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## **Indian Journal of Chemistry**

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#### Papers

691 Synthesis and antituberculosis action of symmetric acridin-9-yl-bis-benzothiazol-2-yl-amines

A new series of symmetric acridin-9-yl-bis-benzothiazol-2-yl-amines have been synthesized in good to excellent yields by intra-molecular cyclization of 1-acridin-9-yl-1-benzothiazol-2-yl-3-aryl thiourea and screened for their *in vitro* antitubercular activity against *Mycobacterium tuberculosis* by BACTEC radiometric method. The synthesis of new analogues bearing an acridine-linked chlorosubstituted benzothiazole has demonstrated enhanced antituberculosis activity.



#### Pravin R Kawle

P. G. Department of Chemistry, Shri Radhakisan Laxminarayan Toshniwal College of Science, Akola 444 001, India

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Thiophene functionalized naphthalene diimide for the sensitive detection of nitroaromatics

NDI-Th as a fluorescent sensor displays selective recognition of 2,4-dinitrophenol (DNP) and 2,4-trinitrophenol (TNP) with a limit of detection of  $4.74 \times 10^{-8}$  M and  $7.60 \times 10^{-8}$  M, respectively.



### Dnyaneshwar I Bhusanur, Prabhat K Singh, Sheshanath V Bhosale & Sidhanath V Bhosale\*

Polymers and Functional Materials Division, CSIR-Indian Institute of Chemical Technology, Hyderabad 500 007, Telangana, India

703 Synthesis, quantum chemical computation, molecular docking analysis and biological activity of chlorophenyl-thiazolylnaphthylmethanone as dendrodoine analogs



#### C Brilla & T F Abbs Fen Reji\*

Department of Chemistry and Research Centre, Nesamony Memorial Christian College, Marthandam 629 165, Tamil Nadu, India

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Schiff base metal complexes: Synthesis, characterisation, and antibacterial properties

All five novel metal complex derivatives from the 2N-salicylidene-5-*p*amino phenyl)-1,3,4-thiadiazole in alcoholic medium have been effectively synthesised by combining HL with the metal ions Vo(II), Co(II), Rh(III), Pd (II) and Au(III). Except for the VO(II) and Co complexes, which has square pyramidal and tetrahedral geometries, all of the complexes have a monomeric structure, with the metal centre moieties being four-coordinated.



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#### Madhukar Vainala, Sunkari Jyothi\* & Sriramoju Shamili

Department of Chemistry, Kakatiya University, Warangal 506 009, India

720 Synthesis of bentonite/Nano-Mn<sub>3</sub>O<sub>4</sub> composite material and degradation of formaldehyde



#### Zhifu Wu\* & Liyun Hu

Guangxi Key Laboratory of Drug Discovery and Optimization, Guangxi Engineering Research Center for Pharmaceutical Molecular Screening and Druggability Evaluation, School of Pharmacy, Guilin Medical University, Guilin 541199, China

α-Glucosidase inhibition properties o azaphthalocyanines containing vanillin

of novel V

Vanillin substituted novel zinc(II) azaphthalocyanines (ZnAzaPcs) have been synthesized and investigated for their  $\alpha$ -glucosidase inhibition properties. All newly synthesized compounds have been evaluated for their *in vitro* inhibitory activity against  $\alpha$ -glucosidase and all of them have more inhibitory effect when compared to acarbose as reference compound.



Günay Kaya Kantar\*, Nimet Baltaş, Onur Şahin & Selami Şaşmaz

Recep Tayyip Erdogan University, Science and Art Faculty, Department of Chemistry, 53100, Rize, Turkey

Volumetric and acoustic studies of binary liquid mixtures of propylene glycol monopropyl ether + *n*-alkylamine at 288.15, 298.15 and 308.15 K  $V_m^E$  values are negative over the whole mole fraction range for the systems propylene glycol monopropyl ether + *n*-butylamine, and dibutylamine, and positive for the system propylene glycol monopropyl ether + tributylamine. Sign and magnitude of  $V_m^E$ ,  $\Delta \kappa_s$  and  $u^D$  with respect to the composition and temperature have been used to analyze the mixing behavior of the components.



#### Amalendu Pal\* & Anil Kumar

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## 746 Synthesis of novel glycosylthiadiazolo triazines and screening for antimicrobial activity



#### Renu B Ghayalkar\* & Shirish P Deshmukh

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755

Synthesis of cholest-5-en-3-ol(3β)-3-[4-(2,2,2-trifluoroacetamido) benzoate] (ChTfAB) a thermotropic liquid crystalline material

Combination of fluorine and steroidal moiety has significant impact on the mesomorphic properties.



Santosh W Zote\*, Dinesh N Navale, Prasanna B Ranade, Dnyaneshwar K Kulal, Swapnil J Wagh & Amol Pansare

Department of Chemistry, PTVA's Sathaye College (Autonomous) of Arts, Science and Commerce, Vile Parle (East), Mumbai 400 057, India

761 Synthesis and characterization of H-cardanol We achieved a two-step high-yielding synthesis of the H-cardanol incorporated C(3)-aminoisoindolinones incorporated C(3)-aminoisoindolinones from the corresponding phthalic anhydrides and primary amines. The isoindolinones are

lipophilic, hexane-soluble, and low-melting waxy solids. They are readily soluble in hydrocarbon solvents - a quality that makes them suitable for the topical administration of medicinal drugs.



 $R^1 = R^2 = CH_3$ ,  $C_{15}H_{31}$  etc., 7 examples, intramolecular, up to 90% yield

#### H Surya Prakash Rao\* & Prabhakaran J

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A facile synthesis, characterization and biological evaluation of novel spiro-thiazolidinone and quinazolinone-thiazolidine derivatives



Krishna Srivastava\*, Abhishek Srivastava, Ram Prakash Tiwari, Amit Tripathi, Sreenivasulu Peta & Manoj Verma

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Oxidation of paracetamol by N-chloro-p-toluene sulfonamide (Chloramine-T) in aqueous acid perchlorate medium: A kinetic and mechanistic pathway



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