

Solubilization and Interaction of Ciprofloxacin with Pluronics and their Mixed micelles

M. Senthilkumar ^a, B. Sheelarani ^a, R.G. Joshi ^b, Sasmita Dash ^{a,*}

^{a,*} Department of Chemistry, Annamalai University, Chidambaram-608002, Tamilnadu, India

^b Condensed Matter Physics Division, Materials Science Group, Indira Gandhi Centre for
Atomic Research, Kalpakkam - 603102, Tamilnadu, India

* Corresponding author: E-mail address: mishra342sas@gmail.com

***Corresponding author**

Dr. Sasmita dash
Professor
Department of Chemistry
Annamalai University
Annamalai nagar-608002
Chidambaram
Tamilnadu, India.
E-mail: mishra342sas@gmail.com

Supplementary Figure and Caption

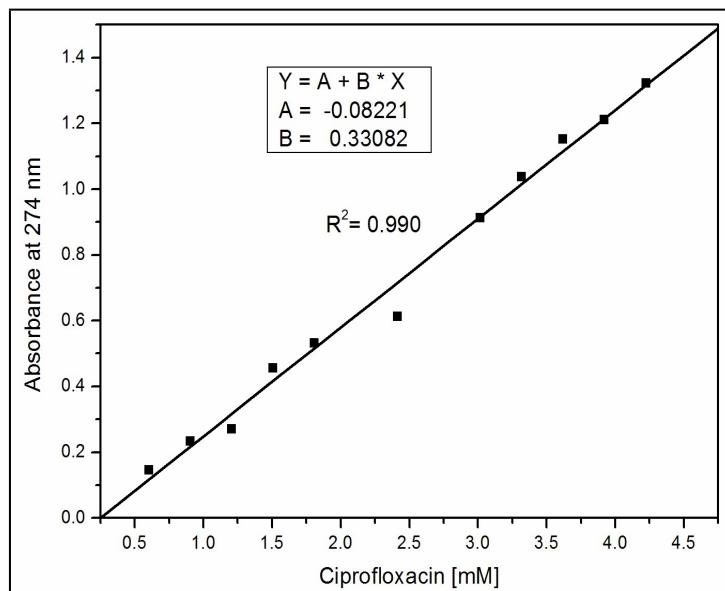


Figure. S1 Standard curve of Ciprofloxacin at 274 nm.

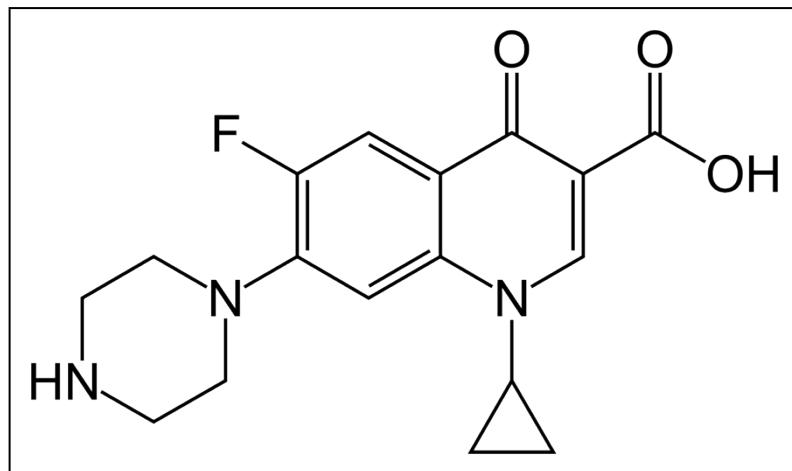


Figure. S2 Structure of Ciprofloxacin.

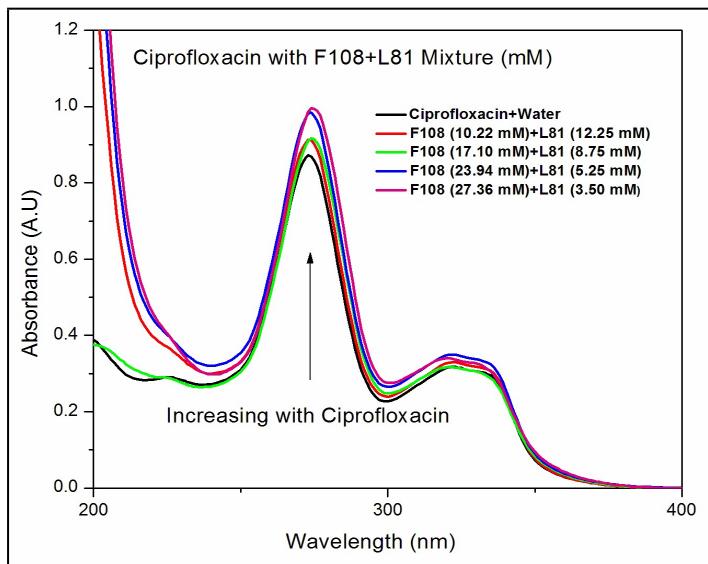


Figure. S3 Absorbance of different combinations of F108+L81 mixture with Ciprofloxacin.

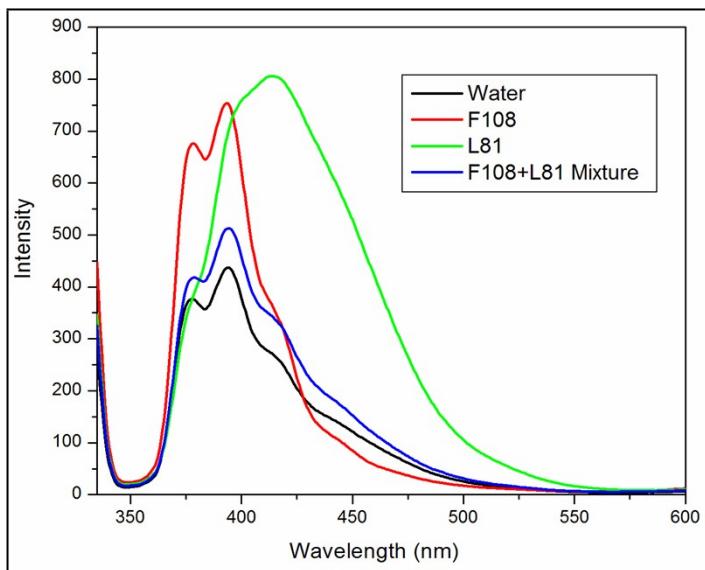
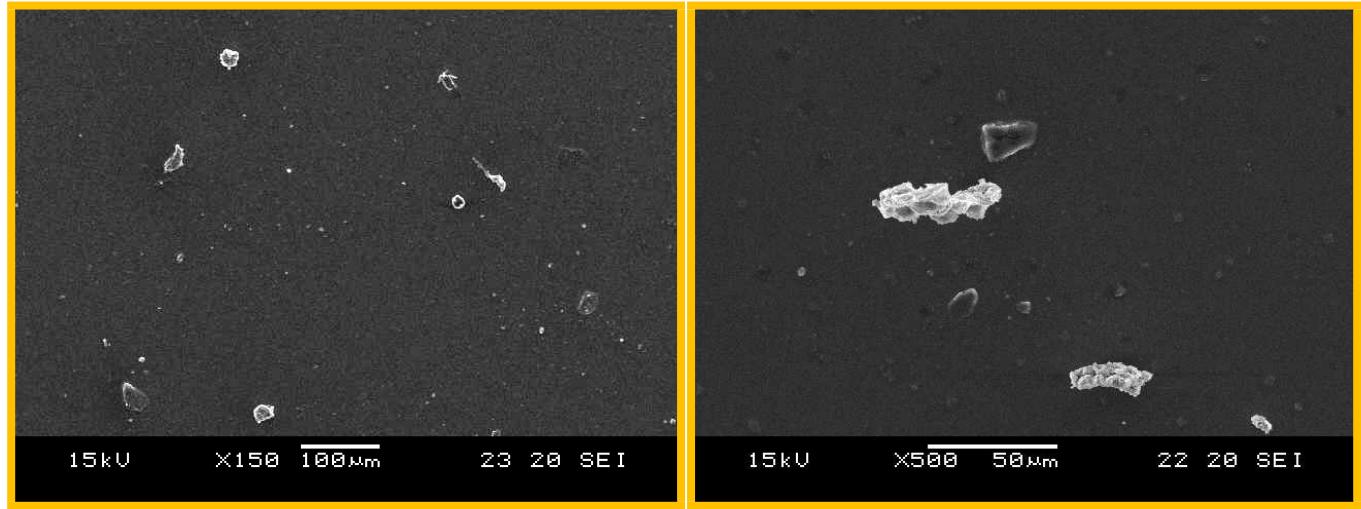


Figure. S4 Fluorescence spectra of Ciprofloxacin with single pluronic and mixed pluronic.



(A)

(B)

Figure. S5 SEM image of (A) Mixed pluronic (L81+F108) and (B) Ciprofloxacin encapsulated mixed pluronic.

Supplementary Table and Caption

Table T1. UV-Absorbance values of different combinations of mixed pluronic

S.No	Abbreviation	Combinations of Pluronic mixture	UV-Absorbance
1	M1	30% F108+70% L81	0.913
2	M2	50% F108+ 50% L81	0.984
3	M3	70% F108+ 30% L81	0.996
4	M4	80% F108+20% L81	0.917

Table T2. pH of Pluronic and mixed pluronic samples with drug

S.No	Sample	pH
1	Pluronic L81	5.91
2	Pluronic F108	6.10
3	Pluronic mixture (L81+F108)	6.26
4	Pluronic mixture+drug	6.21