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Kerala, India

EDUCATION

Degree/Certificate	Year of Pass	Score for Mathematics	University
PhD in Mathematics	2024		Kerala School of Mathematics
M Phil Mathematics	2008	A Grade	University of Kerala
M Sc Mathematics	2005	82%	University of Kerala
B Sc Mathematics	2003	96%	University of Kerala
Pre Degree	2000	78%	University of Kerala
SSLC	1998	100%	Board of Public Exams

DISSERTATIONS DONE

- PhD Thesis: *Some problems on modular forms and Jacobi forms*
Kerala School of Mathematics, University of Calicut (August 2018 to December 2024)
Advisor: Dr. M Manickam
- M Phil Dissertation: *Study on Semitransitive Collection of Operators*
Department of Mathematics, University of Kerala (June 2007–July 2008)
Advisor: Dr. L John
- M Sc Dissertation: *Some Results on Lower Limit Topology*
Department of Mathematics, University of Kerala (June 2004–June 2005)
Advisor: Dr. G Suresh Singh

RECOGNITION AND AWARDS

- Junior Research Fellowship in Mathematics under CSIR Fellowship scheme
(Roll No: 409000, Dated: 15/05/2008 w.e.f. 1st July 2008, Secured a place among the top 25 JRF awardess in 2007-08)

- Secured the third rank in all the examinations conducted at the 2011 SERC School on Multivariable and Matrix Variable Calculus and Applications held at Center for Mathematical Sciences, Department of Science and Technology (DST), India.
- Selected as a FLAIR (Fostering Linkages in Academic Innovation and Research) Member in 2014.

TEACHING EXPERIENCE

- Assistant Professor, Dept. of Mathematics, TKM College of Arts & Science, Kollam (since November 2010).
- Adhoc Lecturer, Dept. of Mathematics, National Institute of Technology, Calicut (NIT-C). Duration: July–December, 2008.

RESEARCH INTERESTS

- Number theory and Modular Forms
- Cryptography

RESEARCH EXPERIENCE

- Junior Research Fellow, National Institute for Interdisciplinary Science & Technology (NIIST), Council of Scientific and Industrial Research (CSIR), India.
Duration: January 2009–November 2010.
Title of study: *Granular material flow in a rotating cylinder*
- Research Schoolar (Part-time), Kerala School of Mathematics, University of Calicut, From 01/09/2018 to 04/12/2024
Title of study: *Some problems on Modular Forms and Jacobi Forms*.

Paper Publications in Journal/Seminar/Conference Proceedings

- *On Super Character Theory of Finite Groups*, Proceedings of the National Seminar on Algebra and Discrete Mathematics, St. Gregorios College, Kottarakara, ISBN 978-93-5258-622-6, pp. 59–65.
- *On Vanishing of Hecke Operators* In: Ramakrishnan B., Heim B., Sahu B. (eds) Modular Forms and Related Topics in Number Theory. ICNT 2018. Springer Proceedings in Mathematics & Statistics, vol 340. Springer, Singapore. http://doi-org-443.webvpn.fjmu.edu.cn/10.1007/978-981-15-8719-1_1

- *On newforms and Saito-Kurokawa lifts*, Journal of Number Theory, Volume 248, 2023, Pages 27-53, ISSN 0022-314X, <https://doi.org/10.1016/j.jnt.2023.01.005> (joint work with Sreejith M M and M Manickam).
- *A certain self-adjoint operator on Jacobi forms and characterizations of Maass space*, joint work with Sreejith M M and M Manickam (Communicated)
- *On a modified shell sort algorithm for privacy-preserving code-based cryptography*, Proceedings of the Kerala Science Congress, Organized by the Kerala State Council for Science Technology and Environment (KSCSTE) at Kerala Agricultural University, Thrissur, February 7–10, 2025.
- *On the algebraicity of certain partial sums related to Hecke eigenvalues of Siegel cusp forms of degree two*, joint work with Sreejith M M (communicated)

SKILL SET

- Platforms: Linux and Windows
- Programming: Python
- Package: \LaTeX , Geogebra, Sagemath

PARTICIPATION IN INTERNATIONAL CONFERENCE/SEMINARS/WORKSHOPS

- Member, Organizing Committee, International Conference on Advances in Pure and Applied Mathematics (ICAPAM 2025), Organized by department of Mathematics, St. Stephen's College, Pathanapuram, Kerala, February 19 to 21, 2025.
- International conference on Number Theory, Kerala School of Mathematics, 23–26 January 2020.
- International conference on Energy and Environment (iCEE 2k19), TKM College of Arts and Science, Kerala, India, 12–14 December 2019.
- International Conference on Number Theory (On the occasion of 60th birthday of Prof. M Manickam), Kerala School of Mathematics, 10–14 December 2018.
- International Congress of Mathematicians, 2010, held at Hyderabad, 19–27 August 2010.
- International Congress of Mathematicians 2010–Satellite Conference on PDE and Related Topics held in Tata Institute of Fundamental Research (TIFR), 13–17 August 2010.
- Short Term Course on Computational Methods in Fluid Flow and Heat Transfer, Indian Institute of Space Science & Technology (IIST), India, 12–16 July 2010.

- International Workshop on PDE: Models and Numerics, Indian Institute of Technology (IIT-C), 7–16 December, 2009.
- Homi Bhabha Birth Centenary Symposium on Hyperbolic PDE and Related Topics, TIFR-CAM, 20-24 July, 2009.
- International Conference held in honor of Late Prof. S L Yadava, Tata Institute of Fundamental Research (TIFR), 7th to 8th January 2009.

PARTICIPATION IN SPECIAL SCHOOLS/RESEARCH VISITS

- Advanced Instructional School on “Modular Forms”, IIT Guwahati, 13th May to 01st June, 2019.
- Research Visit, National Institute for Science Education and Research (NISER), 02-13 May 2018.
- School on Modular Forms, Kerala School of Mathematics, Kozhikode, 12–24 February, 2018.
- Instructional School for Teachers (IST)-Number Theory, National Centre for Mathematics (A joint centre of TIFR and IIT Bombay), 5–17 October, 2015, Kerala School of Mathematics, Kozhikode, Kerala.
- SERC School on Multivariable Calculus and Applications (Matrix Methods), 2011, Center for Mathematical Sciences, Pala Campus, Kerala, 27th April to 27th May, (sponsored by Department of Science and Technology (DST), India).
- Advanced Instructional School in Partial Differential Equations (AIS-PDE) held in Tata Institute of Fundamental Research (TIFR), 15th December 2008 to 6th January 2009.

PARTICIPATION IN NATIONAL SEMINARS/WORKSHOPS

- Member of organizing committee (Coordinator), National Workshop and Conference on Mathematics and its Applications, jointly organized by the post graduate department of Mathematics, TKM College of Arts and Science and KSCSTE-Srinivasa Ramanujan Institute for Basic Sciences, 03–06 March 2025.
- National seminar of Commutative Algebra, Maharaja’s college, sponsored by DCE, Govt. of Kerala, 12-13 October 2023.
- Workshop on Multiple Zeta Values, Kerala School of Mathematics, 18–22 January 2020.
- Workshop on Modular Theory of Elliptic Curves and Uniformisation and Characterization of Riemann Surfaces, Kerala School of Mathematics, Kozhikode, 21 May to 02 June, 2018.

- Teachers Enrichment workshop-Advanced Linear Algebra and Multivariate Calculus, MarThoma College, Tiruvalla, Kerala, Funded by National Centre for Mathematics-a joint centre of TIFR and IIT Bombay, 02–07 April 2018.
- National Seminar on Quality in Higher Education: The Emerging Scenario, Organized by IQAC and sponsored by UGC, TKM College of Arts and Science, Kollam, 14/11/2017 and 17/11/2017.
- Workshop on Recent Advances in Applied Mathematics, Technical Education Quality Improvement Programme-phase II, Department of Mathematics, TKM College of Engineering, Kollam, Kerala, 27–28 November 2014.
- National Seminar on Number Theory and Combinatorics held at TKM College of Arts & Science, Kollam, Kerala, 29th October to 31st October 2014 (Convener).
- National Seminar on Semigroups, Department of Mathematics, St. John's College, Anchal, 16–17 October 2014.
- National Seminar on Number Theory and Ramanujan's Contributions as part of National Mathematical Year Celebrations 2012, Department of Mathematics, University of Kerala, Kariavattom Campus, 13th and 14th December, 2012.
- National Seminar on Complex Analysis and its Applications, B.J.M Government College, Chavara, Kollam, 15th to 17th February, 2012.
- Seminar on Methodology of Science with special emphasis on Python Learning, K.N.M Government Arts and Science College, Thiruvananthapuram, Kerala, 25th 26th August 2011.
- National Seminar On Graph Theory and Analysis, Department of Mathematics, Mar Ivanios College, Thiruvananthapuram, Kerala, 4–6 February 2008.

PARTICIPATION IN ORIENTATION/REFRESHER COURSE/FDP

- NEP 2020 Orientation & Sensitization Programme, Malaviya Mission Teacher Training Programme (MM-TTP) of UGC Organized by UGC-MMTTC, University of Kerala, Kariavattom, Thiruvananthapuram, 19-09-2024 to 01-10-2024.
- Online Hands-on Training on Learning Management System (MOODLE), Programme under Let's Go Digital initiative of the Government of Kerala organised by the Faculty Development Centre of the Kerala State Higher Education Council in association with the Digital University of Kerala during 22nd to 27th September 2021.
- FDP on Outcome Based Education organized by IQAC, TKMCAS in academic collaboration with Kerala State Higher Education Council from 03-08-2021 to 09-08-2021.

- Online FDP on Moodle Learning Management System organized by Bishop Kuriacherry College for Women in association with Spoken tutorial project at IIT Bombay (PMMMNMTT) from 09-11-2020 to 13-11-2020.
- Online FDP on Advanced Pedagogical Techniques organized by Teaching Learning Center, Ramanujan college, University of Delhi (MHRD-PMMMNMTT) from 29-10-2020 to 05-10-2020.
- Online FDP on Learning Advanced E-tools for MOOCs Development & Research organized by Teaching Learning Center, Ramanujan college, University of Delhi (MHRD-PMMMNMTT) from 01-09-2020 to 14-09-2020.
- Refresher Course for College Teachers in Kerala State-Finite Group Representations, Kerala School of Mathematics, Kozhikode, 07–09 September 2018.
- Refresher Course for College Teachers in Kerala State-Topics in Functional Analysis-Spectral theorem and Operator Algebras, Kerala School of Mathematics, Kozhikode, 11–14 January 2018.
- Refresher Course for College Teachers in Kerala State III-Complex Analysis, Kerala School of Mathematics, Kozhikode, 12–15 October 2017.
- Refresher Course for College Teachers in Kerala State II-Algebra, Kerala School of Mathematics, Kozhikode, 7–10 September 2017.
- Summer Workshop for M.Sc. Students and College Teachers, Kerala School of Mathematics, Kozhikode, 1–21 April 2017.
- Refresher Course for College Teachers in Kerala State IV-Algebraic Number Theory, Kerala School of Mathematics, Kozhikode, 09–12 February 2017.
- Special Summer School Programme (Multidisciplinary Refresher Course), U.G.C. Academic Staff College, University of Kerala, 14th October to 03th November, 2016.
- Refresher Course for College Teachers in Kerala State -Linear Algebra in Control Theory–An Introduction, Kerala School of Mathematics, Kozhikode, 20–23 October 2016.
- Refresher Course for College Teachers in Kerala State (I)-Topology, Kerala School of Mathematics, Kozhikode, 23–26 August 2015.
- Refresher Course for College Teachers in Kerala State (V)-Algebra, Kerala School of Mathematics, Kozhikode, 08–11 January 2015.
- FLAIR Communication Skill Development Training Programme, 12–13 December, 2014, Maria rani training centre, Sreekariyam, Thiruvananthapuram.

- Refresher Course for College Teachers in Kerala State-Number Theory and Cryptography, Kerala School of Mathematics, Kozhikode, Kerala, 9th October to 12th October, 2014.
- FLAIR Induction training programme-Phase I, Workshop on Good Learning held at Trivandrum, 29th September to 1st October, 2014.
- Refresher Course for College Teachers in Kerala State-Topology-II, Kerala School of Mathematics, Kozhikode, Kerala, 11th September to 14th September, 2014.
- Refresher Course for College Teachers in Kerala State, Kerala School of Mathematics, Kozhikode, Kerala, 08th to 11th November, 2013.
- Refresher Course for College Teachers in Kerala State, Kerala School of Mathematics, Kozhikode, Kerala, 11th to 14th October, 2013.
- Orientation Programme (IT Oriented), U.G.C. Academic Staff College, University of Kerala, 06th June to 03th July, 2013.

INVITED TALKS/PRESENTATIONS

- Presented a paper titled *A certain self-adjoint operators on Jacobi forms and characterisations of Maass space*, National Seminar on Commutative Algebra, Department of Mathematics, Maharaja's College, Kerala, sponsored by DCE, Govt. of Kerala, 12-13 October 2023.
- Presented a paper titled *Newforms and Saito-Kurokawa lifts*, Workshop in Number Theory, NISER, Bhubaneswar, 20–25 February 2023.
- Resource person for the National Mathematical Day celebration organized by the department of Mathematics, St. Joseph's College for Women, Alappuzha on 31st December 2020.
- Resource person for the online induction program organized by the department of Mathematics, KTCT College of Arts and Science, Kallambalam on 20th November 2020.
- Resource person for the e-Darshan Webinar Series-2020 organized by department of Mathematics & IQAC, T.K Madhava Memorial College, Nangiarkulangara on 5th June 2020.
- Resource person for the lecture series on Mathematical Analysis-Visualization and Applications organized by the department of Mathematics, St. John's College, Anchal, Kollam on 22nd August 2020.
- Resource person for the three day workshop on \LaTeX organized by Government college, Chittur during 30 January 2020 to 01 February 2020.
- Resource person for the seminar Number Theory and Cryptography organized by department of Mathematics, Sree Narayana College for Women, Kollam on 6th February, 2020.

- Resource person in the workshop on Scientific Document Preparation using \LaTeX IQAC, St. Gregorious College, Kottarakara, 7th December 2019.
- Resource person for workshop on Number Theory, TKM College of arts and science, Kollam, 31st October, 1–2 November 2019.
- Resource person for refresher course for higher secondary school teachers, KSoM, Kozhikode, 04–05 August 2018.
- Resource person in the two day seminar on Basics of Analysis, Stochastic Processes and Topology organised by the department of Mathematics, Maharaja's College, Ernakulam on 14–15 December 2017.
- Resource person for the Short Term Training Programme on “Technical Document Preparation for Journals and Conferences”, Department of Electronics & Communication Engineering, College of Engineering Kidangoor, 20–23 February 2017.
- Resource person for the Short Term Training Programme on \LaTeX and Sage, organised by Department of Mathematics, Rajiv Gandhi Institute of Technology, Kottayam on 16th January 2017.
- Resource person for the Workshop on Scientific Computing using Python organized by the Department of Mathematics, University College, Thiruvananthapuram on 13–14 January 2017.
- Resource person for the Workshop on \LaTeX and Moodle organized by the Department of Mathematics, Baby John Memorial Government College, Chavara on December 15–16, 2016.
- Resource person for the Short Term Training Programme on Data Analysis Using Computational Softwares, organised by Department of Mathematics, Rajiv Gandhi Institute of Technology, Kottayam on 02nd July 2016.
- Resource person for the FDP entitled workshop on \LaTeX -Report and Article Writing (\LaTeX -RAW 2016), organized by Division of Electronics, School of Engineering, CUSAT under TEQIP Phase II during 27–28 June 2016.
- Resource person for the National Seminar on *Computational Mathematics* organized by the Department of Mathematics, St. John's College, Anchal, 18–19 February, 2016.
- Resource person for the National Seminar on *Open Source Software for Computing in Mathematics* held at BJM Government College, Chavara on 7–8 January 2016.
- Resource person for the National Seminar on Algebra and Visual Analysis held on 17th December 2015, MSM College, Kayamkulam, Kerala.
- Resource Person for the workshop on ' \LaTeX ' for Faculty and Staff under TEQIP II, College of Engineering, Karunagappally, 29th August 2014.

- Delivered an expert lecture on the topic *Introduction to L^AT_EX* in the TEQIP-II sponsored faculty development programme on *Research Methodology for Engineers* at Government Engineering College, Barton Hill, Thiruvananthapuram on 27th June 2014
- Resource Person for the interactive workshop on *Documenting and Presenting Project Reports using L^AT_EX* under TEQIP II, College of Engineering, Karunagappally, 21st February 2014.
- Resource Person for the three day workshop on *L^AT_EX-A Beginners Approach* sponsored by TEQIP-II at Government Engineering College, Idukki, 5th February to 7th February, 2014.
- Delivered a lecture on *Finite Dimensional Vector Spaces* in the Regional Seminar on *Linear Algebra and Functional Analysis* organised by the Department of Mathematics, Pavanatma College, Murickassery on 5th December 2013.
- Resource Person for the workshop on *Mathematical Programming Techniques* organised by TKM College of Engineering, Kollam on 21st and 22nd November, 2013.
- Delivered a talk on *Essentials of L^AT_EX* for the Instructional Workshop-II conducted by Department of Mathematics, University of Kerala, Kariavattom on 19th April 2013.
- Delivered a talk on *Introduction to L^AT_EX* for the Instructional Workshop-I conducted by Department of Mathematics, University of Kerala, Kariavattom on 21st and 22nd March 2013.
- Resource Person for the workshop for the Preparation of Questions for Quiz Competition as part of National Mathematical Day Celebrations, Department of Mathematics, Kariavattom, 26th to 27th July, 2012.

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