

**Publications list: Dr. Swapan Dey, AP/AC**

1. **Application of the Meerwein Reaction of 1,4-Benzoquinone to a Metal-Free Synthesis of Benzofuropyridine Analogues**, R. Singh, T. Horsten, R. Prakash, Swapan Dey, W. Dehaen, *Beilstein J. Org. Chem.* 2021, 17, 977–982.
2. **Tandem Nenitzescu Reaction/Nucleophilic Aromatic Substitution to Form Novel Pyrido Fused Indole Frameworks** R. Singh, H. Bhatia, P. Prakash, E. Debroye, Swapan Dey, W. Dehaen, *European J. Org. Chem.* 2021, 2021, 4865-4875.
3. **Strategy to Design a Flexible and Macromolecular Sensor to Bind Cd<sup>2+</sup> Ions: A Complete Photophysical Analysis and Bio-Imaging Study**, Surajit Mondal and Swapan Dey, *ACS Omega* 2021, 6, 42, 27936-27945.
4. **Unusual absence of FRET in triazole bridged coumarin–hydroxyquinoline, an active sensor for Hg<sup>2+</sup> detection**, Surajit Mondal, Niladri Patra, Hari Pada Nayek, Sumit K. Hira, Soumit Chatterjee, Swapan Dey, *Photochem. Photobiol. Sci.*, 2020, 19, 1211-1221.
5. **Template-Assisted Regioselective Identification of Metal Ions on Coumarin-Furan Conjugated Chemosensors: AIEE Effect and Photo-Switching pH Indicator by ICT**, Ashish Kumar, Sumit Kumar Hira, Swapan Dey, *Eur. J. Inorg. Chem.* 2020, 3771.
6. **Novel Class of Isoxazole-Based Gelators for the Separation of Bisphenol A from Water and Cleanup of Oil Spills**, Santosh Kumar Singh, Priyanka Saha, Swapan Dey, and Sukhendu Nandi, *ACS Omega* 2020, 5, 15, 8613-8618.
7. **Dual core clickate fluorophores for selective recognition of Cu<sup>2+</sup> and Ni<sup>2+</sup> along with live cell imaging**, Surajit Mondal, Chanda Kumari, Sumit K. Hira and Swapan Dey, *Inorganica Chimica Acta*, 2020, 509, 1196552.
8. **Photo-physical aspects of BODIPY-coumarin conjugated sensor and detection of Al<sup>3+</sup> in MCF-7 cell**, Kumari Somlata Kashyap, Sumit Kumar Hira and Swapan Dey, *Supramolecular Chemistry*, 2019, 31, 695-702.
9. **Recognition of Al<sup>3+</sup> through the off-on mechanism as a proficient driving force for the hydrolysis of BODIPY conjugated Schiff base and its application in bio-**

- imaging*, Kumari Somlata Kashyap Ashish Kumar, Sumit Kumar Hira, Swapan Dey, *Inorganica Chimica Acta*, 2019, 498, 1191572.
10. **Detection of  $Hg^{2+}$  ion using highly selective fluorescent chemosensor in real water sample and in-vitro cell study upon breast adenocarcinoma (MCF-7)**, Ashish Kumar, Sumit Kumar Hira, Partha Pratim Manna, and Swapan Dey\*, *Supramolecular Chemistry*, 2019, 31, 382-390.
  11. **“Epoxy-based polymer incorporating 1-Naphthylamine and sebacic acid moieties: A selective fluorescent sensor for ferric ions”** Samaresh Ghosh, Rajkumar Manna, and Swapan Dey, *Journal of Molecular Structure*, 2019, 1180, 406-410 (IP: 1.6)
  12. **Syntheses, crystal structures and photo physical aspects of azido-bridged tetranuclear cadmium (II) complexes: DFT/TD-DFT, thermal, antibacterial and anti-biofilm properties**, Dhrubajyoti Majumdar, Swapan Dey\*, S. S. Sreejith, Jayanta Kumar Biswas, Monojit Mondal, Pooja Shukla, Sourav Das, Tapan Pal, Dhiraj Das, Kalipada Bankura, Dipankar Mishra\*, *Journal of Molecular Structure*, 2019, 1179, 694-708. (IP: 1.6)
  13. **Nitrato, Pseudohalo-Linked Zn(II)/Cd(II) Schiff-Base Complexes with 1,3-Diimine Spacer Group: Syntheses, Crystal Structures, DFT, TD-DFT and Fluorescence Studies**, Dhrubajyoti Majumdar, Swapan Dey, Sreejith S. Sreekumar, Sourav Das, Dhiraj Das, Ramesh K. Metre, Kalipada Bankura, Dipankar Mishra, *ChemistrySelect*, 2018, 3, 12371-12382. (IP: 1.5)
  14. **Water switched aggregation/disaggregation strategies of a coumarin-naphthalene conjugated sensor and its selectivity on  $Cu^{2+}$  and  $Ag^+$  ions along with cell imaging study on human osteosarcoma cells (U-2 OS)**, Ashish Kumar, Surajit Mondal, Kumari Somlata Kayshap, Sumit Kumar Hira, Partha Pratim Manna, Wim Dehaen and Swapan Dey\*, *New Journal of Chemistry*, 2018, 42, 10983 - 10988. (IP: 3.3)
  15. **“Synthesis, characterization, physical and thermodynamic properties of a novel anionic surfactant derived from Sapindus laurifolius”** Neha Saxena,

Nilajan Pal, Swapan Dey, and Ajay Mondal, [RSC Advances](#) 2018, 8, 24485 – 24499, (IP: 2.9)

16. *Polyurethane network using 1-Naphthylamine embedded epoxy-based polymer: Ferric ion selective Fluorescent probe*" Samaresh Ghosh, Rajkumar Manna and Swapan Dey, [Polymer Bulletin](#) 2018, 1-9. (IP: 1.6)
17. *Highly selective and safe 'in vitro' detection of biologically important 'Uric acid' in living cells by a new fluorescent 'turn-on' probe along with quantum chemical calculation*, Chanda Kumari, Dibyendu Sain, and Swapan Dey\*, [Sensors and Actuators, B: Chemical](#), 2018, 264, 208-215. (IP: 5.7)
18. *Characterizations of surfactant synthesized from palm oil and its application in enhanced oil recovery*, Neha Saxena, Nilanjan Pal, Swapan Dey and Ajay Mandal\* [Journal of the Taiwan Institute of Chemical Engineers](#), 2017, 81, 343–355. (IP: 3.8)
19. *A Non-Perilous Coumarin-Based Ratiometric Probe for 'In Vitro' Detection of Cu through Cell Imaging Technique*, Chanda Kumari, Dibyendu Sain, Ashish Kumar, Hari Pada Nayek, Sushanta Debnath, Partha Saha and Swapan Dey\* [ChemistrySelect](#), 2017, 2, 8270–8277, (IP: 1.5).
20. *"Synthesis of Rhodamine-Based Chemosensor for Fe<sup>3+</sup> Selective Detection with off-on Mechanism and its Biological Application in DL-tumor cells"* Ashish Kumar, Dibyendu Sain, Chanda Kumari and Swapan Dey\* [ChemistrySelect](#) 2017, 2, 2969-2974. (IP: 1.5)
21. *'Intracellular detection of hazardous Cd<sup>2+</sup> through a fluorescence imaging technique by using a nontoxic coumarin based sensor'* Chanda Kumari, Dibyendu Sain, Ashish Kumar, Sushanta Debnath, Partha Saha and Swapan Dey\* [Dalton Trans.](#), 2017, 46, 2524-2531. (IP: 4.0)
22. *Detection of Hg<sup>2+</sup> and Cs<sup>+</sup> with a Rhodamine-based Sensor and Ethoxy-substituted Dihydroimidazole Ring Formation Associated with the Reduction of Hg<sup>2+</sup> to Hg'* Ashish Kumar, Dibyendu Sain, Chanda Kumari and Swapan Dey\* [ChemistrySelect](#) 2017, 2, 1106– 1110. (IP: 1.5)

23. *'A bis-hydrazone derivative of 2,5-furandicarboxaldehyde with perfect hetero-atomic cavity for selective sensing of Hg(II) and its intracellular detection in living HeLa S3 cell'* Chanda Kumari, Dibyendu Sain, Ashish Kumar, Hari Pada Nayek, Sushanta Debnath, Partha Saha and Swapan Dey\* [Sensors and Actuators B](#) **243** (2017) 1181–1190. (IP: 5.7)
24. *'A real time colorimetric 'two in one' kit for tracking ppb levels of uric acid and Hg<sup>2+</sup> in live HeLa S3 cells and Hg<sup>2+</sup> induced keto-enol tautomerism'* Chanda Kumari, Dibyendu Sain, Ashish Kumar, Sushanta Debnath, Partha Saha and Swapan Dey\* [RSC Adv.](#), **2016**, *6*, 62990. (IP: 2.9)
25. *'Lead ion induced chemodosimeter approach of a tripodal hydroxyl-quinoline based phospho-ester through P–O bond cleavage'* Dibyendu Sain, Chanda Kumari, Ashish Kumar, Hari Pada Nayek and Swapan Dey\* [Dalton Trans.](#), **2016**, *45*, 9187 – 9192. (IP: 4.0)
26. *"Indole based distinctive chemosensors for 'naked eye' detection of CN<sup>–</sup> and HSO<sub>4</sub><sup>–</sup>, associated with hydrogen bonded complex and their DFT study'* Dibyendu Sain, Chanda Kumari, Ashish Kumar and Swapan Dey\* [Supramolecular Chemistry](#), **2015**, *28*, 239-48. (IP: 1.5)
27. *'Colorimetric 'turn on TBET' sensors for 'on the spot' visual detection of HSO<sub>4</sub><sup>–</sup> in semi-aqueous medium: experimental and quantum chemical (DFT) studies'* Dibyendu Sain, Chanda Kumari, Ashish Kumar and Swapan Dey\* [Sensors and Actuators B: Chemical](#), **2015**, *221*, 849-856. (IP: 5.7)
28. *'Studies on Crystal Engineering Networks of Amidopyridine N-oxides in Solid State by NMR, mass and X-ray Techniques'* Swapan Dey,\* Ashish Kumar, Dibyendu Sain, Hari Pada Nayek, Anita Hazra, Shyamaprosad Goswami, Subrata Jana, Hoong-Kun Fun and Samil Isik, [Lett. Org. Chem.](#), **2015**, *12*, 584-590.
29. *'A series of ditopic receptors for succinic acid Binding'* Swapan Dey\*, Dibyendu Sain, Ashish Kumar and Chanda Kumari, [RSC Adv.](#), **2014**, *4*, 51486-51495. (IP: 2.9)
30. *'Steric inhibition of hydrogen bonding in molecular recognition of dicarboxylic acids: di-topic receptors containing a nitro group designed to behave like monotopic receptors'* Shyamaprosad Goswami\*, Rinku Chakrabarty, Swapan Dey and Hoong-Kun Fun, [RSC Adv.](#), **2014**, *4*, 49663-49671. (IP: 2.9)

31. *'Directed Molecular Recognition: Furfurylamine appended ditopic receptor for succinic acid'* Swapan Dey\* and Dibyendu Sain *Supramolecular Chemistry*, 2014, 26, 769-776. (IP: 1.5)
32. *'Naphthyridine Based Fluorescent Receptors for the Recognition of Uric Acid'* Swapan Dey\*, Dibyendu Sain and Shyamaprosad Goswami *RSC Adv.*, 2014, 4, 428-433. (IP: 2.9)
33. *'Recognition of a dicarboxylic acid with dipicolyl urea in solution and in solid phases: intramolecular hydrogen bond inhibiting both pyridine nitrogens from binding carboxyl groups'* Shyamaprosad Goswami\*, Subrata Jana, Swapan Dey, Debabrata Sen, Hoong-Kun Fun, Suchada Chantrapromma *Tetrahedron*, 2008, 64, 6426-6433. (IP: 2.4)
34. *'Design and synthesis of a unique ditopic macrocyclic fluorescent receptor containing furan ring as a spacer for molecular recognition of dicarboxylic acids'* Shyamaprosad Goswami\*, Swapan Dey, and Subrata Jana, *Tetrahedron*, 2008, 64, 6358-6363. (IP: 2.4)
35. *'Specificity in crystal engineering: polymerization and dimerisation motif design in pyridine system'* Shyamaprosad Goswami\*, and Swapan Dey, subrata Jana, *Letters in Organic Chemistry*, 2007, 4, 448-451. (IP: 0.8)
36. *'Tailor-made Naphthyridines: Self-Assembling Multiple Hydrogen-Bonded Supramolecular Architectures from Dimer to Helix'* Shyamaprosad Goswami\*, Swapan Dey, John F. Gallagher, Alan J. Lough, Santiago Garcí'a-Granda, Laura Torre-Ferna'ndez, Ibon Alkorta, Jose' Elguero, *Journal of Molecular Structure*, 2007, 846, 97-107. (IP: 1.6)
37. *'Microwave-expedited one-pot, two-component solvent-free synthesis of functionalised pyrimidines'* Shyamaprosad Goswami\*, Subrata Jana, Swapan Dey and Avijit Kumar Adak, *Australian Journal of Chemistry*, 2007, 60, 120-123. (IP: 1.4)
38. *'Directed Molecular Recognition: Design and Synthesis of Neutral Receptors for Biotin to bind both its functional groups'* Shyamaprosad Goswami\* and Swapan Dey, *Journal of Organic Chemistry*, 2006, 71, 7280-7287. (IP: 4.8)

39. *'Recognition of Dicarboxylic Acid by 6,6/-Dipivaloylamino- 3,3/-bipyridine and the Supramolecular Solid State Locking of the Carboxyls in the anti Form'* Shyamaprosad Goswami\*, Subrata Jana, **Swapan Dey**, Ibrahim Abdul Razak, Hoong-Kun Fun. [Supramolecular Chemistry](#), 2006, 18, 571-576. (IP: 1.5)
40. *'2-Amino-6-hydroxymethylpyridine'* Shyamaprosad Goswami, **Swapan Dey**, Suchada Chantrapromma, Hoong-Kun Fun; [Acta Crystallographica](#), 2006, E62, o3225-o3227.
41. *'Dynamic molecular recognition in the generation of a new crystal engineering motif: a unique case study of a dicarboxylic acid with a ditopic receptor favouring a polymeric over a dimeric hydrogen bonded supramolecular complex'* Shyamaprosad Goswami, **Swapan Dey**, Hoong-Kun Fun, Shazia Anjum and Atta-ur-Rahman, [Tetrahedron Letters](#), 2005, 46, 7187-7191. (IP: 2.3)
42. *'Directed H-bonding inhibition in molecular recognition: A NMR case study of the H-bonding of a dicarboxylic acid with a new mixed diamide receptor having one adjacent pyridine-N-oxide'* Shyamaprosad Goswami, **Swapan Dey**, Annada C. Maity and Subrata Jana, [Tetrahedron Letters](#), 2005, 46, 1315-1318. (IP: 2.3)
43. *'A Convenient Palladium Catalyzed Synthesis of Symmetric Biaryls, Biheterocycles and Biaryl Chiral Diamides'* Shyamaprosad Goswami, Avijit Kumar Adak, Reshmi Mukherjee, Subrata Jana, **Swapan Dey**, and John F. Gallagher, [Tetrahedron](#), 2005, 61, 4289-4295. (IP: 2.4)
44. *'N-[6-(Hydroxymethyl)pyridin-2-yl]-2,2-dimethyl-propanamide'* Shyamaprosad Goswami, **Swapan Dey**, Suchada Chantrapromma, Hoong-Kun Fun, [Acta Crystallographica](#), 2005, E61, o105-o107.
45. *'A Simple and Convenient Manganese Dioxide Oxidation of Benzyl Halides to Aromatic Aldehydes under Neutral Condition'* Shyamaprosad Goswami, Subrata Jana, **Swapan Dey**, and Avijit Kumar Adak [Chemistry Letters](#), 2005, 34,194-195. (IP: 1.6)
46. *'Side chain bromination of mono and dimethyl heteroaromatic and aromatic compounds by solid phase N-bromosuccinimide reaction without radical*

*initiator under microwave*' Shyamaprosad Goswami, **Swapan Dey**, Subrata Jana, and Avijit Kumar Adak **Chemistry Letters**, 2004, 33, 916-918. (IP: 1.6)

**47. 'Multiple hydrogen bonds and tautomerism in naphthyridine derivatives'**

Carmen Alvarez-Rua, Santiago García-Granda, Shyamaprosad Goswami, Reshmi Mukherjee, **Swapan Dey**, Rosa M. Claramunt, M. Dolores Santa María, Isabel Rozas, Nadine Jagerovic, Ibon Alkorta, and José Elguero, **New Journal of Chemistry**, 2004, 28, 700-707. (IP: 3.3)

**Abstracts presented in symposia**

1. 'Rhodamine based highly fluorescent and colorimetric chemosensor for selective detection of  $\text{Hg}^{2+}$  and  $\text{Cu}^{2+}$  ions in aqueous medium' O-49, Ashish Kumar and **Swapan Dey\*** Oral Presentation, ICEFN-2016 (March 27-29, 2016), organized by Nanoscience and Nanotechnology Centre, Department of Chemistry, Kumaun University, Uttarakhand, India.
2. 'Rhodamine scaffold bis-triazole used as a highly fluorescent and colorimetric chemosensor for selective detection of  $\text{Fe}^{3+}$  ion and reversible *Off-On* fluorescence response' O-11, Surajit Mondal, Ashish Kumar, Chanda Kumari, K. Somlata Kashyap and **Swapan Dey\*** Oral Presentation, ICEFN-2016 (March 27-29, 2016), organized by Nanoscience and Nanotechnology Centre, Department of Chemistry, Kumaun University, Uttarakhand, India.
3. 'Rhodamine based highly selective fluorescent 'turn-on' chemosensor for visual detection of  $\text{Hg}^{2+}$  ion' Ashish Kumar, Dibyendu Sain, Chanda Kumari and **Swapan Dey\*** Oral Presentation, 33rd Annual Conference, Indian Council of Chemists, Indian School of Mines, Dhanbad (15<sup>th</sup> – 17<sup>th</sup> **December, 2014**)
4. Selective sensing of Mercury (II) ion by a rhodamine & naphthyridine based highly selective fluorescent-chemosensor and their quantum chemical DFT calculation' Chanda Kumari, Dibyendu Sain, Ashish Kumar and **Swapan Dey\*** Oral Presentation, 33rd Annual Conference, Indian Council of Chemists, Indian School of Mines, Dhanbad (15<sup>th</sup> – 17<sup>th</sup> **December, 2014**)



5. Selective sensing of bismuth (III) ion by an 8-hydroxyquinoline based highly fluorescent tripodal receptor, Chanda Kumari, Dibyendu Sain, and **Swapan Dey\*** PP-175, North Maharashtra University, **February 2014**.
6. Visual detection of  $Pb^{+2}$  and  $Cu^{+2}$  by an 8-Hydroxyquinoline based Fluorogenic chemosensor Dibyendu Sain and **Swapan Dey\***, (OP - 16) North Maharashtra University, **February 2014**.
7. Indole based Fluorogenic chemosensor for visual detection of  $HSO_4^-$  and  $CN^-$  ions *Dibyendu Sain, Ashis Kumar and Swapan Dey\** OP-15, **CTriC-2014, CUSAT, 17<sup>th</sup>-18<sup>th</sup> January 2014**.
8. '*Synthesis of an 8-Hydroxyquinoline based fluorogenic chemosensor for visual and spectroscopic detection of  $Pb^{+2}$* ' Dibyendu Sain, Chanda Kumari, Ashish Kumar and **Swapan Dey**, **Best Oral presentation**, **Research Scholar Meet-2014 (RSM-2014)**, Indian School of mines, Dhanbad, 28<sup>th</sup> February, 2014.
9. Furfuryl amine based ditopic receptor for succinic acid, **Swapan Dey\*** and Dibyendu Sain, Abs. # ORG(OP)72, **48<sup>th</sup> Annual Convention of Chemists 2011** organised by the Indian Chemical Society, Allahabad University, **December 2011**.
10. *Dicarboxylic Acids: Good Supramolecular Synthons for Crystal Engineering*, **Swapan Dey** Abs.# ORG(OP)-68; **46<sup>th</sup> Annual Convention of Chemists 2009 and International Conference On Recent Research Trends in Chemical Sciences by Indian Chemical Society** held on 2<sup>nd</sup> -6<sup>th</sup> December **2009** at VIT, Vellore, Tamilnadu, India.
11. *Appliance of Molecular Recognition: Urea-Uric Acid-Biotin-Creatinine*: Subrata Jana and **Swapan Dey**, Abs.# ORG(AP) 32; **45<sup>th</sup> Annual Convention of Chemists 2008** and by Indian Chemical Society held on 23<sup>rd</sup> to 27<sup>th</sup> November, 2008 at Dharwad, Karnatak University, India.
12. *Molecular Recognition and Fluorescence Sensors for Urea and Uric Acid*; Shyamaprosad Goswami and **Swapan Dey**, Abs# ORG (AP)17, **44<sup>th</sup> Annual Convention of Chemists 2007** by Indian Chemical Society held on 23<sup>rd</sup> to 27<sup>th</sup> December, 2007 at Jaipur, India.
13. *Directed Molecular Recognition of Biotin: Design and Synthesis of specific Receptors*: Shyamaprosad Goswami, and **Swapan Dey**. Abs.# 19, **The Ramanbhai Foundation 1<sup>st</sup>**



**International Symposium in Recent Trends in Pharmaceutical Research.** Jan. 23-24, 2003, Ahmedabad, India.

- 14. *Molecular Recognition in Aqueous Media: Receptors for Uric Acid*;** Shyamaprosad Goswami and **Swapan Dey**, Abs.# 11F, **National Symposium on Organic Chemistry-II: Current Trends and Prospects.** Jadavpur University, Kolkata-32, India, December 17, 2003.

**Invited talk / oral presentation:**

1. *International Symposium on “Supramolecular Chemistry and Materials” held on 21-22 May 2015 in the Department of Chemistry, KU Leuven: Title: “Molecular Recognition: The techniques for complexation of the substrates with designed receptors (invited talk)”*
2. *Indole based Fluorogenic chemosensor for visual detection of  $\text{HSO}_4^-$  and  $\text{CN}^-$  ions* **CTriC-2014, CUSAT, 17<sup>th</sup>-18<sup>th</sup> January 2014.**
3. *Dicarboxylic Acids: Good Supramolecular Synthons for Crystal Engineering*, **46<sup>th</sup> Annual Convention of Chemists 2009 and International Conference On Recent Research Trends in Chemical Sciences by Indian Chemical Society** held on 2<sup>nd</sup> -6<sup>th</sup> December **2009** at VIT, Vellore, Tamilnadu, India.
4. *Appliance of Molecular Recognition: Urea-Uric Acid-Biotin-Creatinine*: **45<sup>th</sup> Annual Convention of Chemists 2008** and by Indian Chemical Society held on 23<sup>rd</sup> to 27<sup>th</sup> November, 2008 at Dharwad, Karnatak University, India.
5. Presentation on, ‘*Molecular Recognition and Fluorescence Sensors for Urea and Uric Acid*’ in 44<sup>th</sup> Annual Convention of Chemists 2007 by Indian Chemical Society held in Jaipur.

*Updated as on 11<sup>th</sup> November 2021*