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Tracking Cocrystallization of Active Pharmaceutical Ingredients with Benzoic Acid Co-former using Broadband Acoustic Resonance Dissolution Spectroscopy (BARDS)

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Pfizer, Sandwich, Kent, United Kingdom.

¥ BARDS Acoustic Science Labs, Bio-Innovation Centre, University College Cork.

IR spectra for Table 1:

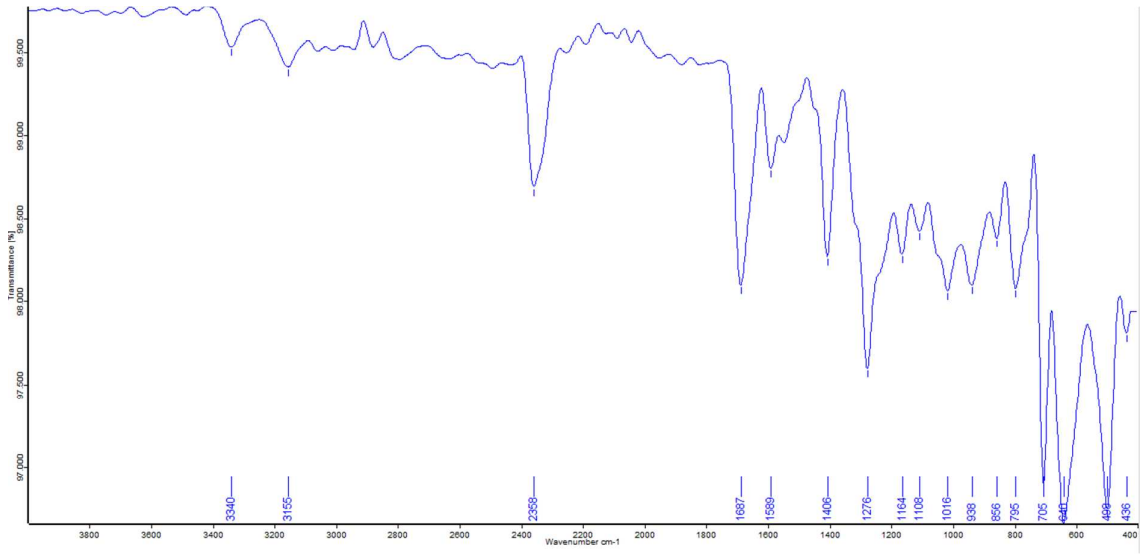


Figure 1: IR Analysis for a 1:1 mixture of INA: BA analysed after 1 minute of milling in the Retsch MM400 mixer mill

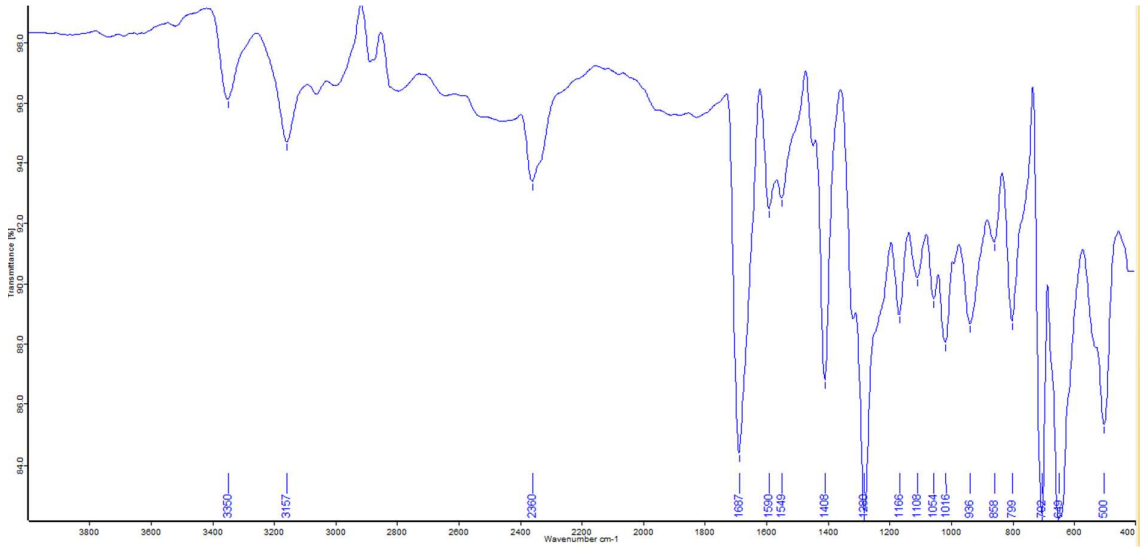


Figure 2: IR Analysis for a 1:1 mixture of INA: BA analysed after 2 minutes of milling in the Retsch MM400 mixer mill.

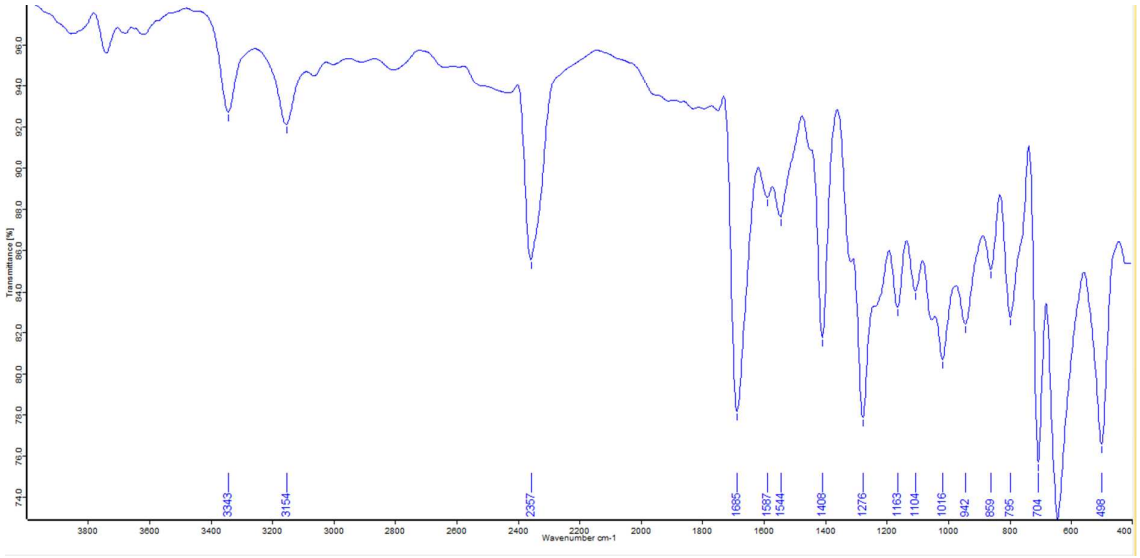


Figure 3: IR Analysis for a 1:1 mixture of INA: BA analysed after 5 minutes of milling in the Retsch MM400 mixer mill.

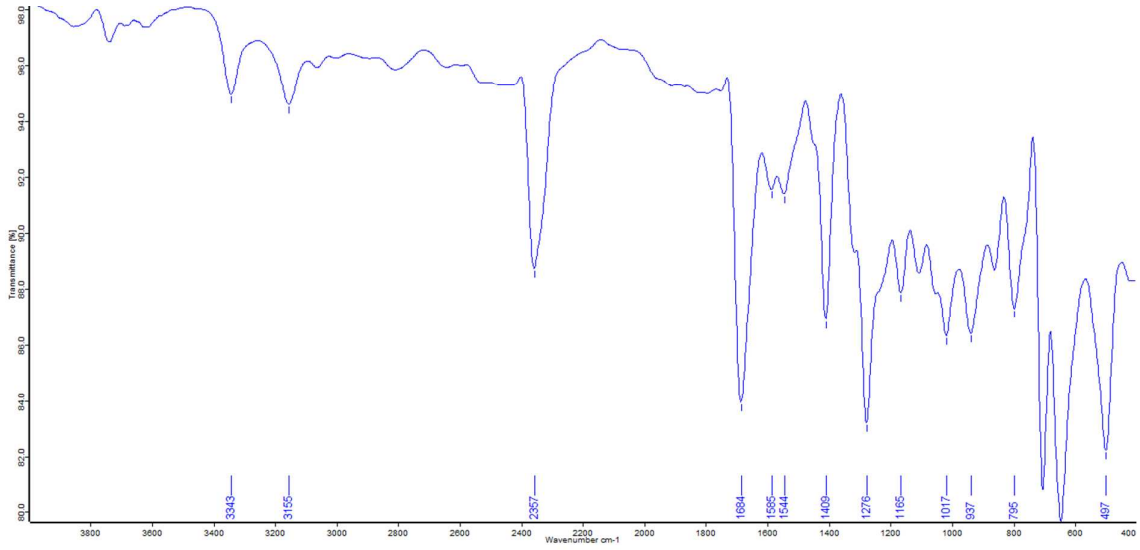


Figure 4: IR Analysis for a 1:1 mixture of INA: BA analysed after 10 minutes of milling in the Retsch MM400 mixer mill.

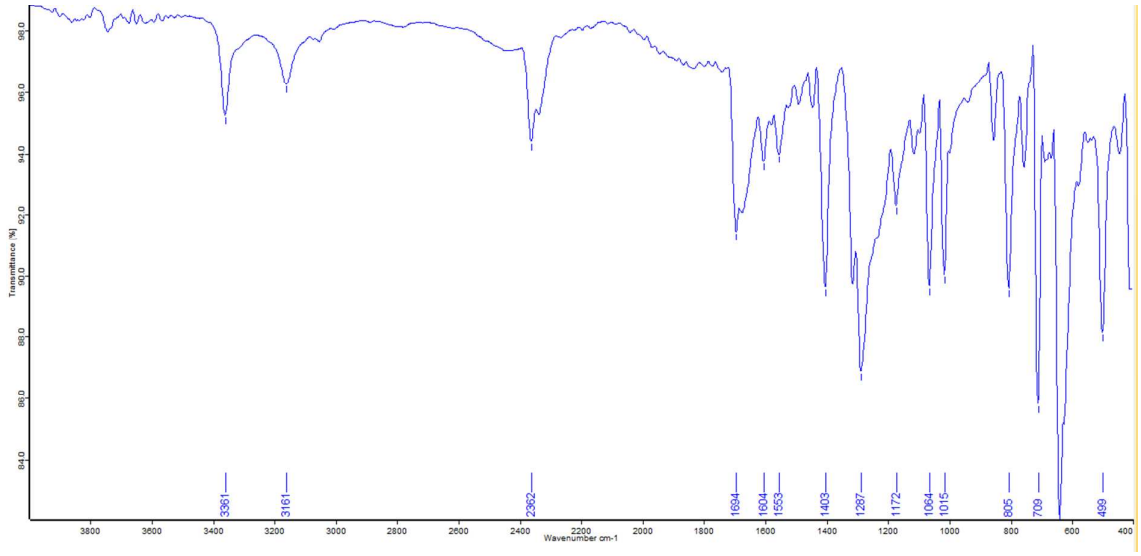


Figure 5: IR Analysis for a 1:1 mixture of INA: BA analysed after 15 minutes of milling in the Retsch MM400 mixer mill.

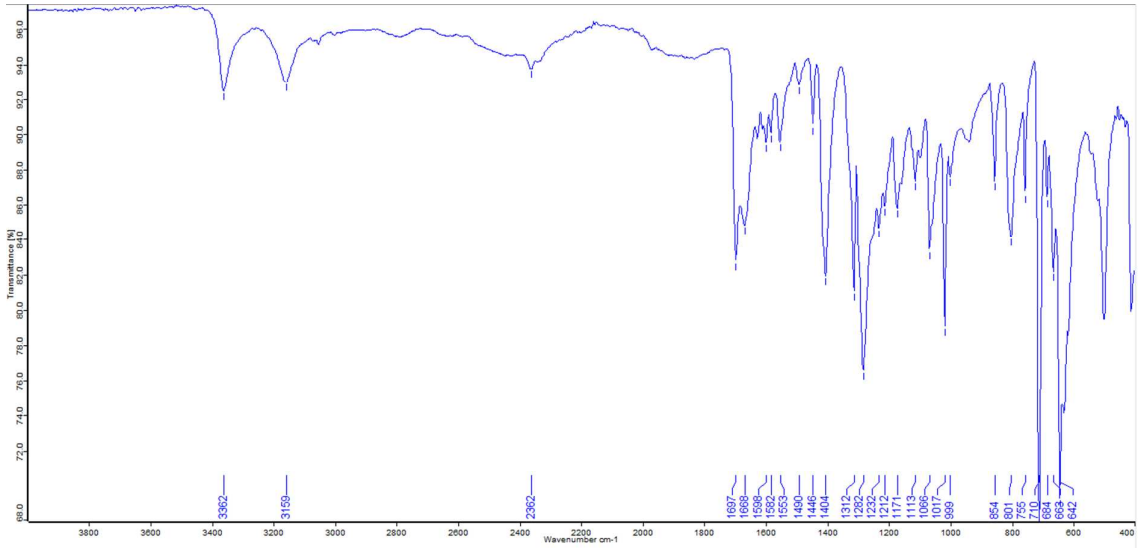


Figure 6: IR Analysis for a 1:1 mixture of INA: BA analysed after 20 minutes of milling in the Retsch MM400 mixer mill.

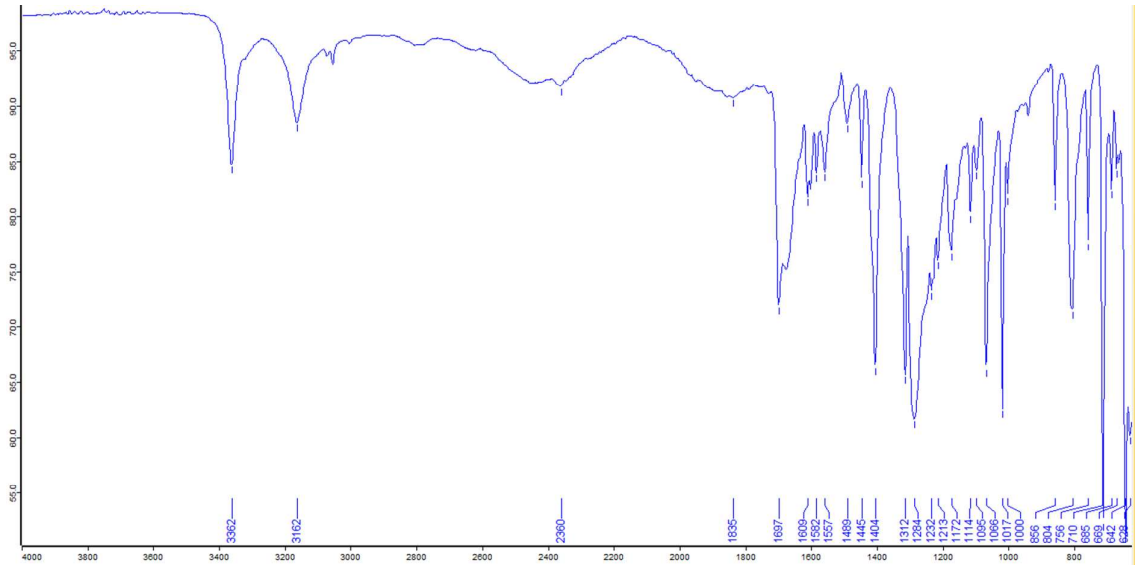


Figure 7: IR Analysis for a 1:1 mixture of INA: BA analysed after 40 minutes of milling in the Retsch MM400 mixer mill.

Analysis of 1:1 mixture of Theophylline and Benzoic Acid:

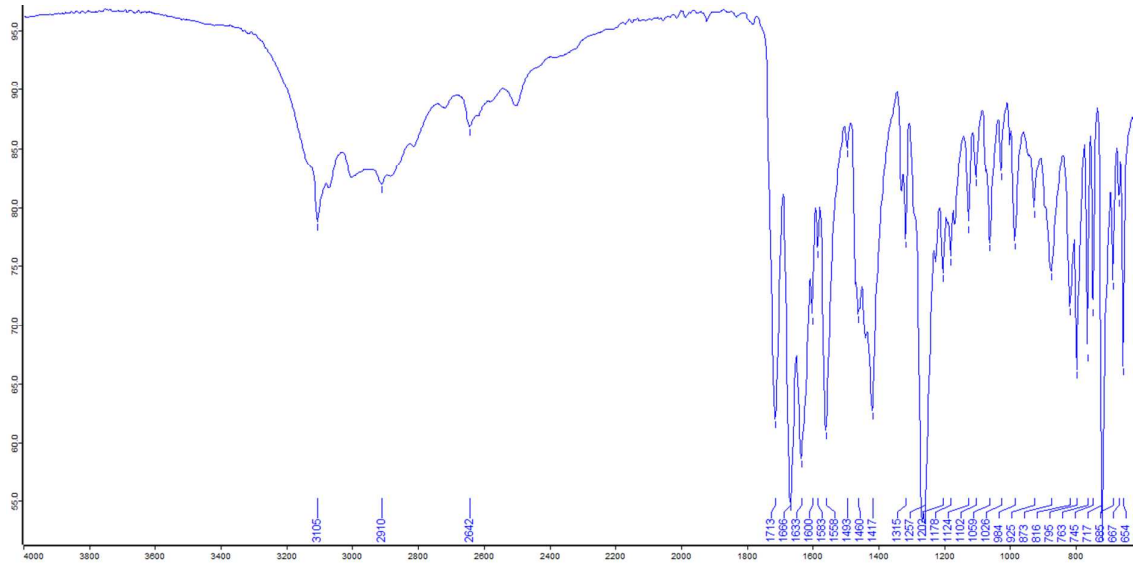


Figure 8: Infrared analysis after 5 minutes of LAG using a Retsch MM400 of a 1:1 TP:BA mixture.

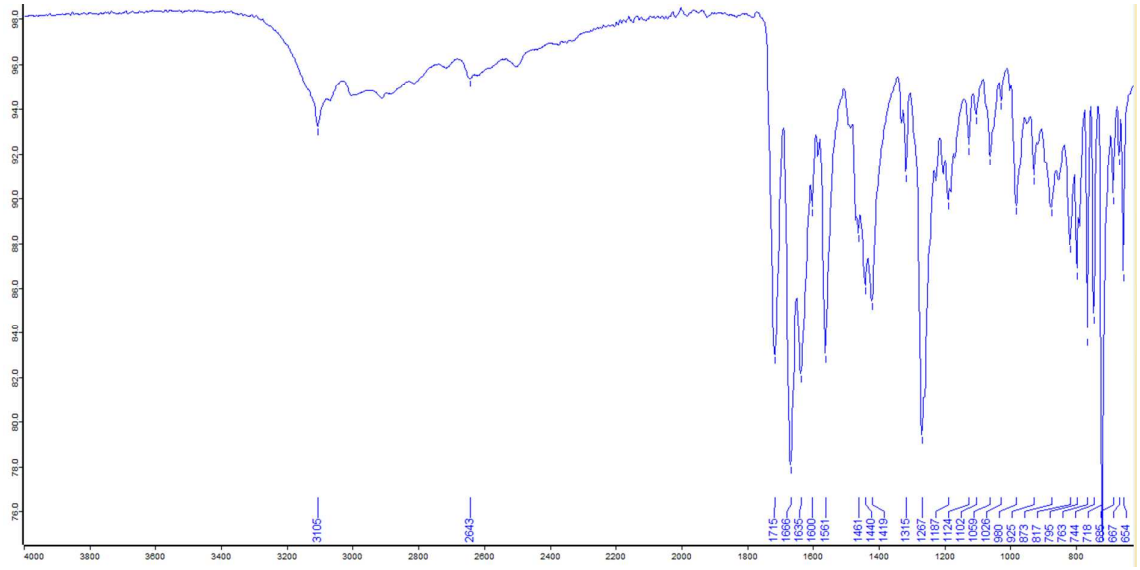


Figure 9: Infrared analysis after 10 minutes of LAG using a Retsch MM400 of a 1:1 TP:BA mixture.

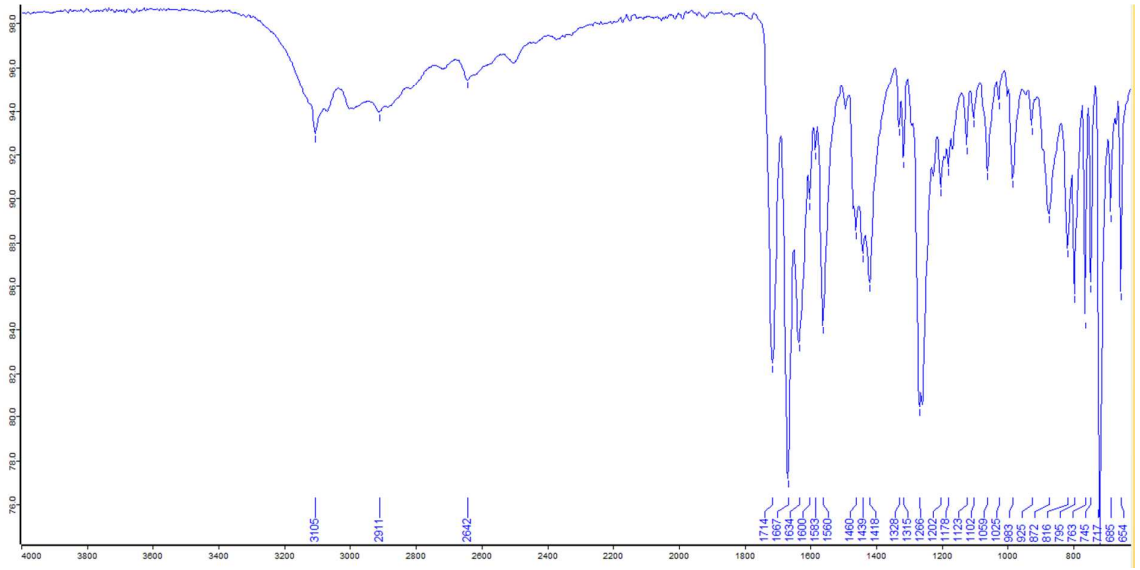


Figure 10: Infrared analysis after 15 minutes of LAG using a Retsch MM400 of a 1:1 TP:BA mixture.

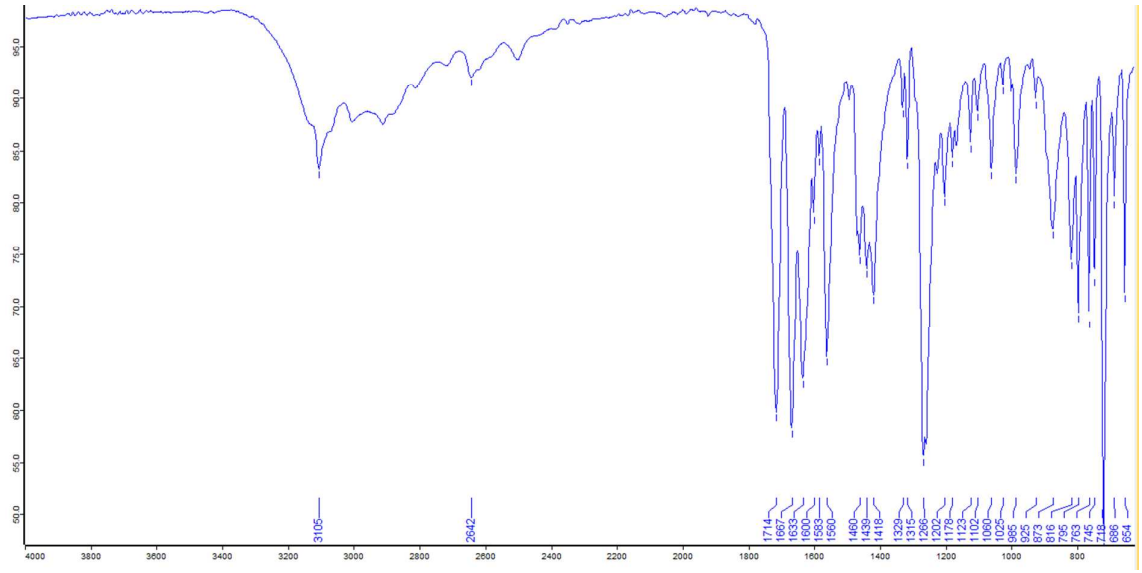


Figure 11: Infrared analysis after 20 minutes of LAG using a Retsch MM400 of a 1:1 TP:BA mixture.