

List of publications:

- 1) Cyanide Selective Colorimetric and turn-on Fluorimetric Sensing by naphthohydrazide Derivative and its application in real sample analysis. Komal Kumar Yadav, Ashish Raina and **Tamal Ghosh**. *Materials Today: Proceedings*. DOI: <https://doi.org/10.1016/j.matpr.2022.11.309>
- 2) Selective colorimetric and fluorimetric detection of cyanide by malonohydrazide derivative and its live cell imaging. Ashish Raina, Komal Kumar Yadav, Yadvendra Singh and **Tamal Ghosh**. *Journal of Chemical Sciences*, 2021, vol. 133. DOI: doi.org/10.1007/s12039-021-01936-z
- 3) Cyanide selective chemodosimeter in aqueous medium, on test strips and its application in real sample analysis. Ashish Raina, Yadvendra Singh, Komal Kumar Yadav and **Tamal Ghosh**. *Journal of Chemical Sciences*, 2020, vol. 132. DOI: doi.org/10.1007/s12039-020-01832-y
- 4) Correlation Between Pharmacokinetic Properties and ^{15}N -NMR and ^{13}C -NMR Chemical Shifts of Angiotensin Converting Enzyme Inhibitors. N. C. Bhanumathi Devi, N. S. Rao, **Tamal Ghosh**, A. Mukerjee. *INDIAN DRUGS*, 2019, vol. 56, 26-32.
- 5) ^{15}N -NMR spectroscopic studies and investigation of spectral data property relationships of proton pump inhibitors. N. C. Bhanumathi Devi, N. Someswara Rao, **Tamal Ghosh**, Alok Mukerjee. *Journal of Applied Pharmaceutical Science*, 2019, vol. 9, 61-66.
- 6) A Novel Design Strategy for Chitosan containing azo-based Schiff bases for Colorimetric Sensing of Anions. Nidhi Nigam, Santosh Kumar, P.K.Dutta and **Tamal Ghosh**. *Journal of Polymer Materials*, 2018, vol. 35, 137-148.
- 7) A cyanide selective colorimetric and turn-on fluorescent probe in solution and on test strips and its live cell imaging. Yadvendra Singh, Israr Ahmad and **Tamal Ghosh**. *Sensors and Actuators B: Chemical*, 2017, vol. 242, 1079-1085.
- 8) Colorimetric and ON-OFF-ON fluorescent chemosensor for the sequential detection of Cu(II) and Cysteine and its application in imaging of living cells. Yadvendra Singh, Shiva Arun, Brijesh Kumar Singh, Pradip Kumar Dutta and **Tamal Ghosh**. *RSC Advances*, 2016, vol. 6, 80268–80274.
- 9) Chitosan containing azo-based Schiff bases: Thermal, antibacterial and birefringence properties for bio-optical devices. Nidhi Nigam, Santosh Kumar, P. K. Dutta, S. Pei and **Tamal Ghosh**. *RSC Advances*, 2016, vol. 6, pp. 5575-5581.

- 10) Highly selective colorimetric and fluorometric chemosensor for cyanide on silica gel and DMSO/H₂O (7:3 v/v) mixed solvent and its imaging in living cells. Yadvendra Singh, **Tamal Ghosh**. *Talanta*, 2016, vol. 148, pp. 257-263.
- 11) Studies on thermo-optic property of chitosan–alizarin yellow GG complex: a direction for devices for biomedical applications. Nidhi Nigam, Santosh Kumar, Pradip Kumar Dutta, **Tamal Ghosh**. *Bulletin of Materials Science*, 2015, vol. 38, pp. 1639-1643.
- 12) 5-(1*H*-Indol-3-yl)-pyrazolyl derivatives as colorimetric sensor for anions. Israr Ahmad, Neeraj Kumar Mishra, **Tamal Ghosh**. *Journal of Inclusion Phenomena and Macrocyclic Chemistry*, 2013, vol. 76, pp. 183-191.
- 13) Selective colorimetric sensing of CN⁻ by dihydropyrazol-3-ol derivative in CH₃CN/H₂O medium. Israr Ahmad, Amit Sharma, **Tamal Ghosh**. *Supramolecular Chemistry*, 2012, Vol. 24, pp. 221-227.
- 14) Preparation, characterization and optical properties of a novel azo-based chitosan biopolymer. Santosh Kumar, Nidhi Nigam, **Tamal Ghosh**, Pradip K. Dutta, S.P. Singh, Prashant K. Datta, Lijia An, Tong Fei Shi. *Materials Chemistry and Physics*, 2010, Vol. 120, pp. 361-370.
- 15) DNA binding and cleavage properties of a newly synthesized Ru(II)-polypyridyl complex. Amrita Ghosh, Amit Mandoli, D. Krishna Kumar, **Tamal Ghosh**, Bhavanath Jha, Jim A Thomas, Amitava Das. *Dalton Transactions*, 2009, pp. 9312-9321.
- 16) Preparation and characterization of chitosan based silver nanocomposites as bio-optical material. Nidhi Nigam, Santosh Kumar, P K Dutta, **Tamal Ghosh**. *Asian Chitin Journal*, 2009, Vol. 5, pp. 97-99.
- 17) A colorimetric chemosensor for both fluoride and transitional metal ions based on dipyrrolyl derivative. **Tamal Ghosh**, Bhaskar G. Maiya, Anunay Samanta. *Dalton Transactions*, 2006, pp. 795-801.
- 18) Mixed-ligand complexes of ruthenium(II) containing new photo- or electro-active ligands: synthesis, spectral characterization and DNA interactions. **Tamal Ghosh**, Atindra D. Shukla, D. Amilan Jose, D. Krishna Kumar, Bhaskar G. Maiya, Anunay Samanta, Amitava Das. *Journal of Biological Inorganic Chemistry*, 2005, Vol. 10, pp. 496-508.
- 19) Fluoride ion receptors based on dipyrrolyl derivatives bearing electron-withdrawing groups: synthesis, optical and electrochemical sensing, and computational studies. **Tamal Ghosh**, Bhaskar G. Maiya, Ming Wah Wong. *Journal of Physical Chemistry A*, 2004, Vol. 108, pp. 11249-11259.

- 20) Visual sensing of fluoride ions by dipyrrolyl derivatives bearing electron-withdrawing groups. **Tamal Ghosh**, Bhaskar G. Maiya. *Journal of Chemical Science*, 2004, Vol. 116, pp. 17-20.
- 21) Structure-property correlations in DNA binding and photocleavage characteristics of metallointercallators. C. V. Sastri, M. Mariappan, **Tamal Ghosh**, Bhaskar G. Maiya. *Proceedings of Indian National Science Academy A*, 2004, Vol. 70, pp. 355-365.
- 22) Kinetics of dissociation of M(II)-aza-oxa cryptates (M = Ni, Cu) in weakly acidic aqueous-acetonitrile media. **Tamal Ghosh**, Prasun Bandyopadhyay, Parimal K. Bharadwaj, Rupendranath Banerjee. *Polyhedron*, 2001, Vol. 20, pp. 477-482.
- 23) Formation and dissociation kinetics of mono- and diazidobis(pentane-2,4-dionato)chromium(III): an example of unusually strong catalysis. **Tamal Ghosh**, Sanjoy Kumar Bhattacharyya, Rupendranath Banerjee. *Journal of Indian Chemical Society*, 1998, Vol. 75, pp 389-391.

List of papers presented in Conference/seminar/workshop:

- (i) Colorimetric and fluorescent probe for cyanide in solution, test strips and live cell imaging. Yadendra Singh, Tamal Ghosh. “14th DAE-BRNS Biennial Trombay Symposium on Radiation & Photochemistry” (TSRP-2018) at Bhabha Atomic Research Centre, Mumbai, India during January 3-7, 2018.
- (ii) Selective colorimetric and fluorometric detection of cyanide on silica gel and DMSO/H₂O (7:3 v/v) mixed solvent and its imaging in living cells. Yadendra Singh, Tamal Ghosh. “Recent Advances in Molecular Spectroscopy: Fundamentals and Applications in Materials and Biology” (RAMS-2016) at School of Chemistry, University of Hyderabad, India during March 2-4, 2016.
- (iii) Indolyl hydrazone derivatives as chemosensor for anions. Tamal Ghosh, Israr Ahmad, Yadendra Singh. “15th CRSI National Symposium in Chemistry and 7th CRSI-RSC Symposium in Chemistry” at Banaras Hindu University, Varanasi during January 31-February 3, 2013.
- (iv) Isatin derivatives as chemosensor for anions. Israr Ahmad, Tamal Ghosh. “Trombay Symposium on Radiation & Photochemistry” (TSRP-2012) at Bhabha Atomic Research Centre, Mumbai, India during January 4-7, 2012.

- (v) Selective colorimetric and fluorescent chemosensors for fluoride ion based on bisindole derivative. Israr Ahmad, Tamal Ghosh. “National Symposium on Radiation & Photochemistry” (NSRP-2011) at JNV University, Jodhpur, Rajasthan during March 10-12, 2011.
- (vi) 5-(1*H*-Indol-3-yl)-pyrazolyl derivatives as chemosensor for anions. Israr Ahmad, Tamal Ghosh. “13th CRSI National Symposium in Chemistry” at NISER, Bhubaneswar during February 4-6, 2011.
- (vii) Colorimetric anions sensor based on dihydropyrazol-3-ol derivative. Israr Ahmad, Tamal Ghosh. “National Conferences on Frontiers in Chemical Sciences” (FICS– 2010) at IIT, Guwahati during December 3-4, 2010.