

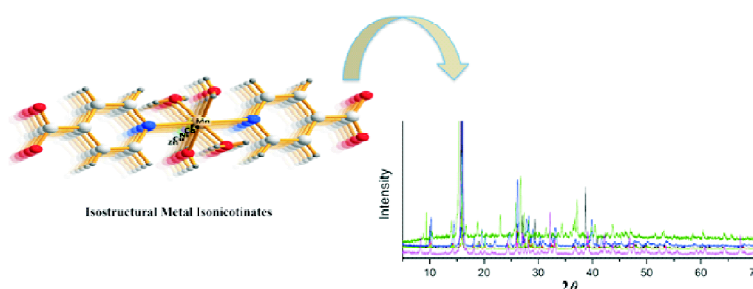
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Inorganic Chemistry

Isostructurality of complexes of the type tetra-aquabis(isonicotinato)metal(II)

Birinchi K. Das, Sanchay J. Bora and Monideepa Chakraborty

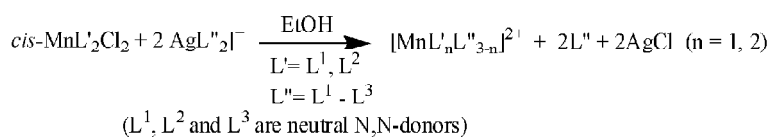
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Convenient approach to the direct synthesis of some mixed-ligand tris-chelates of Mn^{II} containing neutral N,N-donors and to study their antimicrobial activities

Partha Majumdar and Smritikana Biswas

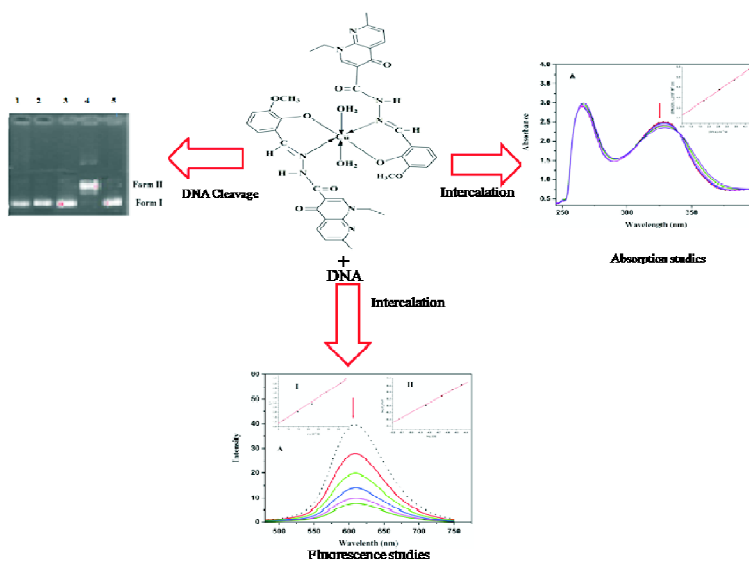
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Synthesis, characterization, DNA cleavage, docking and cytotoxic studies of novel nalidixic acid hydrazone and its Cu^{II}, Ni^{II} and Co^{II} complexes

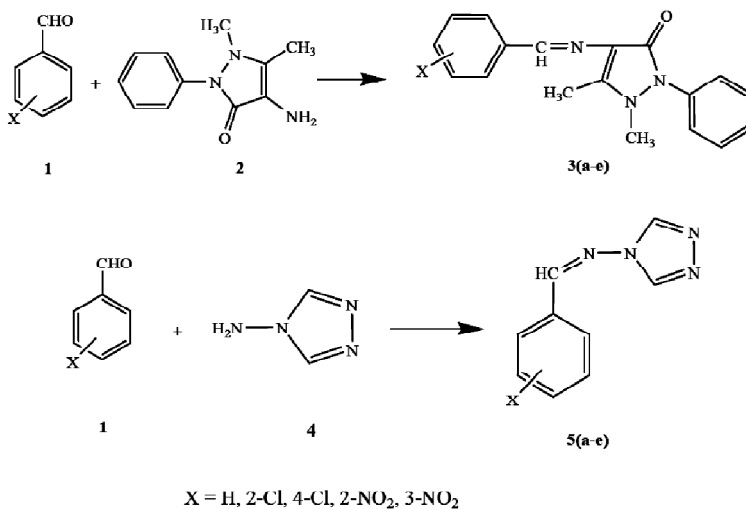
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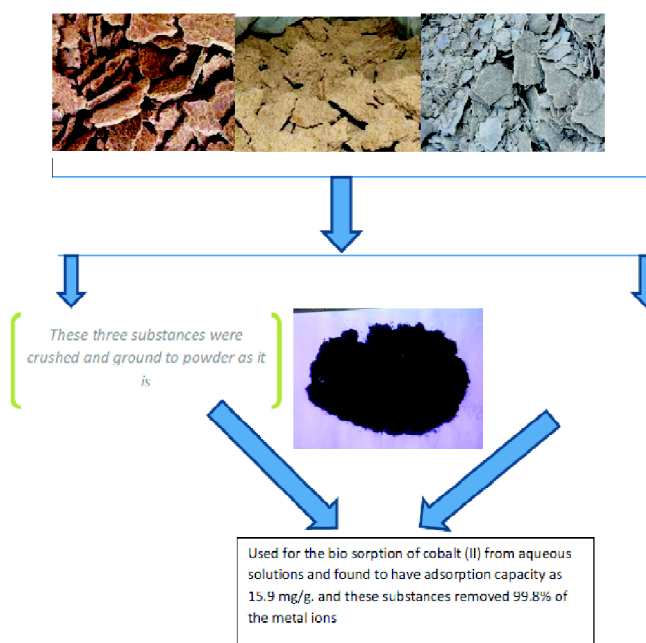
Synthesis of a series of new Schiff bases having heterocyclic moiety and their microbial activity

R. Behal, S. Sharma, T. Bansal, J. Gaba and S. Kaur
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Utilization of three low cost bio adsorbents in their native as well as carbonized forms for the removal of cobalt(II) from aqueous solutions

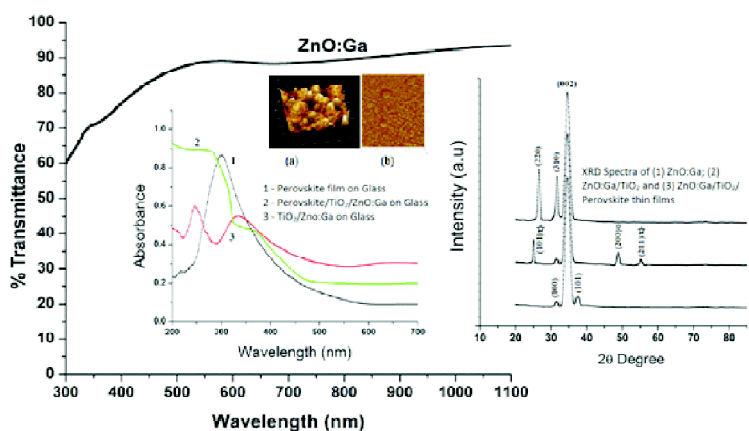
G. V. S. R. Pavan Kumar, K. Srinivasa Rao and Sk. Imran
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Synthesis and characterization of organic-inorganic perovskite material for solar cell application

Himadri Sekhar Das, Prasanta Kumar Nandi, Sajal Biring and Rajesh Das

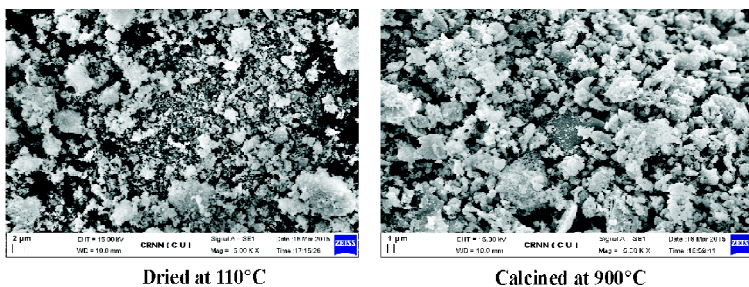
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Synthesis and characterization of cordierite precursor derived by semi-colloidal sol-gel route

G. Pahari, D. Ray and T. K. Parya

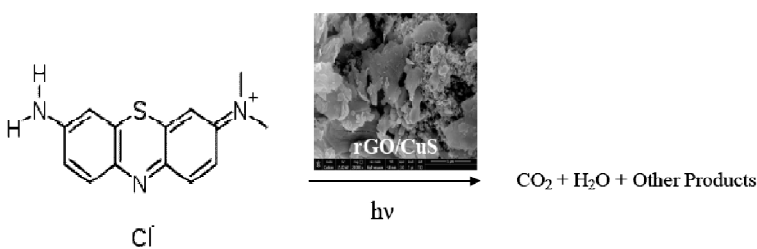
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Reduced graphene oxide/CuS nanocomposite as an efficient photocatalyst for degradation of azure A

Ruchi, Suresh C. Ameta and Rakshit Ameta

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Binding energy and dissociation energy of alkali halide and alkali hydride molecules

Manas Pramanik and Jagdhar Mandal

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The interaction potential model (IPM) by Rittner is-
$$U(r) = -z_1 z_2 \frac{e^2}{r} + \Psi_R(r) \quad (1)$$

Considering the effect of the polarizability of the molecules, covalent effect and effect of Van der Waals dispersive force in the IPM is now be expressed as--

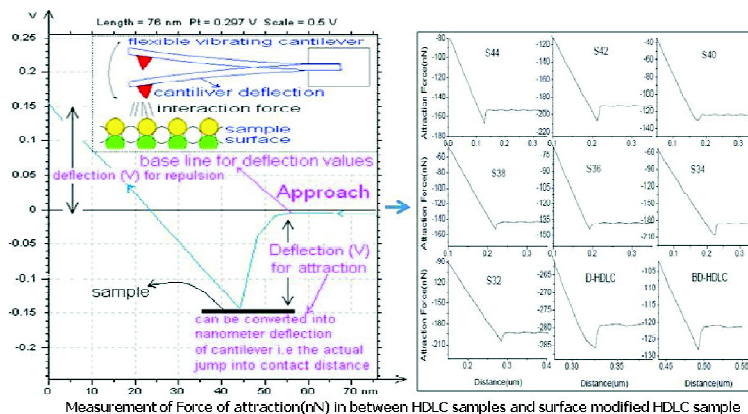
$$U(r) = -\frac{e^2}{r} - \frac{e^2(\alpha_1 + \alpha_2)}{2r^4} - \frac{c}{r^6} + \Psi_R(r) \quad (2)$$

General form of repulsive interactions is $\Psi_R(r) = (S_i/r^m)\exp(-r/\rho_i)$ Where S_i , ρ_i , m , n are potential parameter. S_i is the repulsive strength parameter and ρ_i is the repulsive softness parameter.

Surface morphological characterization of hydrogenated diamond-like carbon and surface modified hydrogenated diamond-like carbon by scanning probe microscope

Hari Shankar Biswas

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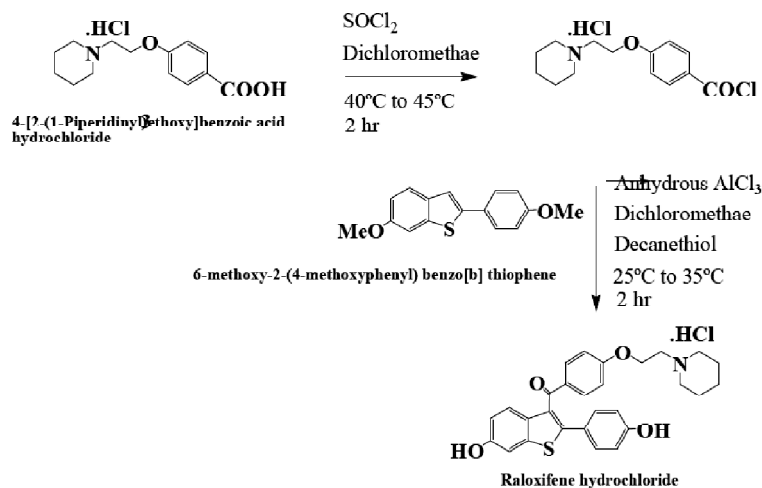


Organic Chemistry

A green process for demethylation reaction in synthesis of raloxifene hydrochloride

Ramadas Chavakula, Chakradhar Saladi J. S., Narayana Rao Mutyala, Vijaya Raju Maddala and Raghu Babu K.

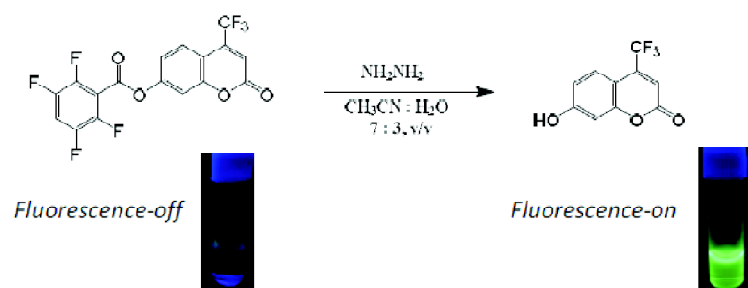
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Coumarin-based fluorescent chemodosimeter for selective sensing of hydrazine in semi-aqueous medium

Sankar Prasad Parua, Sumit Chakraborty, Kalipada Sau and Indrajit Saha

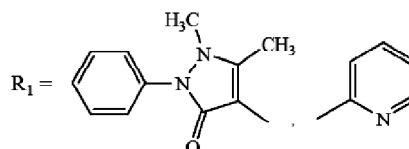
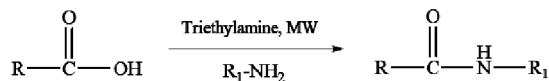
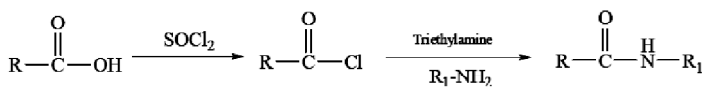
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Conventional vs microwave assisted synthesis of different substituted heterocyclic amides

Pardeep Kaur, Sunita Sharma, Jyoti Gaba and Rashmi

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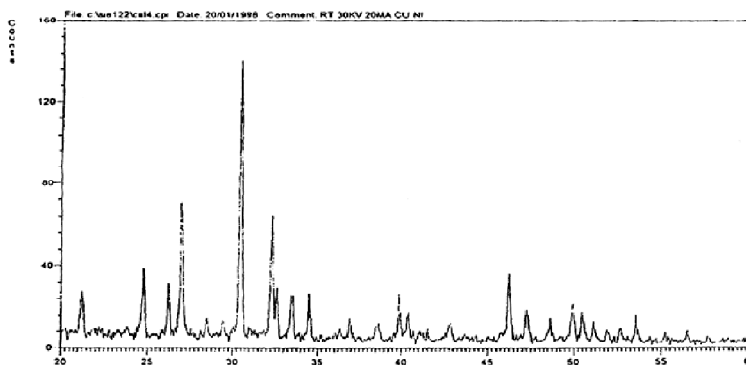
- | | |
|---|---|
| 1 R = -CH ₂ OC ₆ H ₅ , R ₁ = -C ₁₂ H ₁₄ N ₂ O | 6 R = -CCl ₃ , R ₁ = -C ₆ H ₇ N |
| 2 R = -CH ₂ OC ₆ H ₅ , R ₁ = -C ₆ H ₇ N | 7 R = -CH ₂ Cl, R ₁ = -C ₁₂ H ₁₄ N ₂ O |
| 3 R = -CH ₂ C ₆ H ₄ Cl, R ₁ = -C ₁₂ H ₁₄ N ₂ O | 8 R = -CH ₂ Cl, R ₁ = -C ₆ H ₇ N |
| 4 R = -CH ₂ C ₆ H ₄ Cl, R ₁ = -C ₆ H ₇ N | 9 R = -CH ₃ , R ₁ = -C ₁₂ H ₁₄ N ₂ O |
| 5 R = -CCl ₃ , R ₁ = -C ₁₂ H ₁₄ N ₂ O | 10 R = -CH ₃ , R ₁ = -C ₆ H ₇ N |

Analytical Chemistry

Studies on the mechanism of solubilization of Indian rock phosphate by *Aspergillus niger* AB100

Runa Ghosh, Subhadeep Ganguly and Ajit Kumar Banik

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Environmental Chemistry

Removal of fluoride from drinking water using bi-metallic nano-adsorbent $MnFe_2O_4$ prepared by chemical route

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