Curriculum Vitae

Name :	Dr. Arvind Kumar Sahu
Address (Official) :	Department of Chemistry, St. Thomas College, Bhilai (C.G) India.
Address (Residence) :	Dr. AKS Institute, near chandrakar cement house, Borsi road, New Adarsh Nagar, Durg, Chhattisgarh, 491001
Phone No.:	9479283829

Place of Education :	Raipur
Qualifications :	Ph.D
Designation :	Assistant Professor
Area of Specialization :	1. In-vitro reactivation kinetics of organophosphates (Chemical warfare agents: sarin, VX, DFP, Pesticides: paraoxon, parathion) inhibited enzyme acetylcholinesterase using charged and uncharged oximes based reactivators. 2. Study of physicochemical properties (acid dissociation constant: pKa and lipophilicity: log P) of acetylcholinesterase reactivators. 3. Molecular Docking Studies.
Work Experience :	1. Lecturer in Rungta College of Engineering and Technology (R 1), Bhilai, Kohka, 7-9 Months teaching experience. 2. 6 months teaching experience in Guru Ghasidas Vishwavidyalaya, Bilsapur (Jan. 23 to June 22, 2018). 3. 2 months research experience in DRDE Gwalior on chemical Weapons. 4. 3 years (2018-2021) teaching experience in Government Girls College, Durg, Chhattisgarh.
Awards :	1. Young Scientist Award (Santi Ranjan Palit memorial Award), 51th Annual Convention of Chemists-2014, Dec.9-12, 2014, Kurukshetra University, Haryana. 2. Young Scientist Award (Association of Kineticst Award), 52th Annual Convention of Chemists-2015, Dec.28-30, 2015, JECRC University, Jaipur.

3. Selected in Indian Science Congress Association, Young Scientist Award Presentation, University of Mysore, Jan. 03-07, 2016.
4. Shri Premchand Jain Memorial Young Scientist Award, 2017, First prize, organized by Adina group of Institutions, Sagar, M.P.
5. Second prize on poster competition, One Day symposium on Science and Technology, organized by SoS in Chemistry, PTRSU, Raipur.
6. Young Scientist Award, Second Prize, 15th Chhattisgarh Young Scientist Congress, CSVTU, Bhilai.
7. Organic Process Research and Development, best poster award by 22nd Chemical Research Society of India, National Symposium in Chemistry, 1 – 4 Feb. 2018, Pt Ravishankar Shukla University, Raipur, C. G.

Courses Attended

1. Self financed short term training program on Computational Drug Design UsingMolecular Docking and Virtual Screening, 12-14th March, 2015, Department of Chemistry, Visvesvaraya National Institute of Technology, Nagpur.
2. Attended Workshop on h-index, i10-index and scopus 17th January, 2015, Pt. Ravishankar Shukla University, Raipur.
3. National Level One Week Faculty Development Program on Research Methodology. 26th April to 1st May 2021, organised by Kamla Nehru Mahavidyalaya.

Additional Responsibilities

INSPIRE INTERNSHIP CAMP

1. Inspire Internship Camp, An Initiative of Department of Science and Technology, New Delhi, July 16-20, 2013, Pt. Ravishankar Shukla University, Raipur.
2. Inspire Internship Camp, An Initiative of Department of Science and Technology, New Delhi, Dec. 26-30, 2013, Pt. Ravishankar Shukla University, Raipur.
3. Inspire Internship Camp, An Initiative of Department of Science and Technology, New Delhi, August 5-9, 2014, Pt. Ravishankar

Shukla University, Raipur.

4. Inspire Internship Camp, An Initiative of Department of Science and Technology, New Delhi, Dec. 26-30, 2014, Pt. Ravishankar Shukla University, Raipur.
5. Inspire Internship Camp, An Initiative of Department of Science and Technology, New Delhi, July 27-31, 2015, Pt. Ravishankar Shukla University, Raipur.
6. Inspire Internship Camp, An Initiative of Department of Science and Technology, New Delhi, Dec. 21-25, 2015, Pt. Ravishankar Shukla University, Raipur.
7. Inspire Internship Camp, An Initiative of Department of Science and Technology, New Delhi, August. 10-14, 2016, Pt. Ravishankar Shukla University, Raipur.

Publications Title

1.From α-nucleophiles to functionalized aggregates: exploring the reactivity of hydroxamate ion towards esterolytic reactions in micelles. Namrata Singh,Yevgen Karpichev, Rahul Sharma, Bhanushree Gupta, Arvind K. Sahu, Manmohan L. Satnami & Kallol K. Ghosh, Organic Biomolecular Chemistry 2015 Mar 14;13(10), 2827-48

2.Kinetic and physicochemical analysis of structurally different bis-pyridinium oximes against pesticide inhibited AChE, Arvind Kumar Sahu, Bhanushree Gupta, Rahul Sharma, Yama Singh, Kamil

Musilek, Kamil Kuca & Kallol K Ghosh, Indian Journal of Chemistry, 54, 2015, 40-45.

3. Oxime Mediated *In-Vitro* Reactivation Kinetic Analysis of Organophosphates-Inhibited Human and Electric Eel Acetylcholinesterase. Arvind Kumar Sahu,Rahul Sharma, Bhanushree Gupta, Kamil Musilek, Kamil Kuca, Jyotiranjan Acharya, Kallol K Ghosh. Toxicology Mechanism and Methods 2016, 26, 1-8.

4. Synthesis and in-vitro reactivation screening of imidazolium aldoximes as reactivators of sarin and VX-inhibited human acetylcholinesterase (hAChE). Rahul Sharma, Bhanushree Gupta, Arvind Kumar Sahu, Jyotiranjan Acharya, Manmohan L. Satnami, Kallol K. Ghosh, Chemico-Biological Interactions, 2016, Nov 25, 259, 85-92.

5. Reactivation kinetic studies of bis-pyridinium mono-oximes against nerve agents poisoning: An in vitro screening Arvind Kumar Sahu, Rahul Sharma, Bhanushree Gupta, Kallol K Ghosh, Toxicology Letters, 2016, 258, S250.

6.Degradation of Organophosphate Pesticides Using Pyridinium Based Functional Surfactants Rahul Sharma, Bhanushree Gupta, Toshikee Yadav, Srishti Sinha, Arvind Kumar Sahu, Yevgen Karpichev, Nicholas Gathergood, Jan Marek, Kamil Kuca, Kallol K. Ghosh, 2016, ACS Sustainable Chemistry & Engineering, 4, 12, 6962–6973.

Conferences

International

2015, Paper presented in "Reactivation Kinetic Studies of Bis-Pyridinum	September 27- October 2, 2015.	12th International Meeting on Cholinesterases, 6th International Conference On Paraoxonases, ,

Mono-Oximes Against Organophosphate Poisoning: An In-vitro Screening". Arvind Kumar Sahu.		Elche, (Alicante, Spain)
National		
1. 2013, Paper presented in Effect of Combination of Oximes for the Reactivation and Therapeutic Efficacy of Antidotal Treatment of Nerve gases inhibited Human AChE, Arvind Kumar Sahu, Young Scientist Award (Santi Ranjan Palit memorial Award).	December 9-12, 2013.	51th Annual Convention of Chemists-2014, Kurukshetra University, Haryana.
2. 2014, Paper presented in Regeneration of Pesticides Inhibited Cholinesterase, Arvind Kumar Sahu, Rahul Sharma, Bhanushree Gupta and Kallol K Ghosh.	January 23-25, 2014.	National Conference on Recent Trends in Chemical Sciences., Organized by- SoS in chemistry, Pt. Ravishankar Shukla University, Raipur.
3. 2014, Paper presented in The influence of combination of oximes on	February 6 – 9, 2014.	16th Chemical Research Society of India, IIT Powai, Mumbai,

the reactivating and therapeutic efficacy of antidotal treatment of organophosphate poisoning, Rahul Sharma, Arvind Kumar Sahu, Bhanushree Gupta and Kallol K Ghosh, Attended and presented a poster.		
4. 2015, Paper presented in Effect of Functional Groups and docking studies in Bis-Pyridinium Oximes for Reactivation of Organophosphate Inhibited Human Acetylcholinesterase, Arvind Kumar Sahu, Rahul Sharma, Bhanushree Gupta and Kallol K. Ghosh.	February 6-8, 2015.	17th CRSI NSC Symposium National Chemical Laboratory, Pune.
5. 2015, Paper presented in Physicochemical and Kinetic Analysis of Structurally Different Bis-pyridinium Oximes having different functionalities against Pesticide inhibited	February10-11, 2015.	National Conference on Innovation and Advancement in Chemical Science & Technology, St. Thomas College, Bhilai,

Acetylcholinesterase. Arvind Kumar Sahu, Rahul Sharma, Bhanushree Gupta and Kallol K. Ghosh.		
6. 2015, Paper presented in Nucleophilic Reactivation of Organophosphate inhibited Human Acetylcholinesterase: A Molecular Docking and Kinetic Study. Arvind Kumar Sahu, Rahul Sharma, Bhanushree Gupta, Kallol k. Ghosh.	December 28-30, 2015.	52nd Indian Chemical Society, Jecrc University Jaipur, Physical Sciences. Young Scientist Award (Association of Kinetics Award)
7. 2015, Paper presented in A Comparison of the Therapeutic and Reactivating Efficacy of Bis-pyridinium Oximes having different functionality with standard Oximes against Nerve Agent's Poisoned Human Acetylcholinesterase, Arvind Kumar Sahu,	February 28th – March 1st, 2015.	13th Chhattisgarh Young Scientists Congress, Indira Gandhi Krishi Vishwavidyalaya, Raipur,

8. 2015, Participated in 17th National Conference on Surfactants, Emulsions and Biocolloids, Pt. Ravishankar Shukla University, Raipur.	November 4-6, 2015	National Conference on Surfactants, Emulsions and Biocolloids,
9. 2016, Paper presented in Effect of Combination of Bis-pyridinium Oximes on the Reactivating Efficacy against Organophosphate poisoned Human Acetylcholinesterase: A Kinetic and Docking Study. Arvind Kumar Sahu, Rahul Sharma, Bhanushree Gupta, Kallol k. Ghosh.	January 3-7, 2016	Indian Science Congress Association, University of Mysore, Chemical Sciences. (Selected in Young Scientist Award Presentation).
10. 2016, Paper presented in Evaluation Of Reactivation Kinetic Study Of Bis-Oximes Having Different Functionality With Standard Oximes Against Organophosphate Poisoned	February 28 - 29, 2016.	14th Chhattisgarh Young Scientists Congress, Bilaspur University, Chhattisgarh,

Acetylcholineaterase, Arvind Kumar Sahu		
11. 2016, One Day Symposium on Science, Technology and Humanity	March 10, 2016	10th Point of Digital India e-Computational Research", Pt. Ravishankar Shukla University, Raipur.
12.2017, Paper presented in Shri Premchand Jain Memorial Young Scientist Award	March 4, 2017.	First prize, organized by Adina group of Institutions, Sagar, M.P.
13. 2017, 15th Chhattisgarh Young Scientist Congress, CSVTU, Bhilai. Young Scientist Award, Second Prize	February 28 - March 1, 2017.	15th Chhattisgarh Young Scientist Congress, CSVTU, Bhilai.
14. 2018, Organic Process Research and Development, best poster award by 22nd Chemical Research Society of India.	February 1 – 4, 2018.	National Symposium in Chemistry, Pt Ravishankar Shukla University, Raipur, C. G.
15. 2018, 16th Chhattisgarh Young Scientists Congress Indira Gandhi Krishi Vishwavidyalaya, Raipur, Arvind Kumar Sahu	February 27 - 28, 2018.	Indira Gandhi Krishi Vishwavidyalaya, Raipur