

Dr. P. S. Latha Mageshwari



I am Dr. P. S. Latha Mageshwari, an academician and researcher with more than 24 years of teaching experience in Physics. I am currently working as an Associate Professor (Grade II) in the Department of Science and Humanities (Physics) at R.M.K. Engineering College, Tamil Nadu. I hold an M.Sc., M.Phil., and Ph.D. in Physics, and my doctoral research focused on nonlinear optical (NLO) single crystals.

My research interests include nonlinear optics, crystal growth, optical materials, and dielectric behavior. I have published my work in peer-reviewed journals such as Elsevier, Springer, Ferroelectrics, and IEEE. I have also contributed to innovation through several published patents in materials science, automation, and robotics.

I actively participate in the Universal Human Values (UHV) initiatives of AICTE, serving as a facilitator, observer, and resource person in various FDPs and training programs. I have completed multiple NPTEL FDPs and all eight modules of NITTTR, enhancing my pedagogical and professional abilities.

Beyond academics, I contribute to institutional social responsibility activities through the UHV Cell and UBA Cell, supporting sustainable development and rural upliftment initiatives in the adopted villages. I am also a lifetime member of several professional bodies, including the Indian Laser Association, ISTE, IAENG, and the Indian Association of Crystal Growth.

Personal Information

Associate Professor (Grade II)

Department of Science and Humanities (Physics)

R.M.K. Engineering College, Kavaraipettai, Tamil Nadu – 601206

Mobile: 9790791654

Official Email: psl.sh@rmkec.ac.in

Personal Email: latha.lathamageshwari@gmail.com

Educational Qualifications

Ph.D. in Physics, University of Madras, 2017

M.Phil. in Physics, M.S. University, 2005

M.Sc. in Physics, University of Madras, 1997

B.Sc. in Physics, University of Madras, 1995

Teaching Experience

Associate Professor, RMK Engineering College (April 2022 – Present)

Assistant Professor, RMK Engineering College (July 2011 – March 2022)

Senior Lecturer, Sri Durgadevi Polytechnic College (2008–2011)

Lecturer, Sri Durgadevi Polytechnic College (2001–2008)

Research Interests

- Nonlinear Optical (NLO) Materials
- Crystal Growth and Characterization
- Dielectric and Optical Studies
- Advanced Materials and Nanocomposites

Patents Published

- Optical and dielectric behavior of cadmium chloride-doped LSM single crystals (2025)
- Automatic chemical dispensing system for urine analysis (2024)
- Wi-Fi and LoRaWAN-based obstacle-avoiding robot (2024)
- Human-following robot using Arduino (2023)
- Multiple patents on nonlinear optical single crystals, robotics, and smart devices (2022–2024)

Awards

- NPTEL Top Performing Mentor – 2022, 2023, 2024, 2025
- Multiple Elite+Silver NPTEL FDP Certifications

Professional Memberships

- Lifetime Member – Indian Laser Association
- Lifetime Member – ISTE
- Lifetime Full Member – International Society for Development and Sustainability
- Lifetime Member – IAENG
- Lifetime Member – Knowledge Research Academy
- Lifetime Member – Indian Association of Crystal Growth

Research Profiles

Scopus link/ID: Scopus ID: 56072343500

<https://www.scopus.com/authid/detail.uri?authorId=56072343500>

Vidwan Link/ID Vidwan-ID: 281755

<https://vidwan.inflibnet.ac.in/profile/281755>

Publons ID: X-5679-2019

<https://publons.com/researcher/3099220/dr-p-s-latha-mageshwari>

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