. Acted as **aptitude trainer** for the various programs organized by the Guidance & Counselling Center, Jamal Mohamed College, Trichy-20.
- Delivered a lecture entitled "Algebra & Number Theory " on 20.09.2020 at Mount Zion College of Engineering and Technology, Pudukkottai.
- 3. Acted as a resource person for **NET**, **SET coaching classes in Mathematical sciences** organized by Department of Mathematics, Jamal Mohamed College, Trichy-20.
- Acted as a resource person in FDP for supporting staff members under DBT star College scheme on" Developing Quick Arithmetical Skills" organized by Department of Chemistry, Jamal Mohamed College, Trichy-20.

#### **15. Special Awards/ Recognitions:**

- 1. Awarded as a **top performing mentor** from **NPTEL Coordinator**, **IIT Madras** for mentoring the students in NPTEL Online Certification Course on Introduction to abstract and linear algebra during July-December 2022.
- 2. Acted as a reviewer for many international publishers like **IEEE**, **Springer**, **Elsevier** etc.

#### 16. Conference / Seminar attended without presenting papers:

1. Participated in the UGC Autonomous grant Workshop on Mathematical Modeling organized by PG & Research Department of Mathematics, Jamal Mohamed College (Autonomous), Tiruchirappalli, during 19.01.2011 to 25.01.2011

2.. Participated in One day National level seminar on "Mathematics and its Applications" organized by PG & Research Department of Mathematics, Shrimati Indira Gandhi College, Tiruchirappalli, on 19<sup>th</sup> September 2011.

3.. Participated in the UGC Sponsored International conference on "Mathematical Methods and Computation" Organized by PG and Research Department of Mathematics, Jamal Mohamed College (Autonomous), Tiruchirappalli, during February, 13-14, 2014.

4. Participated in the UGC Sponsored National seminar on "New Trends in Analysis" organized by the Department of Mathematics, Nehru Arts and Science College, Kanhangad, Kasaragod, Kerala, during 25<sup>th</sup> and 26<sup>th</sup> of September 2014.

5. Participated in the UGC Sponsored International conference on "Mathematical Methods and Computation" Organized by PG and Research Department of Mathematics, Jamal Mohamed College (Autonomous), Tiruchirappalli, during 22<sup>nd</sup> and 23<sup>rd</sup> of January 2015.

6. Participated in the International Workshop on Big Data Analytics using Distributed Computing Organized by PG and Research Department of Mathematics, Jamal Mohamed College (Autonomous), Tiruchirappalli on 23<sup>rd</sup> of December 2022.

#### 17.Seminar/ Conference/ Workshop/ Inter-collegiate meet Organized:

1. Organizing Secretary, JAMATICS 2K17 (A State Level Intercollegiate Math Competition) at NBAG Auditorium (A/C), Jamal Mohamed College, Tiruchirappalli-20.

2. Organizing Secretary, Math Intelligentsia-2017 (An intra collegiate meet) at NBAG Auditorium (A/C), Jamal Mohamed College, Tiruchirappalli-20.

3. Organizing Secretary, JAMATICS 2K18 (A State Level Intercollegiate Math Competition) at NBAG Auditorium (A/C), Jamal Mohamed College, Tiruchirappalli-20.

4. Organizing Secretary, Math Intelligentsia-2017 (An intra collegiate meet) at NBAG Auditorium (A/C), Jamal Mohamed College, Tiruchirappalli-20.

5. Executive Committee Member, International Conference on Mathematical Methods and Computation at PG and Research Department of Mathematics, Jamal Mohamed College, Tiruchirappalli on 11th December 2017

6. Executive Committee Member, International Conference on Mathematical Methods and Computation at PG and Research Department of Mathematics, Jamal Mohamed College, Tiruchirappalli on 20th & 21st February 2019. 7. Executive Committee Member, International Conference on Mathematical Methods and Computation at PG and Research Department of Mathematics, Jamal Mohamed College, Tiruchirappalli on 19th February 2020.

8. Coordinator, JAMATICS 2020 (A State Level Intercollegiate Competition) at PG and Research Department of Mathematics, Jamal Mohamed College, Tiruchirappalli on 25th February 2020.

9. Coordinator, JAMATICS 2022 (A State Level Intercollegiate Competition) at PG and Research Department of Mathematics, Jamal Mohamed College, Tiruchirappalli-20.

10. Organizing Member, one-week Interdisciplinary Online Faculty Development Programme on Data Analytics and Mathematical Software Tools by Teaching Learning Centre Ramanujan College (University of Delhi) under the aegis of Ministry of Education Pandit Madan Mohan Malaviya National Mission on Teachers and Teaching in Collaboration with PG & Research Department of Mathematics (Under DBT Star College Scheme), Jamal Mohamed College, Trichy from 25-02-2022 to 03-03-2022.

11. Coordinator, JAMATICS 2023 (A State Level Intercollegiate Competition) at PG and Research Department of Mathematics, Jamal Mohamed College, Tiruchirappalli on 1<sup>st</sup> March 2023.

12. Executive Committee Member, International Conference on Mathematical Methods and Computation at PG and Research Department of Mathematics, Jamal Mohamed College, Tiruchirappalli on 21st & 22nd December 2022.

#### 18. Orientation Programme/ Refresher courses attended:

- Attended UGC- Sponsored Orientation Programme at UGC- Academic Staff College, Bharathidasan University, Tiruchirappalli from 20.05.2014 to 16.06.2014.
- Attended Special Winter School in Computational Mathematics (Refresher course) organized by the UGC-HRDC Academic Staff College, Savitribai Phule Pune University, from 06.11.2017 to 26.11.2017.

- 3. Attended Refresher course in Mathematics organized by the UGC-HRDC, University of Hyderabad, Hyderabad during the period from 18.07.2019 to 31.07.2019.
- 4. Completed **8 weeks NPTEL FDP** on "Introduction to Abstract and Linear Algebra" organized by **IIT Kharagpur** and secured **Elite Silver** grade.
- 5. Completed **8 weeks NPTEL FDP** on "Introduction to Rings and Fields" organized by **Chennai Mathematical Institute (CMI)** and secured **Elite** grade.
- 6. Received Certificate of Appreciation from **E&ICT Academy, IIT Kanpur** for completing the Faculty Development Program on **Data Science** from 19. 04.2021 to 30.04.2021.

#### **19. Other Academic Responsibilities:**

- 1. Question Paper Setter in various universities in Tamil Nadu.
- 2. Question Paper scrutiny board member in various universities in Tamil Nadu.

#### 20. Administrative positions held in the College:

- 1. Tutor in-charge for B.Sc. Mathematics (2016-19).
- 2. Tutor in-charge for B.Sc. Mathematics (2019-22).
- 3. Tutor in-charge for M.Sc. Mathematics (2022-24).
- 4. Mathematics Association Vice President (2016-18).
- 5. Department Library in-charge (2013-2022).
- 6. Department Test in-charge (2014-2017).
- 7. Department Curriculum development cell member (2020-till date).
- 8. Department stock register maintenance. (2013-till date).
- Member, Board of studies, Department of Mathematics, Jamal Mohamed College (2013- till date).
- 10. Serving as an Executive committee Member of JMC Staff Alumni Chapter.
- 11. Serving as a staff advisor in Rotaract club.