

FACULTY PROFILE

Dr. M ARAVIND

Assistant Professor (SG)

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1. Educational Qualification

Degree	Programme and Specialization	Class/CGPA	Month& Year of Passing	Institute/University
Ph.D	Physics (Material Science)	-	July 2022	Manonmaniam Sundaranar University, Tirunelveli
M.Sc	Physics	First Class with distinction/ 8.6	April 2018	Manonmaniam Sundaranar University, Tirunelveli
B.Sc	Physics	First Class /8.7	April 2016	Annai Velankanni College, Tholayavattam

2. Working Experience

Institution/Organization	Designation	Period
SSN College of Engineering, Kalavakkam, Chennai	Senior Research Fellow (SRF)	07.12.2021 to 10.07.2022 (7 Months)
National Engineering College, Kovilpatti	Assistant Professor	13.07.2022 to 12.07.2026 (4 years)
National Engineering College, Kovilpatti	Assistant Professor (Senior Grade)	13.07.2026 to till date

3. Scholarly impact and research productivity Sites:

Research and Academic Portal	Website Navigation
Scopus	https://www.scopus.com/authid/detail.uri?authorId=57219596136
Vidwan	https://vidwan.inflibnet.ac.in/profile/286375
Google scholar	https://scholar.google.com/citations?user=WJCuDCUAAAAJ&hl=en

Orcid Id	https://orcid.org/0000-0003-1948-268X
Research gate	https://www.researchgate.net/profile/Aravind-Mani-3
Researcher Id:	http://ResearchID.co/aravind1995

4. Published International Journal

1.	Ananthi, R., Sudha, N., Shankar, R., Sahaya Infant Lasalle, B., M. Aravind & Saleh, A. F. (2026). Insilico approach of 4-Aminopyridin-1-ium 2-Carboxybenzoate as a potential antibacterial agent: Synthesis, structural, DFT, Molecular Docking, Molecular Dynamics, and ADMET Analysis. In <i>Silico Research in Biomedicine</i> , 100508.
2.	Aneesha Kumari, S. M., Joema, S. E., Sahaya Infant Lasalle, B., & Aravind, M. (2026). Investigation of second-and third-order nonlinear optical properties of 4-picolinium glutamate single crystal for laser applications. <i>Journal of Materials Science: Materials in Electronics</i> , 37(16), 1299.
3.	SM, A. K., Joema, S. E., Lasalle, B. S. I., Aravind, M. , & El-marghany, A. (2026). Comprehensive experimental and DFT analysis of a novel NLO-active 2-picolinium maleate single crystal. <i>Journal of Molecular Structure</i> , 146483. IF: 4.9
4.	Mani, A. , Rajaram, P., & Thamotharan, K. (2026). Silver-Assisted Chemical Etching for Enhanced Surface Texturing and Light Absorption in Multicrystalline Silicon Solar Cells. <i>Silicon</i> , 18(1), 241-248.
5.	Edwin, M. H. M., Mani, A. , & Raj, A. S. S. (2024). Efficient and environmentally friendly synthesis of biologically inspired titanium dioxide nanoparticles using <i>Jasminum auriculatum</i> for diverse biological applications: antibacterial, antifungal, antidiabetic, and anti-inflammatory properties. <i>Biomass Conversion and Biorefinery</i> , 14(23), 29699-29717. IF: 4.5
6.	Edwin, M. H. M., Sundara Raj, A. S., Mani, A. , Sillanpää, M., & Al-Farraj, S. (2024). Green synthesis of <i>Vitis vinifera</i> extract-appended magnesium oxide NPs for biomedical applications. <i>Nanotechnology Reviews</i> , 13(1), 20240048. IF: 5.6
7.	Prabula, S. S., Hentry, C., Al-Farraj, S., Ram Kumar, P., Sillanpää, M., & Aravind, M. (2024). Activity of <i>Bambusa vulgaris</i> extract in reducing silver nanoparticles: evaluation against methylene blue organic pollutant and microbial agents. <i>Discover Applied Sciences</i> , 6(4), 142. IF: 3.8
8.	Jini D, Aravind M , Alsaiari, N. S., Alzahrani, F. M., & Sillanpää, M. (2023). Investigation on structural, optical, morphological, electrical, mechanical and biological activities of pure and crystal violet dye-doped epsomite single crystals. <i>Journal of Materials Science: Materials in Electronics</i> , 34(1), 1-15.
9.	Gabriya, L. R., Mary, A. D., & Aravind, M. (2023). Investigation on structural, optical, morphological, elemental, dielectric, mechanical, thermal, and second harmonic generation properties of various dye doped L-Lysine potassium dihydrogen orthophosphate single crystals for optoelectronic devices. <i>Journal of Materials Science: Materials in Electronics</i> , 34(26), 1813. IF: 3.1
10.	Basalius, H., Mani, A. , Michael, A., Mary, S. M., Lenin, M., Chelliah, P., ... & Islam, M. A. (2023). Green synthesis of nano-silver using <i>Syzygium samarangense</i> flower extract for multifaceted applications in biomedical and photocatalytic degradation of methylene blue. <i>Applied Nanoscience</i> , 13(6), 3735-3747.
11.	Udhaya, P. A., Ahmad, A., Meena, M., Queen, M. A. J., Aravind, M. , Velusamy, P., ... & Ali, S. (2023). Copper Ferrite nanoparticles synthesised using a novel green synthesis route: Structural development and photocatalytic activity. <i>Journal of Molecular Structure</i> , 1277, 134807. IF: 4.9
12.	Aravind, M. , Amalanathan, M., Aslam, S., Noor, A. E., Jini, D., Majeed, S., ... & Sillanpää, M. (2023). Hydrothermally synthesized Ag-TiO ₂ nanofibers (NFs) for photocatalytic dye degradation and antibacterial activity. <i>Chemosphere</i> , 321, 138077.
13.	Amalanathan, M., Aravind, M. , Ahmed, N., Mary, M. S. M., Velusamy, P., Kumaresubitha, T., ... & Ali, S. (2022). The influence of activated carbon annealing temperature on sunlight-driven photocatalytic dye degradation and biological activity. <i>Inorganic Chemistry Communications</i> , 146, 110149. IF: 5.9
14.	Aravind, M. , Kumaresubitha, T., Ahmed, N., & Velusamy, P. (2022). DFT, molecular docking, photocatalytic and antimicrobial activity of coumarin enriched Cinnamon bark extract mediated silver nanoparticles. <i>Inorganic Chemistry Communications</i> , 146, 110176. IF: 5.9
	Prabula, S. S., Hentry, C., Rose, B. L., Parvathiraja, C., Mani, A. , Wabaidur, S. M., ... & Islam, M. A. (2022). Synthesis of silver nanoparticles by using <i>Cassia auriculata</i> flower extract and their photocatalytic behavior. <i>Chemical Engineering & Technology</i> , 45(11), 1919-1925. IF: 2.0
15.	Benisha, R., Amalanathan, M., Aravind, M. , Mary, M. S. M., Ahmad, A., Tabassum, S., ... & Ahmad, I.

	(2022). Catharanthus roseus leaf extract mediated Ag-MgO nanocatalyst for photocatalytic degradation of Congo red dye and their antibacterial activity. Journal of Molecular Structure, 1262, 133005. IF: 4.9
16.	Jini, D., Ahmad, A., Aravind, M. , Ajitha, S., Parvathiraja, C., Mazyad, A. T., ... & Ali, S. (2022). Evaluation of congo red dye doped magnesium sulphate crystal and their structural, optical, morphological, electrical and biological activities. Journal of Molecular Structure, 1260, 132837. IF: 4.9
17.	Herbin, H. B., Aravind, M. , Amalanathan, M., Mary, M. S. M., Lenin, M. M., Parvathiraja, C., ... & Islam, M. A. (2022). Synthesis of silver nanoparticles using syzygium malaccense fruit extract and evaluation of their catalytic activity and antibacterial properties. Journal of Inorganic and Organometallic Polymers and Materials, 32(3), 1103-1115. IF: 4.7
18.	Jini, D., Aravind, M. , Ajitha, S., Parvathiraja, C., Muniyappan, M., Vivekanand, P. A., ... & Gonfa, G. (2022). Synthesis, Growth, and Characterization of Methyl Orange Dye-Doped Potassium Sulphate Single Crystal and Its Multifaceted Activities. Advances in Materials Science and Engineering, 2022(1), 4020288.
19.	Aravind, M., Amalanathan, M., Mary, M. S. M., Parvathiraja, C., Alothman, A. A., Wabaidur, S. M., & Islam, M. A. (2022). Enhanced photocatalytic and biological observations of green synthesized activated carbon, activated carbon doped silver and activated carbon/silver/titanium dioxide nanocomposites. Journal of Inorganic and Organometallic Polymers and Materials, 32(1), 267-279. IF: 4.7
20.	Aravind, M. , Amalanathan, M., & Mary, M. S. M. (2021). Synthesis of TiO ₂ nanoparticles by chemical and green synthesis methods and their multifaceted properties. SN Applied Sciences, 3(4), 409. IF: 3.8
21.	Aravind, M. , Ahmad, A., Ahmad, I., Amalanathan, M., Naseem, K., Mary, S. M. M., ... & Zuber, M. (2021). Critical green routing synthesis of silver NPs using jasmine flower extract for biological activities and photocatalytic degradation of methylene blue. Journal of Environmental Chemical Engineering, 9(1), 104877. IF: 7.5
22.	Ahmad, A., Jini, D., Aravind, M. , Parvathiraja, C., Ali, R., Kiyani, M. Z., & Alothman, A. (2020). A novel study on synthesis of egg shell based activated carbon for degradation of methylene blue via photocatalysis. Arabian Journal of Chemistry, 13(12), 8717-8722. IF: 6.27
23.	Aravind, M. , & Amalanathan, M. (2021). Structural, morphological, and optical properties of country egg shell derived activated carbon for dye removal. Materials Today: Proceedings, 43, 1491-1495.
24.	Jini, D., Aravind, M. , Nirmal, L. J., & Ajitha, S. (2021). Structural, optical, and biological properties of L-alanine single crystal by slow evaporation method. Materials Today: Proceedings, 43, 2032-2035.
25.	Jini, D., Ajitha, S., Aravind, M. , Parvathiraja, C., & Muniyappan, M. (2021, October). Electrical, structural, optical, biological properties of Rhodamine B dye doped zinc sulphate single crystals. In AIP Conference Proceedings (Vol. 2417, No. 1, p. 020019). AIP Publishing LLC.

5. National Conference Publications

S. No	Title of the paper	Authors	Name of the conference	Venue	Pages Date
1.	Synthesis of nano silver using elachi seed powder and their antibacterial studies against bacteria	M. Aravind, C. Parvathiraja and S. Shailajha	National Conference on Energy Materials (NCEM-2018)	M.S University, Tirunelveli	29-30 2018

6. Conference Participation

S.No	Title	Programme	Date	Venue
1.	National Seminar in Material Science in Research and Technology(NSRTM-2013)	National Seminar	Oct-2013	Annai Velankanni College, Tholayavattam

2.	National seminar on Recent Trends in Advanced Physics(NSRTAP-2016)	National Seminar	Feb-2016	Annai Velankanni College Tholayavattam
3.	National workshop for legal awareness for women	National Workshop	Feb-2017	Manonmaniam Sundaranar University, Tirunelveli.
4.	National Seminar on Advances in Materials Science(NSAMS-2017)	National Seminar	March-2017	Manonmaniam Sundaranar University, Tirunelveli.
5.	Lemuria Continent National Conference	National Conference	Dec-2017	Manonmaniam Sundaranar University, Tirunelveli.
6.	Two Days Lecture Workshop on Developments in Chemistry	Workshop	July-2018	Manonmaniam Sundaranar University, Tirunelveli.
7.	National Conference on Energy Materials (NCEM-2018)(Oral Presentation)	National Conference	June2018	Manonmaniam Sundaranar University, Tirunelveli.
8.	International Conference on Functional Materials and Nanotechnology (ICFMN-2019) (Oral Presentation)	International Conference	Jan2019	Annai Velankanni College Tholayavattam
9.	National Conference on Advanced Functional Materials (NCAFM-2019)	National Conference	Feb-2019	S.T.Hindu College, Nagercoil
10.	Third National Conference on Advanced Materials (NCAM-2019) (Oral Presentation)	National Conference	Mar-2019	Nanjil Catholic College of Arts and Science, Kaliyakkavilai
11.	State Level Workshop on Sample Preparation and Data Acquisition	Workshop	Oct-2019	Nesamony Memorial Christian College, Marthandam
12.	National Workshop on “Nanomechanical and Tribological Characterization of Materials”,	National Workshop	04.03.2022, 05.03.2022	Centre for Nanoscience and Nanotechnology, Sathyabama Institute of Science and Technology, Chennai,
13.	National Webinar on “Experimental Techniques for the Fabrication & Characterization of Metal Oxide Thinfilms for the Various Applications”	National Webinar	28.02.2022	PG & RESEARCH DEPARTMENT OF PHYSICS, Muthurangam Govt. Arts College (A), Vellore-02.

14.	2 nd International Webinar 4f-3dMagnetic Interactions in Rare- Earth Ferrite Oxide	International webinar	07.10.2021	PG & RESEARCH, DEPARTMENT OF PHYSICS, Muthurangam Govt. Arts College (A), Vellore-02.
15.	(RFeO ₃)SingleCrystals	Webinar	09.06.2021	JP College of Arts & Science, Tenkasi
16.	National Level Webinar on “Interpretation of One and Two Dimensional NMR Spectra”	Webinar	31.03.2021.	Nanjil Catholic College of Arts and Science, Kaliyakkavilai
17.	International Conference on Advanced Materials Behaviour &Characterization	International conference	18.07.2020 – 23.07.2020	Mattest Research Academy, Chennai
18.	International Conference on Advanced Materials for emerging technologies	International conference	29.04.2026 to 30.04.2026	Joy University, Tirunelveli

7. Faculty Development Program/ Refresher Courses

1.	TEQIP-III sponsored FTDP at Department of Physics, Government College of Engineering, Bargur.	Two weeks FDP	19.08.2019 to 01.09. 2019	Government College of Engineering, Bargur.
2.	Refresher Course on Physics	Refresher Course	29.01.2018- 30.01.2018	Department of Physics, Manonmainam Sundaranar University, Tirunelveli.
3.	Six-Day Online International Faculty Development Program on Recent Trends in Applied Physics	One week FDP	25.07.2022 to 30.07.2022.	Department of Physics, Easwari Engineering College (Autonomous), Ramapuram, Chennai
4.	6-Day Hands-on Training on COMSOL MULTI- PHYSICS	Hands-on Training	25.09.2021 to 30.09.2021	SIAS Research Forum Kohinoor, Calicut University, Kerala
5.	International Faculty Development Program on Foremost Frontiers of Material Science	FDP	12.09.2022 to 20.09.2022	Sathyabama Institute of Science and Technology, Chennai
6.	Five-day online faculty development programme on “Insights on Emerging Research in Chemical Science (IERCS-2022)	FDP	10.10.2022 to 14.10.2022.	National Institute of Technology Andhra Pradesh

7.	One Week Online National Level FDP on “Advanced Materials & Quantum Technology” held during	FDP	04.12.2023 – 09.12.2023.	YESHWANTRAO CHAVAN COLLEGE OF ENGINEERING, NAGPUR
8.	Instructional Design and Delivery Systems	FDP	16.05.2024 to 18.05.2024	National Engineering College, Kovilpatti.

8. Honors and Awards Received

Sl.No	Award details	Awarded by	Period	Status
1.	Best Paper Presentation Award	International Conference on Functional Materials and Nanotechnology Annai Velankanni college, Tholayavattam	2019	National

9. NPTEL Courses completion

S. No	Name of the course	Course Durations	Name of the faculty & Institution	Remarks
1.	Physics of Renewable Energy Systems	12 Weeks	Prof. Amreesh Chandra IIT Kharagpur	Elite
2.	Design Thinking - A Primer	4 Weeks	Prof. Ashwin Mahalingam, Prof. Bala Ramadurai IIT Madras	Elite
3.	Digital Circuits	12 Weeks	Prof. Santanu Chattopadhyay IIT Kharagpur	Successfully Completed
4.	Physics of Nanomaterials	12 Weeks	Prof. Amreesh Chandra IIT Kharagpur	Elite Silver

10. Membership in Professional bodies

Name of Society	Grade of Membership
ISTE	Life time Member

11. Technical Events Organized

S.No	Title	Period	Venue
1.	Memorial day international webinar on Nanomaterial synthesis a road map towards industrial production	11 March 2023	NEC Kovilpatti
2.	Online hands on workshop Virtual lab a learners perspective	14 December 2023	NEC Kovilpatti

12. Acted as Reviewer in reputed Journal

1. Biomass conversion and biorefinery.
2. Cellulose.
3. Materials today communications.
4. Next nanotechnology.

13. Convener/Coordinator/Member

S.No	Title	Period	Venue
1.	JCI club member	June 2022 to July 2023	NEC Kovilpatti
2.	Department Skill rack In charge	June 2024 to till date	
3.	NEC Quiz-2k24	24/10/2024.	
4.	OOT-2K25	Dec 2024 to Feb 2025	
5.	OOT 2K26	Dec 2025 to Feb 2026	
6.	Technical member of ICODSES-2026	March 2026	
7.	IQAC –Member	July 2026 to till date	
8.	OOT-2027	Dec 2026 to Feb 2027	

Signature

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NATIONAL ENGINEERING COLLEGE