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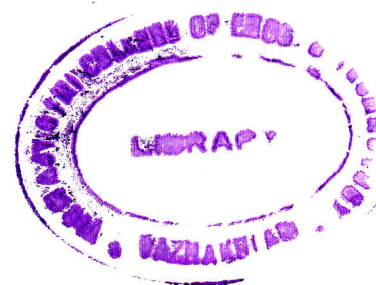
NUMBER 11

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CONTENTS

Papers

- 1015** Studies on acoustical parameters, thermodynamical properties and theoretical evaluation of morpholine with ortho xylene in isopropanol at 303K, 308K and 313K using ultrasonic sound



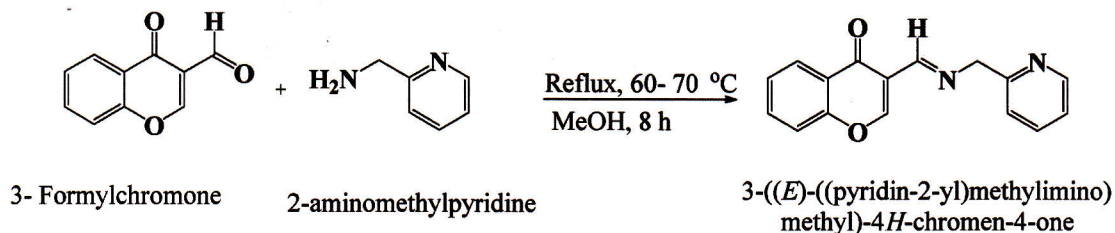
Crystal structure of morpholine

P S Syed Ibrahim*, Y Geetha & J Edward Jeyakumar

Department of Science and Humanities, Dhanalakshmi College of Engineering, Chennai 601 301, India

- 1022** Synthesis, DFT studies, antimicrobial, radical scavenging activity, and QSAR studies of 3-((E)-((pyridin-2-yl)methylimino)methyl)-4H-chromen-4-one

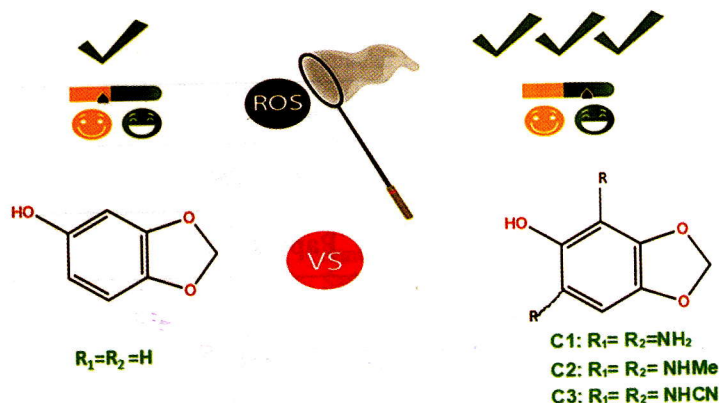
PMMC has been synthesized *via* condensation of chromone derivative with pyridin-2-ylmethylamine under reflux conditions. Structure confirmed by FT-IR, ¹H NMR, and Mass Spectrometry. PMMC exhibits promising NLO, antimicrobial, and antioxidant properties with ideal physicochemical and pharmacokinetic characteristics.



Kandala Satyanarayana, Koppu Suneetha, Mungala Alivelu & Natte Kavitha*

Department of Chemistry, Government Degree College, Bhupalpally 506 169, Telangana, India

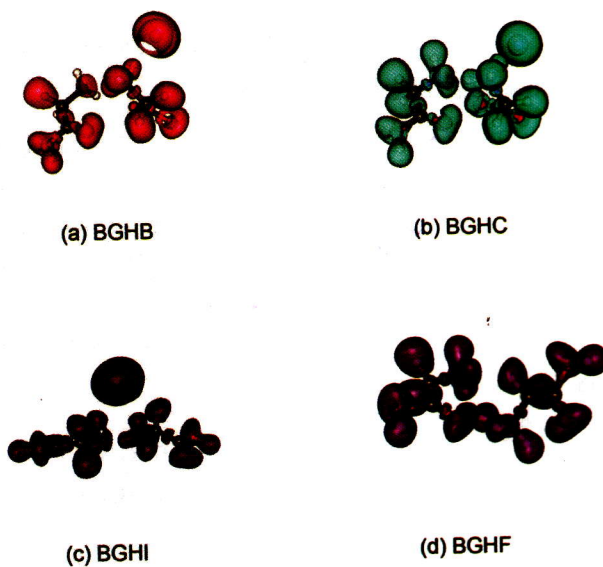
- 1038 Computational investigation of the antioxidant activity of sesamol and its *ortho*-amino derivatives in polar and nonpolar environments: Quantum chemical, molecular docking and druglikeness studies



Fatiha Djazia Larbaoui, Sidi Mohamed Mekelleche* & Khadidja Bellifa

Laboratory of Applied Thermodynamics and Molecular Modeling, Department of Chemistry, Faculty of Science, University of Tlemcen, PB 119, Tlemcen, 13000, Algeria

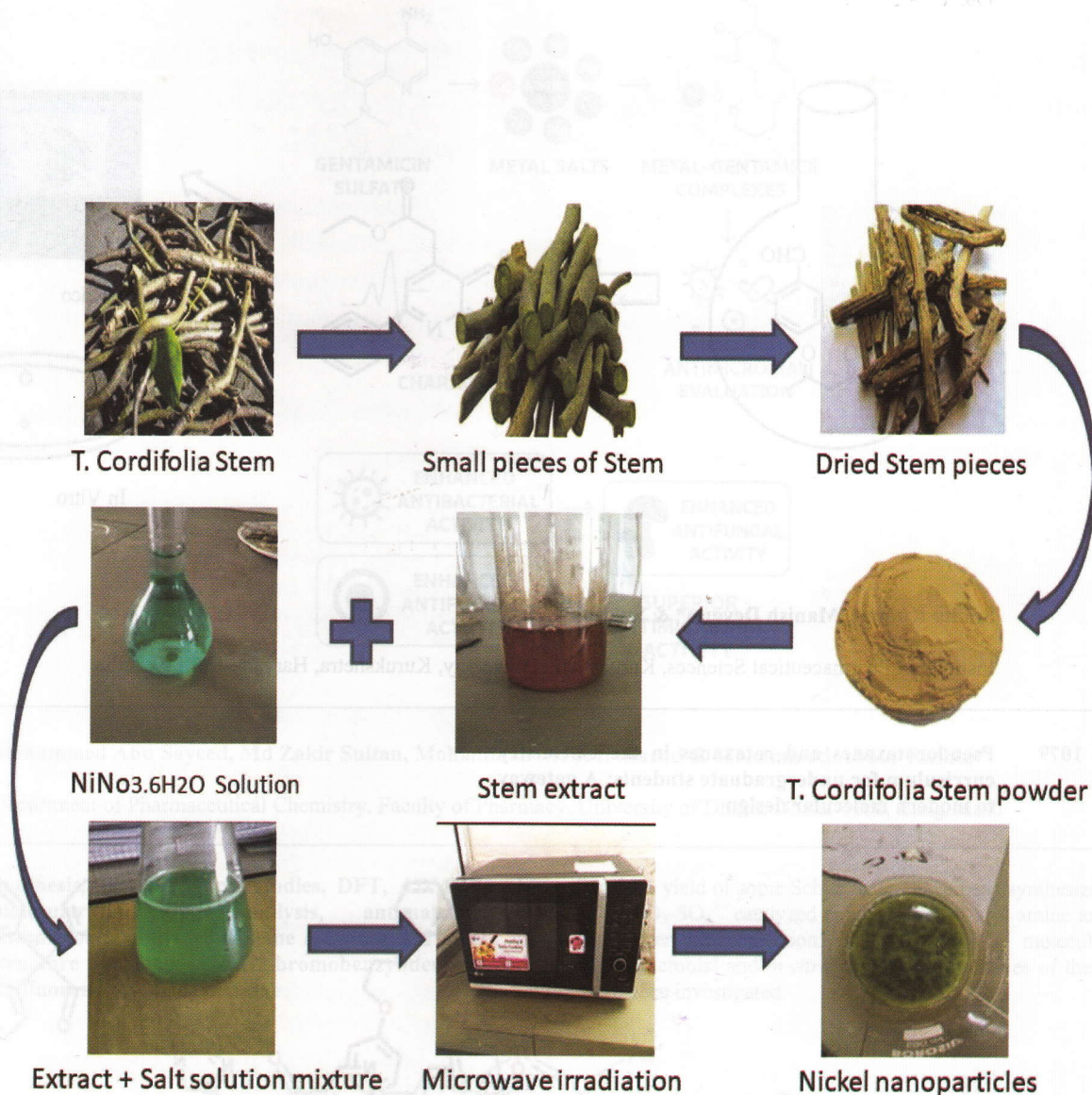
- 1049 Exploring the hydrogen bonding features and electron localisation of molecules of bisglycine with HX (X = Br, Cl, I, F) using quantum chemical computations, AIM and ELF analysis along with vibrational spectral studies



Sarah Susan Jolly, Twinkle A R*, Arunsasi B S & Reshma R

Department of Physics, Mar Ivanios College, Thiruvananthapuram 695 015, India

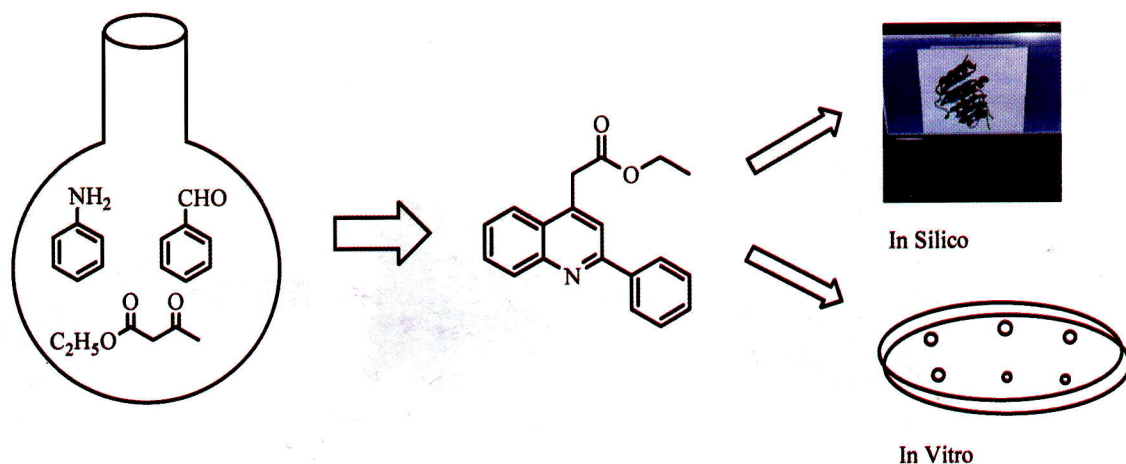
1059 Microwave-assisted green synthesis of nickel nanoparticles using *Tinospora cordifolia* stem extract and its application as a photocatalyst



Sanjay Kumar Upadhyay, Vishant Varma & Devbrat Pundhir*

Nano Research Laboratory, Department of Applied Sciences and Humanities (Chemistry),
Raja Balwant Singh Engineering Technical Campus, Bichpuri, Agra 283 105, India

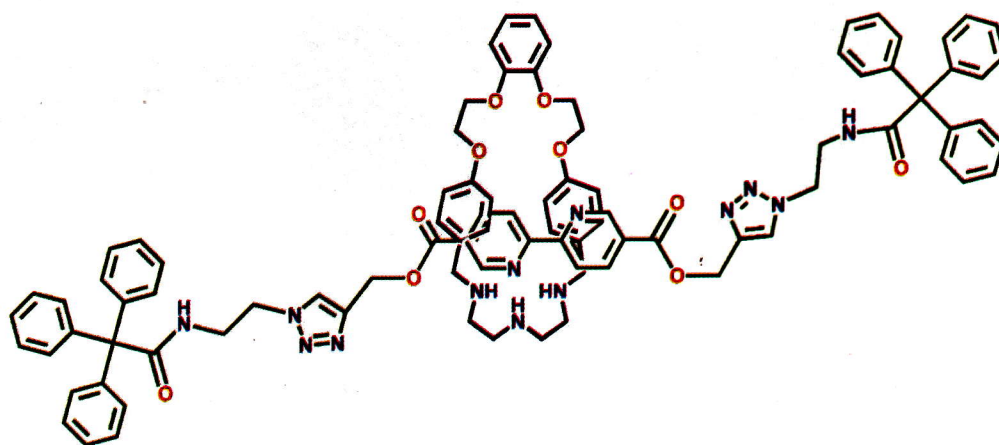
- 1068** **Synthesis, characterization, *in silico* and *in vitro* antimicrobial evaluation of some quinoline derivatives** A series of quinoline derivatives synthesized from anilines, aromatic aldehydes and ethyl acetoacetate have been characterized and evaluated for antimicrobial activity.



Sunita Kumari, Manish Devgun* & Sukhbir Lal

Institute of Pharmaceutical Sciences, Kurukshetra University, Kurukshetra, Haryana 136 119, India

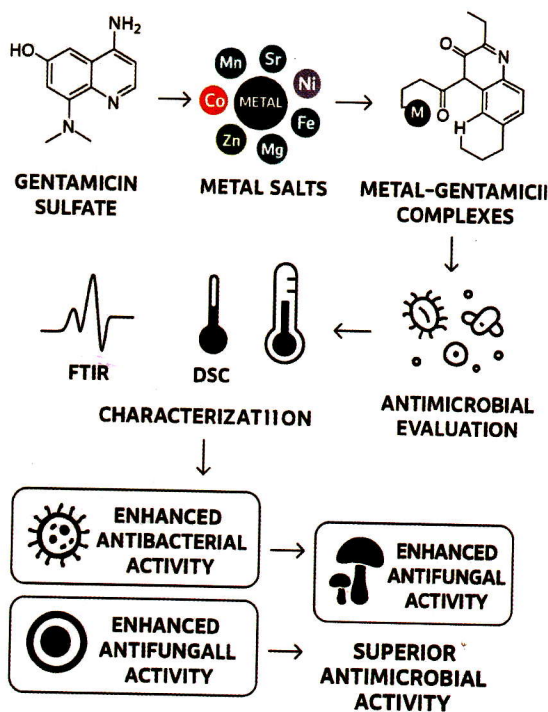
- 1079** **Pseudorotaxanes and rotaxanes in the Chemistry curriculum for undergraduate students: A gateway to modern molecular design**



Saikat Santra

Department of Chemistry, Taki Government College, Taki 743 429, North 24 Parganas, West Bengal, India

1089 Gentamicin sulfate based metal complexes:
Synthesis, characterization and antimicrobial activity

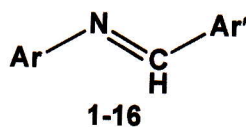


Mohammed Abu Sayeed, Md Zakir Sultan, Mohammad Mehedi Masud & Mohammad Abdur Rashid*

Department of Pharmaceutical Chemistry, Faculty of Pharmacy, University of Dhaka, Dhaka-1000, Bangladesh

1097 Synthesis, spectroscopic studies, DFT, ADMET, molecular docking analysis, antimalarial, antimicrobial activities of some *E*-imines and XRD structure of (*E*)-*N*-(2-bromobenzylidene)-2-(trifluoromethyl)benzenamine

More than 80% yield of some Schiff bases have been synthesized by fly-ash:Bi₂O₃-SO₄²⁻ catalyzed condensation of aryl amine and aldehydes under ultrasonication. The DFT, XRD, molecular docking, antimicrobial and *in vitro* antimalarial activities of these imines have been investigated.



P Gayathri, Koteswara Rao Anam, J Divya, S Balasundari, P Sudha, P Mayavel, I Muthuvel, V Usha, V Sathiyendiran, B Krishnakumar, K Ranganathan, N Dinesh Kumar, S Rajasri & G Thirunarayanan*

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