

The adsorptive removal of curcumin derivative from acetonitrile solution using GrapheneOxide(GOx)

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Curcumin is a bright yellow chemical produced by plants of the *Curcuma longa* species[1] and its derivatives give colored solutions in acetonitrile as solvent, which makes it a good specimen to be analyzed using UV-VIS spectrometry analyzing method. The adsorptive agent is Graphene Oxide (GOx) (synthesized using modified Hummers method)[2]. In further analysis we can come to conclusions of GOx capacity to remove (2E,5E)-2,5-bis(2-methoxybenzylidene)cyclopentanone from the solution. This experiment is backed up with theoretical calculations.

References

[1] Majeed S.,2015, Natural Products Insider

[2] N.I.Zaaba,K.L.Foo,U.Hashim,S.J.Tan,Wei-WenLiu,C.H.Voon,2017,Elsevier

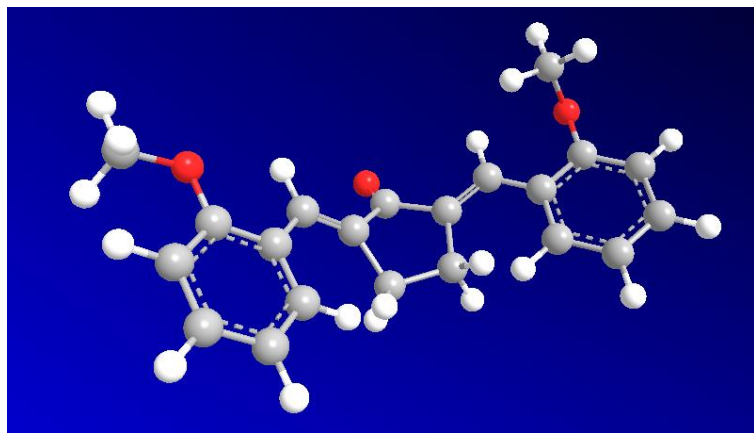


Figure 1. Structure of (2E,5E)-2,5-bis(2-methoxybenzylidene)cyclopentanone