

Name : J. Prema Kumari  
Gender : Female  
Designation : Associate Professor  
Department : Chemistry  
Date of Birth : 20-05-1967  
Date of Appointment : 08-09-1967  
Mobile Number : 9489283471  
E-mail: premaisaac67@gmail.com



Qualification : M.Sc., M.Phil., Ph.D

Approved Guide (University Name) : Manonmanium Sundaranar University

Served as Resource Person :

Association

Anna College, Aralvamozi

P.G. Association

Nesamoney Memorial Christian College, Marthandam.

Microscale Analysis in chemistry

Tamil Nadu Higher Secondary school teachers in  
Nagercoil

Syllabus Evaluation for +1, +2classes  
Seminar

Teacher Training Institute, Tharoor  
Bethlahem Institute Of Engineerng , Karungal

List of Publications : 22

SCOPUS INDEXED ; 3

1. An investigation on host-guest complexation of Metformin hydrochloride with hydroxypropyl- $\alpha$ -cyclodextrin for enhanced oral bioavailability

**J. Prema Kumari**

Materials Today Proceedings (SCOPUS INDEXED)

Volume 21, Part 1, 2020, Pages 514-518

**2.  $^1\text{H}$  NMR – A validation tool for supramolecular complexes of  $\alpha$ -cyclodextrin  
with Antidiabetic drugs**

Available online 25 April 2020

<https://doi.org/10.1016/j.matpr.2020.04.077>

3. INCLUSION STUDIES ON  $\alpha$ -CYCLODEXTRIN COMPLEXES OF GLIPIZIDE AND GLICLAZIDE WITH EFFECT OF PH  
ASIAN JOURNAL OF PHARMACEUTICAL AND CLINICAL RESEARCH  
Vol 10, Issue 1, **2017** PAGES 274-280  
ISSN Online - 2455-3891  
Print - 0974-244 (SCOPUS INDEXED)
4. Fluorescence detection of ferrous(III)ions using green synthesized photoluminescent carbon dots. Journal of applied science and computation, VI. VI, Year **2019**, pp 1187-1200.
5. Turn off fluorescence sensing of mercury(II) using nitrogen doped carbon nanodots derived from natural bioprecursor. Journal of applied science and computation, Vol.VI, Year **2019**, pp 1364—1379.
6. Phase solubility studies on cumarine derivatives with  $\alpha$ -cyclodextrin and hydroxyl propyl  $\alpha$ -cyclodextrin  
International journal of research  
ISSN NO 2236-6124  
Vol. 7 Issue XII, December **2018**
7. Characterization and solubility studies of quinine sulphate and hydroxyl chloroquine sulphate inclusion complexes with alpha cyclodextrin. Journal of applied chemistry, Vol.11,Year **2018**, pp 24-34.
8. Studies on the preparation, characterization and solubility of inclusion complexes of chloroquine phosphate alpha cyclodextrin and hydroxypropyl alpha cyclodextrin . Journal of applied science and computation, VI. Year **2018**, pp 1649-1660.
9. Seasonal evaluation of trace metal concentration in airborne particulate matter in kanyakumari district. International Journal of Scientific research and reviews. Vol. 7, Year 2018, pp 841-849.
10. Physicochemical characterization of capecitabine  $\alpha$ -cyclodextrin complexes and phase solubility studies  
International Journal of Research and Analytical Review  
ISSN 2349-5138  
Vol. 5, Issue 4 October **2018**, pp 885-889.
11. Effect of pH on 4—Aminosalicylic acid :  $\alpha$ -CD/HP  $\alpha$ -CD inclusion complexes. International Journal of Scientific Research. ISSN No. 2277-8179, **2017**, Volume/Issue/Page No.27-29

12. Inclusion studies on alpha cyclodextrin complexes of Glipzide and Gliclazide with effect of pH Asian Journal of Pharmaceutical and Clinical Research . Online : 2455-3891  
Print : 0974-2441, **2017**
13. Preparation and characterization inclusion complexes of Fluorouracil alpha cyclodextrin hydroxyl propyl alpha cyclodextrin, International Journal of Applied Research , Online :2394-5869, Print :2394-7500, **2016**
14. Physicochemical Characterization of Alpha Cyclodextrin complexes of Tamoxisen Citrate and phase solubility studies, International Journal of Pharmaceutical Science and Research, Online : 0975-8232  
Print : 2320-5148, **2016**,
- 15.** Augmentation of Antimicrobial behaviour of silver nanoparticles, International Journal of Modern Sciences and Technology, **2016**
16. Inclusion studies on oral antidiabetic drugs with alpha cyclodextrin and hydroxyl propyl alpha cyclodextrin, International Journal of Applied Research, Online :2394-5869,Print :2394-7500, **2015**,
17. Studies on Metformin Hydrochloride and Alpha Cyclosextrin inclusion complexes, Journal of Green Chemistry Technology Letters, DOI : 10.18510, **2015**,
- 18.** , Effect of Alpha Cyclodextrin on Gefitinib , Indian Journal of Applied Research, 2249-555, **2015**
- 19.** Spectral Characteristics and Solvent Effects of 4-(Phenylazo)benzoic acid and 2-(4-Hydroxyphenylazo)benzoic acid on alpha cyclodextrin, Indian Journal of Applied Science, 2249-555, **2015**
20. Preparation and Characterization of Umbelliferone and Hydroxy propyl alpha cyclodextrin inclusion complex, Indian Journal of Applied Science, 2249-555, **2015**.
21. Effect of  $\alpha$ -Cyclodextrin on 4-Nitro Benzoic Acid and 3,5-Dinitro Benzoic acid, International J of Chemical & Physical Sci., **2014**,.,
22. Synthesis and Characterization of metal complexes of Phloroglucinol, Science Acta Xavertana, An International Science Journal, ISSN, 0976-1152, **2013**,
- 23.** Photophysical behavior of syringaldehyde on pH and  $\alpha$ - Cyclodextrin: Comparison with  $\beta$ - Cyclodextrin,  
*International J. of Pure & Applied Chem.*, **2011**,
- 24.** Spectral characteristics of sulphadiazine, sulphisomidine: effect of solvents, pH and  $\beta$ - Cyclodextrin,  
*Physics and chemistry of Liquids*, **2011**.
- 25.** Effect of solvents and pH on  $\beta$ - Cyclodextrin inclusion complexation of 2,4- Dihydroxyazobenzene and 4-Hydroxyazobenzene, *J. Solution Chem.*, **2011**.

26. Photophysical behavior of p-Dihydroxy Benzene in different solvents, pH and  $\alpha$ - Cyclodextrin, *Asian. J. Chem.*, **2010**,

27 . Study on the spectral characteristics of 4-hydroxy-3-methoxy benzoic acid in different pH and  $\alpha$ - Cyclodextrin, *J. Indian Chem. Soc.*, **2009**.

28. Photophysical properties of syringic acid: Effect of Cyclodextrin complexation and pH, *ANJAC J. Sci.*, **2009**.

**Project Details :**

1. UGC Minor Project, File No.MRP-2587/08 (UGC-SERO) dated 18/03/2008.
2. UGC Minor Project, File No. MRP-3824/11 (MRP/UGC-SERO) dated August 2012.

**Number of Ph.D guided : 7**