


FACULTY PROFILE

Name	:	Dr. K. Dhanalakshmi	
Designation	:	Assistant Professor	
Department	:	Physics	
Educational Qualification	:	M.Sc., M. Phil., Ph.D	
Experience	:	3 Years 9 Months	
Subject of Interest	:	Ultrasonics, Spectroscopic, Density Functional Theory and Molecular Docking	
Publications	:	<p style="text-align: center;">18</p> <ol style="list-style-type: none"> 1. Padmavathy R, Dhanalakshmi K, Jasmine Vasantha Rani E. and Sujatha S. “An analysis of specific acoustic impedance, apparent molal volume and transport properties of non-aqueous solutions of peptides”. International Journal of Science and Research, (2015). 236- 238. 2. Padmavathy R, Sujatha S, Jasmine Vasantha Rani E. and Dhanalakshmi K. “Analysis of transport properties of some Glycyl peptides in non- aqueous medium”. International Journal of Science and Research, (2015). 460-463. 3. Padmavathy R, Dhanalakshmi K, Radha N and Jasmine Vasantha Rani E. “Densitometric, viscometric and conductometric study of non-aqueous solutions of peptide and electrolyte”. International Journal of Recent Innovation in Engineering and Research, 2(2), (2017). 8-13. 4. Padmavathy R, Dhanalakshmi K, Jasmine Vasantha Rani E. and Radha N. “FT-IR, acoustical parameters and antimicrobial activity of a peptide with electrolyte solutions”, World Journal of Pharmaceutical Research, 6(3), (2017). 1166-1177. 5. Padmavathy R, Dhanalakshmi K. and Radha N. (2017). “Solvation, thermodynamic and UV-Visible studies of non-aqueous peptide solutions”. International Journal of Engineering Research & Technology, 5(13), (2017),1-5. 6. Padmavathy R, Dhanalakshmi K, Jasmine Vasantha Rani E. and Radha N, “An investigation of acoustic, thermodynamic and antimicrobial activity study of a drug in a peptide”. International Journal of Pharmaceutical Science and Research, 8(8), (2017), 3477-3483. 7. Padmavathy R, Sujatha S. and Dhanalakshmi K. “A study of thermodynamical and electrochemical properties of peptides in non- aqueous medium”. International Journal of Pure and Applied Mathematics, 119(12), (2018), 2003-2012. 	

8. Padmavathy R, **Dhanalakshmi K.** and Radha N. “Effect of drug in non-aqueous peptide solutions using ultrasonic and biological studies”. *International Journal of Pure and Applied Mathematics*, 119(12), (2018), 2013-2020.
9. Padmavathy, R., **Dhanalakshmi, K.** and Radha, N. “Study of a peptide with a drug using ultrasonic velocity and molecular modelling techniques”. *IOP conference series: Materials science and Engineering*, 390, (2018),1-6.
10. Padmavathy, R., **Dhanalakshmi, K.** and Radha, N, “FT-IR, Acoustic, Thermodynamic and Docking Study of a Drug in a Peptide”. *International Journal of Current Research and Review*, 10(21), (2018),53-58.
11. Padmavathy. R, **Dhanalakshmi, K.**, Ishwarya, S. and Radha, N. “UV-Visible, Transport and Solvation Analysis of an Electrolyte AT 308.15K”. *International Journal of Current Research and Review*, 10(21), (2018),59-63.
12. Padmavathy, R. **Dhanalakshmi, K.** and Malini, T. “Thermoacoustical studies of sodium electrolyte in non-aqueous peptide solutions”. *Aegacum Journal*, 8(3), (2020),38-43.
13. Padmavathy, R., **Dhanalakshmi, K.** and Geetha, R. “A Study On Ternary Mixture Of Peptide Using Ultrasonic, Invitro and Insilico Processes”. *International Journal of Pharmaceutical Science and Research*, 11(12), (2020), 6143-6148.
14. Srinivasan alias Arunsankar, N., Deepa, C., Anbuhezhiyan, M. and **K. Dhanalakshmi***, “Molecular Interaction and Physico-Chemical and Docking Analysis in Binary Organic Molecules at various Temperatures”. *Jundishapur Journal of Microbiology*, 15(1), (2022), 5097- 5109.
15. Prabhu, L., **Dhanalakshmi, K.**, Tahani Awad Alahmadi and Sulaiman Ali Alharbi. “How do microalgae biodiesel blends affects the acoustic and vibration characteristics of the direct injection engine: An experimental examination. *Journal of Energy Resources Technology*”. (2022).
16. **K.Dhanalakshmi, K.** Sulthana Razia, Arunkumar A.L.N, Yatika Gori, Kavitha A, Kishore Mendam, “Micronucleus Testing and Nuclear Abnormalities in fish exposed acutely and Chronically to Titanium Dioxide Nanoparticles”. *Materials Today Proceedings*, (2023).
17. Sangeetha Manimaran, Selvakumaran T, Sulaiman Ali Alharbi, Karthikeyan L, **Dhanalakshmi K.**, “Enhancing diesel engine performance and emissions control: The role of RuO₂ nanoparticles and ammonia additives with microalgae blends”, *Fuel*, 368, (2024), 131662.
18. **Dhanalakshmi K.** Loganathan V, Susindhiran S, Gnanasekar A, Noureddine ISSAOUI, “Exploring photobiological

		performance of ternary chemical combinations: Ultrasonic, spectroscopic investigations, photochemical reactivity, topology and antimicrobial evaluation of acetic acid trihydrate, 2-[(2-aminoacetyl) amino] acetic acid with methanamide”, Journal of Photochemistry & Photobiology, A: Chemistry, 456, (2024), 115838.
Awards and Achievements	:	<ul style="list-style-type: none"> • UGC Major Research Project Assistant (2013-2017) • Patent Published - Advances in Gene Transfer with the Association of Nanoparticles for Therapeutic Treatment –Office of the Controller General of Patents, Designs and Trade Marks, Department of Industrial Policy & Promotion, Government of India, 2022.
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Conferences/FDP/Seminars/Workshops attended	:	82
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