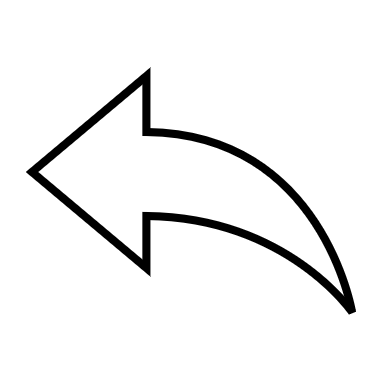
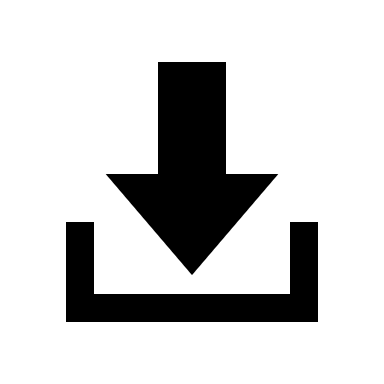
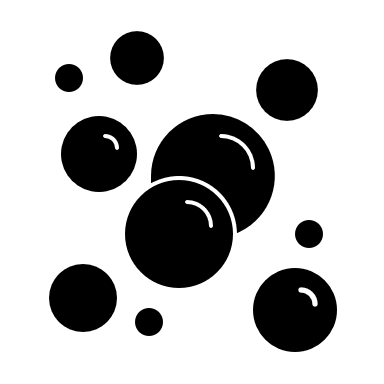
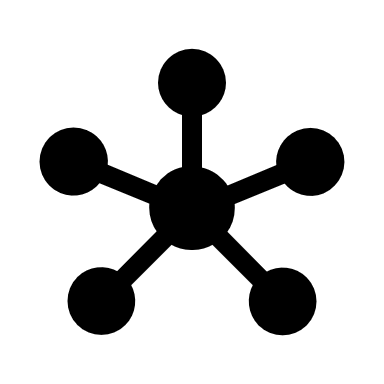
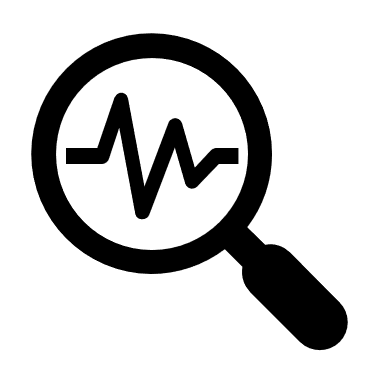


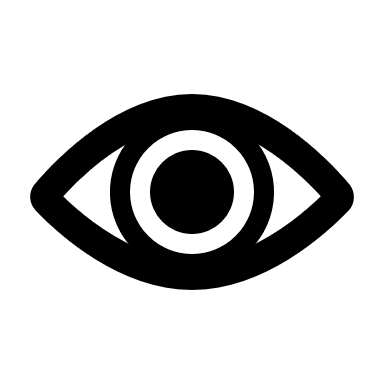
**nicotinamide (NCTA)**



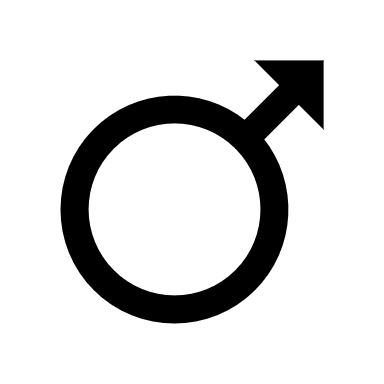
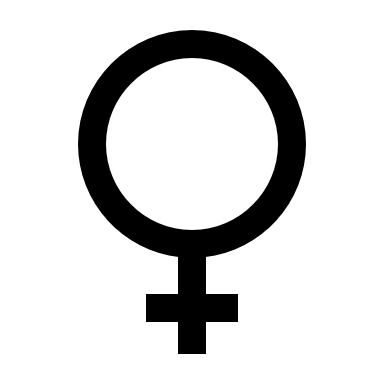
**Twin Screw Granulator**



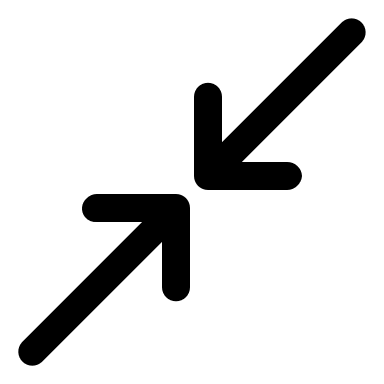
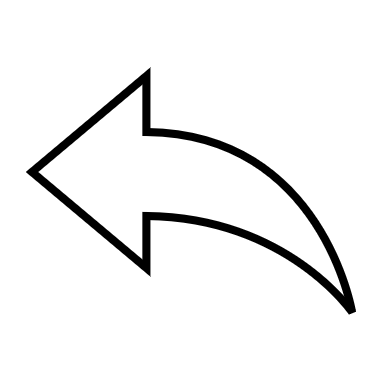
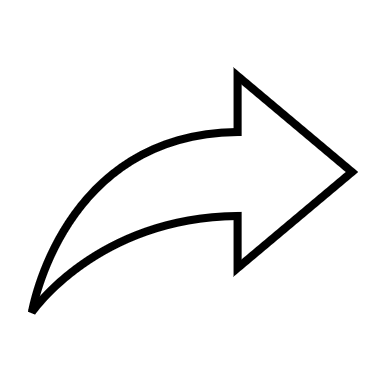
**API** and **Coformer**



**DFT** kernel

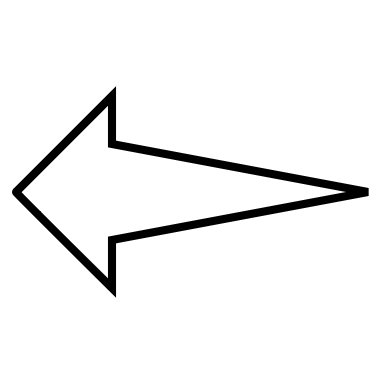
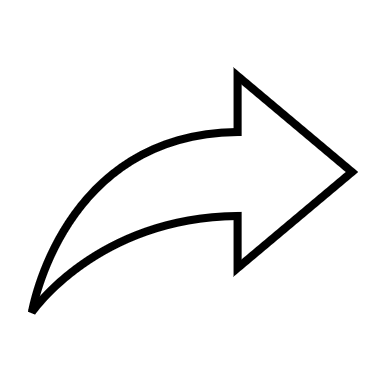


**Donor**–**Acceptor** sites

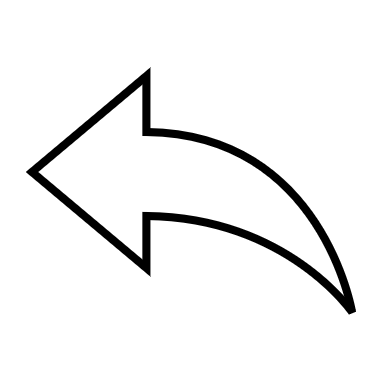


**Interactions**

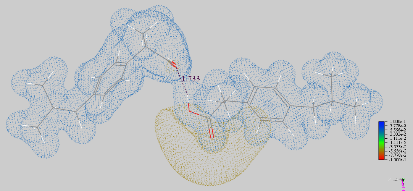
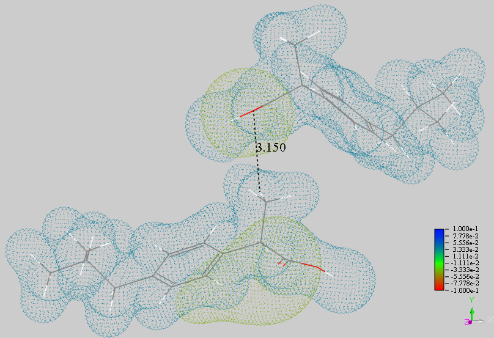
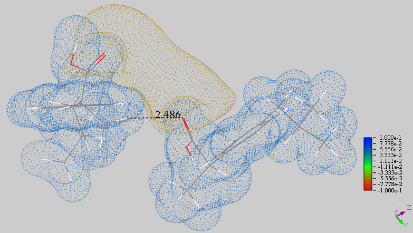
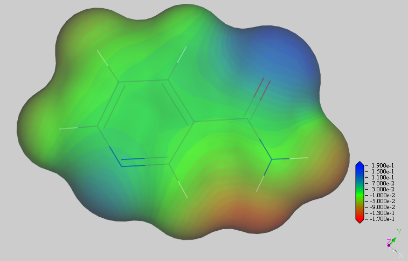
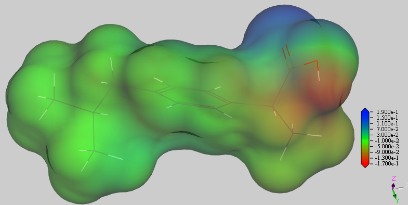
**Mixture**



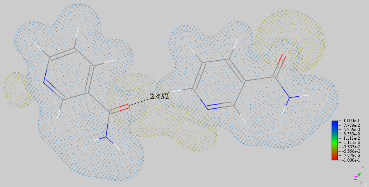
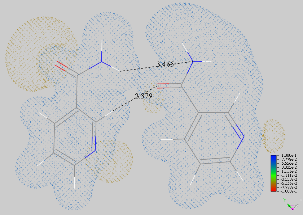
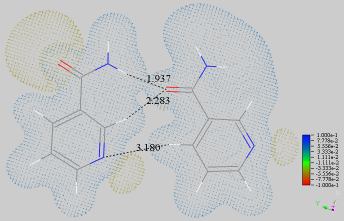
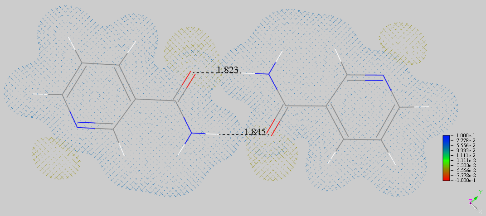
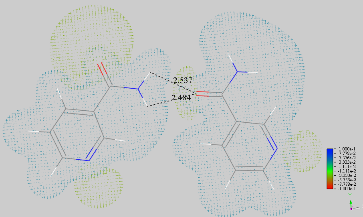
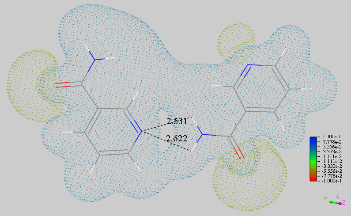
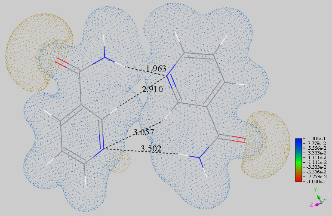
**Dimer/(co)crystal?**



**ibuprofen (IBF)**



**IBF-d: IBF dimers**



**NCTA-d**

**:**

**NCTA dimers**



**Mixture**

**Phase diagram of ibuprofen (and nicotinamide (NCTA) mixtures showing the effect of dimers formation on mixture phase behaviour.**

**When IBF forms dimers, the LCST drops to 314 K and UCST drops to 194 K.**