

Profile

1. **Name :** Dr. A. Mahendraprabu
2. **Department:** Physics
3. **Designation:** Assistant professor
4. **Cell phone number:** 94425-78643, 87780-19280.
5. **E-mail I.d:** mahendraprabu80@gmail.com



6. **Academic details:** Focus: **Physics**

S.No	Course	Institution	University
01	Ph.D	Thiagarajar college (Autonomous), Madurai-625 009, Tamilnadu, India.	Madurai KamarajUniversity, Madurai-625 021,Tamilnadu, India.
02	M.Phil	Bharathidasan University,Tiruchirappalli, Tamil nadu, India.	Bharathidasan University, Tiruchirappalli, Tamil nadu, India
03	B.Ed	Annamalai University, Chidambaram, Tamil nadu, India.	Annamalai University, Chidambaram, Tamil nadu, India.
04	M.Sc	N.M.S.S. Vellaisamy Nadar College, Nagamalai, Madurai, Tamil nadu, India.	Madurai KamarajUniversity, Madurai-625 021,Tamilnadu, India.
05	B.Sc	Dr Zakir Hussain College, Ilayangudi, Tamil nadu, India.	Madurai KamarajUniversity, Madurai-625 021,Tamilnadu, India.

7. Research Experience:

Ph.D Title: Fluid structure of liquid mixtures containing associative molecules by dielectric and spectroscopic studies (**under the guidance of Dr. G. Arivazhagan, Thiagarajar College, Madurai.**)

8. Award: Appreciation award from lions club at paramakudi

9. Teaching Experience:

01	3 years experience in teaching at Paramakudi Lions Matric Higher Secondary School in Paramakudi, Tamil nadu.
02	3 years experience in teaching at St. Michael Polytechnic College in Sivagangai, Tamil nadu.
03	1 year experience in teaching at Dr. Zakir Hussain College in Ilayangudi, Tamil nadu.
04	1 year experience in teaching at Government Arts College in paramakudi, Tamil nadu.

10. **Area of specialization:** Spectroscopic studies

11. Publications:

01	T. Sangeetha, P.P. Kannan, N.K. Karthick, A. Mahendraprabu , G. Arivazhagan, Classical/non-classical hydrogen bonds in m-xylene - ethanol solution: FTIR and theoretical approach, J. Mol. Liq. 312 (2020) 113406.
02	A. Mahendraprabu , T. Sangeetha, P. P. Kannan, N. K. Karthick, A. C. Kumbharkhane, G. Arivazhagan, Hydrogen bond interactions of ethyl acetate with methyl Cellosolve: FTIR spectroscopic and dielectric relaxation studies, J. Mol. Liq. 301 (2020) 112490.
03	A. Mahendraprabu , K. Karthick, P.P. Kannan, T. Sangeetha, A. C. Kumbharkhane, G. Arivazhagan, Molecular interactions in the binary solutions of methyl cellosolve with chlorobenzene: Spectroscopic and dielectric studies, J. Mol. Struct. 1205 (2020) 127565.
04	P. P. Kannan, N. K. Karthick, A. Mahendraprabu, A. C. Kumbharkhane, Y. S. Joshi, G. Arivazhagan, FTIR spectroscopy, quantum chemical calculations and time domain reflectometry studies on the behavior of methanol molecules in the environment of dibutyl ether, J. Mol. Struct. 1183 (2019) 60.
05	N. K. Karthick, G. Arivazhagan, P. P. Kannan, A. Mahendraprabu , FTIR spectral studies and dielectric relaxation studies on binary solutions of ethyl acetate with bromobenzene, Indian J. Pure Appl. Phys. 56 (2018) 261.
06	N. K. Karthick, G. Arivazhagan, P. P. Kannan, A. Mahendraprabu , A. C. Kumbharkhane, S. S. Shaikh, Y. S. Joshi, Hydrogen bond interactions in the binary solutions of ethyl acetate with nitrobenzene: Spectroscopic, theoretical and dielectric studies, J. Mol. Liq. 251 (2018) 385.
07	P. P. Kannan, N. K. Karthick, A. Mahendraprabu, R. Shanmugam, A. Elangovan, G. Arivazhagan, Red/Blue shifting hydrogen bonds in acetonitrile - dimethyl sulphoxide solutions: FTIR and Theoretical Studies, J. Mol. Struct. 1139 (2017) 196.
08	N. K. Karthick, A. C. Kumbharkhane, Y. S. Joshi, A. Mahendraprabu , R. Shanmugam, A. Elangovan, G. Arivazhagan, Molecular interactions in Ethyl acetate - Chlorobenzene binary solution : Dielectric , Spectroscopic studies and Quantum Chemical Calculations, Spectrochim. Acta Part A 178 (2017) 218.
09	N. K. Karthick, P. P. Kannan, A. Mahendraprabu , G. Arivazhagan, N. Suganya, Spectroscopic studies on the binary solutions of ethanol with 1,4- dioxane, J. Mol. Liq. 232 (2017) 147.
10	A. Mahendraprabu , A. C. Kumbharkhane, Y. S. Joshi, S. S. Shaikh, P. P. Kannan, N. K. Karthick, G. Arivazhagan, Spectroscopic and Time Domain Reflectometry studies on acetonitrile - ethylene glycol binary solutions, J. Mol. Struct. 1136 (2017) 303.
11	A. Elangovan, R. Shanmugam, G. Arivazhagan, A. Mahendraprabu , N. K. Karthick, Intermolecular forces in acetonitrile + ethanol binary liquid mixtures, Chem. Phys. Lett. 639 (2015) 161

12. Details of paper presented in conference/seminars :

01). **A. Mahendraprabu**, G. Arivazhagan, P.P. Kannan, FT-IR and ¹³CNMR spectroscopic studies for pure and Binary solution of molecules such as THF/ (EG and MCS), II International Conference on Recent Trends in Materials, Devanga Arts College, Aruppukottai, Tamilnadu, 22rd & 23rd January 2016.

02). **A. Mahendraprabu**, G. Arivazhagan, Molecular interaction between methyl cellosolve and substituted benzenes using spectroscopic studies, National Seminar on Functional Materials for Present World, Arignar Anna Government Arts College, Cheyyar, Tamilnadu, 7th October 2016.

03). **A. Mahendraprabu**, P.P. Kannan, N.K. Karthick, G. Arivazhagan, H-bond interaction between octane and methyl cellosolve/dibutyl ether using FT-IR spectroscopic studies, National level Seminar on Recent Advancements in Materials, Jamal Mohamed College, Trichy, Tamilnadu, 15th February 2017.

04). **A. Mahendraprabu**, G. Arivazhagan, FTIR and Time domain reflectometric spectroscopic studies on octane/pentanol binary solutions, National Conference on Dielectric Relaxation and Spectroscopic Techniques, Swami Ramanand Marathwada Teerth University, Nanded, Maharashtra, 14th & 15th December 2017.

13. Details of conferences/ seminars/ workshops Participated:

Date	Event	Venue
Feb 14, 2014	National level seminar on "Emerging Technology in Physics"	V.V.Vanniaperumal College for Women- Virudhunagar
Feb 20, 2014	State level seminar on "Recent Trends in Solar technology"	American College- Madurai
Feb 22, 2014	One day national seminar on Nanomaterials Research- VISION NANO 2014	Sri Ramakrishna Engineering College- Coimbatore
March 20 and 21, 2014	International Workshop on Advanced Materials- IWAM	Alagappa University- Karaikudi
July 17 and 18, 2014	National Conference on Optics, Photonics and Lasers – NCOPL-14	Arul Anandar College- Madurai
Sept 12 and 13, 2014	HORIZON-14- "National Level Symposium on Biomimetics and Molecular Modelling"	National Institute of Technology- Trichurappalli
Sept 21, 2014	State level seminar on "Current Trends in Physics"	Zakir Husain College- Ilayankudi
Aug 14, 2015	National level seminar on "Recent Trends in Energy Technologies"	American College- Madurai
Nov 5 and 6, 2015	TEQIP II Sponsored Workshop on "Physics in Engineering (PIE)"	Thiagarajar College of Engineering- Madurai
Feb 24, 2016	State level seminar on "Recent Advancement in Material Synthesis"	Syed Hameedha Arts and Science College- Kilakarai
June 30 and July 01, 2016	Workshop on "Corrosion and its Control"	PSGR Krishnammal College for Women- Coimbatore
Aug 26, 2016	TEQIP II Sponsored Workshop on "Research Paper Writing"	Thiagarajar College of Engineering- Madurai
Jan 05 and 06, 2017	Science Academics Lecture Workshop on "Scope of Nonlinear Physics"	Fatima College, Madurai