

Supporting Information for

**Multifunctional Intercalation in Layered
Double Hydroxide: Toward Multifunctional
Nanohybrid for Epoxy Resin**

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In order to further prove the incorporation of the chalcone species into the cavity of sCD, FTIR spectra of sCD, chalcone, their physical mixture and the complex have been recorded, as shown in Figure S1 in the supporting information. The FTIR spectrum of sCD displays the prominent absorption bands at 3387 cm^{-1} (for O-H stretching vibration), 2935 cm^{-1} (for C-H stretching vibration) and 1158, 1083 and 1033 cm^{-1} (for C-H, C-O stretching vibration). The FTIR spectrum of chalcone presents the characteristic absorption bands of the aromatic conjugated carbonyl group (about 1646 cm^{-1}) and the aromatic nucleus (about 1566, 1512, 1494, 1442 cm^{-1}). For the physical mixture of sCD and chalcone, the FTIR spectrum shows a spectral addition effect and is essentially a combination of the spectra of sCD and chalcone species. However, in the case of complex, several small but characteristic absorption peaks of chalcone between 400 and 1600 cm^{-1} almost disappeared, indicating that the incorporation of the chalcone species into the cavity of sCD.

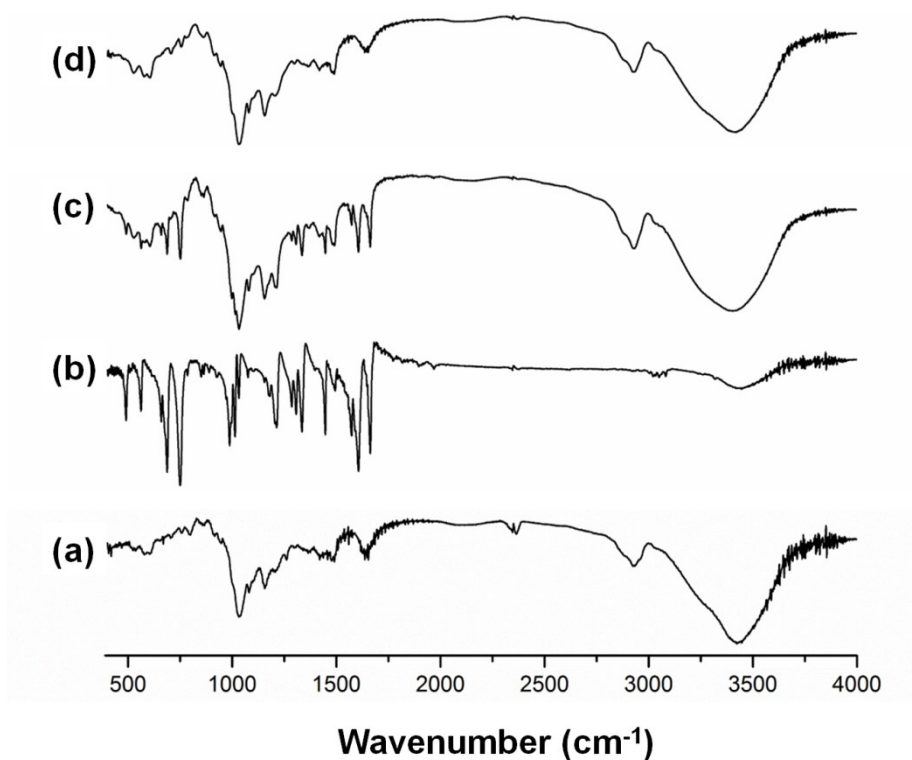


Fig. S1. FTIR spectra of sCD (a), chalcone (b), their physical mixture (c) and complex (d).