### CSIR-NISCAIR



A CSIR Publication

Indian J Chem (Monthly) JULY 2019

CODEN: IJOCAP 58 B (7) 791-860 (2019 ISSN : 0376-4699 (Print); 0975-0983 (Online ijc\_b@niscair.res.im

Single Copy: ₹ 460.00 \$ 80.00 Annual Subs: ₹ 4600.00 \$ 800.00

# Indian Journal of Chemistry

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# Section B

(Organic including Medicinal)





Published by CSIR-National Institute of Science Communication And Information Resources, CSIR New Delhi, INDIA

in association with Indian National Science Academy, New Delhi, INDIA

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Website address: www.niscair.res.in; http://nopr.niscair.res.in

# **Indian Journal of Chemistry**

#### Sect. B: Organic Chemistry including Medicinal Chemistry

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#### Papers

799 Synthesis of new donor-acceptor thiophene linked coumarin chromophores: Potential photosensitizers for dye sensitized solar cells



Sabir H Mashraqui\*, Sushil Ghorpade, Rupesh Mestri, Aniket Chilekar & Jyoti Upadhyay

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805 (E)-2-(2-Pyridinyl)-3-(2-pyridinylmethylene)chromanone, a 1:2 condensation product of 2'-hydroxyacetophenone and pyridine-2-aldehyde, showing some interesting properties



Rina Mondal, Nayim Sepay & Asok K Mallik\*

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811 Sulfonic acid functionalized CoFe<sub>2</sub>O<sub>4</sub> magnetic nanocatalyst for the synthesis of benzimidazoles and benzothiazoles



#### Mintu Maan Dutta, Mridusmita Goswami & Prodeep Phukan\*

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820 Fumaric acid catalyzed a green convenient and expedient approach for facile preparation of 3,4dihydropyrimidin-2-(1*H*)-ones/thiones derivatives and N-aryl-3-aminodihydro- pyrrole-2-one-4carboxylates under eco-safe conditions Fumaric acid as a naturally green and efficient catalyst has been found to be cost effective for the one-pot three-component Biginelli synthesis of 3,4-dihydropyrimidin-2-(1H)-ones/thiones derivatives and one-pot four-component domino condensation of N-aryl-3- aminodihydropyrrol-2-one-4-carboxylates. Fumaric acid shows promising features for these reactions, such as ecofriendliness, easily separation with no column chromatographic separation, clean synthesis, simple operational procedures, excellent yields and short reaction times.



#### **Farzaneh Mohamadpour**

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832 Green and solvent-free protocol promoted facile and one-pot synthesis of xanthene derivatives using succinic acid as a bio-based, biodegradable and versatile di-functional Brønsted acid catalyst A green and highly versatile protocol for the synthesis of 12aryl-tetrahydrobenzo[ $\alpha$ ]xanthene-11-ones, 1,8-dioxo-octahydroxanthenes and 14-aryl-14*H*-dibenzo[ $\alpha$ ,j]xanthenes in the presence of catalytic amount of succinic acid under solvent-free conditions has been described. The reaction has been carried out without using any solvent and the process subscribes to the principles of green chemistry. Moreover, the present protocol offers several advantages such as simple work-up, green, biobased, biodegradable and readily available catalyst, eco-safe reactions, shorter reaction times, high to excellent yields, facile reaction profiles and one-pot procedure.

5a-k



Succinic acid Green catalyst Solvent-free conditions

R



4a-1

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2 Synthesis, characterization and antimicrobial activity of some coumarin fused heterocycles



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Arunkumar M Shirahatti, Mahesh Kumar K\*, Sachin P A, Soumya K, Kotresh O & Masuku M C

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Synthesis and antidiabetic evaluation of some novel compounds



N-({4-[3-(substitutedamino)-2-hydroxypropoxy]phenyl}(chloro)methyl)-N-phenylbenzamide

#### Anagha S Avalakki, Shailaja B Jadhav\*, Deepti D Bandawane & Pournima A Bhalekar

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855 Synthesis and characterization of diclofenac impurity-A for the quality control of diclofenac and its formulation as per international compendiums



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