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

Indian Journal of Chemistry

Sect. B: Organic Chemistry including Medicinal Chemistry

Impact Factor: 0.592 (JCR 2020)

VOL. 60B

NUMBER 10

OCTOBER 2021

CONTENTS

Papers

1347 Enantioselective synthesis of bronchodilating agent (R)-Salmeterol

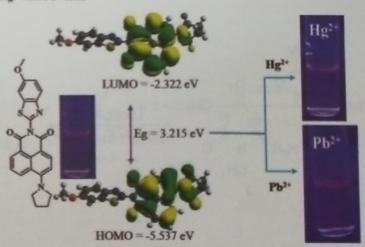
Sharpless Asymmetric
Dihydroxylation
HO

(R)-Salmeterol

P L N Ranganath, T Anil & A Venkat Narsaiah*

Organic Synthesis Laboratory, Fluoro-Agrochemicals Department, CSIR-Indian Institute of Chemical Technology, Hyderabad 500 007, India

1353 An efficient naphthalimide based receptor for selective detection of Hg²⁺ and Pb²⁺ions



Pramod D Jawale Patil, Sopan M Wagalgave, Mohammad Al Kobaisi, Shailesh S Birajdar, Rajesh S Bhosale, Rajita D Ingle, Rajendra P Pawar, Sheshanath V Bhosale & Sidhanath V Bhosale*

Polymers and Functional Materials Division, CSIR-Indian Institute of Chemical Technology, Hyderabad 500 007, India Tomato fruit extract: an environmentally benign catalytic medium for the synthesis of isoxazoles derivatives

Ar =
$$-C_6H_5$$
, 2-Cl- C_6H_4 , 4-Cl- C_6H_4 , 4-OH- C_6H_4 , 4-OCH₃- C_6H_4 , 2,4-Cl- C_6H_3 , etc.

R¹ = Et, Me

R² = H, CH₃

Bhushan B Popatkar*, Ankita A Mane & Gangadhar A Meshram

Department of Chemistry, University of Mumbai, Vidyanagari, Kalina, Santacruz (E), Mumbai 400 098, India

An efficient solvent-free synthesis of pyrido[2,3-d]pyrimidine derivatives utilizing lactic acid as green and eco-friendly catalyst

An efficient, solvent-free and one-pot procedure for the synthesis of pyrido[2,3-d]pyrimidine derivatives by condensation of aromatic aldehydes, malononitrile and 6-amino-1,3-dimethyl uracil at 90°C catalyzed by lactic acid as an inexpensive, biological and ecofriendly compound is described. The remarkable benefits of this procedure are green and environmentally friendly reaction conditions, high yields, short reaction time, simple methodology and easy workup.

Mohyeddin Safarzaei, Ebrahim Mollashahi*, Mojtaba Lashkari, Malek Taher Maghsoodlou & Nourallah Hazeri

Department of Chemistry, Faculty of Sciences, University of Sistan and Baluchestan, P.O. Box 98135-674, Zahedan, Iran

1373 Ultrasonicated synthesis of some potent antimicrobial aryl sulphonamides

Nine N-(2,4-difluorophenyl) substituted benzene sulphonamides have been synthesized by ultrasonication method within short reaction time having more than 90% yield. The antimicrobial activities have been measured by Bauer-Kirby method.

S Dineshkumar, I Muthuvel, P Mayavel, R Markanadan, V Usha & G Thirunarayanan*

Department of Chemistry, Annamalai University, Annamalaiangar 608 002, India

1378 A convenient metal free approach towards the synthesis of dihydropyrimidones mediated by achiral nicotinic acid without solvent

A straightforward organocatalytic approach towards the synthesis of pyrimidones by a multicomponent domino strategy is depicted with a handful of examples.

$$H_3C$$
 $R^1 + X$
 NH_2
 H_2
 $R^1 = OEt, OMe, Ph$
 $Nicotinic acid$
 $Nico$

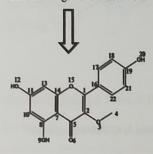
Mohinuddin Khan Imon, Koteswara R Kamma, M N Islam & Harendra N Roy*

Department of Chemistry, University of Rajshahi, Rajshahi, Bangladesh

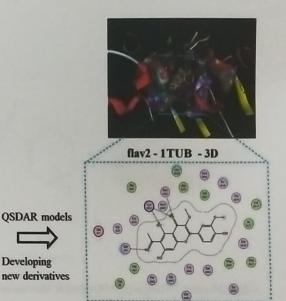
Insight QSDAR models for prediction of anticancer 1385 activity on Hela cell line of new flavonoid isolating from rhizome Zingiber zerumbet SM in Viet Nam



Rhizome Zingiber Zerumbet Sm



kaempferol-3-O-methylether



Docking results for new compound

Bui Thi Phuong Thuy, Nguyen Minh Quang, Nguyen Hung Huy & Pham Van Tat*

Developing

Faculty of Health Science, Hoa Sen University, Ho Chi Minh City, Viet Nam

1396 Synthesis and biological evaluation of azetidinone derivatives with pyrazolone moiety

Falguni Bhabhor & Harish Dabhi*

Department of Chemistry, Navjivan Science College, Dahod 389 151, India

Authors for correspondence are indicated by (*)