CV

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Academic qualification

Exam Passed	Discipline/Subjec ts	Institute/University	Passing Year	Division
B.Sc.	Zoology, Botany and Chemistry	Dr. B. R. Ambedkar University Agra, U. P., India	2001	First
M.Sc.	Environmental Science	Babasaheb Bhimrao Ambedkar University Lucknow, U. P., India	2006	First
M. Tech.	Environmental Engineering	National Institute of Foundry and Forge Technology, Ranchi (Ranchi University, Ranchi), India	2010	First
Ph.D.	Civil Engineering (Environmental Engineering)	Indian Institute of Technology Guwahati, Assam (IITG), India	2013	-

Dissertation / Thesis title

- Singh, J., 2013. Ph.D. thesis entitled as "Chemical Speciation and Bioavailability of Heavy Metals during Water Hyacinth Composting" advised by Dr. Ajay S. Kalamdhad at IIT Guwahati, Assam. (http://gyan.iitg.ernet.in/handle/123456789/414).
- Singh J., 2010. M. Tech thesis entitled as "Removal of anionic dye from aqueous solution by modified sawdust" advised by Professor Y. C. Sharma (IIT BHU, Varanasi) and Professor N. S. Mishara (National Institute of Foundry and Forge Technology, Ranchi).
- M.Sc. Dissertation entitled as "Study of Water Pollution in Gomti River" advised by Dr. Narendra Kumar at Babasaheb Bhimrao Ambedkar University, Lucknow (UP), India.

Professional Experience: 4 Year and 6 months

- 1. Working as Assistant Professor at Department of Environmental Science, Babasaheb Bhimrao Ambedkar University, Lucknow-226025, from June 27, 2016 to present.
- 2. Worked as Assistant Professor at Department of Environmental Engineering, Kwangwoon University, Seoul, South Korea, from March 01, 2015 to June 24, 2016.
- 3. Worked as Post-Doctoral Research Fellow at Department of Civil Engineering and Environmental Engineering, University of Ulsan, South Korea, from December 16, 2013 to February, 2015.

Teaching Experience at IIT Guwahati

- 1. Taken laboratory classes of B. Tech Civil Engineering students (VI semester 2012) with Dr. Saswati Chakraborty. Sub.: Environmental engineering I (3-0-0-6).
- 2. Taken laboratory classes of M. Tech Environmental engineering students (I semester, July to November, 2011) with Dr. P. K Ghosh. Sub.: Process Chemistry for Water and Wastewater Treatment (CE 521).
- 3. Taken laboratory classes of B. Tech Civil Engineering students (VI semester, January to April 2011) with Professor M. Jawed. Sub.: Environmental engineering I (3-0-0-6).

Teaching Experience at Kwangwoon University

Post graduate level

- Ecological Engineering
- Environmental application of nanotechnology
- Physico-chemical process in Environmental Engineering
- Waste minimization and resources recovery

Ph. D. supervision

S.N.	Name of	Title of thesis	Year of	Year of
	student		completion	registration
1.	Mr. Chandra Development of novel adsorbent from		2017	Ongoing
	Bhan	natural materials and its application		
		for Arsenic removal (Tentative)		
2.	Ms. Shalu Recovery of valuable materials from			Ongoing
	Rawat the solid wastes (Tentative)			
3.	Ms. Lata	Preparation of biochar from waste	Ongoing	Ongoing
	Verma	materials (Tentative)	_	

4.	Ms.	Nikita	Anaerobic digestion of waste biomass	Ongoing	Ongoing
	Kanauj	ia	(Tentative)		

Fellowship/Honour/Award/Achievements

- 1. Post-Doctoral Fellowship (Brain Korea Research 21), University of Ulsan, Ulsan, South Korea (from December, 2013 to February, 2015).
- 2. Doctoral Fellowship by MHRD, Government of India from July 2010-December 2013.
- 3. GATE (Graduate Aptitude Test of Engineering) Scholarship by MHRD, Government of India from August 2008- July 2010 (Score-437, All India rank-485, Year-2008).
- 4. UGC National Eligibility Test (Environmental Science), 2013
- 5. Outstanding Reviewer Award in 2015 from Elsevier
- 6. ICAR National Eligibility Test (Environmental Science), 2013
- 7. Outstanding Reviewer Award in 2015 from Elsevier
- 8. Outstanding Reviewer Award in 2016 from Elsevier
- 9. Reviewer recognition Award in 2016 from American chemical society (ACS)
- 10. Outstanding Reviewer Award in 2018 from Elsevier
- 11. Received "Environmental conservation award" in International seminar on Environmental Issues & Challenges in the 21st Century (EICC-2019) held at Bareilly College, Bareilly, U.P. India, from January 20-22, 2019.

Academic Membership-

- 1. The Institutions of Engineers, India, Associate member (MEMBCODE- AM1505249, RECSLNO- 130200622970), from October, 31 2013 to present.
- 2. Korean Society of Environmental Engineers (Member no. 7351)
- 3. Asia-Pacific Chemical, Biological & Environmental Engineering Society (APCBEES) (Member no. 201901) from (March 07-2016 to present)
- 4. Life time member- Prof. H.S. Srivastava Foundation for Science and Society, Lucknow, India

Supervision of Master thesis (M. Sc. Environmental Science)

(.N.	Name of	Title of thesis	Year	of
		student		completi	ion

1.	Anamika Gautama	Removal of phenol red from aqueous solution using "green"zero-valent iron nanoparticles synthesized from the extract of waste tea	2017
2.	Naincy Shahu	Removal of methylene blue in an aqueous solutions using iron nanoparticles prepared from the mosambi (Citrus sinensis (L.) Osbeck) pulp	2017
3.	Pallavi Vishnoi	Removal of methyl orange from aqueous solutions using "green"zero-valent iron nanoparticles synthesized from the extract of cauliflower leaves	2017
4.	Alka Verma	Synthesis of a novel low cost magnetic adsorbent from waste disposable cups: an application for removal of rhodamine-b from an aqueous solution	2018
5.	Subham Mishra	Removal of phenol from aqueous solution by activated carbon prepared from corn husk by thermal activation	2018
6.	Swati Singh Yadav	Synthesis of magnetic bioadsorbent from corn husk waste and its application for removal of p-nitrophenol from an aqueous solution	2018
7.	Dipti	Adsorption of hazardous dye crystal violet by low cost biosadsorbent synthesized from flower waste (marigold)	2018
8.	Dhruv Narayan	Synthesis of bioadsorbent from the Cauliflower Waste and its application for the removal of p-nitrophenol from an aqueous solution	2018
9.	Kshipra Shukla	A novel approach to utilize waste disposable cups for the development of adsorbent and its application for the removal of malachite green from an aqueous solution	2018
10.	Nidhi Yadav	Synthesis of bioadsorbent from the Cauliflower Waste and its application for the removal of phenol from an aqueous solution	2018
11	Mohd. Ibrahim	Preparation of bioadsorbent from <i>Citrus limetta</i> pulp for the removal of fluoride from aqueous solution	2018

Research/Consultancy Projects

S.N o.	Title of the Project	Duration of the Project	Sponsorin g Agency	Value of the Project Rs. (in lakhs)	Other Investigators/ Co- Investigators
1.	Development of novel nano materials from waste materials and their applications for removal of inorganic and organic	(2017-2019)	UGC start up Grant	10, 00, 000/-	Nil

	pollutants from the water and wastewater			
2.	Synthesis of low cost materials for the removal of arsenic and fluoride from the ground water and wastewater	DST, SERB (Early research carrier award)	12, 82, 413/-	Nil

Research Interest

Specialization: Environmental Science & Engineering

Area of interest

Solid waste management; Composting; Vermicomposting; Bioavailability and chemical speciation of heavy metals; Characterization and analysis of solid wastes; Water and waste water treatment; Ecological Engineering; Remediation of soil pollutants; Recovery of heavy metals from solid waste; Phytoremediation; Synthesis and environmental applications of nanomaterial.

List of Publications

Publication in referred Journals-56

Total impact factor=100.188 (as on Feb, 2019)

<u>2019</u>

 Ibrahim, Mohd., Siddique, A., Verma, L., Singh, J., Koduru, J. R. 2018. Adsorptive removal of fluoride from aqueous solution by biogenic iron permeated activated carbon derived from sweet lime waste *Acta Chimica Slovenica*, 66 (1), 123-136 (SCI) (IF=1.104).

2018

Gautam A, Rawat, S., Verma, L., <u>Singh, J.,</u> Sikarwar, S., Yadav, B.C., Kalamdhad, A.S., 2018. Green synthesis of iron nanoparticle from extract of waste tea: An application for phenol red removal from aqueous solution. *Environmental Nanotechnology, Monitoring & Management* 10, 377-387 (Elsevier) (Scopus).

- 3. Lingamdinne, L. P., Choi, J.-S., Yang, J.-K., Chang, Y.-Y., Koduru, J. R., Singh, J., 2018. Adsorptive Removal of Selected Anionic and Cationic Dyes by Using Graphitic Carbon Material Prepared from Edible Sugar: A Study of Kinetics and Isotherms. *Acta Chimica Slovenica* 65 (3), 599-610 (SCI) (IF=1.104).
- **4.** Ghosh, U., Hazarika, J., Kalamdhad, A.S., Khwairakpam, M., <u>Singh J.</u>, 2018. Speciation of trace metals (Cu, Zn, Ni, Fe and Mn) during rotary drum composting of paper mill sludge. *G- Journal of Environmental Science and Technology* 5(5): 61-68.
- 5. Lingamdinne, L. P., Choi, J.-S., <u>Singh, J.,</u> Chang, Y.-Y. Yang, J.-K. Karri, R. R. 2018. Multivariate modelling via artificial neural network applied to enhance methylene blue sorption using graphene-like carbon material prepared from edible sugar. *Journal of Molecular Liquids* 265 (2018) 416–427. SCI, Elsevier (IF=4.513).
- 6. <u>Singh, J.,</u> Chang, Y.-Y., Koduru, J.R., Yang, J.K., 2018. Potential Degradation of Methylene Blue (MB) by Nano-Metallic Particles: A Kinetic Study and Possible Mechanism of MB Degradation. *Environmental Engineering Research* 23(1):1-9 (Scopus) (IF=1.5).
- 7. Hazarika, J., Ghosh, U., Kalamdhad, A.S., Khwairakpam, M., <u>Singh J.,</u> 2018. Fractionation and reduction in bioavailability of toxic heavy metals during rotary drum composting of paper mill sludge. *Nature, Environment and Pollution Technology 17 (3)* 999-1004. (Scopus)
- 8. <u>Singh, J.</u>, Lee, B. K. 2018. Effects of Nano-TiO₂ particles on bioaccumulation of 133Cs from the contaminated soil by Soybean (Glycine max). *Process Safety and Environmental Protection*, 116, 301-311. (IF = 3.441).

<u>2017</u>

- 9. Singh, J., Kalamdhad, A., Koduru, J.R. 2017. Potential degradation of hazardous dye congo red by nano-metallic particles synthesized from the automobile shredder residue.
 Nanotechnology for Environmental Engineering 2, 1-10, (Springer).
- Singh, J., Chang, Y.-Y., Koduru, J.R., Yang, J.K., Singh, D.P., 2017. The Rapid Fenton-like Degradation of Methyl Orange by Ultrasonically Dispersed Nano-Metallic Particles. Environmental Engineering Research 22(3): 245-254. (Scopus) (IF=1.5).
- 11. Hazarika, J., Ghosh, U., Kalamdhad, A.S., Khwairakpam, M., <u>Singh J.,</u> 2017. Transformation of elemental toxic metals into immobile fractions in paper mill sludge

- through rotary drum composting. *Ecological Engineering*, 101, 185-192 (**IF** = **3.023**) (Elsevier).
- Lingamdinne, L. P., Chang, Y.-Y., Yang, J.K., <u>Singh, J.</u>, Choi, E.H., Shiratani, M., Koduru, J.R. Attri, P. 2017. Biogenic reductive preparation of magnetic inverse spinel iron oxide nanoparticles for the adsorption removal of heavy metals. *Chemical Engineering Journal*, 307, 74-84 (IF=6.735)
- 13. <u>Singh, J.,</u> Lingamdinne L.P., Chang, Y. Y., Yang, J.K., Lee, B. K., Koduru, J.R. 2017. Effect of pH values on recovery of nano particles (NPs) from the fine fraction of automobile shredder residue (ASR): An application of NPs for phenol removal from the water. *Process Safety and Environmental Protection*, 105, 52-59. (**IF** = **3.441**). ISSN: 0957-5820 (Elsevier).
- **14.** <u>Singh, J.,</u> Lingamdinne L.P., Chang, Y. Y., Yang, J.K., Koduru, J.R. 2017. Degradation and Mechanism of Methyl Orange by Nanometallic Particles Under a Fenton-Like Process. *Environmental Engineering Science* **34 (5)**, **350-356**. (IF=1.547).
- 15. Singh, J., Yang, J.K., Chang, Y. Y., Koduru, J.R. 2017. Fenton-like degradation of methylene blue by ultrasonically dispersed nano zero-valent metals. *Environmental Process* 4 (1), 169–182.

2016

- 16. Reddy, K.J., Lingamdinne, L. P., <u>Singh, J.,</u> Choo K.-H. (2016). Effective removal of bisphenol-A (BPA) from water using a goethite/activated carbon composite. *Process Safety and Environmental Protection* 103, 87-96.(Elsevier). (IF = 3.441).
- Singh, J., Chang, Y. Y., Yang, J.K., Kang S.H., Reddy, K.J. (2016). Utilization of nano/micro-size iron recovered from the fine fraction of automobile shredder residue for phenol degradation in water. *Frontiers of Environmental Science and Engineering*, 10 (4), 1-7. (IF =1.961) ISSN 2095-2201
- 18. Roshan, S.W., Kalamdhad, A.S., <u>Singh, J.</u> (2016). The preferential composting of water fern and a reduction of the mobility of potential toxic elements in a rotary drum reactor. *Process Safety and Environmental Protection*, 102, 485-194 (Elsevier). (IF = 3.441).
- 19. <u>Singh, J.,</u> Yang, J. K., Chang, Y. Y. (2016). Synthesis of nano zero-valent metals from the leaching liquor of automobile shredder residue: A mechanism and potential

- applications for phenol degradation in water. *Process Safety and Environmental Protection*, 102, 204-213. (Elsevier). (IF = 3.441).
- 20. <u>Singh, J.</u>, Yang, J. K., Chang, Y. Y. (2016). Rapid degradation of phenol by ultrasound-dispersed nano-metallic particles (NMPs) in the presence of hydrogen peroxide: A possible mechanism for phenol degradation in water. *Journal of Environmental Management* 175, 60-66. (Elsevier) (SCI) (IF = 4.005). ISSN: 0301-4797
- 21. <u>Singh, J.</u>, Lee, B. K. (2016). Influence of Nano-TiO₂ particles on the bioaccumulation of Cd in Soybean plants (Glycine max): A possible mechanism for the removal of Cd from the contaminated soil. *Journal of Environmental Management* 170, 88-96 (Elsevier) (SCI) (IF = 4.005).
- 22. <u>Singh, J.</u>, Kalamdhad, A.S. (2016). Effect of lime on speciation of heavy metals during agitated pile composting of water hyacinth. *Frontiers of Environmental Science and Engineering*, 10 (1), 93-102. (Springer) (SCI).
- 23. <u>Singh</u>, <u>J.</u>, Reddy, K.J., Chang, Y. Y., Kang S.H., Yang, J.K., (2016). A novel reutilization method for automobile shredder residue as an adsorbent for the removal of methylene blue: mechanisms and heavy metal recovery using an ultrasonically assisted acid. *Process Safety and Environmental Protection* 99, 88-97 (Elsevier). (IF = 3.441).
- 24. <u>Singh</u>, <u>J.</u>, Lee, B. K. (2016). Kinetics and extraction of heavy metals resources from automobile shredder residue. *Process Safety and Environmental Protection* 99, 69-79. (IF = 3.441).
- 25. <u>Singh, J.,</u> Lee, B. K., (2016). Recovery of precious metals from low-grade automobile shredder residue: a novel approach for the recovery of nano zero-valent copper particles. *Waste Management* 48, 353–365. (IF=4.723), ISSN: 0956-053X (SCIE) (Elsevier)
- 26. <u>Singh, J.</u>, Yang, J. K., Chang, Y. Y. (2016). Quantitative analysis and reduction of the eco-toxicity risk of heavy metals for the fine fraction of automobile shredder residue (ASR) using H₂O₂. *Waste Management* 48, 374–382 (**IF=4.030**), ISSN: 0956-053X (SCIE) (Elsevier). (**IF=4.723**),

<u>2015</u>

27. <u>Singh, J.</u>, Lee, B. K. (2015). Hydrometallurgical recovery of heavy metals from low grade automobile shredder residue (ASR): An application of advanced Fenton process (AFP). *Journal of Environmental Management* **161**, **1-10**. (Elsevier) **(SCI)** (**IF** = **4.005**).

- Singh, J., Kalamdhad, A. S., Lee, B. K. (2015). Reduction of eco-toxicity risk of heavy metals in the rotary drum composting of water hyacinth: waste lime application and mechanisms. *Environmental Engineering Research* 20, (3), 212-222. (IF=1.5). Publisher: Korean Society of Environmental Engineers (KSEE).
- 29. <u>Singh, J.,</u> Kalamdhad, A. S. (2015). Assessment of compost quality during water hyacinth collected from different sources. *International Journal of Recycling of Organic Waste in Agriculture* 4 (3), 175-183 (Springer).
- 30. <u>Singh, J.</u>, Lee, B. K. (2015). Reduction of environmental availability and ecological risk of heavy metals in automobile shredder residues. *Ecological Engineering* 81, 76-81 (Elsevier) (SCI). (IF = 3.023)
- 31. <u>Singh, J.,</u> Lee, B. K. (2015). Pollution control and metal resource recovery for low grade automobile shredder residue: A mechanism, bioavailability and risk assessment. *Waste Management* 38, 271-283. (IF=3.829), ISSN: 0956-053X (SCIE) (Elsevier) (IF=4.723),

<u>2014</u>

- 32. Sarika, D., Prasad, R., Singh, J., Vishan, I., Varma, V. S., Kalamdhad, A.S. (2014). Study of physico-chemical and biochemical parameters during rotary drum composting of water hyacinth. *International Journal of Recycling of Organic Waste in Agriculture* 3 (63) 1-10 (Springer) ISSN: 2251-7715.
- 33. <u>Singh, J., Kalamdhad, A.S.</u> (2014). Uptake of heavy metals by natural zeolite during agitated pile composting of water hyacinth. *International Journal of Environmental Science* **5** (1), 1-15. ISSN: 0976-4402, Integrated Publishing Association.
- 34. Singh, W.R., Pankaj S.K., <u>Singh, J.,</u> Kalamdhad, A.S. (2014). Reduction of bioavailability of heavy metals during vermicomposting of phumdi biomass of Loktak Lake (India) using Eisenia fetida. *Chemical Speciation & Bioavailability* 26 (3), 158-168. (SCIE) (IF=1.362) (Taylor & Francis)
- 35. <u>Singh, J., Kalamdhad, A.S.</u> (2014). Effects of natural zeolite on speciation of heavy metals during agitated pile composting of water hyacinth. *International Journal of Recycling of Organic Waste in Agriculture*, 3 (55), 1-17 (Springer) ISSN: 2251-7715,
- 36. <u>Singh, J., Kalamdhad, A.S.</u> (2014). Effects of carbide sludge (lime) on bioavailability and leachability of heavy metals during rotary drum composting of water hyacinth. *Chemical Speciation & Bioavailability* 26 (2), 76-84. ISSN: 0954-2299. (Taylor & Francis) (SCIE)

- 37. <u>Singh J., Kalamdhad</u>, A. S. (2014). Influences of natural zeolite on speciation of heavy metals during rotary drum composting of green waste. *Chemical Speciation & Bioavailability* 26 (2), 65-75 (**IF=1.054**) ISSN: 0954-2299. (Taylor & Francis) (SCIE)
- **38.** Singh, W.R., Pankaj, S., <u>Singh J.,</u> Kalamdhad, A. S. (2014). Evaluation of bioavailability of heavy metals and nutrients during agitated pile composting of green Phumdi. *Research Journal of Chemistry and Environment* 18 (4), 1-8. E-ISSN No.: 2278 452. (SCIE)

2013

- 39. <u>Singh, J.,</u> Prasad, R., Varma, V.S., Kalamdhad, A.S. (2013). Estimation of compost stability during rotary drum composting of municipal solid waste. *G- Journal of Environmental Science and Technology*1 (1), 1-7. ISSN- 2322-0228.
- 40. <u>Singh, J.,</u> Kalamdhad, A.S. (2013). Effect of *Eisenia fetida* on speciation of heavy metals during vermicomposting of water hyacinth. *Ecological Engineering* 60, 214-223.((Elsevier) (SCI)
- 41. <u>Singh, J., Kalamdhad, A.S.</u> (2013). Effect of rotary drum on speciation of heavy metals during water hyacinth composting. *Environmental Engineering Research* 18 (3), 177-189., ISSN 1226-1025.
- **42.** <u>Singh, J.,</u> Prasad, R., Kalamdhad, A.S. (2013). Effect of natural zeolite on bioavailability and leachability of heavy metals during rotary drum composting of water hyacinth. *Research Journal of Chemistry and Environment* 17 (8) 26-34 E-ISSN No.: 2278 452,
- 43. <u>Singh, J.,</u> Kalamdhad, A.S. (2013). Reduction of bioavailability and leachability of heavy metals during vermicomposting of water hyacinth (*Eichhornia crassipes*). *Environmental Science and Pollution Research* 20, 8974–8985 ISSN: 0944-134 (Springer) (SCI) (IF=2.8)
- 44. Shankar, A., Singh, T.N., Uma, Banerjee, S., <u>Singh, J.,</u> Sharma, Y.C. (2013). Effect of Adsorption on Degradation of the Pesticide Aldicarb in the Soil. *International Review in Chemical Engineering* 5 (2) 88-101. Print ISSN: 2035-1755
- 45. <u>Singh, J.,</u> Kalamdhad, A.S. (2013). Chemical speciation of heavy metals in compost and compost amended soil -A review. *International Journal of Environmental Engineering Research* 2 (2) 27-37. ISSN print: 1756-8463,

- 46. <u>Singh, J.,</u> Kalamdhad, A.S. (2013). Effect of lime on bioavailability and leachability of heavy metals during agitated pile composting of water hyacinth. *Bioresource Technology* 138, 148-155. (**IF=5.807**) ISSN: 0960-8524 (Elsevier) (SCI)
- 47. Prasad, R., <u>Singh, J.,</u> Kalamdhad, A.S. (2013), Assessment of nutrients and stability parameters during composting of water hyacinth mixed with cattle manure and sawdust. *Research Journal of Chemical Sciences* 3 (4) 1-4. ISSN: 2250 9261
- 48. <u>Singh, J., Kalamdhad, A.S.</u> (2013). Bioavailability and leachability of heavy metals during composting-A review. *International Research Journal of Environmental Sciences* 2 (4), 1-5. ISSN: 2319 1414,
- 49. <u>Singh, J.,</u> Kalamdhad, A.S. (2013). Bioavailability and leachability of heavy metals during water hyacinth composting. *Chemical Speciation & Bioavailability* 25 (1), 1-14. (IF=1.054) (Taylor & Francis) (ISSN: 0954-2299. (SCIE)
- 50. <u>Singh</u>, <u>J.</u>, Kalamdhad, A.S. (2013). Assessment of bioavailability and leachability of heavy metals during rotary drum composting of green waste (Water hyacinth). *Ecological Engineering* 52, 59–69 ((Elsevier) (SCI),

2012

- 51. <u>Singh, J.,</u> Kalamdhad, A.S. (2012). Concentration and speciation of heavy metals during water hyacinth composting. *Bioresource Technology* 124, 169-179. (Elsevier) (SCI)
- 52. <u>Singh, J.,</u> Kalamdhad, A.S. (2012). Reduction of Heavy Metals during composting- A review. *International Journal of Environmental Protection* 2 (9) 36-43. ISSN: 2226-6437 (Print)
- **53.** <u>Singh, J.</u>, Uma, Banerjee, S., Sharma, Y.C. (2012). A very fast removal of Orange G from its aqueous solution by adsorption on activated sawdust: kinetic modelling and effects of various parameters. *International Review in Chemical Engineering* 4 (1), 1-7.

<u>2011</u>

- 54. <u>Singh, J.,</u> Kalamdhad, A.S. (2011). Effects of Heavy Metals on Soil, Plants, Human Health and Aquatic Life. *International Journal of Research in Chemistry and Environment* 1 (2) 15-21. ISSN: 2248-9649
- 55. <u>Singh, J.,</u> Uma, Banerjee, S., Gusain, D., Sharma, Y.C. (2011). Equilibrium modelling and thermodynamics of removal of Orange G from its aqueous solutions. *Journals of*

- Applied Sciences in Environmental Sanitation 6 (3), 317-326. ISSN/EISSN: 01262807 19786980
- 56. <u>Singh, J.,</u> Mishra, N.S., Uma, Banerjee, S., Sharma, Y.C. (2011). Comparative studies of physical characteristics of raw and modified sawdust for their use as adsorbents for removal of acid dye. *BioResources* 6 (3), 2732-2743. (IF =1.202) ISSN: 1930-2126,

Patents-2

- Singh, J., Lee, B.K. (2015). Method for recovering metal in solid waste, Patent no. P15U23C1485 (Korean Patent), Ulsan University Academic Cooperation Agency (2-2005-014509-2)
- Singh, J., Lee, B.K. (2015) Method for recovering copper in solid waste, Patent no.
 P15U23C1487 (Korean Patent), Ulsan University Academic Cooperation Agency (2-2005-014509-2)

Book-

- Singh, J., Kalamdhad, A. S., 2018. Bioavailability, Leachability, Chemical Speciation and Bioremediation of Heavy Metals in the process of Composting. Published by CRC Press.
- 2. Kalamdhad, A.S., Singh, J., Dhamodharan, K. 2019. Advances in Waste Management, Select Proceedings of Recycle 2016 (ISBN 978-981-13-0215-2) published by Springer.

Book Chpater-06

- 1. Bhan, C., Verma, L., Singh J., 2019. 'Alternative fuels for sustainable development', in Shukla, Vertika, Kumar, Narendra (Eds.) *Environmental Concerns and Sustainable Development, Volume 1: Air, Water and Energy Resources* (In Press) Springer nature.
- 2. Rawat, S., Verma, L., Singh J., 2019. 'Environmental hazards and management of Ewaste' in Shukla, Vertika, Kumar, Narendra (Eds.) Environmental Concerns and Sustainable Development, Volume 2: Biodiversity, Soil and Waste Management (In Press) Springer nature.
- 3. Singh, J., Kalamdhad, A. S. 2018. 'Effects of Heavy Metals on the Environment by Utilization of Urban Waste Compost for Land Application: A Review', in Sarma,

- A.K., Singh, V.P., Bhattacharjya, R.K., Kartha, S.A. (Eds.) "*Urban Ecology, Water Quality and Climate Change*" volume 84, pp 329-340. (Springer, Part of the <u>Water Science and Technology Library</u> book series (WSTL) **Print ISBN** 978-3-319-74493-3
- 4. Koduru, J.R., More, N.S., Shiv Shankar, Shikha, Lingamdinne, L.P., Singh, J., 2017. "Toxic metals contamination in environments, their toxicological effects and bioremediation approaches for environmental cleanup" in Bharagava, R.N. Environmental Pollutants and their Bioremediation Approaches", CRC Pres, Taylor & Francis Group, USA (In press). ISBN 9781138628892 CAT# K32053
- <u>Singh</u>, <u>J.</u>, Kalamdhad, A. S., Lee, B. K. (2016). 'Effects of Natural Zeolites on Bioavailability and Leachability of Heavy Metals in the Composting Process of Biodegradable Wastes', in Belviso C. (Ed.) *Zeolites useful mineral*, ISBN 978-953-51-4826-5 (Chapter 10), Editor-Claudia Belviso; Publisher-In Tech., Janeza Trdine, Rijeka, Croatia EUROPEAN UNION *DOI:* 10.5772/63679
- <u>6.</u> <u>Singh, J.,</u> Kalamdhad, A. S., (2016). An Application of Lime to Reduce the Bioavailability of Heavy Metals in the Process of Composting. Book: <u>Global Progress In Development of Sustainable Environment</u> (published), Publisher-Discovery publishing House Pvt. Ltd. New Delhi, India

Invited Lectures-07

- 1. Invited Lecture on "Transformation of organic waste biomass into compost" in national workshop programme on "Solid waste management-reduce, reuse and recycle" held at Govt. Autonomous P.G. College, Chhindwara, M.P., India from 28 Feb. 2019 to 02 March, 2019.
- 2. Invited Lecture on "Removal of Fluoride from drinking water by Adsorption Technology" in International seminar on Environmental Issues & Challenges in the 21st Century (EICC-2019) held at Bareilly College, Bareilly, U.P. India, from January 20-22, 2019.
- Invited Lecture on "Hydrometallurgical recovery of valuable metals resource from the solid waste". RECYCLE 2018 2nd International Conference on Waste Management, held at IIT Guwahati, India during 22 - 24 February, 2018.
- **4. Invited Lecture on** "Transformation of heavy metals in the composting and vermicomposting process". **Lucknow Science Congress 2017**, held at BBA University, Lucknow from 3rd March to 4th March, 2017.
- **5. Invited seminar on** "Recovery of nano metallic particles from the Fine fraction of automobile shredder residue: An application for removal of water pollutants" for

- regular seminar under **Brain Korea 21 Plus Program** at Department of Civil and Environmental Engineering, University of Ulsan, South Korea, held on June 21, 2016.
- 6. **Invited seminar on** "Recovery of heavy metals from low grade automobile shredder residue (ASR): A reuse of ASR for removal of methylene blue (MB) from water" for regular seminar under **Brain Korea 21 Plus Program** at Department of Civil and Environmental Engineering, University of Ulsan, South Korea, held on October 30, 2015.
- 7. Invited Lecture on "Bioavailability and speciation of heavy metals in urban waste compost utilization for land application". International Symposium on Environmental Solutions for Industrial Cities (ISESIC), held at Department of Civil and Environmental Engineering, University of Ulsan, South Korea, during 14-16 January 2014.

Conference (International)-27

- Adil Siddique, Ashish Kumar Nayak, Lata Verma, and <u>Jiwan Singh</u>, 2019 "Development of magnetic activated carbon derived from sweet lime biomass waste for removal of fluoride" in international seminar on Environmental Issues & Challenges in the 21st Century (EICC-2019) held at Bareilly College, Bareilly, U.P. India, from January 20-22, 2019.
- 2. Lata Verma, Kshipra Shukla, Alka Verma, <u>Jiwan Singh</u>, 2019. Bioadsorbent synthesis from waste disposal paper cups: An application for removal of Rh-B (Rhodamine-B) and MG (Malachite Green) from aqueous solution" in international seminar on Environmental Issues & Challenges in the 21st Century (EICC-2019) held at Bareilly College, Bareilly, U.P. India, from January 20-22, 2019.
- 3. Shalu Rawat, Shubham Mishra, and <u>Jiwan Singh</u>, 2019. Removal of phenol from an aqueous solution by the application of magnetic activated carbon synthesised from maize husk" in international seminar on Environmental Issues & Challenges in the 21st Century (EICC-2019) held at Bareilly College, Bareilly, U.P. India, from January 20-22, 2019.
- 4. Shalu Rawat, Lata Verma and <u>Jiwan Singh</u>, 2018, Poster presentation on "Recovery of heavy metals from solid wastes: A review", in 1st North Indian Science Congress (NISC-

- 2018) and International conference on Science and Technology for Sustainable Future, held at B.B.A. University, Lucknow, during 10th and 11th January, 2018
- 5. Lata Verma, Shalu Rawat and <u>Jiwan Singh</u>, 2018, Poster presentation on "Application of biochar for the removal of arsenic from waste water: A review", in 1st North Indian Science Congress (NISC- 2018) and International conference on Science and Technology for Sustainable Future, held at B.B.A. University, Lucknow, during 10th and 11th January, 2018
- 6. Shalu Rawat and <u>Jiwan Singh</u>, 2018, Poster presentation on "Synthesis of iron nanoparticles from organic waste for the removal of a basic dye", in International conference on Emerging Issues in Agricultural, Environmental and Applied Sciences for Sustainable Development (EIAEASSD-2018), held at Sam Higginbottom University of Agriculture, Technology and Sciences (SHUATS), Allahabad, during 27th to 29th November, 2018
- 7. Lata Verma, Mohd. Ibrahim and <u>Jiwan Singh</u>, 2018, Poster presentation on "Characterization of iron infused activated carbon developed from *Citrus limetta* biomass: An application for the removal of fluoride from aqueous solution", in International conference on Emerging Issues in Agricultural, Environmental and Applied Sciences for Sustainable Development (EIAEASSD-2018), held at Sam Higginbottom University of Agriculture, Technology and Sciences (SHUATS), Allahabad, during 27th to 29th November, 2018
- 8. Chandra Bhan and <u>Jiwan Singh</u>, 2018, Poster presentation on "Application of natural materials for the removal of fluoride from drinking water: A review", in International conference on Emerging Issues in Agricultural, Environmental and Applied Sciences for Sustainable Development (EIAEASSD-2018), held at Sam Higginbottom University of Agriculture, Technology and Sciences (SHUATS), Allahabad, during 27th to 29th November, 2018
- 9. <u>Jiwan Singh</u>, 2018. Oral presentation on "Very fast degradation of phenol and methylene blue by ultrasonically dispersed nano-metallic particles (NMPs) in RECYCLE 2018 2nd International Conference on Waste Management, held at IIT Guwahati, India during 22 24 February, 2018.
- 10. Kashifa Iqbal, Mohd. Adil Siddique, <u>Jiwan Singh</u>, 2017. Poster presentation on "Removal of arsenic from ground water using biological approaches: a review" in 58th annual conference of Association of Microbiologists of India (AMI-2017) and

- International symposium held at Babasaheb Bhimrao Ambedkar University during November 16-19, 2017.
- 11. Nanincy Shahu, <u>Jiwan Singh</u>, 2017. Oral presentation on "Removal of methylene blue from an aqueous solution using iron nanoparticles prepared from the sweet lime pulp" in International Conference on Nanoscience and Nanotechnology-2017 held at BBA University Lucknow during 22-24 September, 2017.
- 12. Anamika Gautam, <u>Jiwan Singh</u>, 2017. Oral presentation "Removal of phenol red from aqueous solutions using iron Nanoparticles synthesized from the extract of waste tea in International Conference on Nanoscience and Nanotechnology-2017 held at BBA University Lucknow during 22-24 September, 2017.
- 13. <u>Singh, J.</u>, Lee, B.K, 2016. Oral presentation on "Recovery of heavy metals from the automobile shredder residue (ASR) through a precipitation methods with the support of zero valent iron" in International conference on waste management (RECYCLE 2016) held at IIT Guwahati, India, from April 1-2, 2016.
- 14. Lingamdinne, L. P., Lim, Y., Koduru, J. R., <u>Singh, J.,</u> Yang, J.K., Chang, Y. Y., 2015. Poster presentation on "Spinel Nano Ferrite-*Cnidium monnieri (L.) Cuss* Fruits for Remediation of Pb(II) and Cr(III) from Aqueous Solutions" in 2015 International Environmental Engineering conference and Annual meeting of the Korean Society of Environmental Engineers (IEEC 2015) held in BEXCO, Busan, South Korea, held from 28 to 30 October, 2015.
- 15. <u>Singh, J.,</u> Koduru, J. R., Lim, Y., Lingamdinne, L. P., Chang, Y. Y., Yang, J.K., 2015. Poster presentation on" Chemical Speciation and Reduction of Environmental Risk of Ni, Pb, Cd and Cr in the Automobile Shredder Residue (ASR)" in 2015 International Environmental Engineering conference and Annual meeting of the Korean Society of Environmental Engineers (IEEC 2015) held in BEXCO, Busan, South Korea held from 28 to 30 October, 2015
- 16. <u>Singh, J.</u>, Lee, B.K, 2015. Oral presentation on "Pollution reduction and hydrometallurgical recovery of heavy metals from the automobile shredder residue: leaching kinetics" in the 10th Asia Pacific Conference on Sustainable Energy and Environmental Technologies (APCSEET 2015) held at University of Seoul, Seoul, Republic of Korea, from July 02 to 05, 2015.
- 17. <u>Singh, J.,</u> Kalamdhad A. S., Chang, Y. Y., 2015. Oral presentation on "Effect of waste lime on bioavailability and chemical speciation of heavy metals in rotary drum

- composting of water hyacinth" in the 2nd 3R International Scientific Conference on Material Cycles and Waste Management, held at Daejeon Convention Centre Daejeon, Republic of Korea, during 21-23 May 2015.
- 18. <u>Singh, J.</u>, Lee, B. K. 2014. Poster presentation on "Extraction of Ni and Mn from automobile shredder residue" in the International Conference on Contaminated Land, Ecological Assessment and Remediation (CLEAR -2014),held at Kangwon National University, Chuncheon, South Korea during October 5th-8th, 2014.
- 19. Prasad, R., <u>Singh, J.,</u> Kalamdhad, A.S. (2014). Paper presentation on "Study of physicochemical parameters during rotary drum composting of water hyacinth in International conference on Environmental technology and sustainable development: Challenges & remedies held at BBAU Lucknow, India during February 21-23, 2014.
- 20. Prasad, R., <u>Singh, J.</u>, Kalamdhad, A.S. (2014). Paper presentation on 'Study of physicochemical and stability parameter during water hyacinth verrnicomposting" in International conference on "Harnessing Natural Resources for Sustainable Development: Global Trends" held at Cotton College Guwahati, Assam India, during January 29-31, 2014.
- 21. <u>Singh, J.</u>, Kalamdhad, A.S. (2013). Paper presentation on "Uptake of bioavailable and leachable fractions of Zn, Cu, Ni, and Cr by natural zeolite during rotary drum composting of water hyacinth", in International conference on waste management and environment (ICWME) held at Institute of Biological Sciences, Faculty of Science University of Malaya, Kuala Lumpur Malaysia, during 26-27 August, 2013.
- 22. Prasad, R., <u>Singh, J.</u>, Kalamdhad, A.S. (2013). Paper presentation on "Estimation of nutrients and stability parameters during vermicomposting of water hyacinth using *Eiseniafetida*", in International conference on Technologies for Sustainable Waste Management in Developing Countries(ICTW) held at Vignan's University, Guntur, Aandhra Pradesh (India), during 23-24 August, 2013
- 23. <u>Singh, J.,</u> Kalamdhad, A.S. (2013). Paper presentation on "Study of heavy metals during water hyacinth composting", in International conference on waste, health and wealth held at International Institute of Waste Management, Bhopal, M.P., India, during 15-17 February 2013. (Full paper)
- 24. <u>Singh, J.</u>, Kalamdhad, A.S. (2013). Paper presentation on "Assessment of bioavailability and speciation of zinc, copper, nickel and chromium during water hyacinth composting" in waste safe 2013-3rd International conference on Solid Waste Management in

- Developing Countries, held at Khulna, University of Engineering and Technology, Khulna, Bangladesh, during 10-12 February 2013.
- 25. <u>Singh, J.,</u> Kalamdhad, A.S. (2012). Paper presentation on "Effects of heavy metals on the environment by utilization of urban waste compost for land application", in International conference on Environmentally Sustainable Urban Ecosystems held at IIT Guwahati, during 24th-26th February 2012.
- 26. <u>Singh, J.</u>, Kalamdhad, A.S. (2012). Paper presentation on "Estimation of bioavailability, leachability and speciation of Zn, Cu, Cd and Pb during water hyacinth composting", in **2**ndInternational science congress held at Bon Maharaj Engineering College Vrindavan, Mathura (U.P.) during 6-8 December 2012.
- 27. <u>Singh, J.</u> Poster presentation on "Removal of anionic dye from aqueous solution by modified sawdust", in International conference on Effects of Climate Change on Water Resource held at IIT Guwahati, during 4th-5th January 2011.

Conference (National)-7

- Hazarika, J., Ghosh, U., Kalamdhad, A., Khairakpam, M., <u>Singh, J.</u> 2017. Paper presentation on "Changes in different forms of heavy metals during rotary drum composting of paper mill sludge" in 1st National Convention-cum-seminar on Doubling Farmers' Income and farm Profitability by 2022 held at BBAU, Lucknow, from October 28-29, 2017 organized by Royal Association for Science-led Socioculture advancement (RASSA).
- Ghosh, U., Hazarika, J., <u>Singh, J.,</u> Kalamdhad, A., Khairakpam, M., 2017. Paper presentation on "Reduction of bioavailability of heavy metals during the rotary drum composting of paper mill sludge" in National Seminar on Farmer Cinema held at ICAR-Indian Institute of Sugarcane Research, Lucknow during October 14-16, 2017. Organized by ICAR-IISR and Samagra Vikash Welfare Society.
- 3. Gautam, P.K. Pandey, J.D. <u>Singh' J.</u> 2017. Paper presentation on "Removal of tartrazine using activated carbon prepared from Alligator weed (*Alternentheraphiloxeroids*): Isotherm, kinetics and spectroscopic analysis" in the 4th Lucknow Science congress 2017 held at BBAU, Lucknow from March 03 to March 04, 2017.

- Sarika, D., <u>Singh, J.</u>, Vishan, I., Varma, V. S., Kalamdhad, A.S. (2014). Paper presentation on Biodegradation of lignocelluloses during drum composting of water hyacinth National School on sustainable polymers & Fist symposium on advanced in sustainable polymers held at Department of Chemical Engineering, IIT Guwahti, India, during January 6-11, 2014.
- 5. <u>Singh, J.</u>, Pathak, K., Prasad, R., Kalamdhad, A.S. (2013). Paper presentation on "Evaluation of Bioavailability and Chemical Speciation of Zinc and Copper during Vermicomposting of Water Hyacinth" in National symposium on environmental issues and challenges in 21th century held at Bareilly College, Bareilly, U.P. during 3-5 February, 2013.
- 6. Prasad, R., <u>Singh, J.,</u> Kalamdhad, A.S. (2013). Paper presentation on "Composting of water hyacinth with cattle manure" in National symposium on environmental issues and challenges in 21th century held at Bareilly College, Bareilly (U.P.), during 3-5 February, 2013.
- 7. Das, A., <u>Singh, J.,</u> Kalamdhad, A.S. (2011). Assessment of water hyacinth compost using respirometric techniques, National conference on Health Impacts of Polluted Environment: Assessement & Solutions. 25-26 February, International Development Centre Foundation (IDC) New Delhi.

Local conferences/Meeting

1. <u>Singh, J.</u>, Lee, B. K. 2014. Poster presentation on "Assessment of bioavailability and ecological risk of Cu, Pb and Cd in automobile shredder residues" Annual Meeting of Korean Society for Atmospheric Environment, Alpensia resort, S. Korea, from 30 to 31st October, 2014.

Organization of seminar/conference/workshop/symposium

- Organization of seminar on "A novel ideas on Environmental Management" on June 5th, 2018 (World Environment Day, 2018) at Department of Environmental Science, BBAU, Lucknow.
- 2. Organizing secretory: Grassroots Innovation Summit & Exhibition (GrISE 2017), December 14-16, 2017

Other Relevant Information

- SCOPUS h- index **13**; citations **535** (as on October, 2018) (https://www.scopus.com/authid/detail.uri?authorId=55356980100)
- Google Scholar: h-index 16, i10-index 26, citations 845 (as on October, 2018)
 (http://scholar.google.com/citations?user=89rAq1QAAAAJ)

OTHER OFFICIAL DUTIES PERFORMING/PERFORMED:

- 1. Warden (Maintenance), Ashoka Boys Hostel
- 2. Board of Post-graduate Studies, Babasaheb Bhimrao Ambedkar University, Lucknow, India

Editorial Board-

- 1. Associate Editor of International Journal of Current Biochemistry Research (IJBR) (ISSN: 2354 3809)
- 2. Editorial member-PST Plant Science Today (ISSN No. 2348-1900)
- 3. Editorial member-International Journal of Agricultural Science and Food Technology (ISSN No. 2455-815X).

Reviewer of Journals

- 1. Acta Physiologiae Plantarum (Springer) (1)
- 2. Bioresourse Technology (1) (Elsevier)
- 3. Ecological Engineering (Elsevier) (5)
- 4. Ecotoxicology and Environmental Safety (2)(Elsevier)
- 5. Environmental Engineering Research (2) (Korean Society of Environmental Engineering)
- 6. Environmental Science and Pollution Research (Springer)(2)
- 7. International Journal of Current Biochemistry (3)
- 8. Journal of Cleaner Production (3) (Elsevier)
- 9. Journal of Hazardous Materials (2) (Elsevier)
- 10. Process Safety and Environmental Protection (4) (Elsevier)
- 11. Waste management (Elsevier) (4)

- 12. International Journal of Environmental Science and Technology (Springer) (1)
- 13. Journal of Environmental Science (China) (1)
- 14. Environmental Science and Technology (ACS) (1)

Declaration

I hereby declare that above mentioned information is correct to my knowledge and I bear the responsibility for the correctness of the above mentioned particulars.

Date: (Jiwan Singh)

Place: BBAU, Lucknow