

**Polycyclic Aromatic Compounds** >

Volume 42, 2022 - Issue 10

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Research Articles

An Organocatalytic Newer Synthetic Approach toward the Access of Dihydropyrido[2,3-*d*] Pyrimidine in Water: A Perfect Synergy for Eco-compatible Organic Synthesis

Chetan K. Jadhav , Amol S. Nipate, Asha V. Chate & Charansingh H. Gill 

Pages 7368-7384 | Received 25 Nov 2020, Accepted 17 Oct 2021, Published online: 02 Nov 2021

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Abstract

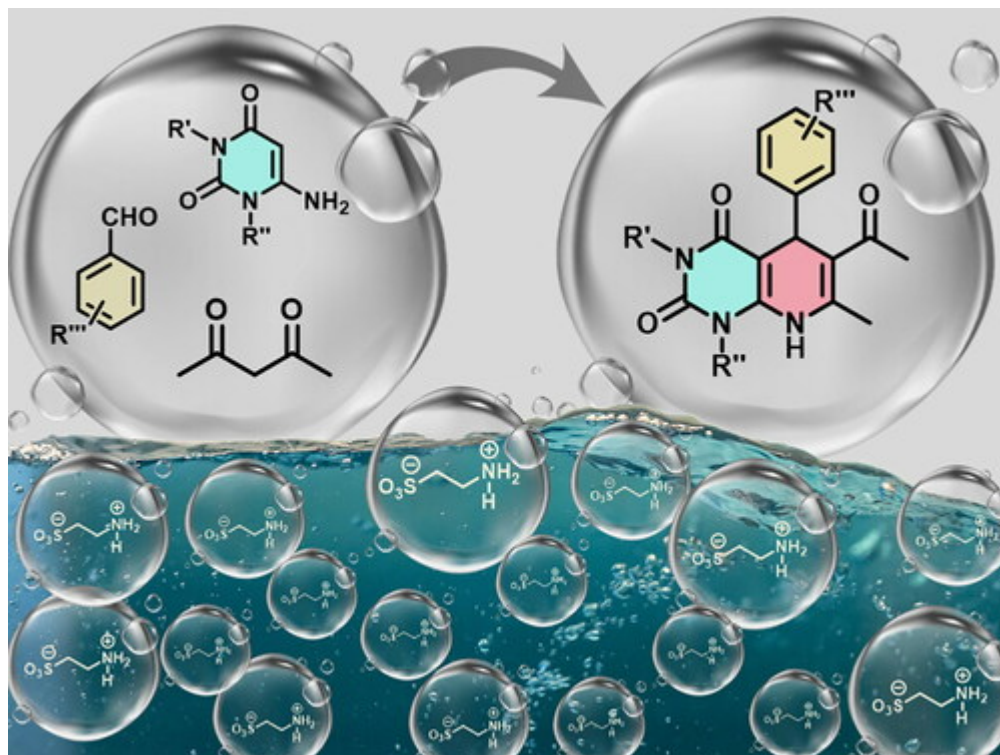
The simple and effective one-pot, three-component protocol for the synthesis of dihydropyrido[2,3-*d*]pyrimidine derivatives is presented using a 2-aminoethanesulfonic acid in water. Uracil annulated heterocycles were obtained using various aromatic/aliphatic aldehydes, 6-amino-1,3-dimethyl uracil, and acetyl acetone at 60–80 °C in 2-aminoethanesulfonic acid and water as a green reaction medium. The product obtained was in good to excellent yield (90-94%) in minimum

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reaction time. Operational simplicity, easy workup, Superior green credentials and the catalyst could be recovered and reused for four consecutive cycles without appreciable loss in catalytic activity.

Graphical Abstract



Q Keywords: Multicomponent reaction taurine three-component reaction organocatalysis dihydropyrido[2,3-d]pyrimidine

Acknowledgments

One of the authors CKJ is very much grateful to the Council of Scientific and Industrial Research (CSIR), New Delhi for the award of a research fellowship. Authors are also thankful to the Head, Department of Chemistry, Dr. Babasaheb Ambedkar Marathwada University, Aurangabad for providing laboratory facility.

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Disclosure statement

No potential conflict of interest was reported by the authors.

Author contributions

The manuscript was written through the contributions of all authors. All authors have approved the final version of the manuscript.

Additional information

Funding

One of the authors CKJ is very much grateful to the Council of Scientific and Industrial Research (CSIR), New Delhi for the award of a research fellowship. Authors are also thankful to the Head, Department of Chemistry, Dr. Babasaheb Ambedkar Marathwada University, Aurangabad for providing laboratory facility.

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