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# **Indian Journal of Chemistry**

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#### **CONTENTS**

### **Papers**

Design, synthesis and antitubercular activity of pyrazole and benzo[d]imidazole clubbed dihydro-imidazo[1,2-a]pyrimidinones

(5a-5o) -3-F, (g) -4-F, (h) -2-OH, (i) -4-O

Where R = (a) -H, (b) -3-Br, (c) -4-Br, (d) -3-Cl, (e) -4-Cl, (f) -3-F, (g) -4-F, (h) -2-OH, (i) -4-OH, (j) -3-OCH<sub>3</sub>, (k) -4-OCH<sub>3</sub>, (l) -4-CH<sub>3</sub>, (m) -3-NO<sub>2</sub>, (n) -4-NO<sub>2</sub>, (o) -2,4- $(OCH_3)_2$ 

## Nisheeth Desai\*, Jahnvi Monapara & Aratiba Jethawa

Division of Medicinal Chemistry, Department of Chemistry, Mahatma Gandhi Campus, Maharaja Krishnakumarsinhji Bhavnagar University, Bhavnagar 364 002, India

Design, synthesis, characterization and biological evaluation, of some novel (E)-6-(benzyloxy)-2-(4-bromobenzylidene)-7-methylbenzofuran-3(2H)-one derivatives

Where:  $R_1 = 3$ ,  $5(CI)_{2}$ ,  $4-(OCH_3)_2$ , 3,  $5-(OCH_3)_2$ , 2-Br, 3-Br, 4-Br, 4-OH, 3,  $5-(OCH_3)_2$ , 3-OH,  $4-OCH_3$ ,  $3-OCH_2CH_3$ ,  $4-OCH_3$ , 2-Br, 4,  $5-(OCH_3)_2$ 

# Foram J Patel, Kinjal D Patel, Vipul B Audichya\* & Rashmikant A Patel

Department of Chemistry, Municipal Arts and Urban Bank Science College, Mahesana 384 002, India

# 1147 Synthesis of N-cinnamoyl dipeptide esters and investigation of their self-assembly leading to nanorods formation

# Saurabh Shete\*, Manoj Gavali, M M V Ramana, Mandar Maduskar, Nanabhau Karanjule & Dilip Kumar Yadav

Department of Chemistry, K J Somaiya College of Science and Commerce, Vidyanagar, Vidyavihar, Mumbai 400 077, India

# 1151 Synthesis, molecular docking and CNS activity of 5,5-diphenylimidazolidine-2,4-dione derivatives

# Shweta Verma\* & Sonam Rani

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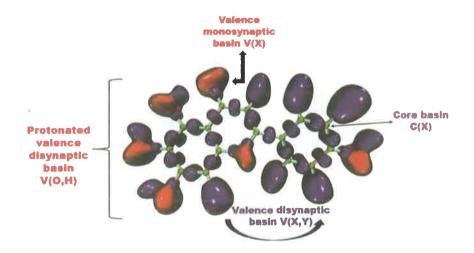
### 1162 Synthesis of novel anticancer coumarin-triazolechalcone hybrids as potential AKT inhibitors

A series of novel hybrid analogues of Coumarin-Triazole-Chalcones have been synthesized and tested for anticancer activity *in vitro*. Compound **9a**, which demonstrates significant IC50 values has been assessed for affinity towards AKT/PI3K targets through *in silico* approaches.

E Mallikarjun, D Suneesha, A Niranjana Kumar, Akanksha Singh, Hashnu Dutta, J Kotesh Kumar\*, K V N Satya Srinivas\*, Abha Meena, B Venkatesh, Nishant Jain, Sravanthi & T Radhika

Phytochemistry Division, CSIR-Central Institute of Medicinal and Aromatic Plants, Research Centre, Boduppal, Hyderabad 500 092, India

# 1171 Topology analysis of six phytochemicals through ELF and LOL basins – A DFT study



Shilpa D, Sadasivam K\* & Thirumoorthy M

Department of Physics, Bannari Amman Institute of Technology, Sathyamangalam, Tamil Nadu 638 401, India

One-pot, three-component synthesis of pyrimidine heterocyclic derivatives using reusable zinc ferrite catalyst and molecular docking study

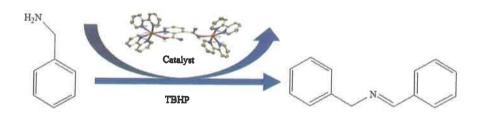
Biphenyl based pyrimidinones have been prepared by zinc ferrite catalysed one-pot three-component reaction with more than 80% yield. Molecular docking studies have been performed for these pyrimidines.

# J Divya, P Gayathri, I Muthuvel & G Thirunarayanan\*

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

1186 Synthesis of novel binuclear Cu(II) complex and its application as catalyst for conversion of amine to imine

A novel binuclear Cu(II) complex has been used as catalyst for oxidative coupling reaction of benzylamine to imine under very mild condition. It shows good yield of 90%.



# Aieshri Swargiary, Somali Mukherjee, Dulu Brahma, Pranjal Kalita & Arunendu Mondal\*

Department of Chemistry, Central Institute of Technology Kokrajhar, Kokrajhar 783 370, Assam, India (Deemed to be University under MHRD, Govt. of India)

1193 Design, synthesis, characterization and biological evaluation of some azetidinone derivatives containing pyrimidine moiety

Dinesh R Godhani\*, Umang P Mehta, Anwar H Saiyad, Kuldip P Parmar & Jignasu P Mehta

Department of Chemistry (DST-FIST sponsored Department), Mahatma Gandhi Campus, Maharaja Krishnakumarsinhji Bhavnagar University, Bhavnagar 364 002, India

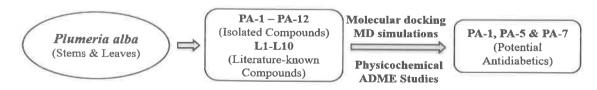
1201 A highly efficient route for synthesis of N-hydroxymethyl sumatriptan and sumatriptan dimer: Impurity C and H of anti-migraine drug sumatriptan

M R Suryawanshi\*, R A Rane\*, G V Babhulkar, P D Khobragade, S R Moharir, S A Chindhe & D K Pawar

Department of Pharmaceutical Chemistry, BVDU Poona College of Pharmacy, Erandwane, Pune 411 038, India

Molecular docking, MD simulations and ADME studies of phytoconstituents of *Plumeria alba* as potential antidiabetics

An in silico approach has been utilised to target antidiabetics from isolated and reported phytochemicals of *Plumeria alba*.



Leena Khanna, Mansi, Sangeeta Talwar, Neeti Misra, Subhash C Jain & Pankaj Khanna\*

Department of Chemistry, Acharya Narendra Dev College, University of Delhi, New Delhi 110 019, India

## **Notes**

1218 EcoScale MCR sustainability to impart rapid access to pyrrolo[1,2-b]pyrazoles scaffolds assisted by recyclable HClO<sub>4</sub>•SiO<sub>2</sub> heterogeneous catalytic system

Twinkle Solanki, Ashok Waskle, Prakash Barfa, Ashok Kumar & Pratibha Sharma\*

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