

Poster Presentation

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Engineering multicomponent solids based on fenamates

Vineet Kumar¹, Ram Thaimattam², Arunachalam Ramanan¹

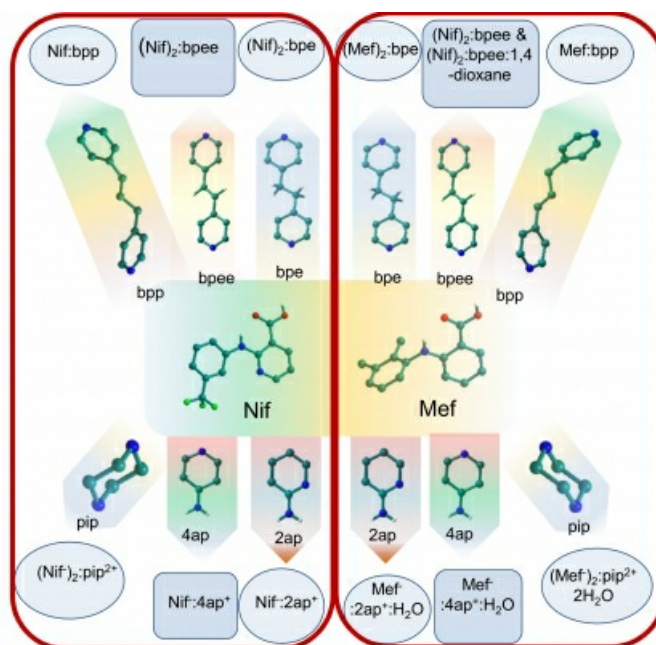
¹Department Of Chemistry, IIT Delhi, New Delhi, India, ²PD Generics, DS-1, IKP Knowledge park, Turkapally, Shameerpet, Hyderabad – 500078, India, Hyderabad, India
E-mail: vinhivin.123@gmail.com

Nonsteroidal anti-inflammatory drugs (nsaids) are among the most commonly used pharmaceutical solids and primarily used as anti-inflammatory, analgesic, and antipyretic agents.¹ In this study we focused on two nsaids molecules Niflumic acid (Nif) and Mefenamic acid (Mef) which are BCS (Biopharmaceutical classification system) class II drug with poor solubility and high permeability.² Both these molecules have important pharmacological activity. The first drug Nif used in rheumatoid arthritis and arthrosis the second drug Mef prescribed in conditions of dental pain, premenstrual syndrome, headache and postoperative surgeries. Recently Mef is also found to have therapeutic effect in Alzheimer's diseases and anti-cancer activity (colon and liver cancer).³ We extended our approach to exploit acid-pyridine synthon to obtain new multicomponent solids based on Nif and Mef. In this poster, we discuss the design strategy, comparative structural features of twelve new solids based on Nif and Mef.

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