

Dr. Tapas Kumar Mandal

Assistant Professor, M.Sc, B.Ed., Ph.D.



PERSONAL INFORMATION

- Ph. D.:** 2012, Jadavpur University, Jadavpur, Kolkata – 32
- Thesis Title:** Synthesis and Transformation of Benzopyran and Benzothiopyran Derivatives
- Thesis Supervisor:** Professor (Dr.) Asok Kr. Mallik
Dept. of Chemistry, Jadavpur University
- Specialization:** Organic Chemistry
- Area of Interest:** Synthesis of heterocycle compounds under green methods and study their biological importance, Study of heavy metals in
- Date of Joining:** November 01, 2006
- Email:** tapasmandal83@gmail.com

PUBLICATIONS:

1. Mallik, A.K.; Pal, R.; **Mandal, T.K.** Facile formation of bis(3-indolyl)methylarenes by iodine-catalysed reaction of indole with α,α' -bis(arylmethylene)-ketones and α -substituted arylmethyleneketones in dry ethanol. *Indian J. Chem.* **2007**, 46B, 2056-2059.
2. Pal, R.; **Mandal, T.K.**; Mallik, A.K. Base-catalysed cyclocondensation of α,α' -bis(arylmethylene)cyclohexanones with thiourea: Formation of *E*-8-(arylmethylene)-4-aryl-1,2,3,4,5,6,7,8-octahydrobenzo[*d*]pyrimidine-2-thiones. *J. Indian Chem. Soc.* **2009**, 86, 402-405.
3. Pal, R.; **Mandal, T.K.**; Mallik, A.K. An efficient synthesis of *E*-2-amino-4-aryl-8-(arylmethylene)-5,6,7,8-tetrahydrobenzo[*d*]pyrimidines and their lower analogues, *J. Indian Chem. Soc.* **2010**, 87, 711-715.
4. **Mandal, T.K.**; Pal, R.; Mondal, R.; Mallik, A.K. Facile condensation of aromatic aldehydes with chroman-4-ones and 1-thiochroman-4-ones catalysed by amberlyst-15 under microwave irradiation condition. *E-Journal of Chemistry.* **2011**, 8(2), 863-869.

5. **Mandal, T.K.;** Pal, R.; Patra, A.; Mallik, A.K. *trans*-2-Phenyl-4-thiophenoxy-3,4-dihydro-2H-1-benzothiopyran. *Molbank*. **2011**, M719. [doi:10.3390/M719]
6. **Mandal, T.K.;** Pal, R.; Mondal, R.; Dev, S.V.; Mallik, A.K. NBS Oxidation of *E*-3-Benzylidenechromanone to 3-(α -Hydroxybenzyl)-chromones and 3-Benzoylchromones. *Org. Prep. Proced. Int.* **2011**, 43, 467-474.
7. Pal, R.; **Mandal, T.K.;** Mallik, A.K. Iodine-catalysed conjugate addition of indole with α -cinnamylideneketones: Formation of β -(3-indolyl)- α , β -dihydro- α -cinnamylideneketones and bis(3-indolyl) methylbenzene. *Indian J. Chem.* **2011**, 50B, 619-623.
8. Pal, R.; **Mandal, T.K.;** Guha, C.; Mallik, A.K. Amberlyst-15 catalysed microwave assisted cross-aldol condensation between ketones and aldehydes under solvent free condition. *J. Indian Chem. Soc.* **2011**, 88, 711-717.
9. **Mandal, T.K.** An Innovative Green Methodology for Synthesis of Benzylidene and Cinnamylidene Derivatives of Some Hemicyclic and Heterocyclic Ketones. *Green Chemistry: From laboratory to Industry*. **2012**, 74-79. [ISBN: 978-81-922961-3-5]
10. **Mandal, T.K.;** Pal, R.; Ghosal, D.; Patra, A.; Mallik, A.K. An Expedient Synthesis of *cis*-2-(Aroylmethyl)-4-phenylthiochromans by Iodine Catalyzed Combination of Thiophenol with Cinnamylideneacetophenones. *Synlett*. 2012, 23 (17), 2459-2462.
11. Mondal, R.; **Mandal, T.K.;** Mallik, A.K. Simple synthesis of a new family of 22- to 28-membered macrocycles containing two chalcone moieties. *ARKIVOC* 2012 (ix) 95-110.
12. Mondal, R.; **Mandal, T.K.;** Mallik, A.K. An expedient and safe synthesis of some Exocyclic - Unsaturated Ketones by Microwave-Assisted Condensation of Cyclic Ketones with Aromatic Aldehydes over Anhydrous Potassium Carbonate. *Organic Chemistry International*, 2012, Article ID 456097.
13. **Mandal, T.K.** Biological importance of 4-H-1-benzopyran and derivatives. *Prajnan O Sadhona - A Science Annual*, 2015, 2, 179-189. [ISSN: 2348-7410]
14. **Mandal, T.K.** Recent Applications of Iodine in Organic Synthesis. *Prajnan O Sadhona - A Science Annual*, 2014, 1, 71-86. [ISSN: 2348-7410]
15. **Mandal, T.K.** Chemistry of Synthetic Perfumes. *Boson - A Science Annual*, 2014, 1, 38-42. [ISSN: 2349-2686]

16. **Mandal, T.K.;** Sepay, N.; Chaterjee, N.; Mallik, A.K. Novel results from the sodium borohydride reduction of E-3-benzylidenechromanone epoxides in methanol: formation of an interesting class of chromone derived methoxydiols. *J. Indian Chem. Soc.* 2013, 90, 1805-1813.
17. **Mandal, T.K.;** Pal, R.; Mondal R.; Dey, S.P.; Mallik, A.K. Schmidt Reaction of E-3-Benzylidenechromanones and E-3-Benzylidene-thiochromanones. *Journal of Chemistry*, 2013. [Article ID 392128, 5 pages, <http://dx.doi.org/10.1155/2013/392128>]