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Formerly Department of Chemistry, Indian Institute of Technology Bombay, Powai, Mumbai 400 076, India
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Pronab Kundu, Tirtha Mondal, Sinjan Das & Nitin Chattopadhyay*
Department of Chemistry, Jadavpur University, Kolkata 700 032, India

157  Visible light driven photocatalytic degradation of brilliant green dye using graphene oxide/copper oxide binary composite

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Photochemistry Laboratory, Department of Chemistry, University College of Science, M. L. Sukhadia University, Udaipur 313 002, India

167  Solvent modulated optical tuning for discrimination of Hg²⁺, Zn²⁺ and Cu²⁺ ions by a coumarin-functionalized azine receptor

Subrata Kumar Padhan, Punam Rana, Narayan Murmu, Biswa Ranjan Swain & Satya Narayan Sahu*
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Visible light photoredox catalyzed one pot Stadler–Ziegler reaction of heteroaryl amines with heteroaryl thiols at room temperature: An efficient synthesis of diheteroaryl sulphides

An efficient synthesis of diheteroaryl sulphides has been achieved by visible light photo catalyzed reaction of heteroaryl thiols and heteroaryl amines via in situ diazotization of heteroaryl amines with t-BuONO under LED light irradiation at room temperature. A library of functionalized diheteroaryl sulphides are obtained by using this protocol.

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A new pyrrolyl-pyranone based AIEgen with solution solid dual emissive property

Ajay Kumar Jha, Deepak Purohit, Chandra Prakash Sharma, Neeraj Mohan Gupta, Kundan Singh Rawat & Atul Goel*

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200  Solvent directed self-assembly of naphthalenediimide-tryptophan-glutamate conjugates Various supramolecular nanostructures of naphthalene-diimide bearing Trp-GLU dipeptide in THF:MCH have been reported, which yield microsheet and microfiber, respectively.

Santosh P Goskulwad, Duong Duc La, Rajesh S Bhosale, Avinash L Puyad, Sidhanath V Bhosale & Sheshanath V Bhosale*

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209  Experimental and theoretical investigations on the photo-oxidation reaction of OH radicals with 2,3-dimethyl-1,3-butadiene in gas phase Temperature dependent rate coefficients have been measured for the reaction of OH radicals with 2,3-dimethyl-1,3-butadiene over the temperature range of 269–359K using relative rate experimental technique. To complement the experimental measurements, theoretical calculations have been performed for the title reaction using CVT/SCT in combination with CCSD(T)/aug-cc-pvdz//M062X/6-311+G(d,p) level of theory.

S Vijayakumar & B Rajakumar*

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An overview on biomolecular caging and photocleavable molecules

Biomolecular caging is a powerful photochemical technique for achieving spatially and temporally controlled release of bioactive compounds with wide range of applications in biology, chemistry, medicine, materials and physiology; In this technique, a bioactive molecule is rendered inactive by covalently linking it to a light-sensitive group and when required, the caged molecule can be liberated in its active form by irradiation of the cage.

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Exploring flavonoid-DNA interactions via photoinduced proton transfer and two color fluorescence studies: Perspectives and emerging frontiers

Pradeep K Sengupta
Department of Biophysics, Molecular Biology and Bioinformatics, University of Calcutta, 92 Acharya Prafulla Chandra Road, Kolkata 700 009, India
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247  Stilbene stilbene shining bright: α-Cyanostilbenes as functional organic materials

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