CURRICULUM VITAE

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Nationality Indian
Date of Birth: September 17, 1978

Educational Qualifications:

- 1994, 10th Science, Math, Eng., Oriya, Social Science; CBSE, New Delhi (First Class); Jawahar Navoday Vidyalaya, Zinc Nagar, Sng, Orissa
- 1996, 12th Chemistry, Physics, Math, Biology, English; CBSE, New Delhi (First Class); Jawahar Navoday Vidyalaya, Zinc Nagar, Sng, Orissa
- 1999, B.Sc. Chemistry (Hons.), Physics, math; Sambalpur University, Orissa (First Class with Distinction
- 2001, M.Sc. Chemistry; Sambalpur University, Orissa (First Class)
- 2004, NET Chemical Sciences; JRF Qualified, CSIR-UGC, New Delhi
- 2008, Ph.D. Chemistry; Punjab Technical University (PTU), Jalandhar with Prof. BK Kanungo, Department of Chemistry, SLIET, Longowal, Punjab. Thesis: "*Synthesis and Molecular Modeling of some Novel Macrocyclic Metal Complexes*".

Professional recognition, awards, fellowship received

- 2019, Visiting Professor, Kyungpook National University, Daegu, South Korea
- 2015, Contract Professor (BK21+ Scheme), Kyungpook National University, Daegu, South Korea
- 2009, Visiting Professor, University of Cagliari, Italy
- 2009, Young Scientist Award, Orissa Chemical Society, Orissa, India
- 2004, Young Scientist Award, Punjab Academy of Sciences, Punjab, India

- 2004, Qualified the joint CSIR-UGC National Eligibility Test (NET) for the award of Junior Research Fellowship and Lectureship
- July 2005-June 2006, Junior Research Fellowship, UGC, New Delhi, India.

Experiences:

- 28.01.2019 to Till date Associate Professor, SVNIT, Surat, Gujrat
- 20.03.2009 to 27.01.2019 Assistant Professor, SVNIT, Surat, Gujrat
- 04.08.2008 to 13.03.2009 Lecturer, JMIT, Radaur, Haryana
- 11.01.2007 to 25.05.2007 Lecturer (ad hoc), SLIET, Longowal, Punjab
- 02.08.2006 to 22.12.2006 Lecturer (ad hoc), SLIET, Longowal, Punjab
- 01.07.2005 to 30.06.2006 Junior Research Fellow (JRF), SLIET, Longowal, Punjab
- 01.04.2003 to 31.03.2004 Research Assistant (RA) in MHRD project entitled "Design, Synthesis and Study of Biologically Active Iron(III) Carriers: A Molecular Modeling Approach", SLIET, Longowal, Punjab
- 19.09.2001 to 31.03.2003 Project Assistant (PA) in MHRD project entitled "Development of Quantum Sized Metallic and Semiconductor Particles", SLIET, Longowal, Punjab

Research Projects as PI/Co-PI/Mentor:

- Department of Science and Technology (DST), New Delhi (Registration No. Sr/S1/IC-54/2012 dated May, 13, 2014); Title of the project: Development of novel supramolecular sensing systems using fluorescent quantum dots. Scheme: DST SERB; Amount: Rs. 39.40 lacs (Completed)
- National Post-Doctoral Fellowship (N-PDF) to Dr T Anand, DST (SERB), PDF/2016/000804 dated 16 Jan, 2017, Small molecule Functionalized dyes and corroles as Optical Chemosensors and its application in live cell imaging, Rs. 17,25,785 (Completed).
- Institute Research Grant (IRG), SVNIT (Dean (R&C)/1503/2013-2014 dated 17/02/2014; Title of the project: Receptors design and fluorescent sensing of iron(III) using functionalized QDs; Amount: Rs. 10 lacs (Completed).
- Department of Science and Technology (DST), New Delhi (Registration No. 0057/2008 dated Sept., 30, 2008); Title of the project: Design, synthesis and molecular modeling studies of some biomimetic tris(hydroxamate)siderophore analogs; Scheme: DST Young Scientist Award under Fast Track Scheme; Amount: Rs. 17.56 lacs (completed).

- JMIT, Radaur (Ref. No. 2048 dated 29/09/08); Title of the project: Design, synthesis and development of some hydroxamate-based iron(III) selective fluorescent sensors; Scheme: Institute Projects to support the research work to faculty members; Amount: Rs. 60,000 (Completed).

Research Interest:

- Supramolecular deep cavitand and recognition of small guest molecules.
- Fluorescence study of the model compounds.
- Design and development of Chemosensors
- Colorimetric and fluorescent sensors based on nanoparticles and quantum dots (QDs)
- Computational chemistry (DFT, Ab-Initio, semi-empirical based calculations)
- Molecular dynamic simulations and docking
- Complexation studies of the ligands with various metal ions both by potentiometric and spectrophotometric methods.
- Synthesis of multidentate ligands and metal complexes

Publications:

Google Scholar (***https://scholar.google.co.in/citations?user=P7GKHgcAAAAJ&hl=en***)

2020

1. Y. Upadhyay, R. Kumar and Suban K Sahoo, Developing a cost-effective bioassay to detect alkaline phosphatase activity and generating white light emission from a single nano-assembly by conjugating vitamin B_6 cofactors with lysozyme-stabilized fluorescent gold nanoclusters, **ACS Sustainable Chemistry & Engineering**, 2020, Accepted.
2. N. Singh, Suban K Sahoo, R. Kumar, Hemolysis tendency of anticancer nanoparticles changes with type of blood group antigen: An insight into blood nanoparticle interactions, **Materials Science and Engineering: C**, 2020,109, 110645.
3. Y. Upadhyay, S. Bothra, R. Kumar, Ashok Kumar SK and Suban K Sahoo, Mimicking biological process to detect alkaline phosphatase activity using the vitamin B_6 cofactor conjugated bovine serum albumin capped CdS quantum dots, **Colloids and Surfaces B: Biointerfaces**, 2020, 185, 110624.

2019

4. Suban K Sahoo, Guido Crisponi, Recent Advances on Iron(III) Selective Fluorescent Probes with Possible Applications in Bioimaging, **Molecules**, 2019, 24, 3267.

5. Y. B. Wagh, K. C. Tayade, A. Kuwar, Suban K. Sahoo, Mayank, N. Singh, Exploration of highly selective fluorogenic 'on–off' chemosensor for $H_2PO_4^-$ ions: ICT-based sensing and ATPase activity profiling, **Luminescence**, 2019, Accepted.
6. H. A. Patel, A. Gutal, Suban K. Sahoo, H. P. Soni, Asymmetric Direct Aldol Reaction in Confined Space: Molecular Conformations of Organocatalyst Affect Chiral Induction, **ChemistrySelect**, 2019, 4, 13210-13218.
7. Y. Upadhyay, P. Paira, S.K. Ashok Kumar, H.-J. Choi, R. Kumar, Suban K. Sahoo, Vitamin B_6 cofactor conjugated rhodamine 6G derivative: Fluorescent turn-on sensing of Al(III) and Cr(III) with bioimaging application in live HeLa cells, **Inorganica Chimica Acta**, 2019, 489, 198–203.
8. Vetriarasu Venkatesan, R Selva Kumar, SK Ashok Kumar, Suban K Sahoo, Dual optical properties of new Schiff base based on bisthiophene for sensing of Cu2+ in protic media, **Journal of Molecular Structure**, 2019, 1198, 126906.
9. Jung Eun Park, Thangaraj Anand, Vinita Bharadwaj, Suban K Sahoo, Heung-Jin Choi, A novel fluorescent triazole trindane-coumarin receptor for the selective detection of nitroaromatics, **Journal of Photochemistry and Photobiology A: Chemistry**, 2019, 383, 111990.
10. Vinita Bharadwaj, Jung Eun Park, Suban K Sahoo, and Heung-Jin Choi, Selective Fluorescent Turn-Off Detection of Picric Acid Using a Novel Tripodal Supramolecular Triazole-Trindane-Based Receptor, **ChemistrySelect** 2019, 4, 1– 8.
11. Vinita Bhardwaj, Thangaraj Anand, Heung-Jin Choi, Suban K Sahoo, Sensing of Zn(II) and nitroaromatics using salicyclaldehyde conjugated lysozyme-stabilized fluorescent gold nanoclusters, **Microchemical Journal**, 2019,104227.
12. A Thangaraj, SK Sahoo, Cost-effective approach to detect Cu (II) and Hg (II) by integrating smartphone with the colorimetric response from NBD-benzimidazole based dyad, **Physical Chemistry Chemical Physics**, 2019, **21**, 11839-11845.
13. A Thangaraj, V Bhardwaj, SK Sahoo, A multi-analyte selective dansyl derivative for the fluorescence detection of Cu(ii) and cysteine, **Photochemical & Photobiological Sciences**, 2019, **18**, 1533-1539.
14. M. Khannam, C. Mukherjee, Suban K Sahoo, Effect of Ligand Chirality and Hyperconjugation on Thermodynamic Stability of a Tris(aquated) Gd(III) Complex: Synthesis, Characterization

and T1-Weighted Phantom MR Image Study, **European Journal of Inorganic Chemistry**, 2019, 2019, 2518-2523.

15. G Hambarde, S Bothra, Y Upadhyay, RK Bera, SK Sahoo, m-Dinitrobenzene directed aggregation-induced emission enhancement of cysteine modified fluorescent copper nanoclusters, **Microchemical Journal**, 2019, 147, 899-904.
16. B Kanoje, D Patel, V Kumar, SK Sahoo, J Parikh, K Kuperkar, Unraveling the Solubilization and Cytotoxicity study of poorly water-soluble anti-inflammatory drug in aqueous Gemini Surfactants solution with physicochemical characterization and simulation study, **Colloids and Surfaces B: Biointerfaces**, 2019, 179, 437-444.
17. NB Patil, UD Patil, PA Patil, S Bothra, SK Sahoo, S Sehlangia, Chullikkattil P Pradeep, Ashok A Patil, Samadhan R Patil, A Fused Benzothiazolo-Pyrimidine-Based Chemosensor for Selective Optical Detection of Fe^{3+} and I^{-} Ions in Aqueous Media, **ChemistrySelect**, 2019, 4 (14), 4185-4189
18. R Kaur, SK Sahoo, A Kuwar, N Kaur, N Singh, Rhodamine based NIR and ratiometric fluorescent sensor for selective identification of potassium ion: application in biological sample, **Supramolecular Chemistry**, 2019, 31, 36-44
19. SKA Kumar, K Vijayakrishna, A Sivaramakrishna, CVSB Rao, N Sivaraman, Suban K Sahoo, Development of highly selective potentiometric thorium(IV) ion-selective electrode: exploration supported with optical and DFT analysis, **Anal. Methods**, 2019, 11, 1338-1345.
20. V Venkatesan, ASK Kumar, SK Sahoo, Spectrophotometric and RGB performances of a new tetraphenylcyclopenta-derived Schiff base for the quantification of cyanide ions, **Anal. Methods**, 2019, 11, 1137-1143
21. N Singh, F Sallem, C Mirjolet, T Nury, SK Sahoo, N Millot, R Kumar, Polydopamine Modified Superparamagnetic Iron Oxide Nanoparticles as Multifunctional Nanocarrier for Targeted Prostate Cancer Treatment, **Nanomaterials**, 2019, 9, 138.
22. R Selva Kumar, SK Ashok Kumar, Kari Vijayakrishna, Akell Sivaramakrishna, CVS Brahmnanda Rao, N Sivaraman, Suban K Sahoo, Highly selective CHEF-type chemosensor for lutetium (III) recognition in semi-aqueous media, **Spectrochim. Acta A**, 2019, 214, 32-39.
23. N Singh, J Nayak, SK Sahoo, R Kumar, Glutathione conjugated superparamagnetic Fe3O4-Au core shell nanoparticles for pH controlled release of DOX, **Materials Science and Engineering: C**, 2019, 100, 453-465.

24. V Raju, RS Kumar, SKA Kumar, Y Tharakeswar, SK Sahoo, Development of highly selective chemosensor for chomium(III) estimation in aqueous environment, **Inorganic. Chem. Commun.**, 2019, 101, 74-80
25. V Venkatesan, SKA Kumar, SK Sahoo, Highly selective turn-on fluorogenic chemosensor for Zn^{2+} based on chelation enhanced fluorescence, Inorganic. Chem. Commun., 2019, 102, 171-179.
26. R. Patel, S. Bothra, R. Kumar, Suban K Sahoo, Selective turn-off sensing of picric acid and *p*-nitrophenol using fluorescent histidine, **Nano-Structures & Nano-Objects**, 2019, 19, 100345.
27. G.-D. Kim, S. Bothra, S. K. Sahoo, H.-J. Choi, Tripodal tris(diamide) receptor having H-bond donors and acceptors on trindane platform for $H_2PO_4^-$ recognition, **Journal of Inclusion Phenomena and Macrocyclic Chemistry**, 2019, 95, 215-221.
28. P. Patil, S. Sehlangia, A. Patil, C. Pradeep, Suban K. Sahoo, A new phthalimide based chemosensor for selective spectrophotometric detection of Cu(II) from aqueous medium, **Spectrochimica Acta A**, 2019, 220, 117129.
29. V. Tekuri, Suban K. Sahoo, D. R. Trivedi, Hg2+ induced hydrolysis of thiazole amine based Schiff base: Colorimetric and fluorogenic chemodosimeter for Hg2+ ions in an aqueous medium, **Spectrochimica Acta A**, 2019, 218, 19-26.

2018

30. Y. Upadyay, S. Bothra, R. Kumar, Suban K Sahoo, Smartphone-Assisted Colorimetric Detection of Cr^{3+} using Vitamin B6 Cofactor Functionalized Gold Nanoparticles and Its Applications in Real Sample Analyses, **ChemistrySelect**, 2018, 3, 6892-6896.
31. M. Patil, K. Keshav, M. K. Kumawat, S. Bothra, Suban K. Sahoo, R. Srivastava, J. Rajput, R. Bendre, A. Kuwar, Monoterpenoid derivative based ratiometric fluorescent chemosensor for bioimaging and intracellular detection of Zn^{2+} and Mg^{2+} ions, **J. Photochem. Photobiol. A**, 2018, 364, 758-763.
32. N. Kaur, S. Chopra, P. Raj, A. Bhasin, G. Singh, Suban K Sahoo, A. Kuwar, N. Singh, Chemosensors for biogenic amines and biothiols, **Journal of Materials Chemistry B**, 2018, **6**, 4872-4902 .
33. T. Anand, SK Ashok Kumar, Suban K Sahoo, A new Al^{3+} selective fluorescent turn-on sensor based on hydrazide-naphthalic anhydride conjugate and its application in live cells imaging, **Spectrochimica Acta A**, 2018, 204, 105–112.

34. Suban K Sahoo, D. Sharma, A. Moirangthem, A. Basu, Ashok Kumar S K, U. D Patil, Fluoride selective chemosensor derived from Vitamin B_6 cofactor pyridoxal and its application in living HeLa cells imaging, **Indian J Chem A**, 2018, 57A, 619-625.
35. M. Patil, S. Bothra, Suban K. Sahoo, H. A. Rather, R. Vasita, R. Bendre, A. Kuwar, Highly selective nicotinohydrazide based 'turn-on' chemosensor for the detection of bioactive zinc(II): its biocompitability and bioimaging application in cancer cells, **Sensors and Actuators B: Chem.**, 2018, 270, 200-206.
36. Y. Upadyay, T. Anand, Lavanya T Babu, P. Paira, SK Ashok Kumar, R. Kumar, Suban K Sahoo, Combined use of spectrophotometer and smartphone for the optical detection of Fe^{3+} using a vitamin B_6 cofactor conjugated pyrene derivative and its application in live cells imaging, **J. Photochem. Photobiol. A**, 2018, 361, 34-40.
37. R S. Kumar, S.K. Ashok Kumar, K. Vijayakrishna, A. Sivaramakrishna, P. Paira, C.V.S.B. Rao, N. Sivaraman and S. K. Sahoo, Bipyridine bisphosphonate-based fluorescent optical sensor and optode for selective detection of Zn^{2+} ions and its applications, **New J Chem**, 2018, 42, 8494-8502.
38. G.-D. Kim, S. Bothra, S. K. Sahoo and H.-J. Choi, A novel C_{3v}-symmetric molecular clip with tris(diamide) recognition sites on trindane platform for $H_2PO_4^-$ recognition, **Tetrahedron Letters**, 2018, 59, 1679-1682.
39. T. Anand, Ashok Kumar SK, Suban K Sahoo, A novel Schiff base derivative of pyridoxal for the optical sensing of Zn^{2+} and cysteine, **Photochemical and Photobiological Sciences**, 2018, **17**, 414-422.
40. V. Venkatesan, Ashok Kumar SK, S. Bothra, Suban K Sahoo, Highly selective iodide sensing ability of an anthraquinone derived Schiff base in semi-aqueous medium and its performance as antioxidant, anti-inflammatory and HRBC membrane protection, **New J Chem**, 2018, 42, 6175-6182.
41. Quoc-Thiet Nguyen, Suban K Sahoo and Heung-Jin Choi, Inclusion complexation of a deep cavitand with imidazoquinoxaline flaps forming stable vase-like conformation, **Tetrahedron**, 2018, 74, 1759-1766.
42. B. Phukan, C. Mukherjee, U. Goswami, A. Sarmah, S. Mukherjee, Suban K. Sahoo, S. C. Moi, A New Bis(aquated) High Relaxivity Mn(II) Complex as an Alternative to Gd(III)-Based MRI Contrast Agent, **Inorg Chem**, 2018, 57, 2631–2638.

43. K. Patel, N. Singh, J. M. Nayak, B. Jha, Suban K. Sahoo, R. Kumar, Environmentally Friendly Inorganic Magnetic Sulfide Nanoparticles for Efficient Adsorption-Based Mercury Remediation from Aqueous Solution, **ChemistrySelect**, 2018, 3, 1840–1851.
44. K. Patel, N. Singh, J. Yadav, J. M. Nayak, **Suban K. Sahoo**, J. Lata, D. Chand, S. Kumar and R. Kumar, Polydopamine films change their physicochemical and antimicrobial properties with a change in reaction conditions, **Phys. Chem. Chem. Phys**., 2018, 20, 5744-5755.
45. Prashanthakumar T.K.M., Ashok Kumar S.K., Suban K Sahoo, A quick removal of toxic phenolic compounds using porous carbon prepared from renewable biomass coconut spathe and exploration of new source for porous carbon materials, **J. Environ. Chemical Engineering**, 2018, 6, 1434-1442.
46. R. Patel, S. Bothra, R. Kumar, G. Crisponi, Suban K Sahoo, Pyridoxamine driven selective turn-off detection of picric acid using glutathione stabilized fluorescent copper nanoclusters and its applications with chemically modified cellulose strips, **Biosensors and Bioelectronics**, 2018, 102, 196-203.
47. B. Kanoje, S. Padshala, J. Parikh, Suban K Sahoo, K. Kuperkar, P. Bahadur, Synergism and aggregation behaviour in an aqueous binary mixture of cationic–zwitterionic surfactants: physico-chemical characterization with molecular simulation approach, **Phys. Chem. Chem. Phys**., 2018, **20**, 670-681.
48. R Selvakumar, SK Ashok Kumar, Kari Vijayakrishna, Akella Sivaramakrishna, CVS Brahmmananda Rao, N Sivaraman, Suban K Sahoo, Development of highly selective chemosensor for thorium estimation, **Sensors and Actuators B: Chem**., 2018, 255, 1391.

A. Singh, Suban K Sahoo, D. R. Trivedi, Colorimetric anion sensors based on positional effect of nitro group for recognition of biologically relevant anions in organic and aqueous medium, insight real-life application and DFT studies, **Spectrochimica Acta A**, 2018, 188, 596-610.

49. S. Bothra, L. T. Babu, P. Paira, SK Ashok Kumar, R. Kumar and Suban K Sahoo, A biomimetic approach to conjugate vitamin B_6 cofactor with the lysozyme cocooned fluorescent AuNCs and its application in turn-on sensing of zinc(II) in environmental and biological samples, Analytical and Bioanalytical Chemistry, 2018, 410, 201-210.
50. Yachana Upadhyay, Lavanya T Babu, Priyankar Paira, Guido Crisponi, Ashok Kumar SK, Rajender Kumar, Suban K Sahoo, Three-in-one type fluorescent sensor based on pyrene pyridoxal cascade for the selective detection of Zn(II), hydrogen phosphate and cysteine, Dalton Transactions, 2018, 47, 742-749.

51. Anil Kuwar, K Tayade, K Keshav, Suban K Sahoo, Mayank, N Singh, Cu^{2+}-driven metallo-supramolecular self-assembly and its application in sensing of hydroxyl ion, Supramolecular Chemistry, 2018, 30, 52-60.
52. SKA Kumar, K Vijayakrishna, A Sivaramakrishna, CVS Rao Brahmmananda, N Sivaraman, SK Sahoo, Development of the Smartphone-Assisted Colorimetric Detection of Thorium by Using New Schiff's Base and Its Applications to Real Time Samples, Inorganic Chemistry, 2018, 57, 15270-15279.
53. N Singh, K Patel, SK Sahoo, R Kumar, Human nitric oxide biomarker as potential NO donor in conjunction with superparamagnetic iron oxide@ gold core shell nanoparticles for cancer therapeutics, Colloids and Surfaces B: Biointerfaces, 2018, 163, 246-256.

2017

54. S. Bothra and Suban K. Sahoo, A short overview on fluorescent nanoclusters and its application in sensing of metal ions, J. Indian Chem. Soc., 2017, 94, 1-8.
55. Nimisha Singh, Khushbu Patel, Jyotsna M Nayak, Jyoti Yadav, Suban K Sahoo, Rajender Kumar, A New Methodology for Detection and Assessment of Nitric Oxide in Biological Samples, ChemistrySelect, 2017, 2, 8483-8485.
56. Jitendra P Nandre, Samadhan R Patil, Suban K Sahoo, Chullikkattil P Pradeep, Andrei Churakov, Fabiao Yu, Lingxin Chen, Carl Redshaw, Ashok Anandrao Patil, Umesh Daga Patil, Chemosensor for micro to nano-molar detection of Ag^{+} and Hg^{2+} ions in pure aqueous media and its applications in cell imaging, Dalton Trans, 2017, 46, 14201.
57. Thangaraj Anand, SK Kumar, Suban K Sahoo, Vitamin B6 Cofactor Derivative: A Dual Fluorescent Turn-On Sensor to Detect Zn^{2+} and CN^{-} Ions and Its Application in Live Cell Imaging, ChemistrySelect, 2017, 2, 7570-7579.
58. Navneet Kaur, Gaganpreet Kaur, Umesh A Fegade, Amanpreet Singh, Suban K Sahoo, Anil S Kuwar, Narinder Singh, Anion sensing with chemosensors having multiple –NH recognition units, TrAC Trends in Analytical Chemistry, 2017, 95, 86-109.
59. Pritam Torawane, Suban K Sahoo, Amulrao Borse, Anil Kuwar, A new Schiff base as a turn-off fluorescent sensor for Cu^{2+} and its photophysical properties, Luminescence, 2017, Accepted.
60. Shilpa Bothra, Yachana Upadhyay, Rajender Kumar, SK Ashok Kumar, Suban K Sahoo, Chemically modified cellulose strips with pyridoxal conjugated red fluorescent gold

nanoclusters for nanomolar detection of mercuric ions, Biosensors and Bioelectronics, 2017, 90, 329-335.

61. Keshav, Karunesh; Torawane, Pritam; Kumawat, Mukesh Kumar; Tayade, Kundan; Sahoo, Suban K; Srivastava, Rohit; Kuwar, Anil; Highly selective optical and reversible dual-path chemosensor for cyanide detection and its application in live cells imaging, Biosensors and Bioelectronics, 2017, 92, 95-100.
62. Singh, Nimisha; Patel, Khushbu; Sahoo, Suban K; Pati, Ranjan K; Kumar, Rajender; Gastrointestinal tract mechanism of nitrite capture modeled on the self-assembled monolayer of thioproline for electrochemical nitrite determination, Journal of Materials Chemistry A, 2017, 5, 3389-3403.
63. Upadhyay, Yachana; Bothra, Shilpa; Kumar, Rajender; Choi, Heung-Jin; Sahoo, Suban K; Optical sensing of hydrogen sulphate using rhodamine 6G hydrazide from aqueous medium, Spectrochimica Acta A, 2017, 180, 44-50.
64. Shilpa Bothra, Yachana Upadhyay, Rajender Kumar, Suban K Sahoo, Applications of vitamin B6 cofactor pyridoxal 5′-phosphate and pyridoxal 5′-phosphate crowned gold nanoparticles for optical sensing of metal ions, Spectrochimica Acta A, 2017, 174, 1-6.
65. Bothra, Shilpa; Kumar, Rajender; Sahoo, Suban K; Pyridoxal conjugated gold nanoparticles for distinct colorimetric detection of chromium (III) and iodide ions in biological and environmental fluids, New Journal of Chemistry, 2017, **41**, 7339-7346.
66. Raju, V; Kumar, SK; Abbareddy, D Srikanth; Rao, Mallikarjuna; Sahoo, Suban K; Isatin-3-Phenylhydrazone: A Highly Selective Colorimetric Chemosensor for Copper, Chromium and Cobalt Ions in Semi-Aqueous Medium, Sensor Letters, 2017, 15, 266-275.
67. Patel, Divyesh R; Bilimoriya, Jignesh T; Patel, Bhavesh M; Patel, Paresh S; Mehta, Kalpesh M; Patel, Shreyas A; Patel, Keshav C; Patel, Bhavesh S; Sahoo, Suban K; Monoazo Styryl Quinazolinone Reactive Dyes: Their Synthesis, Application and Density Function Theory (DFT) Calculation, Proceedings of the National Academy of Sciences, India Section A: Physical Sciences, 2017, 87, 339-348.
68. Kuwar, Anil; Torawane, Pritam D; Keshav, Karunesh; Kumawat, Mukesh Kumar; Srivastava, Rohit; Sahoo, Suban K; Borse, Amulrao Uttamrao, A novel terephthalaldehyde based turn-on fluorescent chemosensor for Cu2+ and its application in living cells imaging, Photochemical and Photobiological Sciences, 2017, **16**, 1464-1470.

69. Bothra, Shilpa; Paira, Priyankar; Kumar, SK; Kumar, Rajender; Sahoo, Suban K; Vitamin B6 Cofactor-Conjugated Polyethyleneimine-Passivated Silver Nanoclusters for Fluorescent Sensing of Zn^{2+} and Cd^{2+} Using Chemically Modified Cellulose Strips, ChemistrySelect, 2017, 2, 6023-6029.

2016

70. Suban K Sahoo, Gi-Dong Kim, Heung-Jin Choi, Optical sensing of anions using C3v-symmetric tripodal receptors, Journal of Photochemistry and Photobiology C, 2016, 27, 30-53.
71. Madhuri K Pawar, Kundan C Tayade, Suban K Sahoo, Pramod P Mahulikar, Anil S Kuwar, Bhushan L Chaudhari, Selective ciprofloxacin antibiotic detection by fluorescent siderophore pyoverdin, Biosensors and Bioelectronics, 2016, 81, 274-279.
72. Kundan C Tayade, B. Bondhopadhyay, K. Keshav, Suban K Sahoo, Anupam Basu, Jasminder Singh, Narinder Singh, Deelip Nehete, Anil Kuwar, A novel Zinc (II) and Hydrogen sulphate selective fluorescent" turn-on" chemosensor based on isonicotiamide: INHIBIT type's logic gate and application in cancer cell imaging, Analyst, 2016, **141**, 1814-1821.
73. Suban K Sahoo, Darshna Sharma, Anuradha Moirangthem, Aman Kuba, Rini Thomas, Rajender Kumar, Anil Kuwar, Heung-Jin Choi, Anupam Basu, Pyridoxal derived chemosensor for chromogenic sensing of Cu^{2+} and fluorogenic sensing of Fe3+ in semi-aqueous medium, Journal of Luminescence, 2016, 172, 297-303.
74. Darshna Sharma, Aman Kuba, Rini Thomas, SK Ashok Kumar, Anil Kuwar, Heung-Jin Choi, Suban K Sahoo, Acetate selective fluorescent turn-on sensors derived using vitamin B 6 cofactor pyridoxal-5-phosphate, Spectrochimica Acta A, 2016, 157, 110-115.
75. Pritam Torawane, Kundan Tayade, Shilpa Bothra, Suban K Sahoo, Narinder Singh, Amulrao Borse, Anil Kuwar, A highly selective and sensitive fluorescent ‘turn-on’chemosensor for Al3+ based on C=N isomerisation mechanism with nanomolar detection, Sensors and Actuators B: Chem., 2016, 222, 562-566.
76. Darshna Sharma, Aman Kuba, Rini Thomas, Rajender Kumar, Heung-Jin Choi, Suban K Sahoo, An aqueous friendly chemosensor derived from vitamin B 6 cofactor for colorimetric sensing of Cu2+ and fluorescent turn-off sensing of Fe3+, Spectrochimica Acta A, 2016, 153, 393-396.
77. Jin-Oh Park, Suban K Sahoo, Heung-Jin Choi, Design, synthesis and 1 H NMR study of C 3v-symmetric anion receptors with urethane-NH as recognition group, Spectrochimica Acta A, 2016, 153, 199-205.

78. Won Kim, Suban K Sahoo, Gi-Dong Kim, Heung-Jin Choi, C 3v-symmetric anion receptors with guanidine recognition motifs for ratiometric sensing of fluoride, RSC Adv., 2016, 10, 7872-7878.
79. Mahendra Sonawane, Kundan Tayade, Suban K Sahoo, Chatur P Sawant, Anil Kuwar, A new lawsone azo-dye for optical sensing of Fe^{3+} and Cu^{2+} and their DFT study, Journal of Coordination Chemistry, 2016, 69, 2785-2792.
80. Suban K Sahoo, Darshna Sharma, Shilpa Bothra, Sutapa Mondal Roy, Rajender Kumar, Ashok SK Kumar, Jitendra P Nandre, Umesh D Patil, John F Callan, Pyridoxal derived chemosensor: Its application in anion sensing and molecular logic gate building, Indian J. Chemistry A, 2016, 55A, 44-50.

2015

81. S. Bothra, R. Kumar, R.K. Pati, A. Kuwar, H.-J. Choi, Suban K. Sahoo, Virgin silver nanoparticles as colorimetric nanoprobes for simultaneous detection of iodide and bromide ion in aqueous medium, Spectrochimica Acta A, 2015, 149, 122-126.
82. Mahendra Sonawane, Suban K Sahoo, Jasminder Singh, Narinder Singh, Chatur P Sawant, Anil Kuwar, A lawsone azo dye-based fluorescent chemosensor for Cu 2+ and its application in drug analysis, Inorganica Chimica Acta, 2015, 438, 37-41.
83. W. Kim, Suban K. Sahoo, G.D. Kim, H.J. Choi, Novel C 3V-symmetric trindane based tripodal anion receptor with tris (coumarin-urea) extension for optical sensing of bioactive anions, Tetrahedron, 2015, 71, 8111-8116.
84. DS Lim, Suban K Sahoo, CS Cho, Y Kim, HJ Choi, A C 3v-symmetric triphosphine ligand derived from trindane skeleton: synthesis, inclusion of C 60, and catalytic activity of its Pd complex, Tetrahedron Letters, 2015, 56 (41), 5665-5669.
85. P. N. Borase, P.B. Thale, Suban K Sahoo, G.S. Shankarling, An “off–on” colorimetric chemosensor for selective detection of Al3+, Cr3+ and Fe3+: Its application in molecular logic gate, Sensors and Actuators B: Chemical, 2015, 215, 451-458.
86. R Patil, U Fegade, R Kaur, Suban K Sahoo, N Singh, A Kuwar, Highly sensitive and selective determination of Hg2+ by using 3-((2-(1H-benzo [d] imidazol-2-yl) phenylimino) methyl) benzene-1, 2-diol as fluorescent chemosensor and its application in real water sample, Supramolecular Chemistry, 2015, 27 (7-8), 527-532.

87. QT Nguyen, DW Oh, W Kim, Suban K Sahoo, HJ Choi, Self-Folding Deep Cavitand with Acetamidoquinoxaline Flaps: Hindered Ring Inversion of Cyclohexane in a Confined Cavity by CH–π Interaction, Asian Journal of Organic Chemistry, 2015, 4 (8), 729-732.
88. Darshna Sharma, Anuradha Moirangthem, Sutapa Mondal Roy, Ashok SK Kumar, Jitendra P Nandre, Umesh D Patil, Anupam Basu, Suban K Sahoo, Bioimaging application of a novel anion selective chemosensor derived from vitamin B6 cofactor, Journal of Photochemistry and Photobiology B: Biology, 2015, 148, 37-42.
89. K Matharu, SK Mittal, SKA Kumar, Suban K Sahoo, Selectivity enhancement of Arsenazo (III) reagent towards heavier lanthanides using polyaminocarboxylic acids: A spectrophotometric study, Spectrochimica Acta A, 2015, 145, 165-175.
90. UA Fegade, Suabn K Sahoo, A Singh, N Singh, SB Attarde, AS Kuwar, A chemosensor showing discriminating fluorescent response for highly selective and nanomolar detection of Cu2+ and Zn2+ and its application in molecular logic gate, Analytica chimica acta, 2015, 872, 63-69.
91. U Fegade, S Patil, R Kaur, SK Sahoo, N Singh, R Bendre, A Kuwar, A novel chromogenic and fluorogenic chemosensor for detection of trace water in methanol, Sensors and Actuators B: Chemical, 2015, 210, 324-327.
92. S Bothra, R Kumar, A Kuwar, N Singh, Suban K Sahoo, Cu2+-driven selective colorimetric sensing of iodide ions and AND logic gate using citrate-capped AgNPs, Materials Letters, 2015, 145, 34-36.
93. RK Bera, M Baral, Suban K Sahoo, BK Kanungo, Spectroscopic, potentiometric and theoretical studies of novel imino-phenolate chelators for Fe (III), Spectrochimica Acta A, 2015, 134, 165-172.
94. TKM Prashantha Kumar, Triveni R Mandlimath, P Sangeetha, P Sakthivel, SK Revathi, SK Ashok Kumar, Suban K Sahoo, Highly efficient performance of activated carbon impregnated with Ag, ZnO and Ag/ZnO nanoparticles as antimicrobial materials, RSC Advances, 2015, 5 (130), 108034-108043.
95. S Bothra, R Kumar, Suban K Sahoo, Pyridoxal derivative functionalized gold nanoparticles for colorimetric determination of zinc(ii) and aluminium(iii), RSC Advances, 2015, 5 (118), 97690-97695.

96. Darshna Sharma, Anuradha Moirangthem, Rajender Kumar, SK Ashok Kumar, Anil Kuwar, John F Callan, Anupam Basu, Suban K Sahoo, Pyridoxal-thiosemicarbazide: its anion sensing ability and application in living cells imaging, RSC Advances, 2015, 5 (63), 50741-50746.
97. YB Wagh, A Kuwar, Suban K Sahoo, J Gallucci, DS Dalal, Highly selective fluorimetric sensor for Cu2+ and Hg2+ using a benzothiazole-based receptor in semi-aqueous media and molecular docking studies, RSC Advances, 2015, 5 (56), 45528-45534.
98. Graham RC Hamilton, Suban K Sahoo, Sukanta Kamila, Narinder Singh, Navneet Kaur, Barry W Hyland, John F Callan, Optical probes for the detection of protons, and alkali and alkaline earth metal cations, Chemical Society Reviews, 2015, 44 (13), 4415-4432.
99. Samadhan R Patil, Jitendra P Nandre, Prashant A Patil, Suban K Sahoo, Manisha Devi, Chullikkattil P Pradeep, Yu Fabiao, Lingxin Chen, Carl Redshaw, Umesh D Patil, A uracil nitroso amine based colorimetric sensor for the detection of Cu2+ ions from aqueous environment and its practical applications, RSC Advances, 2015, 5 (28), 21464-21470.
100. Dipesh Mahajan, Nilesh Khairnar, Banashree Bondhopadhyay, Suban K Sahoo, Anupam Basu, Jasminder Singh, Narinder Singh, Ratnamala Bendre, Anil Kuwar, A highly selective fluorescent ‘turn-on’ chemosensor for Hg2+ based on a phthalazin-hydrazone derivative and its application in human cervical cancer cell imaging, New Journal of Chemistry, 2015, 39 (4), 3071-3076.
101. Nilesh Khairnar, Kundan Tayade, Suban K Sahoo, Banashree Bondhopadhyay, Anupam Basu, Jasminder Singh, Narinder Singh, Vikas Gite, Anil Kuwar, A highly selective fluorescent ‘turn-on’chemosensor for Zn2+ based on a benzothiazole conjugate: their applicability in live cell imaging and use of the resultant complex as a secondary sensor of CN−, Dalton Transactions, 2015, 44 (5), 2097-2102.
102. Smita Patil, Rahul Patil, Umesh Fegade, Banashree Bondhopadhyay, Umesh Pete, Suban K Sahoo, Narinder Singh, Anupam Basu, Ratnamala Bendre, Anil Kuwar, A novel phthalazine based highly selective chromogenic and fluorogenic chemosensor for Co2+ in semi-aqueous medium: application in cancer cell imaging, Photochemical & Photobiological Sciences, 2015, 14 (2), 439-443.
103. A Kuwar, R Patil, A Singh, Suban K Sahoo, J Marek, N Singh, A two-in-one dual channel chemosensor for Fe3+ and Cu2+ with nanomolar detection mimicking the IMPLICATION logic gate, Journal of Materials Chemistry C, 2015, 3 (2), 453-460.

104. Nilkanth M Mattiwala, Raj Kamal and Suban K Sahoo, Schiff base bis(5-nitrosalycilaldehyde)ethylenediamine as colorimetric sensor for fluoride, Res. Chem. Intermediat., 2015, 41, 391-400.
105. Bhupendra M Mistry, Suban K Sahoo, Doo Hwan Kim, Smita Jauhari, Tetrazolo [1, 5-a] quinoline-4-carbaldehyde and its Schiff base on mild steel as corrosion inhibitor in 1 M HCl solution: electrochemistry, theoretical and SEM surface analysis, Surface and Interface Analysis, 2015, 47, 706-718.
106. Sutapa Mondal Roy, Debesh R Roy, Suban K Sahoo, Toxicity prediction of PHDDs and phenols in the light of nucleic acid bases and DNA base pair interaction, Journal of Molecular Graphics and Modelling, 2015, 62, 128-137.
107. Urmiladevi Narad Yadav, Haribhau Shantaram Kumbhar, Saurabh Satish Deshpande, Suban Kumar Sahoo, Ganapati Subray Shankarling, Photophysical and thermal properties of novel solid state fluorescent benzoxazole based styryl dyes from a DFT study, RSC Adv., 2015, 5, 42971-42977.

2014

108. S.R. Patil, J. P. Nandre, D. Jadhav, S. Bothra, Suban K. Sahoo, M. Devi, C. P. Pradeep, P.P. Mahulikar and U. D. Patil, Imatinib Intermediate as a Two in One Dual Channel Sensor for the Recognition of Cu^{2+} and I^- ions in Aqueous Media and its Practical Applications, **Dalton Trans.**, 2014,**43**, 13299-13306.
109. S. R. Patil, J. P. Nandre, P. A. Patil, S. Bothra, Suban K Sahoo, A. Klasek, J. Rodríguez-López, P. P. Mahulikar, U. D. Patil, Quinolone based chemosensor for the naked-eye and spectrophotometric detection of Cu^{2+} in aqueous media, Inorganic Chemistry Communications, 2014, 49, 59-62.
110. U. N. Yadav, P. Pant, Suban K. Sahoo, G.S. Shankarling, A simple colorimetric and fluorogenic chemosensor for selective detection of Cu^{2+} ions in aqueous media, RSC Adv., 2014, **4**, 42647-42653.
111. D. Sharma, A. Moirangthem, Suban K Sahoo, A. Basu, S. M. Roy, R. K. Pati, A. Kumar SK, J. P. Nandre, U. D. Patil, Anion selective chromogenic and fluorogenic chemosensor and its application in breast cancer live cell imaging, RSC Adv., 2014, **4**, 41446-41452.
112. K. Tayade, N. Khairnar, S. Bothra, Suban K. Sahoo, J. Singh, N. Singh, R. Bendre, A. Kuwar, Novel fluorescent chemosensing of CN- anion with nanomolar detection using Zn2+-isonicotinohydrazide metal complex, RSC Adv., 2014, **4**, 41802-41806.

113. Umesh A Fegade, Anu Saini, Suban K Sahoo, Narinder Singh, Ratnamala S. Bendre and Anil Kuwar, 2,2'-(hydrazine-1,2-diylidenedimethylylidene) bis(6-isopropyl-3-methylphenol) Based Selective Dual Channel Chemosensor for Cu2+ in Semi-Aqueous Medium, RSC Adv., 2014, **4**, 39639-39644.
114. Jitendra Nandre, Samadhan Patil, Prashant Patil, Suban Sahoo, Carl Redshaw, Pramod Mahulikar and Umesh Patil, The Amidine Based Colorimetric Sensor for Fe^{3+}, Fe^{2+}, and Cu^{2+} in Aqueous Medium, Journal of Fluorescence, 2014, 24, 1563.
115. R. Patil, K. Tayade, Suban K Sahoo, A. Kuwar, Ratiometric fluorescent scaffold giving discrete response towards iodide ion: a combined experimental and DFT study, Journal of Molecular Recognition, 2014, 27(11), 683-688.
116. U. Fegade, Suban K. Sahoo, S. Attarde, N. Singh, A. Kuwar, Colorimetric and fluorescent "On-Off" chemosensor for Cu2+ in semi-aqueous medium, Sensors and Actuators B: Chem, 2014, 202, 924-928.
117. K. Tayade, Suban K Sahoo, N. Singh, S. Attarde and A. Kuwar, Architecture of dipodal ratiometric motif showing discrete nanomolar response towards fluoride ion, Sensors and Actuators B: Chem, 2014, 202, 1333-1337.
118. J. Nandre, S. Patil, V. Patil, F. Yu, L. Chen, Suban K Sahoo, T. Prior, C. Redshaw, P. Mahulikar, U. Patil, A novel fluorescent "turn-on" chemosensor for nanomolar detection of Fe(III) from aqueous solution and its application in living cells imaging, Biosensors and Bioelectronics, 2014, 61, 612-617.
119. M. Chandel, S. M. Roy, D. Sharma, Suban K Sahoo, A. Patel, P. Kumari, R. S. Dhale, A. Kumar SK, J. P. Nandre, U. D. Patil, Anion recognition ability of a novel azo dye derived from 4-hydroxycoumarin, Journal of Luminescence, 2014, 154, 515-519.
120. S. Patil, U. Fegade, Suban K. Sahoo, J. Marek, N. Singh, R. Bendre, A. Kuwar, Highly sensitive and ratiometric chemosensor for selective 'naked-eye' and nanomolar detection of Co^{2+} in semi-aqueous medium, ChemPhysChem, 2014, 15, 2230-2235.
121. K. Tayade, Suban K. Sahoo, S. Chopra, N. Singh, B. Bondhopadhyay, A. Basu, N. Patil, S. Attarde, A. Kuwar, A novel fluorescent "turn-on" sensor for the biologically active Zn^{2+} ion, Inorganica Chimica Acta, 2014, 421, 538-543.
122. K. Tayade, Suban K Sahoo, B. Bondhopadhyay, V. Bhardwaj, N. Singh, A. Basu, R. Bendre, A. Kuwar, Highly selective turn-on fluorescent sensor for nanomolar detection of biologically

important Zn^{2+} based on isonicotinohydrazide derivative: Application in live cell imaging, Biosensors and Bioelectronics, 2014, 61, 429-433.

123. Saravana KS, S. Bothra, Ashok Kumar S.K, Suban K Sahoo, Fluoride selective colorimetric sensor based on cefetamet pivoxil drug, Journal of Fluorine Chemistry, 2014, 164, 51-57.
124. U. Fegade, Suban K. Sahoo, N. Singh, P. Mahulikar, S. Attarde, A. Kuwar, A selective and discriminating noncyclic receptor for HSO_4^- ion recognition, RSC Adv., 2014, 4, 15288-15292.
125. K. Tayade, B. Bondhopadhyay, A. Basu, G. K. Chaitanya, Suban K. Sahoo, S. Attarde, A. Kuwar, A novel urea-linked dipodal naphthalene-based fluorescent sensor for Hg(II) and its application in live cell imaging, Talanta, 2014, 122, 16-22.
126. U.N. Yadav, P. Pant, D. Sharma, Suban K. Sahoo, G.S. Shankarling, Quinoline-based chemosensor for fluoride and acetate: A combined experimental and DFT study, Sensors and Actuators B: Chem, 2014, 197, 73-80.
127. D. Sharma, Ashok Kumar SK, Suban K. Sahoo, Vitamin B6 cofactor derived chemosensor for the selective colorimetric detection of acetate anions, Tetrahedron Lett., 2014, 55, 927-930.
128. S. Bothra, J. N. Solanki, Suban K. Sahoo, J. F. Callan, Anion-driven selective colorimetric detection of Hg^{2+} and Fe^{3+} using functionalized silver nanoparticles, RSC Adv., 2014, **4**, 1341-1346.
129. K. Tayade, Suban K. Sahoo, N. Singh, R. Patil, A. Kuwar, 2,2'-[Benzene-1,2-diylbis(iminomethanediyl)]diphenol derivative bearing two amine and hydroxyl groups as fluorescent receptor for Zinc(II) ion, Spectrochimica Acta A, 2014, 126, 312-316.
130. M. K. K. Rathod, S.R. Mistry, Suban K Sahoo, An efficient synthesis of annulated novel dihydropyridine derivatives using zeolite H-BEA and zeolite BEA-SO3H, Journal of Catalyst & Catalysis, 2014, 1, 1-12.

2013

131. Shilpa Bothra, Jignasa N. Solanki, Suban K. Sahoo, Functionalized Silver Nanoparticles as Chemosensor for pH, Hg^{2+} and Fe^{3+} in Aqueous Medium, Sensors and Actuators B: Chem, 2013, 188, 937-943.
132. Darshna Sharma, Suban K. Sahoo, Soma Chaudhary, Rati Kanta Bera and John F Callan, Fluorescence 'turn-on' sensor for F^- derived from Vitamin B6 cofactor, Analyst, 2013, 138, 3646-3650.

133. Darshna Sharma, Suban K. Sahoo, Rati Kanta Bera and Raj Kamal, Spectroscopic and computational study of a naphthalene derivative as colorimetric and fluorescent sensor for bioactive anions, J. Fluorescence, 2013, 23, 387–392.
134. Darshna Sharma, Rati Kanta Bera and Suban K. Sahoo, Naphthalene based colorimetric sensor for bioactive anions: experimental and DFT study, Spectrochimica Acta A, 2013, 105, 477-482.
135. Darshna Sharma, Ankit R Mistry, Rati Kanta Bera and Suban K. Sahoo, Spectroscopic and computational studies on the development of simple colorimetric and fluorescent sensors for bioactive anions, Supramolecular Chemistry, 2013, 25, 212-220.
136. Bhupendra M. Mistry, Suban K Sahoo, Smita Jauhari, Experimental and theoretical investigation of 2-mercaptoquinoline-3-carbaldehyde and its Schiff base as an inhibitor of mild steel in 1 M HCl, Journal of Electroanalytical Chemistry, **2013**, 704, 118-129.
137. Amit B. Patel, Suban K. Sahoo, Kishor H. Chikhalia and Premlata Kumari, Design, Synthesis and Computational Studies of New Benzothiazole Substituted Quinazolines as Potential Antimicrobial Agents, Letters in Drug Design & Discovery, 2013, 10, 957-966.

2012

138. Suban K. Sahoo, Darshna Sharma, Rati Kanta Bera, G Crisponi and John F Callan, Iron(III) selective molecular and supramolecular fluorescent probes, Chem. Soc. Rev., 2012, 41, 7195-7227.
139. María José Casanueva Marenco, Colin Fowley, Barry W. Hyland, Dolores Galindo-Riaño, Suban K Sahoo and John F. Callan, A new fluorescent sensor for the determination of Fe(III) in semi-aqueous solution, J. Fluorescence, 2012, 22, 795-798.
140. Suban K Sahoo, Darshna Sharma and Rati Kant Bera, Studies on molecular structure and tautomerism of a vitamin B6 analog with density functional theory, J. Mol. Modeling, 2012, 18, 1993-2001.
141. Nikhil M. Parekh, Suban K. Sahoo, Kalpana C. Maheria, Quantum chemical studies and dyeing performance of some novel benzoquinoline based heterocyclic monoazo dyes on polyester fiber, Dyes and Pigments, 2012, 95, 142-148.
142. Suban K. Sahoo, Rati kanta Bera, B.K. Kanungo, and Minati Baral, Spectroscopic and pH-metric studies on the complexation of a novel tripodal aminephenol ligand towards Al(III), Ga(III) and In(III), Spectrochimica Acta A, 2012, 89, 322-328.

143. B M Mistry, N S Patel, Suban K Sahoo and S Jauhari, Experimental and Quantum chemical studies on the corrosion inhibition performance of quinoline derivatives for MS in 1 N HCl, Bull Mat Science, 2012, 35, 459-469.

2011

144. Sunil R. Mistry, Rikesh S. Joshi, Suban K. Sahoo and Kalpana C. Maheria, Synthesis of dihydropyrimidinones using large pore zeolites, Catalysis Lett., 2011, 141, 1541-1547.
145. Rati Kanta Bera, Suban K Sahoo, Minati Baral and B. K. Kanungo, A novel iron(III) selective membrane electrode containing a tripodal polycatacholamine as sensor, Bulletin of Korean Chemical Society, 2011, 32, 1-5.
146. Suban K Sahoo, Darshna Sharma, Rati Kant Bera and B.K. Kanungo, Potentiometric study of a benzene-based tripodal triamine as chelator for Zn(II) ion, Acta Chimica Slovenica, 2011, 58, 590–595.
147. Suban K Sahoo, Rati Kanta Bera, Minati Baral and B. K. Kanungo, Spectrophotometric and Potentiometric studies on the binding abilities of two novel tripodal imine-phenol ligands towards Al(III) and Ga(III), J. Solution Chemistry, 2011, 40, 1187-1199.
148. Suban K Sahoo, Minati Baral and B. K. Kanungo, Potentiometric and Spectrophotometric Studies on the Binding Ability of a Flexible Tripodal Catecholamine Ligand Towards Iron(III), J. Chem. Engg. Data, 2011, 56, 2849-2855.

2010

149. B. K. Kanungo, Minati Baral, Rati Kanta Bera and Suban K Sahoo, A new dioxotetraamine ligand derived from binicotinic acid (BNA): synthesis, coordination and fluorescence behavior towards divalent transition metal ions, Monatshefte fur Chemie, 2010, 141, 157-168.
150. Rati Kanta Bera, Suban K Sahoo, Susheel K Mittal and Ashok Kumar S.K., An imidazol based novel potentiometric PVC membrane sensor for aluminium(III) determination, Int. J. Electrochem. Sci., 2010, 5, 29-38.

2009

151. Suban K Sahoo and Minati Baral, “Dioxotetraamines derived molecular and supramolecular devices, J. Photochem. and Photobiol. C, 2009, 10, 1-20.
152. Suban K Sahoo, Minati Baral and B. K. Kanungo, Potentially Multidentate Tripodal Amine Catechol Ligands as chelators for Ga(III) and In(III), Bulletin of Korean Chemical Society, 2009, 30, 1956-1962.

153. Suban K Sahoo, Rati Kanta Bera, Minati Baral and B. K. Kanungo, Excited state intramolecular proton transfer in methyl and methoxy substituted salicylic acid, Chinese J. of Chemistry, 2009, 28, 1-10.
154. Suban K Sahoo, Minati Baral and B. K. Kanungo, "Complexation of a Tripodal Amine-catechol Ligand Tris((2,3-dihydroxybenzylamino)ethyl)amine towards Al(III), Ga(III), and In(III)", Monatshefte fur Chemie, 2009, 140, 139-145.
155. Suban K Sahoo, Minati Baral and B. K. Kanungo, Synthesis, spectroscopic and theoretical studies of two novel tripodal imine-phenol ligands and their complexation with Fe(III), Spectrochimica Acta A, 2009, 74, 544-552.

2008

156. Suban K Sahoo, Rati Kanta Bera, Minati Baral and B. K. Kanungo, "Spectroscopic and Potentiometric Study of 2,3-Dihydroxybenzoic Acid and its Complexation with La(III) Ion". Acta Chimica Slovenica, 2008, 55, 243-247.
157. Minati Baral, Suban K Sahoo and B. K. Kanungo, "Tripodal Amine Catechol Ligands: A Fascinating Class of Chelators for Aluminium(III)", Journal of Inorganic Biochemistry, 2008, 102, 1581-1588.
158. B. K. Kanungo, Suban K Sahoo and Minati Baral, "Spectroscopic, Potentiometric and Theoretical Studies on the Binding Properties of a Novel Tripodal Polycatechol-imine Ligand towards Iron(III)", Spectrochimica Acta A, 2008, 71, 1452-1460.

2007

159. Suban K Sahoo, Rati Kanta Bera, Minati Baral and B. K. Kanungo, "Excited state intramolecular proton transfer (ESIPT) in a dioxotetraamine derived schiff base and its complexation with Fe(III) and Cr(III)", Journal of Photochem and Photobiol. A: Chem., 2007, 188, 298-310.

2006

160. Suban K Sahoo, Minati Baral and B. K. Kanungo, "Potentiometric, spectrophotometric, theoretical studies and binding properties of a novel tripodal polycatechol-amine ligand with lanthanide(III) ions", Polyhedron, 2006, 25, 722-736. (Selected in best 25 articles)
161. Suban K Sahoo, S. E. Muthu, Minati Baral and B. K. Kanungo, "Potentiometric and spectrophotometric study of a new dipodal ligand N,N'-bis{2-[(2-hydroxybenzylidine)amino]ethyl}malonamide with Co(II), Ni(II), Cu(II) and Zn(II)", Spectrochimica Acta A, 2006, 63, 574-586. (Selected in best 25 articles)

162. Subrato Bhattacharya, Suban Sahoo and B. K. Kanungo, “Synthesis, characterization and dynamic stereochemistry of thermochromic tris(dithiocarbamato)vanadium(III) complexes”, Journal of Coordination Chemistry, 2006, 59, 371-378.

Book Chapters:

- John F Callan, Bridgeen McCaughan, Colin Fowley, Narinder Singh, Navneet Kaur and Suban Sahoo, Quantum Dot Probes Based on Energy Transfer Mechanisms, *Eds.: J. F. Callan, F. M. Raymo, Quantum Dot Sensors: Technology and Commercial Applications, Pan Stanford Publishing, Singapore, 2012,* ISBN-10: 981431600, ISBN-13: 978-9814316002.
- Sutapa M Roy, Suban K Sahoo, Polymers as Biomaterials for Controlled Drug Delivery, In M. Mishra (Ed.), Handbook of encapsulation and controlled release, CRC press, 2015, pp. 1255-1270.

Postdoc:

Dr Thangraj Anad, NPDF (DST), 2016-2018 (Small molecule Functionalized dyes and corroles as Optical Chemosensors and its application in live cell imaging; PDF2016/000804)

Dr Sutapa M Roy, CSIR-RA, 2013-2015

PhD Thesis guided/On-going

Darshana G. Sharma, 2015, Novel supramolecular sensing systems for some bioactive anions and cations.

Shilpa Bothra, 2017, Vitamin B6 cofactors conjugated metal nanoparticles for optical sensing of metal ions and anions.

Nimisha Singh, 2018, Biocompatible nanoparticles for cancer drug delivery and therapeutics by facilitating nitric oxide release.

Yachana Upadhaya, 2019, Vitamin B6 cofactors conjugated fluorogenic and chromogenic probes for the detection of bioactive metal ions and alkaline phosphatase.

MSc Thesis guided

- Ashish Yadav, 2019, Vitamin B6 cofactors guided highly selective fluorescent turn-on sensing of bioactive histamine using beta-cyclodextrin stabilized ZnO quantum dots
- Amit Kumar, 2019, Fluorescent turn-on sensing of Zn(II) and alkaline phosphatase activity using a pyridoxal 5’-phosphate derived Schiff base.
- Akash Gutal, 2019, Quantum mechanical and molecular dynamics studies of host-guest inclusion complexation between β-cyclodextrin and pyridoxal-5'-phosphate.

- Ravi Patel, 2017, Optical detection of nitroaromatics using fluorescent probes
- Gaurav Hambarde, 2017, Fluorescent sensing of picric acid and m-dinitrobenzene by using L-cysteine modified copper nanoclusters
- Rini Thomas Mariam, 2015, Vitamin B6 cofactor modified chemosensor for selective detection of Fe^{3+} and AcO^{-}.
- Aman M. Kuba, 2015, Fluorescent detection of bioactive ions based on vitamin B6 cofactor derived Schiff bases
- Chandani Meena, 2014, Selective colorimetric detection of toxic metal ions using functionalized silver nanomaterials
- Nimesh N. Jariwala, 2013, A novel tripodal chelator for Fe^{3+} and Al^{3+} intoxication
- Shilpa Bothra, 2013, Anion-driven selective colorimetric detection of Hg^{2+} and Fe^{3+} using functionalized silver nanoparticles.
- Dharmesh Ahir, 2013, Pyridoxal as acetate selective chemosensor.
- Priyank Patel, 2013, Design, synthesis and structural analysis of binary cocrystals derived from API 1,4-bis(4-pyridyl)-2,3-diaza-1,3-butadiene and camphoric acid
- Ankit R. Mistry, 2012, A simple colorimetric anion sensor with higher selectivity for acetate anion.
- Nilkanth M. Matiwala, 2011, Development of colorimetric sensors

Invited Talks Delivered (Recent only):

- Sensing with vitamin B6 cofactors conjugated fluorescent nanoclusters, IIT Gandhinagar, NCONC-20-PXX, 12-13th Feb 2020.
- Generating white-light emission from a single nano-assembly with its potential application in the detection of alkaline phosphatase activity in biological samples, Orissa Chemical Society, 24-25th Dec 2019.
- Chemically modified cellulose strips with vitamin B6 cofactors conjugated fluorescent nanoclusters for the detection of metal ions; 254th ACS meeting, Washington, August 20-24, 2017.
- Fluorescent nanoclusters and its application in sensing, National Conference on Advances in Chemical Sciences (ACS-2017), North Maharashtra University, Jalgaon, March 2017.
- Supramolecular Chemistry and Nanotechnology, Uka Tarsadia University, 25th March, 2017

- Fluorescent nanoclusters and its application in sensing of metal ions, ICNM 2017, 10-12 Feb 2017, Mahatma Gandhi University, Kottayam, Kerala, India.
- Fluorescent nanoclusters: applications in sensing of metal ions and nitro compounds, RTG-Hazira, June 2017.
- Supramolecular Chemistry and Deep Cavitand, Workshop on 'Current Scenario in Chemical Sciences and Technology (CSCST-2017), SVNIT, Jan 2017.
- Applications of Computational Tools in understanding molecular interactions; Workshop on 'Current Scenario in Chemical Sciences and Technology (CSCST-2017), SVNIT, Jan 2017.
- Optical sensing of ionic analytes using vitamin B6 cofactors derivatives, Recent Advances in Analytical Sciences, IIT BHU, April 2016.
- Optical sensing using Vitamin B_6 cofactors from aqueous medium, 7^{th} International Symposium on Nano & Supramolecular Chemistry- Materials Science, 14th to 17th August 2015, South Korea
- Vitamin B6 cofactors derived chemosensors for bioactive anions: applications in live cells imaging and molecular logic gates, *4th International Conference on Molecular Sensors and Molecular Logic Gates (MSMLG2014), East China University of Science and Technology (ECUST), Shanghai, China, November 9-12, 2014*

Courses Taught:

Engineering Chemistry; Fundamental Chemistry; Inorganic Chemistry; Advanced Inorganic Chemistry; Computational Chemistry; Spectroscopic methods; Advanced Spectroscopic methods etc.

Awards and Recognitions:

- 2009, Young Scientist Award, Orissa Chemical Society, Orissa, India
- 2004, Young Scientist Award, Punjab Academy of Sciences, Punjab, India
- July 2005-June 2006, Junior Research Fellowship, UGC, New Delhi, India.

Reviewer Experiences:

Reviewed articles from the listed journals: Spectrochimica Acta A; Journal of photochem photobiology A; Dyes and Pigments; Materials and Design; Journal of Molecular Liquids; Indian J Chem A; New Journal of Chemistry; Journal of Analytical Methods in Chemistry; RSC Adv; Analytical Methods; Analytical Chimica Acta; European Journal of Medicinal Chemistry; Research on Chemical Intermediates; Journal of fluorescence; Journal of Hazardous

Materials; Talanta; Journal of Molecular structure; Journal of Molecular Modeling; Journal of Coordination Chemistry; Supramolecular Chemistry; Nanoscale; Biosensors and Bioelectronics; Inorganica Chimica Acta; ChemistrySelect; Materials Chemistry and Physics; Journal of Molecular Graphics and Modelling; Molecular Systems Design & Engineering; Tetrahedron; Tetrahedron Letters; Materials Science & Engineering C; Inorganic Chemistry Communications; Chinese Chemical Letters; Catalysis Today; Luminescence: The Journal of Biological and Chemical Luminescence; Journal of Luminescence; Journal of Solution Chemistry; Analytical Science; ACS Applied Materials & Interfaces; Journal of Saudi Chemical Society; International Journal of Nanoscience; International Journal of Environmental Analytical Chemistry; World Journal of Chemical Education; Sensors; Measurement; Coordination Chemistry Reviews; Journal of Chemical Science and Technology; Journal of Molecular Recognition; Fibers and Polymers; Journal of Chemical Thermodynamics; Central European Journal of Chemistry; Bioorganic & Medicinal Chemistry Letters

Editorial Advisory Board Membership:

Micro and Nanosystems (Bentham), 2017-

Nanoscience & Nanotechnology-Asia (Bentham), 2017-

Innovations in Corrosion and Materials Science (Bentham), 2017-

Administrative Experiences:

I have associated with several duties like Associate warden; Member of Anti-ragging committee; PG Incharge; UG Incharge; Lab-Incharge, Member of the Library committee; Member secretary of the Department; Coordinator of annual report, Department time table coordinator etc