

CURRICULUM VITAE

Dr. Satyanarayan Sahoo

Assistant Professor

M. Sc. (Utkal University), Ph.D. (IIT Madras)



1. Name with address:

Dr. Satyanarayan Sahoo

Assistant Professor

P. G. Department of Chemistry

Berhampur University, Bhanja Bihar

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2. Areas of Interest/Specialization:

Organometallic Chemistry, Organic Synthesis, Nanochemistry

3. Qualifications:

M. Sc. – Utkal University – 2005

Ph. D. – IIT Madras – 2010

4. Professional Experience:

Assistant Professor, Chemistry, Berhampur University (2011-2015)

Assistant Professor (Stage-II), Chemistry, Berhampur University (2015-2020)

Assistant Professor, Chemistry (Stage-III), Berhampur University (2020-till date)

5. Responsibilities held at Berhampur University:

Assistant Superintendent, Bahuda Hostel, July 2011 to May 2014

Associate Editor, Annual Report 2014

Associate Editor, Annual Report 2015

Member, Board of Studies, Chemistry, 2016-till date

Member, DRDC, Chemistry, 2016-till date

Member, NAAC Steering Committee, 2016

Group Member, Centre of Excellence, Berhampur University, 2019-till date

Chairman, Board of Studies, Chemistry, June 2021-till date

Coordinator, Department of Chemistry, Berhampur University, June 2021-till date

6. M. Sc. Students Guided:

Completed – 15

Pursuing – 11

7. M. Phil. Scholars Guided:

Completed – 11

8. Ph. D. Scholars Guided:

Completed – 03

Pursuing – 05

9. Research Projects:

1. Principal Investigator, Synthesis of some carbohydrate functionalized thiourea and thiazolidinones and their applications as analytical reagents for estimation of toxic metals and fluoride ions in industrial effluent water, SERB, India, 18.3 Lakhs, 2018-21,
2. Group Member, Nanoscience and Technology for the Development of Sensor, Centre of Excellence, Berhampur University, OHEPEE, Govt. of Odisha, 300 Lakhs, 2019-24.

10. Publications:

1. **S. Sahoo**, K. H. K. Reddy, R. S. Dhayal, S. M. Mobin, V. Ramkumar, E. D. Jemmis and S. Ghosh Chlorinated Hypoelectronic Dimetallaborane Clusters: Synthesis, Characterization and Electronic Structures of $(\eta^5\text{-C}_5\text{Me}_5\text{W})_2\text{B}_5\text{H}_n\text{Cl}_m$ ($n = 7$, $m = 2$ and $n = 8$, $m = 1$), *Inorg. Chem.* **2009**, *48*, 6509-6516.
2. **S. Sahoo**, R. S. Dhayal, B. Varghese and S. Ghosh Unusual Open Eight-Vertex Oxamolybdaboranes: Structural Characterizations of $(\eta^5\text{-C}_5\text{Me}_5\text{Mo})_2\text{B}_5(\mu_3\text{-OEt})\text{H}_6\text{R}$ ($\text{R} = \text{H}$ and $n\text{-BuO}$), *Organometallics* **2009**, *28*, 1586-1589.
3. R. S. Dhayal, **S. Sahoo**, V. Ramkumar and S. Ghosh Substitution at Boron in Molybdaborane Frameworks: Synthesis and Characterization of Isomeric $(\eta^5\text{-C}_5\text{Me}_5\text{Mo})_2\text{B}_5\text{H}_n\text{X}_m$ (When $\text{X} = \text{Cl}$: $n = 5, 7, 8$; $m = 4, 2, 1$ and when $\text{X} = \text{Me}$: $n = 6, 7$; $m = 3, 2$), *J. Organomet. Chem.* **2009**, *694*, 237-243.
4. **S. Sahoo**, S. M. Mobin and S. Ghosh Direct Insertion of Sulfur, Selenium and Tellurium atoms into Metallaborane Cages using Chalcogen Powders, *J. Organomet. Chem.* **2010**, *695*, 945-949.
5. R. S. Dhayal, **S. Sahoo**, K. H. K. Reddy, S. M. Mobin, E. D. Jemmis and S. Ghosh Vertex-Fused Metallaborane Clusters: Synthesis, Characterization and Electronic Structure of $[(\eta^5\text{-C}_5\text{Me}_5\text{Mo})_3\text{MoB}_9\text{H}_{18}]$, *Inorg. Chem.* **2010**, *49*, 900-904.
6. K. Geetharani, S. K. Bose, **S. Sahoo** and S. Ghosh A Family of Heterometallic Cubane-Type Clusters with an $\text{exo-Fe}(\text{CO})_3$ Fragment Anchored to the Cubane, *Angew. Chem. Int. Ed.* **2011**, *50*, 3908–3911.
7. K. Geetharani, S. K. Bose, **S. Sahoo**, B. Varghese, S. M. Mobin and S. Ghosh Cluster Expansion Reactions of Group 6 and 8 Metallaboranes Using Transition Metal Carbonyl Compounds of Groups 7-9, *Inorg. Chem.* **2011**, *50*, 5824-5832.
8. A. Thakur, **S. Sahoo** and S. Ghosh A Homometallic Tricapped Cubane Cluster: $[(\text{Cp}^*\text{Mo})_4\text{B}_4\text{H}_4(\mu_4\text{-BH})_3]$ ($\text{Cp}^* = \eta^5\text{-C}_5\text{Me}_5$), *Inorg. Chem.* **2011**, *50*, 7940-7942.
9. S. K. Bose, K. Geetharani, **S. Sahoo**, K. H. K. Reddy, B. Varghese, E. D. Jemmis and S. Ghosh Synthesis, Characterization, and Electronic Structure of New Type of Heterometallic Boride Clusters, *Inorg. Chem.* **2011**, *50*, 9414-9422.
10. R. S. Dhayal, S. J. Ponniah, **S. Sahoo** and S. Ghosh, Synthesis and Structural Characterization of an Open Cage Dithiatungstaborane $[(\text{C}_p\text{W})_2\text{B}_4\text{H}_4\text{S}_2]$ Cluster, *Ind. J. Chem.* **2011**, *50A*, 1363-1368.
11. B. B. K. R Reddy, K. E. V. Nagoji, S. Sahoo, M. Shoney and P. Prasanthi, Formulation and Evaluation of Controlled Release Matrix Tablet of

Cephalexin: Influence of Combination of Hydrophobic and Hydrophilic Matrix Former, *J. Drug. Del. Res.* **2015**, 4(4), 1-9.

12. B. B. K. R Reddy, K. E. V. Nagoji and **S. Sahoo**, Formulation Design and Evaluation of Cephalexin Controlled Release Matrix Tablets, *World. J. Pharm. Res.* **2016**, 5(8), 1193-1204.

13. B. B. K. Reddy, K.E.V. Nagoji, **S. Sahoo** and Y. Parimala, Formulation, In-Vitro Evaluation and Release Kinetics of Cephalexin Matrix Tablets using HPMC K4M, HPMC K15M, HPMC K100M and Ethyl Cellulose, *J. Chem. Pharm. Sci.* **2017**, 10(3), 1394-1400.

14. V. V. Ravindra, T. U. Rao, I. N. Rao and S. Sahoo, Studies on the Distribution of Particulate Trace Metal like Cadmium and Copper in Visakhapatnam Harbor Waters, India, *IOSR J. Appl. Chem.*, **2017**, 10(9), 1-10

15. L. Sahoo, A. Singhamahapatra and **S. Sahoo** Synthesis of 1,3-divalent glycoconjugates with diverse structure and functionalization, *J. Serb. Chem. Soc.* **2018**, 83(5), 539–548

16. B. B. K. Reddy, K.E.V. Nagoji, **S. Sahoo** and Y. Parimala, Preparation and *in vitro* & *in vivo* evaluation of cephalexin matrix tablets, *Braz. J. Pharm. Sci.* **2018**, 54(3), e1727.

17. L. Sahoo, A. Singhamahapatra and **S. Sahoo** 5-Benzoyl Triazole as New Structural Dimension in Glycoconjugates, *Carbohydr. Res.* **2018**, 469, 23-30.

18. A. Singhamahapatra, L. Sahoo and **S. Sahoo** Mosquito Repellent: A Novel Approach for Human Protection in Molecular Identification of mosquito vectors and their management, T. K. Barik (Ed.), Springer Nature, **2020**, 149-178.

11. Conferences/Workshops/Orientation Programme/ Refresher Courses

Attended:

1. **S. Sahoo**, K. H. K. Reddy, R. S. Dhayal, S. M. Mobin, V. Ramkumar, E. D. Jemmis and S. Ghosh. Chlorinated Hypoelectronic Dimetallaborane Clusters: Synthesis, Characterization and Electronic Structures of $(\eta^5\text{-C}_5\text{Me}_5\text{W})_2\text{B}_5\text{H}_n\text{Cl}_m$ ($n = 7$, $m = 2$ and $n = 8$, $m = 1$), Modern Trends in Inorganic Chemistry-XII, IIT Madras, 06-08th December, 2007.

2. **S. Sahoo**, R. S. Dhayal, B. Varghese and S. Ghosh. Unusual Open Eight-Vertex Oxamolybdaboranes: Structural Characterizations of $(\eta^5\text{-C}_5\text{Me}_5\text{Mo})_2\text{B}_5(\mu_3\text{-OEt})\text{H}_6\text{R}$ ($\text{R} = \text{H}$ and $n\text{-BuO}$), 11th CRSI National Symposium in Chemistry, Pune, 06-08th February, 2009.

3. **S. Sahoo**, S. M. Mobin and S. Ghosh. Direct Insertion of Sulfur, Selenium and Tellurium atoms into Metallaborane Cages using Chalcogen Powders, Inorganic Ring Systems- 12, Goa, 16th-21st August, 2009.

4. **S. Sahoo**. Cubane geometries in metallaborane chemistry, National Seminar on Frontiers in Recent Chemical Research, P. G. Department of Chemistry, Berhampur University, Odisha, 26-27th November, 2011.

5. **S. Sahoo**. Boranes and Metallaboranes, Invited Talk in DST-PURSE Sponsored National Seminar, Utkal University, Odisha, 28th March, 2012.

6. **L. Sahoo and S. Sahoo.** Green chemistry: challenges ahead, National Seminar on Green Chemistry: Solution to Environmental Crisis, P. G. Department of Chemistry, Berhampur University, Odisha, 13-14th October, 2012.
7. **S. Sahoo.** Synthesis and reactivity of heterodimetallaboranes of group 6 transition metals, Award Lecture, 26th Annual Conference, Orissa Chemical Society, Ravenshaw University, Cuttack, Odisha, 08-09th December 2012.
8. **A. Satapathy and S. Sahoo.** Synthesis and Characterization of Transition Metal Complexes of Carbothioamide Ligands, National Seminar on Emerging Trends in Chemical Sciences, Saraswati Vidya Mandir, Neelakantha Nagar, Odisha, 12-13th April, 2014.
9. **S. Sahoo.** Synthesis, Characterization and Pharmacological Study of Transition Metal Complexes of Carbothioamide Ligands, International Conference on Innovative Applications of Chemistry in Pharmacology & Technology, P. G. Department of Chemistry, Berhampur University, Odisha, 06-08th February, 2015.
10. **S. Sahoo.** Carbothioamide based chemosensors for transition metal ions, National Seminar on Recent Advancements in Material Sciences, Department of Chemistry, Veer Surendra Sai University of Technology, Burla, Odisha, 14-15th November, 2015
11. **S. Sahoo.** Studies on metal sensing abilities of carbothioamide ligands, 29th Annual Conference of Orissa Chemical Society and National Seminar on Recent Advances on Material Science for Sustainable Energy and Environment, Indira Gandhi Institute of Technology, Sarang, Odisha, 24-25th December 2015.
12. **S. Sahoo.** Synthesis and Characterization of Transition Metal Complexes of Schiff Base Ligands, National Seminar on Roll of Chemistry in Agriculture & Environment, Neelamadhab Mahavidyalaya, Kantilo, Odisha, 21st-22nd February 2016.
13. B. B. K. Reddy, K. E. V. Nagoji, **S. Sahoo** and R. Geeta Rani. Formulation and Evaluation of Domperidone Fast Dissolving Tablet Using *Musa paradisiaca L.*, as a Natural Superdisintegrant, National Seminar on Green Environment for Sustainable Development, T. S. D. College, B. D. Pur, Ganjam, Odisha, 23rd-24th July 2016.
14. **S. Sahoo.** Synthesis and Characterization of Transition Metal Complexes with Schiff Base Ligands, 30th Annual Conference of Orissa Chemical Society, KIIT University, Bhubaneswar, Odisha, 24-25th December 2016.
15. **S. Sahoo.** Air pollution: Impact, Prevention and Mitigation, National Seminar on Air Pollution: its effects & Mitigation, O. P. S. Mahavidyalaya, Dhenkanal, Odisha, 07-08th January 2017.
16. **S. Sahoo.** Carbothioamide based chemosensors for selective detection of transition metal ions, International Conference on Recent Advances in Materials Chemistry, Utkal University, Bhubaneswar, Odisha, 24-26th February 2017.
17. **S. Sahoo.** Air pollution: Sources, Effects, Prevention and Mitigation, National Seminar on Environmental Protection: Concerns and Avenues, Aska Science College, Aska, Odisha, 28th February 2017.
18. S. K. Panigrahi, S. S. Nayak, M. Jena and **S. Sahoo.** Evaluation of Wound Healing Activity of Extracts of *Mimosa Pudica Linn*, International Conference on

Recent Trends of Chemical & Biological Sciences in Medicine, Natural Product and Drug Discovery, P. G. Department of Chemistry, Berhampur University, Odisha, 03rd-05th March, 2017.

19. S. K. Panigrahi, S. S. Nayak, M. Jena and **S. Sahoo**. Evaluation of Antimicrobial Activity of Extracts of *Mimosa Pudica Linn*, 31st Annual Conference of Orissa Chemical Society and National Seminar on Recent Developments and Applications of Functional Material, Centurion University of Technology & Management, Paralakhemundi, Odisha, 23rd-24th December 2017.

20. L. Sahoo, A. Singhamahapatra and **S. Sahoo**. Synthesis and structural aspects of 5-Benzoyl triazole linked glycoconjugates, National Seminar on Recent Advances in Functional Nano Materials 2018, NIST, Berhampur, Odisha, 23rd-24th December 2018.

21. **S. Sahoo**. Recent Advances in Coordination Compounds, Invited Talk, RCM Science College, 15th February 2019.

22. **S. Sahoo**. Carbohydrate functionalized thiourea as chemosensor for selective detection of transition metal ions, International Conference on Chemical & Biological Sciences in Drug Discovery 2019, Berhampur University, 8-10th March 2019.

23. L. Sahoo and **S. Sahoo**. Click chemistry: An Alternate, Green Approach for Synthesis of Carbohydrate Functionalized Biomolecules, State Level Seminar and Regional Conference of Orissa Chemical Society, Kendrapara College, 3rd November 2019.

24. **S. Sahoo**. Organometallic Compounds, Invited Talk, Kendrapara College, 4th November 2019.

25. **S. Sahoo**. Importance of Metal Cluster, Invited Talk, RCM Science College, 19th November 2019.

26. **S. Sahoo**, Recent Trends in Coordination Compounds, Invited Talk, Government Science College Chatrapur, 30th December 2019.

27. **S. Sahoo**, Thiourea based colorimetric chemosensor for selective detection of fluoride ion, National Conference on Organic Synthesis 2020, Berhampur University, 02nd-03rd March 2020.

28. UGC sponsored Orientation Programme on Disaster Management, Academic Staff College, Utkal University during 03-30th December 2011.

29. UGC sponsored Refresher Course on Recent Trends in Physical Sciences, UGC-Human Resource Development Centre, Utkal University, Odisha during 19th February-09th December 2015.

30. UGC sponsored Refresher Course in Chemistry, Utkal University, Bhubaneswar, Odisha, 29th August-18th September 2017.

31. UGC sponsored Refresher Course in Research Methodology in Basic Science, UGC-HRDC, Utkal University during 19th August-1st September 2019.

32. UGC sponsored Refresher Course in Research Methodology in Basic Science, UGC-HRDC, Utkal University during 10th-23rd February 2021.

33. NMR Workshop, IISER Berhampur, 24-26th September 2018.

34. Faculty Development Programme on Online Teaching-Learning and Research Methodology, Govt. P. G. College, Bilaspur, Rampur, Uttar Pradesh, 18-29th July 2020.
35. Faculty Development Programme on Trends in Chemical Science: Challenges and Opportunities in the coming decade, Department of Chemistry, Central University of Jharkhand, 21st-26th September 2020.

Organized:

1. **Co-Convener**, National Seminar on Frontiers in Recent Chemical Research, P. G. Department of Chemistry, Berhampur University, Odisha, November, 2011.
2. **Co-Convener**, National Seminar on Green Chemistry: Solution to Environmental Crisis, P. G. Department of Chemistry, Berhampur University, Odisha, October, 2012.
3. **Co-Convener**, National Seminar on Emerging Trends in Chemical Sciences, Saraswati Vidya Mandir, Neelakantha Nagar, Berhampur, Odisha, April, 2014.
4. **Co-Convener**, International Conference on Innovative Applications of Chemistry in Pharmacology & Technology, P. G. Department of Chemistry, Berhampur University, Odisha, February, 2015.
5. **Co-Convener**, International Conference on Recent Trends of Chemical & Biological Sciences in Medicine, Natural Product and Drug Discovery, P. G. Department of Chemistry, Berhampur University, Odisha, March, 2017.
6. **Co-Convener**, International Conference on Chemical & Biological Sciences in Drug Discovery, P. G. Department of Chemistry, Berhampur University, Odisha, March, 2019.
7. **Co-Convener**, National Conference on Organic Synthesis 2020, P. G. Department of Chemistry, Berhampur University, Odisha, March, 2020.
8. **Convener**, National Webinar on Recent Advances in Chemical Sciences, P. G. Department of Chemistry, Berhampur University, Odisha, March, 2021.

12. Member of Academic Bodies:

1. Patron member of Orissa Chemical Society
2. Life Member of Association of Environmental Analytical Chemistry of India

13. Scholarships and Awards:

1. Qualified **CSIR-UGC** Junior Research Fellowship examination and National Eligibility Test, June 2006.
2. Qualified Graduate Aptitude Test in Engineering (**GATE**), 2006.
3. R. C. Tripathy Young Chemist Award, Orissa Chemical Society, 2012.
4. Teachers Associateship for Research Excellence (**TARE**) Fellow, IISER Berhampur, 2018-21.

14. Google Scholar Citations: 396

h-index: 8

i10-index: 8