



SHRIMATI INDIRA GANDHI COLLEGE

(Affiliated to Bharathidasan University)

Nationally Accredited at 'A' Grade (4th Cycle) by NAAC | An ISO 9001 : 2015 Certified Institution
Tiruchirappalli - 620 002

Name : R.Nagalakshmi

Designation : Assistant Professor

Department : Physics

Qualification : M.Sc., M.Phil.,

Experience : Teaching: 22 Research: Nil

Area of Specialization(s) : Spectroscopy

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Academic Qualifications

Degree	Branch	Institution/University Name	Year of Graduation
M.Phil	Physics	St. Joseph's College- Trichy	2002
M.Sc	APPLIED PHYSICS (Instrumentation)	Nehru Memorial College - Puthanampatti	2001
B.Sc	Physics	N.K.R Government College - Namakkal	1999

Additional Qualifications

Diploma / Vocational / Certification	Area of Specialization	Institution / University / Agency Name	Year
-	-	-	-

Research Guidance

Programme	No.ofScholars	
	Completed	Pursuing
-	-	-

Research Publications (Indexed)

1. Quantum chemical calculations and molecular docking studies of 5-amino-3-(2,5-dimethoxyphenyl)-1-isonicotinoyl-2,3-dihydro-1H-pyrazole-4-carbonitrile, Zeitschrift Für Physikalische Chemie (2024). <https://doi.org/10.1515/zpch-2024-0750>.
2. Synthesis and spectroscopic characterization with topology analysis, drug-likeness (ADMET), and molecular docking of novel antitumor molecule 5-Amino-3-(4-hydroxy-3-methoxyphenyl)-1-isonicotinoyl-2,3-dihydro-1H-pyrazole-4-carbonitrile, Zeitschrift Fur Physikalische Chemie (2025). <https://doi.org/10.1515/zpch-2024-0735>

Presentations in Conference:-

1. International conference on Emerging Trends And Prospects in Nano Materials and applications (ETPNA-2022), 18th August 2022, P.K.R. Arts College For Women (Autonomous), Gobichettipalayam.
2. International conference on Crystal Growth and Spectroscopy, August (29-31), St Joseph's College, Trichy.
3. International Conference on Environmental Friendly Materials and Its Applications, November (3-4) 2022, Srinivasan College of Arts and Science, Perambalur.
4. International Conference on Recent Innovations in Materials Science and Spectroscopy (ICRIMS-2023), 10th January 2023, Jamal Mohamed College (Autonomous), Trichy.
5. 3rd International Symposium on Modeling of Crystal Growth Processes and Devices (MCGPD-23), March (6-8) 2023.
6. International Conference on Waste to Wealth for Water Treatment, E-Waste Recycling & Plastic Rejuvenation (ICWWRP – 2023), October (4-5) 2023, Thanthai Hans Rover College (Autonomous), Perambalur.

7. National Conference on Nanomaterials for Energy Harvesting & Storage Applications (NCNEA-2025), January (8-9) 2025, Arignar Anna Government Arts College, Musiri.

Participation in Conference

International:

- i.** Participated in National Virtual Conference on “Novel Materials, Characterization and Applications” organized by Auxilium College (Autonomous) – Vellore.
- ii.** Participated in Virtual Webinar on “Define and Design Your Destiny” organized by Shrimati Indira Gandhi College– Trichy.
- iii.** Participated in National Level Three Days Online Faculty Development Program on “Role of Creative Thinking in Physical Science & Its Applications” organized by Srinivasan College of Arts and Science –Perambalure.
- iv.** Participated in International Workshop on “Academic Writing: Ethical Issues” organized by Global Institute of Statistical Solutions (GISS)
- v.** Participated in Two Days Online Faculty Development Programme on “Recent Developments in Materials Science” organized by Srimad Andavan Arts and Science College (Autonomous)- Trichy.
- vi.** Participated in Six Days National Level Virtual Faculty Enrichment Program on “Aligning with the New Educational Era” organized by Primax Foundation- Bengaluru.
- vii.** Participated in Virtual Faculty Enrichment program on “Introduction to Cloud Computing” organized by Shrimati Indira Gandhi College- Trichy.
- viii.** Participated in “Innovative Pedagogies of the Future in Teaching Learning Process” organized by Shrimati Indira Gandhi College- Trichy sponsored by Youth Development, Ministry of Youth Affairs and Sports, Government of India, Sriperumbudur.
- ix.** Participated in international conference on Recent Advances In Materials Science organized by National College (Autonomous), Trichy and AVVM Sri Pushpam College (Autonomous), Poondi, Thanjavur, sponsored by TNSCST.

Participation in Workshop:02

- i) Participated workshop in Training of Trainees Programme on Cyber Crime conducted by Awareness Bharathidasan University
- ii) Participated workshop in Information Literacy and Cyber Safety conducted by Awareness Bharathidasan University .

Conference / Seminar / Workshop Organized:-

- i) Participated in Webinar on “Raman Spectroscopy – Instrumentation & Analysis” organized by ISAS Tamilnadu Chapter in association with Bhaktavatsalam Memorial College for Women- Chennai.
- ii) Participated in Webinar on “Preparation Strategies for UGC NET & TN SET” organized by CSIR/UGC Counseling Cell, The Standard Fireworks Rajaratnam College for Women (Autonomous)- Sivakasi.

Participation in Faculty Development Programme: 3

- 1. Participated five day online FDP on “Theoretical & Experimental physics” organized by School of Advanced Sciences(SAS) and G.T.S. Arts College, Dindigul on from 29.05.2023 to 02.06. 2023.
- 2. Participated Two Days National Conference on “Recent Trends in Material Science and its Applications”.
- 3. Participated in NEP 2020 Orientation and Sensitization program under Malaviya Mission Teacher training centre, Bharathidasan University from 08.04.2024 to 17.04.2024
- 4. NEP 2020 Orientation & Sensitization Programme organized by Malaviya Mission Teacher Training Institute NIT Warangal from 15.09.2025 to 23.09.2025 .

Patents

- 1. Designed a patent on “Nanomaterial synthesis and purification device” on 18th February 2025.
- 2. Nano-embedded drug discovery system for targeted therapeutic applications