



## **CURRICULAM VITAE**

### **Dr. Rajeev Pratap Singh**

Assistant Professor

Institute of Environment and Sustainable Development  
Banaras Hindu University, Varanasi, India- 221005

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### **Professional Synopsis**

Research professional with more than ten years of experience in the field of R&D on various fields including waste management, Sustainable Agriculture, air pollution etc. A tenacious and committed science researcher experienced at working effectively in teams and independently. Proven expertise at both applied and basic research, managing projects and solving problems.

### **Career Objective**

Fostering creativity, with many learning opportunities. I have interpersonal skills, good work ethic and the ability to work well in a team and individual environment.

### **Educational credentials**

B.Sc. in Botany, Chemistry and Zoology from Purvanchal University (1<sup>st</sup> class)-1997 securing 68 % marks.

P.G.D.E.P.L. in Environmental Protection Laws from Lucknow University, Lucknow, India (1<sup>st</sup> class)-1999 securing 64 % marks.

M.Sc. in Environmental Science from Lucknow University, Lucknow, India (1<sup>st</sup> class)-1999 securing 63 % marks.

M.Phil. in Energy and Environment from Devi Ahilya University, Indore, India (1<sup>st</sup> class) – 2002 securing 84 % marks.

Ph.D. (2008) on “**Land application of Sewage sludge: appraisal of potential effects on plants**” from Botany Department, B. H. U., Varanasi, India under supervision of Prof. M. Agrawal.

**IT Skills: Sigma Plot-8, SPSS-10, office automation and internet applications**

**Date of Birth: 10.07.1977**

### **Professional Experience**

- i) Currently working as Assistant Professor at Institute of Environment and Sustainable Development, Banaras Hindu University, India from 28<sup>th</sup> Feb, 2011 to till date.
- ii) Worked as Visiting Researcher at **School of Industrial Technology, Universiti Sains Malaysia, Penang, Malaysia** from 7<sup>th</sup> May to 5<sup>th</sup> July, 2013.
- iii) Worked as Post Doctoral Fellow at **School of Industrial Technology, Universiti Sains Malaysia, Penang, Malaysia** from 15 June, 2009 to 27<sup>th</sup> Feb, 2011.
- iv) Worked as **Council of Scientific and Industrial Research Senior Research Fellow (CSIR-SRF)** from 1 Feb, 2009 to 10 June, 2009 in Civil Engineering Department, IIT Delhi, New Delhi under supervision of Dr A. K. Mittal.
- v) Worked as **Council of Scientific and Industrial Research Senior Research Fellow (CSIR-SRF)** from 1 April, 2008 to 31 Jan, 2009 in Botany from Banaras Hindu University, Varanasi under supervision of Prof. Madhoolika Agrawal.

vi) Worked as Project Fellow in University Grants Commission, New Delhi sponsored project “**Crop loss assessment under ambient air pollution around Varanasi**” from 27 Jan 2006 upto 31 March, 2008.

vii) Worked as Research Assistant in project entitled “*Contaminated irrigation water and food safety for the urban and periurban poor: appropriate measures for monitoring and control from field research in India and Zambia*” funded by **DFID, U. K.** at Varanasi under a consultancy Toxics Link, New Delhi.

## Publications

**Publications = 44 (International = 38; National =4; Article= 2), Book Chapters = 11, Conference Proceedings = 12 and Books = 4, Total citations = 1991 (Google Scholar), Scopus citations =1042**

### International Journals

1. **R. P. Singh** and M. Agrawal. (2007) Effects of sewage sludge amendment on heavy metal accumulation and consequent responses of *Beta vulgaris* plants. *Chemos* 67: 2229-2240.
2. **R. P. Singh** and M. Agrawal. (2008) Potential benefits and risks of land application of sewage sludge. *Waste Management* 28: 347 - 358.
3. **R. P. Singh** and M. Agrawal. (2009). Use of sewage sludge as fertilizer supplement for *Abelmoschus esculentus* plants: Physiological, biochemical and growth responses. *International Journal of Environment and Waste Management* 3: 91-106.
4. Ademir Sérgio Ferreira de Araújo, Wanderley José de Melo, **Rajeev Pratap Singh**. (2010) Municipal Solid Waste compost in agricultural soil: changes in soil microbial biomass. *Reviews in Environmental Science and Bio/technology* 9: 41-49.
5. **R. P. Singh**, M. Hakimi Ibrahim, Norizan Esa and M. S. Iliyana. (2010) Composting of waste from palm oil mill: A sustainable waste management practice. *Reviews in Environmental Science and Biotechnology* 9:331–344.
6. **R. P. Singh** and M. Agrawal. (2010). Variations in heavy metal accumulation, growth and yield of rice plants grown at different sewage sludge amendment rates. *Ecotoxicology and Environmental Safety* 73: 632–641.
7. **R. P. Singh** and M. Agrawal. (2010). Biochemical and physiological responses of Rice (*Oryza sativa* L.) grown on different sewage sludge amendments rates. *Bulletin of Environmental Contamination & Toxicology* 84: 606-612.
8. Jayara D. C. Silva, Tamara T. B. Leal, Ademir S.F. Araújo, Raul M. Araujo, Regina L. F. Gomes, Wanderley J. Melo, **Rajeev P. Singh** (2010). Effect of different tannery sludge compost amendment rates on growth, biomass accumulation and yield responses of Capsicum plants. *Waste Management*. 30:1976–1980.
9. **R. P. Singh** and **M. Agrawal**. (2010) Effect of different sewage sludge applications on growth and yield of *Vigna radiata* L. field crop: Metal uptake by plant. *Ecological Engineering* 36: 969–972.
10. **R. P. Singh**, A. K. Gupta, M. Hakimi Ibrahim, A. K. Mittal. (2010) Coal fly ash utilization in agriculture: its potential benefits and risks. *Reviews in Environmental Science and Biotechnology* 9: 345–358.
11. Parveen Fatemeh Rupani, **Rajeev Pratap Singh**, M. Hakimi Ibrahim and Norizan Esa (2010) Review of Current Palm Oil Mill Effluent (POME) treatment methods: Vermicomposting as a sustainable practice. *World Applied Science Journal* 11(1), 70-81.
12. **R. P. Singh**, Asha Embrandiri, M. Hakimi Ibrahim and Norizan Esa (2011) Management of biomass residues generated from palm oil mill: Vermicomposting a sustainable option. *Resources, Conservation & Recycling*. 55 (4), 423-434.

13. **Rajeev Pratap Singh**, Pooja Singh, Ademir S. F. Araujo, M. Hakimi Ibrahim, Othman Sulaiman (2011) Management of urban solid waste: Vermicomposting a sustainable option. *Resources, Conservation & Recycling* 55(7), 719-729.
14. **Rajeev Pratap Singh**, Pooja Singh, M. Hakimi Ibrahim, Rokiah Hashim (2011) Land Application of Sewage Sludge: Physico-chemical and Microbial Response. *Reviews of Environmental Contamination and Toxicology* 214, 41-61.
15. **R. P. Singh**, Richa Kothari, V. V. Tyagi, Tanu Allen, M. Hakimi Ibrahim (2011) An Overview for Exploring the Possibilities of Energy Generation from Municipal Solid Waste (MSW) in Indian Scenario. *Renewable and Sustainable Energy Reviews* 15 (9), 4797-4808.
16. Joseany Andrade Santos, Luís Alfredo Pinheiro Leal Nunes, Wanderley José de Melo, Marcia Barreto do Vale Figueiredo, **Rajeev Pratap Singh**, Antônio Aécio Carvalho Bezerra & Ademir Sérgio Ferreira de Araújo (2011). Growth, Nodulation and Nitrogen fixation of Cowpea in soils amended with composted tannery sludge. *R. Bras. Ci. Solo*, 35:1865-1871.
17. Asha Embrandiri, **Rajeev P. Singh**, Hakimi M. Ibrahim, Azhani A. Ramli (2012) Land application of biomass residue generated from palm oil processing: its potential benefits and threats. *Environmentalist* 32 (1), 111-117.
18. Asha Embrandiri, **Rajeev P. Singh**, Hakimi M. Ibrahim and Anisa B. Khan (2012) An Epidemiological Study on the Health Effects of Endosulfan Spraying on Cashew Plantations in Kasaragod District, Kerala, India. *Asian Journal of Epidemiology*. 5 (1) 22-31.
19. Pooja Singh, Othman Sulaiman, Rokiah Hashim, Leh Cheu Peng and **Rajeev Pratap Singh** (2012) Biodegradation study of Pycnoporou *sanguineus* and its effect on structural and chemical features on Oil Palm biomass chips. *Lignocellulose*. 1 (3), 210-227.
20. Pooja Singh, Othman Sulaiman, Rokiah Hashim, Leh Cheu Peng, **Rajeev Pratap Singh** (2013) Using biomass residues from oil palm industry as a raw material for pulp and paper industry: potential benefits and threat to the environment. *Environment, Development and Sustainability*. 15:367–383.
21. Pooja Singh, Othman Sulaiman, Rokiah Hashim, Leh Cheu Peng, **Rajeev Pratap Singh** (2013). Evaluating biopulping as an alternative application on oil palm trunk using the white-rot fungus *Trametes versicolor*. *Int. Biodeterioration & Biodegradation*. 82: 96- 103.
22. Asha Embrandiri, Mahammad H Ibrahim, **Rajeev P Singh**. (2013). Palm oil mill waste utilization: Sustainability in Malaysian context. *International Journal of Scientific and Research Publications*, Volume 3, Issue 3, March 2013, ISSN 2250-3153.
23. Asha Embrandiri, **Rajeev P Singh**. Mahammad H Ibrahim. (2013). Biochemical, Morphological and Yield responses of Lady's Finger plants to varying ratios of palm oil mill waste (Decanter cake) application as bio-fertilizer. *International Journal of Recycling of Organic Waste in Agriculture*, 2:2-7.
24. Silva Maria Doroteia Marcal, Ademir Sergio Ferreira Araujo, Luis Alfredo Pinheiro Leal Nunes, Wanderley Jose de Melo, and **Rajeev Pratap Singh** (2013). Heavy metals in cowpea (*Vigna unguiculata* L.) after amendment of composted tannery sludge, *Chilean Journal of Agricultural Research*. 73 (3):282-287.
25. **Rajeev Pratap Singh**, Bhavisha Sharma, Abhijit Sarkar, Chandan Sengupta, Pooja Singh, Mahamad Hakimi Ibrahim (2014) Biological Responses of Agricultural Soils to Fly-Ash Amendment. *Reviews of Environmental Contamination and Toxicology*. 232, 45-60
26. Shlrene Quaik, **Rajeev Pratap Singh**, Mahamad Hakimi Ibrahim (2014) Growth impact, photosynthetic pigments and heavy metal contents of *Coleus Aromaticus*: A vermiponic approach. *Journal of Sustainability Science and Management* 9 (1): 49-55.
27. **Rajeev Pratap Singh**, Abhijit Sarkar, Chandan Sengupta, Pooja Singh, Ana Roberta Lima Miranda, Luis Alfredo Pinheiro Leal Nunes, Ademir Sérgio Ferreira de Araujo and

- Wanderley José de Melo (2015) Effect of Utilization of Organic Waste as Agricultural Amendment on Soil Microbial Biomass. *Ann. Research & Review in Biology* 7(3): 155-162.
28. Vaibhav Srivastava, Sultan Ahmed Ismail, Pooja Singh, **Rajeev Pratap Singh** (2015) Urban solid waste management in the developing world with emphasis on India: challenges and opportunities. *Reviews in Environmental Science and Biotechnology*, 14 (2): 317-337.
  29. Anita Singh, Barkha Vaish, **Rajeev Pratap Singh** (2016) Eco- Restoration of degraded lands through microbial biomass as ecological engineer. *Acta Biomedica Scientia*. 2016; 3(1):133-135
  30. Asha Embrandiri, Parveen Fatemeh Rupani, Sultan Ahmed Ismail, **Rajeev Pratap Singh**, Mahammad Hakimi Ibrahim, Mohd Omar Abd Kadir, (2016) The effect of oil palm decanter cake on the accumulation of nutrients and the stomatal opening of *Solanum melongena* (brinjal) plants. *Int. J. of Recycling of Organic Waste in Agriculture*. 5:141–147.
  31. Barkha Vaish, Vaibhav Srivastava, Pooja Singh, Anita Singh, Prabhat Kumar Singh, **Rajeev Pratap Singh** (2016) Exploring Untapped Energy Potential of Urban Solid Waste. *Energy, Ecology and Environment* 1 (5) 323-342.
  32. Vaibhav Srivastava, Ademir Sergio Ferreira de Araujo, Barkha Vaish, Shannon Bartelt-Hunt, Pooja Singh and **Rajeev Pratap Singh** (2016) Biological Response of Using Municipal Solid Waste Compost in Agriculture as fertilizer Supplement, *Reviews in Environmental Science and Biotechnology* 15:677-696.
  33. Rajeev Pratap Singh (2016) Book Review on "Modern Poisons: A Brief Introduction to Contemporary Toxicology". *Current Science* 3: 1709-1710
  34. A. Embrandiri, P. F. Rupani, M. Shahadat, **R. P. Singh**, S. A. Ismail, M. H. Ibrahim, M. O. Abd. Kadir (2017) The phytoextraction potential of selected vegetable plants from soil amended with oil palm decanter cake. *Int J Recycl Org Waste Agricult*. 6 (1), 37–45.
  35. Bhavisha Sharma, Abhijit Sarkar, Pooja Singh and **Rajeev Pratap Singh** (2017) Agricultural utilization of biosolids: A review on potential effect on soil and plant grown. *Waste Management* 64, 117–132.
  36. Ademir Sergio Ferreira De Araujo, Sandra Mara Barbosa Rocha, Vilma Maria Dod Santos, **Rajeev Pratap Singh**, Radomir Schmidt and Kate M. Scow. (2017) Abundance of ammonia-oxidizing organisms across a gradient of preserved Brazilian Cerrado. *Tropical Ecology* 58( 3) (Accepted)
  37. Shamsad Ahmad, Vinayak V. Pathak, Richa Kothari, **Rajeev Pratap Singh** (2017) Comparative overview of Conventional and Advance approaches for pretreatment methods of Lignocellulosic Waste Biomass (LCWB) for Biogas enhancement: Opportunities and Challenges. *Biofuels* (Accepted).
  38. Barkha Vaish, Bhavisha Sharma, Sonu Singh, Pooja Singh and **Rajeev Pratap Singh** (2017) Energy Recovery Potential and Environmental Impact of Gasification for Municipal Solid Waste. *Biofuels* (Accepted)

#### National Journal

1. **R. P. Singh**, K. K. Srivastava and S P Singh. (2006) Wastewater minimization in process industry through pinch technology: a case study” *Journal of Industrial Pollution Control*, 22 (1), 107-116.
2. Anita Singh, **Rajeev Pratap Singh** (2015) Phytoremediation Species and Their Modification Under By Weed Varying Climatic Condition: A Changing Scenario. *International Journal of Scientific and Technology Research*, 4 (11), 1-5.
3. Barkha Vaish, Pooja Singh, Richa Kothari, Prabhat Kumar Singh, **Rajeev Pratap Singh** (2016) The potential of bioenergy production from marginalized lands and its effect on climate change. *Climate Change and Environmental Sustainability* 4(1): 7–13.

4. Pooja Singh, Barkha Vaish, Vaibhav Srivastava, **Rajeev Pratap Singh** (2017) Role of Green Energy in Sustainable Development. Research in Environment and life sciences. 10 (9), 732-38.

#### Article

1. A. S. Raghubanshi, **R. P. Singh** and B. Sharma (2013) Biomass to Energy. Akshay Urja. February, 2013, 6 (4): 13-15. A bi-monthly newsletter of the Ministry of New and Renewable Energy, Government of India.
2. Barkha Vaish, Rajeev Pratap Singh and Vaibhav Srivastava (2017) Wetlands of India: threats, restoration and management strategies, in Current Issue - Wetlands: Conservation and Management, The Environment Management, a Quarterly E magazine on Environment and Sustainable Development by SIES, Mumbai, Vol III (I), Jan – Mar, 2017.

#### Book

1. **Organic Fertilizers: Types, Production and Environmental Impact” (2012)** edited by Rajeev Pratap Singh, published by Nova Science Inc., New York. ISBN: 978-1-62081-422-2.
2. **“Waste Management: Challenges, Threats and Opportunities” (2015)** edited by Rajeev Pratap Singh and Abhijit Sarkar, published by Nova Science Inc., New York. ISBN: 978-1-63482-150-6.
3. **“Environmental Issues Surrounding Human Overpopulation” (2017)** edited by **Rajeev Pratap Singh**, Anita Singh and Vaibhav Srivastava published by IGI Global, USA. ISBN 9781522516835
4. **“Plant Responses to Xenobiotics” (2017)** edited by, Anita Singh, Sheo Mohan Prasad, and **Rajeev Pratap Singh** published by Springer, India. ISBN 978-981-10-2859-5.

#### Book Chapter

1. Amit K. Gupta, **Rajeev Pratap Singh**, Anita Singh and M. Hakimi Ibrahim (2010) “Effects of heavy metal and metalloid contamination on the soil microbial response: An overview” published in the book “Microbial Ecology of Tropical Soils” edited by Dr. Ademir S. F. Araújo and Dr. Márcia B. V. Figueiredo and published by Nova Science Inc., New York. ISBN: 978-1-61728-505-9
2. Amit K Gupta, **Rajeev Pratap Singh**, M. Hakimi Ibrahim, Byeong-Kye (2012) “Fly ash for agriculture: Implication for soil properties, nutrients, heavy metal, plant growth and pest control” published in the book "Sustainable Agriculture Reviews” edited by Dr. Eric Lichtfouse and published by Springer in volume 8, pp269-286.
3. P. S. Chauhan, A. Singh, **R. P. Singh**, and M. H. Ibrahim (2012) “Environmental impacts of organic fertilizers usage in agriculture” published in book “Organic Fertilizers: Types, Production and Environmental Impact” edited by Rajeev Pratap Singh and published by Nova Science Inc., New York. ISBN: 978-1-62081-422-2
4. **Rajeev Pratap Singh**, Sonu Singh, Anita Singh, Puneet Singh Chauhan (2012) “Reclamation of degraded land through forestry practices” published in book “Land Management” edited by Surinder Suthar and published by Nova Science Inc., New York. ISBN: 978-1-62081-421-5.
5. **Rajeev Pratap Singh**, Parveen Fatemeh Rupani, Anita Singh, Asha Embrandiri, Mahamad Hakimi Ibrahim (2012) Towards Sustainable Palm Oil Production: Minimizing The Environmental Damage From Palm Oil Processing published book “Waste management: New Research” edited by Dr. Ademir S. F. Araújo and published by Nova Science Inc., New York. ISBN: 978-1-62081-955-1.

6. Naveen K. Singh, **Rajeev P. Singh** (2015) Potential of plants and microbes for the removal of metals: Eco-friendly approach for remediation of soil and water, pp469-483. In book “Plant Metal Interaction” edited by Parvaiz Ahmad and published by Elsevier. ISBN: 978-0-12-803158-2
7. Barkha Vaish, Pooja Singh, Vaibhav Srivastava, Prabhat Kumar Singh, **Rajeev Pratap Singh** (2016) Municipal Solid Waste Management in India: Present Status and Energy Conversion Opportunities, pp276-303. In book “*Emerging energy alternatives for sustainable environment.*” edited by D P Singh, Richa Kothari and V V Tyagi and published by Teri Press, New Delhi, ISBN: 9788179934111
8. Barkha Vaish, Abhijit Sarkar, Pooja Singh, Prabhat Kumar Singh, Chandan Sengupta, **Rajeev Pratap Singh** (2016) Prospects of Biomethanation in Indian Urban Solid Waste: Stepping Towards a Sustainable Future. Published in Springer book Series Title: Environmental Footprints and Eco-design of Products and Processes, Book Title: Recycling of Solid Waste for Biofuels and Bio-chemicals. ISBN: 978-981-10-0148-2
9. Barkha Vaish, Pooja Singh, Prabhat Kumar Singh, **Rajeev Pratap Singh** (2016) Biomethanation Potential of Algal Biomass pages1-29. Published in book Algal Biofuels: Recent Advances and Future Prospects Editors: Dr. Sanjay Kumar Gupta, Dr. Anushree Malik and Dr. Faizal Bux. Published by Springer.
10. Anirban Biswas, Abhijit Sarkar, Pooja Singh, Sanjeeb Mohapatra, **Rajeev Pratap Singh** (2016) Perspective of Environment, Economy and Society. Biofuels: Recent Advances and Future Perspectives (Biofuels: Advances and Perspectives). Publishers Studium Press LLC, USA. Editors: Geetanjali Kaushik, Satish S Patil, Shivani Chaturvedi & Arvind Chel.
11. Abhijit Sarkar, Shyamali Das, Pooja Singh and **Rajeev Pratap Singh** (2017) Effect of wastewater irrigation on crop health in Indian agricultural scenario. Accepted for publication in book entitled ‘Emerging trends of Plant Physiology for Sustainable Crop Production’ published by Apple Academic Press Inc. 9 Spinnaker Way Waretown, NJ, USA, Edited by - Drs. Zafar Abba, A K Tiwari and Pradeep Kumar

#### **Publication in proceeding**

1. Kaviraj Pradhan, **R. P. Singh** and Shweta Kaushik (2003) “Energy plantation and waste land utilization in India “published in a book Energy Technologies for Sustainable Development / Editors: Dr. Upender Pandel and Dr. M. P. Poonia. 1st ed. Ghaziabad, Prime Publishing House. 2004.
2. **R. P. Singh**, M. Agrawal and M. Hakimi Ibrahim (2010) Land application of sewage sludge and fly ash: single and interactive effects on heavy metal accumulation and yield of mung bean plant. Pages 646-652. Proceeding of an International conference organized by Universiti Sains Malaysia, Penang, Malaysia from 2-4 June, 2010
3. **Rajeev Pratap Singh**, Mahamad Hakimi Ibrahim, Asha Embrandiri and Azhani Atifah(2011) Effect Of Palm Oil Mill Effluent (POME) On Seed Germination, Seedling Growth, Total Chlorophyll And carotenoid Content Of Mung Bean Plant. INESCO-2011, USM, Penang, Malaysia, 14-16 Oct, 2011.
4. Shlrene Quaik, Asha Embrandiri, Parveen F. Rupani, **Rajeev P. Singh**, Mahamad H. Ibrahim (2012). Effect of Vermiwash and Vermicomposting Leachate in Hydroponics Culture of Indian Borage (*Plectranthus ambionicus*) Plantlets. UMT 11<sup>th</sup> International Annual Symposium on Sustainability Science and Management 09th – 11th July 2012, Terengganu, Malaysia.
5. Asha Embrandiri, Parveen Rupani, Shlrene Quaik, Hakimi Ibrahim, **Rajeev Singh** (2012). Palm oil mill wastes (Decanter cake) as soil amendments; heavy metal analysis AND SEM

- studies and *Abelmoschus Esculentus* (LADY'S FINGER) plants. Proceeding of an International conference organized by Universiti Sains Malaysia, Penang, Malaysia from 30 May- 1 June, 2012, pages 412-416.
6. Azhani Ramli, **Rajeev Pratap Singh**, M. Hakimi Ibrahim (2012). Use of Decanter cake from palm oil mill as fertilizer supplement: Heavy metal accumulation on leafy vegetables grown at different amendment ratios. Proceeding of an International conference organized by Universiti Sains Malaysia, Penang, Malaysia from 30 May- 1 June, 2012, pages 417-420.
  7. **Rajeev Pratap Singh**, Mahamad Hakimi Ibrahim, Pooja Singh, Othman Sulaiman Towards a sustainable future: waste management and vermicomposting in environmental education for school children Proceeding of an International conference organized by Universiti Sains Malaysia, Penang, Malaysia from 30 May- 1 June, 2012, pages 497-501
  8. Pooja Singh, Rokiah Hashim, Othoman Solaiman, Leh Cheu Peng and Rajeev **Pratap Singh** (2012). Initial Studies On The Effect Of Biopulping On Oil Palm (*Elaeis Guineensis*) Trunk In Cultures Supplemented With Mn<sup>+2</sup>, Corn Steep Liquor And Glucose. Proceedings of International Conference on Environmental Research and Technology (ICERT 2012).
  9. Asha Embrandiri, Parveen F Rupani, Shlrene Quaik, Mahammad H Ibrahim and **Rajeev Pratap Singh** (2012). Environmental Sustainability in the palm oil industry: palm waste as nutrient supplement and effects on plant growth characteristics. Proceeding of international conference on Environmental, Biomedical and Biotechnology (IPCBEE) held in Singapore.
  10. Azhani Ramli, **Rajeev Pratap Singh**, M Hakimi Ibrahim (2012) Use of decanter cake from palm oil mill as fertiliser supplement: The pattern of macronutrients accumulation in soil and plant with the amendment of decanter cake. UMT 11th Inter. Annual Symposium on Sustainability Sci. and Management.
  11. **Rajeev P. Singh**, M. Agrawal (2013). Agricultural utilization of sewage sludge: HM uptake, biochemical, physicochemical and growth responses of Mung bean (*Vigna radiata* L.) plant grown at different amendment rates, pages 74-87. International conference on waste, wealth and health (ICWWH – 2013), 15<sup>th</sup> – 17<sup>th</sup> February, 2013, jointly organized by MPCST, Bhopal and Vijnana Bharti.
  12. Srivastava, V., **Singh, R. P.**, Singh, P., & Verma, K. (2017). Varietal germination, biochemical and growth responses of radish (*Raphanus sativus* L.) grown under different level of salt stress. Environmental Conservation, Clean Water, Air & Soil (CleanWAS), 335.

#### Projects undertaken

1. “**Characterization and comparison of various palm oil mill waste in relation to the effects of waste amendments in soil on plants growth**” funded by Universiti Sains Malaysia, Penang, Malaysia as co-supervisor.
2. “**Land application of Fly ash and Sewage sludge: Single and Interactive Effects on soil and plants grown**” funded by University Grants Commission, New Delhi.
3. “**Quantification and Characterization of Municipal Solid Waste produced in Varanasi city and composting/ vermicomposting as its sustainable management options**” funded by Department of Science and Technology (DST), New Delhi.

#### Awards

1. **Green Talent – 2011** given by Federal Ministry of Education and Research (BMBF), Germany on 16<sup>th</sup> December at Berlin, Germany
2. **Prosper.Net Scopus Young Scientist award-2012**, 1<sup>st</sup> Runner Up in area of Sustainable Consumption and Production- Award is jointly given by Prosper.Net (United Nations), Humboldt foundation Germany, Scopus and Elsevier.
3. **Water Advanced Research and Innovation (WARI) Fellowship**. The program is supported by the Department of Science and Technology (DST), Govt. of India, the Indo-US Science and Technology Forum (IUSSTF), University of Nebraska-Lincoln (UNL) and the Daugherty Water for Food Institute (DWFI). (Duration 15.04.2016 to 14.04.2017).

### Editorial Board

1. Guest Edited “**The IIOAB Journal**” special issue on “Environmental management for Sustainable Development” Vol.2 (1): Jan, 2011.
2. Editorial board member of “**Global Scholars Journal of Agricultural Research (GSJAR)**”.
3. Editorial board member of “**Journal of Environmental and Social Sciences**”.
4. Editorial board member of “**International Journal of Advanced and Applied Sciences**”.
5. Associate Editor of “**Climate Change and Environmental Sustainability Journal**”.
6. Editorial Board member for “**International Journal of Agriculture (IJAG)**”.
7. Editorial Board member for “**International Journal of Research in Science and Technology**”.
8. Editorial Board member for “**Integrated Environmental Assessment and Management (IEAM)**” published by Society of Environmental Toxicology and Chemistry (SETAC) in partnership with publisher Wiley-Blackwell. (impact factor = 1.53)
9. Editorial Board member of “**UGB Journal of Plant Biology and Biotechnology**”.
10. Editorial Board member of “**IRA Publications**”.
11. Editorial Board member for “**Acta Scientifica International Journal of Agriculture (ASIJAG)**”.
12. Associate Editor of “**Frontiers in Environmental Science**” journal

### Research Guidance

- Guided M.Phil. dissertation to Ms Barkha Vaish on topic entitled “**Agricultural Utilization of Urban Solid Waste Vermicompost: A Sustainable Waste Management Option**”
- Four students are pursuing Ph.D. under my supervision

### Seminar / Conference / Workshop Attended/ Invited talk

1. Presented a poster titled “**Effect of sewage sludge amendment on yield and heavy metal accumulation in *Beta vulgaris* plants**” in a third International conference on plant and Environmental pollution (ICPEP-3), organized by International Society of Environmental Botanists (ISEB), N.B.R.I., Lucknow from 29<sup>th</sup> Nov - 2 Dec, 2005.



2. Presented a poster titled “Use of sewage sludge amendment as fertilizer supplement for wheat.” in **TROPICAL ECOLOGY CONGRESS -2007**, organized by International Society of Tropical Ecology, B.H. U., Varanasi from 2<sup>nd</sup> - 5<sup>th</sup> Dec, 2007.
3. Presented a research paper entitled “**Sewage sludge as fertilizer supplement: Heavy metal accumulation, growth, biomass and yield responses of *Triticum aestivum* L. plants at different ratios of sewage sludge amendment**” in an International conference organized by **Universiti Sains Malaysia, Penang, Malaysia from 15 to 17 Dec, 2008.**
4. Presented a research paper entitled “**Land application of sewage sludge and fly ash: Single and interactive effects on heavy metal accumulation and yield of mung bean plant**” in an International conference organized by **Universiti Sains Malaysia, Penang, Malaysia from 2-4 June, 2010.** Participated in 3 day orientation workshop under **Ganges Dolphin – Conservation Education Programme** from 28-30 July, 2011 jointly organized by CEE North and Institute of Environment and Sustainable Development, BHU, Varanasi.
5. Participated in National Seminar on Himalayan Devastation and Eco-Balancing held on 31 August, 2013 organized by Department of Botany, university of Lucknow, Lucknow.
6. Participated in International BHU Alumni Meet and Seminar on Mahamana’s Vision of Nation Building held from 23-24 December, 2012.
7. **Participated in workshop on “Alternative Sustainable Processes” Organized by UGC Networking Resource Centre, Department of Chemical Engineering, Institute of Chemical Technology, Mumbai from 14-18, March, 2012.**
8. **Participated in workshop on “Metabolomics: Basics and Application to Plant Sciences” Organized by The Energy and Research Institute, New Delhi and Universiteit Leiden, Neitherland, from 19-23 November 2012.**
9. Presented a paper entitled “**Towards a Sustainable Future: Waste Management and Vermicomposting in Environmental Education For School Children**” in **3<sup>rd</sup> International Conference On Environmental Research And Technology (ICERT) 2012** held between 30 May -1 June, 2012 at Hotel Parkroyal, Penang, Malaysia.
10. **Participated in International Summer School, BLISS (Building Learning in Sustainability Science), 15-19<sup>th</sup> July, 2013, Organized by TERI University, New Delhi, India.**
11. **Participated in workshop on “Green and Sustainable Technologies” Organized by The Energy and Research Institute, New Delhi and DST, New Delhi, from 19-22 November 2013.**
12. Presented a paper entitled “**Urban Solid Waste Management in Developing World: Challenges and Opportunities**” at **National Seminar on Green technologies for Sustainable Environmental management (GTSEM)** held between 22 -23 March, 2013 at School of Environment and Natural Resources, Doon University, Dehradun, India.
13. Presented a paper entitled “**Effect Of Palm Oil Mill Effluent (POME) On Seed Germination, Seedling Growth, Total Chlorophyll And Carotenoid Content Of Mung Bean Plant**” at **International Engineering For Sustainability Conference (INESCO)** held between 14 -16 October, 2011 at Engineering Campus, University Sains Malaysia.
14. Presented a paper entitled “**Landfill gas recovery and its utilization in India: Current status and potential prospects**” at **National Seminar on Environmental Concerns and Sustainable Development: Issues and Challenges for India** held between 2-4 March,

- 2012 at Institute of Environment and Sustainable Development, Banaras Hindu University, Varanasi, India.
15. **Delivered an invited lecture on “Relevance of Studying Morphological, Biomass, Biochemical, Physiological and Yield responses of Plants Grown in Different Organic Waste Based Substrate Experiments” in a Research Seminar in School of Industrial Technology, Universiti Sains Malaysia, Penang, Malaysia on 5<sup>th</sup> June, 2013.**
  16. **Participated in workshop on “Water treatment by Adsorption” organized by Department of Environmental Sciences, Dr Ram Manohar Lohia Avadh University, Faizabad, held during 27-29 July, 2013.**
  17. Presented a poster titled **“Utilization of municipal solid waste compost as fertilizer supplement”** in Tropical Ecology Congress 2014 held on 10-12 December 2014 in School of Environmental Sciences JNU, New Delhi organized by International Society for Tropical Ecology.
  18. **Invited lecturer in refresher course on topic “Energy and environment” on 27<sup>th</sup> Jan, 2014 in 6<sup>th</sup> refresher course in Environmental studies organized by UFC-Academic staff college, BHU, Varanasi.**
  19. **Delivered an Invited lecture on topic entitled “Urban Solid Waste Management in India: Challenges, Opportunities and Threats” in International Conference on Environmental Technology and Sustainable Development: Challenges and Remedies 21-23 Feb, 2014, organized by Department of Environmental Science, B. B. A. University, (Central University), Lucknow, U.P., India.**
  20. **Poster presentation entitled “Sustainable Biogas Production by Anaerobic Digestion of Municipal Solid waste” at International Conference on Issues and Challenges in Doctoral Research (ICICDR- 2015) held on 25 August 2015 at Banaras Hindu University, Varanasi, India.**
  21. **Participated in workshop on “Hyperspectral Remote Sensing of Natural Resources”** Organized by Indian Society of Geomatics (Vadodara Chapter) in association with the Department of Botany, Faculty of Science, The M.S. University of Baroda, Indian Science Congress Association and Indian Women Scientists’ Association (Vadodara Chapter) held during 7-13 September, 2015.
  22. **Participated in Summer School on Urban WASH schedule from 3<sup>rd</sup> to 7<sup>th</sup> August, 2015 at TERI University, New Delhi.**
  23. **Delivered an Invited lecture on “Restoration of soil fertility through application of MSW compost” in Bridging Development Divide for Inclusive Growth through Science, Technology and Innovation (BRIDGES-2015) 2015, organized by DST-Centre for Policy Research, B. B. A. University, (Central University), Lucknow, U.P., India ” from 16-17 January 2015.**
  24. **Chaired a session in the National Conference on “Sustainable Water Resources Management: Challenges & Opportunities” on January 20-21, 2015 Organized by Department of Biological Science & University Institute of Management & Commerce (UIMC), Rani Durgavati University, Jabalpur-482001 (M.P.), India.**
  25. **Presented a poster titled “Effect of treated waste water on soil micro and macro faunal diversity” in the National Conference on “Sustainable Water Resources Management: Challenges & Opportunities” on January 20-21, 2015 Organized by Department of Biological Science & University Institute of Management & Commerce (UIMC), Rani Durgavati University, Jabalpur-482001 (M.P.), India.**

26. Presented a paper entitled “**Varietal Germination, Biochemical and Growth Responses of Radish (*Raphanus sativus* L.) Grown under Different Level of Salt Stress**” in International Conference on Clean Water, Air & Soil (Clean WAS) held between 28 -30 August, 2015 at Hotel Armada Petaling Jaya, Kuala Lumpur, Malaysia under The International Water, Air and Soil Conservation society (INWASCON) with joint supports from Malaya University, Universiti Kebangsaan Malaysia and University Putra Malaysia.
27. Presented a poster titled “**Biogas production: A solution for municipal solid waste management in India**” at National Seminar on Sustainable Development: Environmental Awareness for a secured future held on 6-7 February 2015 in S.S.S.V.S Govt. Post Graduate College, Chunar, Mirzapur, U.P., India.
28. Poster presentation at DST-SERB supported National Conference on “**Climate Change: Impacts, Adaptation, Mitigation Scenario and future Challenges in Indian Perspective**”, on the topic entitled “**Energy recovery from landfill gases in Indian Scenario: A mitigation strategy** held at University of Delhi, New Delhi from 2.3.2015-3.3.2015.
29. **Delivered an Invited lecture on topic entitled “Bioenergy Production from Marginalized Lands and Its Effect on Climate Change” in National Conference on Climate Change: Challenges to Plant Biologist 2016**, Sponsored by DBT-STAR College Scheme, DBT New Delhi and organized on March 27, 2016 by Department of Botany, UP College, (Autonomous) Varanasi, U.P., India.
30. Presented a paper entitled “**Small Scale Decentralized Biomethanation Plant: A Sustainable Solution For Solid Waste Management In India**” in **3<sup>rd</sup> International Conference On Environmental Friendly Agriculture And Horticulture In Planning Of A Smart City** held between 12 -14 December, 2015 at Bhopal, Madhya Pradesh, India.
31. Participated in International BHU Alumni Meet (IBAM-2015) and Seminar on Science and Religion: Mahamana’s Vision held from 23-24 November, 2015.
32. Participated in Water for Food Global Conference 2016, April 24-26, 2016 organized by DWFI, UNL Nebraska.
33. Presented a paper entitled “**Morphological, biochemical and yield response of *Capsicum annum* grown at different SLASH (sewage sludge and fly ash mixture) amendment rates**” in **7<sup>th</sup> World Congress of Society of Environmental Toxicology and Chemistry** held between 06-11 November, 2016 at Orlando, Florida, USA

#### **Training programme attended**

- Environment Management System (E.M.S.) at **Hindustan Motors Ltd. Pithampur, Indore, M.P.**
- **Reclamation of degraded land through forestry practices under supervision of Dr. H.M. Behl, Dy. Director and Head Tree biology and biomass section N.B.R.I. Lucknow.**
- **Physico-chemical properties of Dairy effluent and E.T.P. , under guidance of Shri Lal Sahab Singh, Factory Manager, PARAG DAIRY, Varanasi**
- **Water pollution and its management (Legal aspect), under guidance of Shri Vinod Singh, U.P. COLLEGE, Varanasi**
- **Waste water minimization in process industry through pinch technology. Prof. K.K. SRIVASTAVA, Head, Chemical Engineering Dept.I.T. BHU, VARANASI.**

#### **Research interests**

Waste management, Waste Water treatment and management, Sustainable Agriculture, Heavy metal Toxicity, Phytoremediation, Ecotoxicology etc

### Personal information

**NAME** RAJEEV PRATAP SINGH  
**FATHER'S NAME** SHRI SABHA JEET SINGH  
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### Declaration

I declare that the information presented above is true to the best of my knowledge and belief. Further, if given any opportunity to work in co-ordination and supervision, I will definitely reciprocate with my abilities best and tend towards making the association fruitful.

Date: \_\_\_\_\_

Place: \_\_\_\_\_

(RAJEEV PRATAP SINGH)