

# Effect of Deep Eutectic System (DES) on Oral Bioavailability of Celecoxib: In Silico, In Vitro, and In Vivo Study

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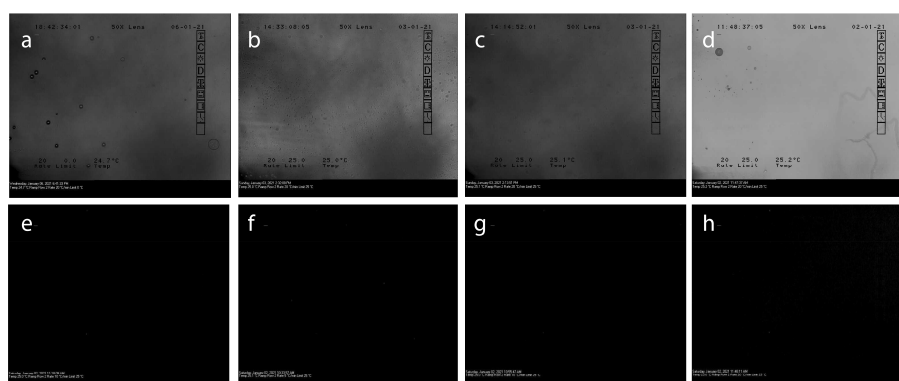
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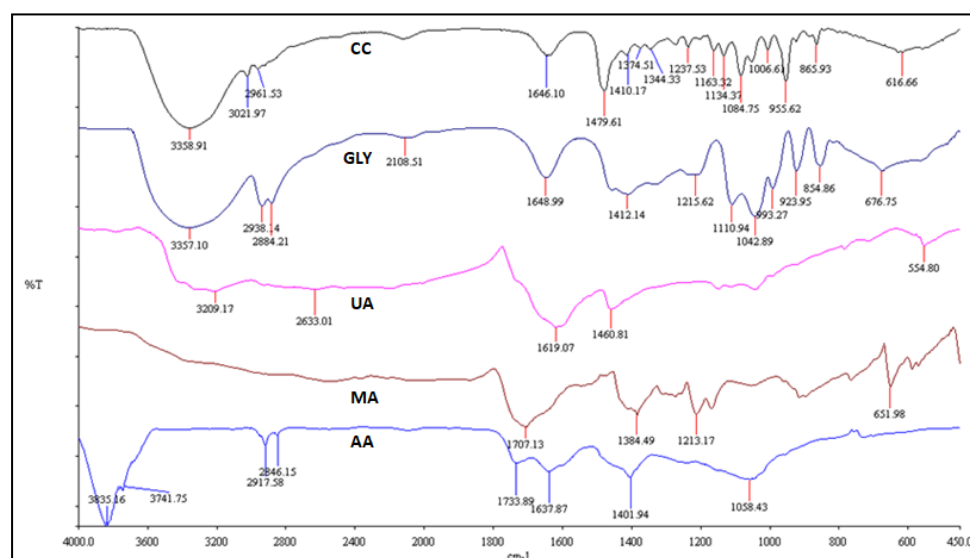
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**Figure S1.** Optical (a–d) and PLM (e–h) images of DES of (a,e) CC-UA (1:2), (b,f) CC-GLY (1:2), (c,g) CC-MA (1:1), and (d,h) CC-AA (2:1).



**Figure S2.** FTIR spectra of pure components.

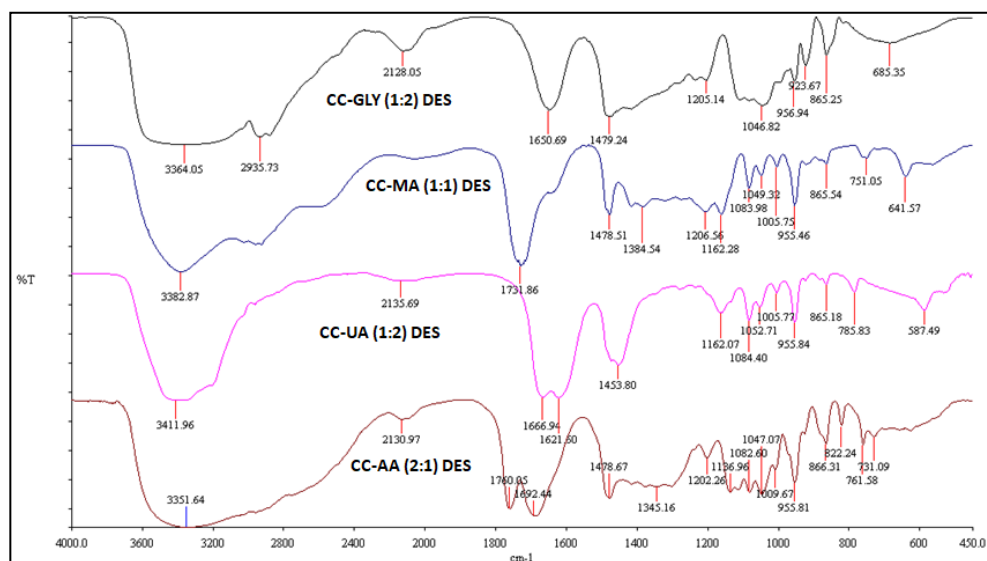


Figure S3. FTIR spectra of DESs.

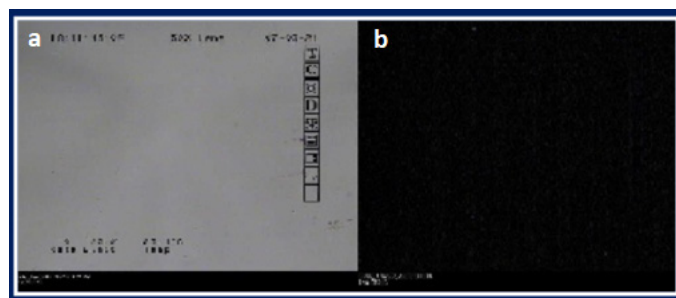


Figure S4. Optical (a) and polarized (b) microscopic images of pure CLX-DES system.

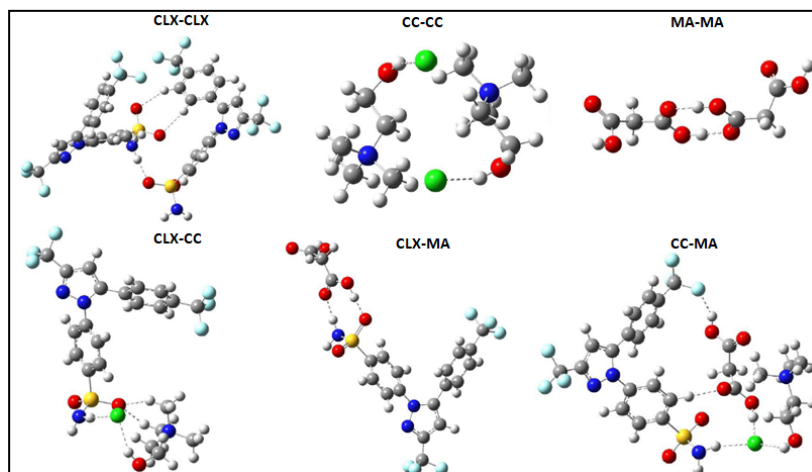
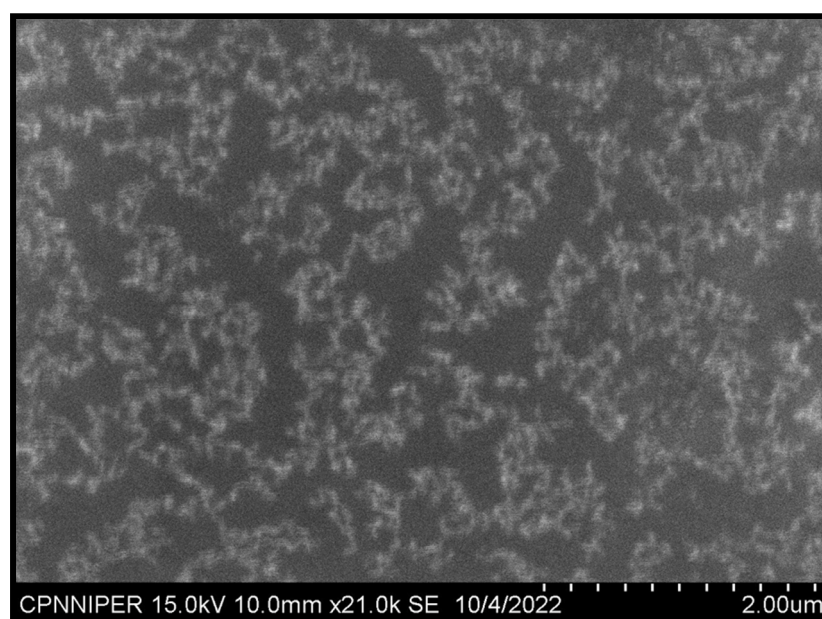
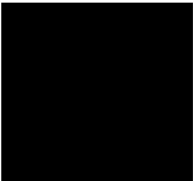
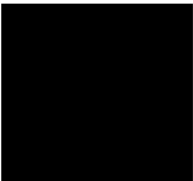


Figure S5. Optimized geometries of all the possible homo- and hetero-molecular pairs of CLX, CC, and MA.



**Figure S6.** SEM image of blank FaSSIF containing vesicular structures.

**Table S1.** Percentage assay value and PLM images of CLX-DES system after 15 and 30 days storage at 40°C/75% RH.

Time (Days)	Assay (%)	PLM
0	100.01	
15	99.15	
30	99.72	