PATENT NO. 346678

ONE POT SYNTHESIS OF A NEW SERIES OF ACYLOXY-AMIDE AND ACYLAMINO-AMIDE DIHYDROPYRIMIDONE DERIVATES

APPLICATION NO. 1797/DEL/2015

APPLICANT

PEC University of Technology, Chandigarh

ABSTRACT

A novel synthetic route providing one pot autocatalysed synthesis of dihydropyrimidone derivatives of Formula 1 and 2. The process comprising the steps of reacting ethylaceotacetate, pcarboxybenzaldehyde and urea to yield an intermediate dihydropyrimidone with benzoic acid functionality, having the structure of Formula 3; reacting the said intermediate with a moiety of isocyanide and a moiety of aldehyde in methanol to five component dihydropyrimidone result in derivatives i.e. Formula1; and/or reacting the said intermediate with a moiety of isocyanide and a moiety of aldehyde in methanol and aniline to result in six dihydropyrimidone component derivatives i.e. Formula 2.

INVENTOR

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CLAIM 1

A one pot autocatalysed synthesis of Formula 1 comprising the steps of reacting Ethylaceotacetate, p-carboxybenzaldehyde and urea to yield an intermediate dihydropyrimidone having the structure of Formula 3; reacting the said intermediate with a moiety of isocyanide and a moiety of aldehyde in methanol resulting into a five component dihydropyrimidone derivative of Formula 1