

R E S U M E

OF

DR. VINOD KUMAR

Assistant Professor

DEPARTMENT OF ZOOLOGY & ENVIRONMENTAL SCIENCE

Gurukula Kangri University

Haridwar-249 404 (Uttarakhand) India



RESUME

Name : **Dr. Vinod Kumar**
Designation : **Asst. Professor of Environmental Science**
Date of Birth : **August 10, 1980**
Date of Appointment : **March 23, 2011**
Address : **Opp. 12- Sarvpriya Vihar, Dadu Bagh
Kankhal, Haridwar-249 408**
Department : **Dept. of Zoology & Environmental Science
Faculty of Life Science
Gurukula Kangri University
Haridwar-249404 (Uttarakhnad) India**
Contact : **+911334249091 (Office) +919897189197 (Mobile)**
E-mail : **drvksorwal@gmail.com**

Educational Qualifications : M. Sc., Ph.D.

Gurukula Kangri University, Haridwar

- Ph.D. in Environmental Science, Thesis title “**Effect of Industrial Effluents Irrigation on Agronomical Characteristics of Two Leguminous Crops *Phaseolus vulgaris* (L.) and *Vigna radiata* (L.)**”. (2010)
- M.Sc. in Environmental Science, Specialization: Wastewater management (2004)
- B.Sc. (Zool., Bot. & Chem.) (2001)

Academic Experience:

UG: 4 Years

PG: 3 Years

Research Experience: 7 years

- 2011 to: As **Assistant Professor**
Department of Zoology and Environmental Science
Gurukula Kangri University, Haridwar, (U.K.)
- 2009 to 2011: As **Senior Research Fellow**
No.1 Professors' Colony, Gurukula Kangri University, Haridwar, (U.K.)
-Performed research work on Wastewater treatment
- 2007 to 2009: As **Research Fellow**
Department of Zoology and Environmental Science
Gurukula Kangri University, Haridwar, (U.K.)
-Performed research work on "Effect of Industrial Effluents Irrigation on Agronomical Characteristics of Two Leguminous Crops *Phaseolus vulgaris* (L.) and *Vigna radiata* (L.)".

Research Area:

- Agro-ecology
- Environmental Pollution Research
- Wastewater Management

Research Guidance:

At Post-graduate level-

Two students worked for **M. Sc dissertation** under my supervision covering important areas of research in the field of **Environmental Science**.

At Doctorate level:

Kindly see Enclosure 'A'

Research Publications:

Research papers/ scientific articles are published /accepted in Indian/ International Journals of repute.

Research papers - Published: **37**, Accepted: **1**, Communicated: **3**

Scientific articles- Published: **03**

Kindly see Enclosure "B"

Journal/Book chapters: 03

Kindly see Enclosure "C"

Seminars/Conferences attended: 16

Kindly see Enclosure "D"

Members of Scientific Societies:

- **Founder member** of Applied and Natural Science Foundation, Haridwar
- **Life member** of Applied and Natural Science Foundation, Haridwar
- **Editorial Board member** of Journal of Applied and Natural Science, Haridwar

Academic Honours:

- As **Fellow** of Applied and Natural Science Foundation
- As **Joint Organizing Secretary member** of the World Congress for Man and Nature held at Department of Zoology and Environmental Science, Gurukula Kangri University, Haridwar, 2011.

Kindly see Encl. "E"

Teaching Experience: Graduate and Postgraduate- **Three** years

- **Three years** (2011 to....): **As Assistant Professor**, Department of Zoology & Environmental Science, Gurukula Kangri University, Haridwar.
- -Teaching graduate, post-graduate and Ph.D. (Research Methodology) classes.

Sd....

(Dr. Vinod Kumar)

Enclosure 'A'
(Research Guidance)

At Post-graduate level-
(M.Sc Dissertations)

1. Effect of pulp and paper mill effluent disposal on soil characteristics in the vicinity of Uttaranchal Pulp and Paper Mill, Haridwar (Uttarakhand), India by Mr. Sandeep Kumar in 2014.
2. Impact of Glass industry effluent disposal on soil properties in the province of Asahi India Glass Ltd., Haridwar (Uttarakhand), India by Mr. Vishvendra Tomar in 2014.

At Doctorate level:
(Ph.D Dissertations)

- 1.

Enclosure “B”
(List of Publications of Dr. Vinod Kumar)

RESEARCH PUBLICATIONS:

1. **Vinod Kumar** and Chopra, A.K. (2007). Electronic Waste “E-Waste: A New Environmental Threat. *Journal of Natural and Physical Sciences*, 21 (1-2) 45-50 (ISSN 097-3799).
2. **Vinod Kumar** and Chopra, A.K. (2009). Impact of Climate Change on Biodiversity of India with special Reference to Himalayan region-An Overview. *Journal of Applied and Natural Science*, 1(1): 117-122 (ISSN 0974-9411).
3. **Vinod Kumar**, Chopra, A.K., Chakresh Pathak and Sachin Pathak (2010). Agropotentiality of Paper Mill Effluent on the characteristics of *Trigonella foenum-graecum* L. (Fenugreek) *New York Science Journal*, 3(5): 68-77 (ISSN: Print: 1554-0200).
4. **Vinod Kumar** and Chopra, A.K. (2010). Influence of sugar mill effluent on physico-chemical characteristics of soil at Haridwar (Uttarakhand), India. *Journal of Applied and Natural Science*, 2(2): 269-279 (ISSN: Print: 0974-9411; Online: 2231-5209).
5. Chakresh Pathak, A.K. Chopra, **Vinod Kumar** and Sachin Srivastava (2010). Heavy metals contamination in wastewater irrigated agricultural soil near Bindal River, Dehradun, India. *Pollution Research*, 29 (4): 33-37 (ISSN: 0257-8050).
6. Chakresh Pathak, Chopra, A. K., **Vinod Kumar** and Sunil Sharma (2011). Effect of sewage-water irrigation on physico-chemical parameters with special reference to heavy metals in agricultural soil of Haridwar city. *Journal of Applied and Natural Science*, 3 (1): 108-113 (ISSN: Print: 0974-9411; Online: 2231-5209).
7. **Vinod Kumar** and Chopra, A.K. (2011). Impact on physico-chemical characteristics of soil after irrigation with distillery effluent. *Archives of Applied Science Research*, 3(4):63-77 (ISSN 0975-508X).
8. A.K. Chopra, Sachin Srivastava and **Vinod Kumar** (2011). Comparative study on agropotentiality of Paper mill effluent and synthetic nutrient (DAP) on *Vigna unguiculata* L. (Walp) Cowpea. *Journal of Chemical and Pharmaceutical Research*, 3(5):151-165. (ISSN 0975-7384).
9. Chopra, A.K., Arun Kumar Sharma and **Vinod Kumar** (2011). Overview of Electrolytic treatment: An alternative technology for purification of wastewater. *Archives of Applied Science Research*, 3(5): 191-206 (ISSN 0975-508X).

10. **Vinod Kumar** and Chopra, A.K. (2011). Alterations in physico-chemical characteristics of soil after irrigation with paper mill effluent. *Journal of Chemical and Pharmaceutical Research*, 3(6):7-22 (ISSN 0975-7384).
11. **Vinod Kumar** and Chopra, A.K. (2012). Fertigation effect of distillery effluent on agronomical practices of *Trigonella foenum-graecum* L. (Fenugreek). *Environmental Monitoring and Assessment*, 184:1207-1219 (DOI 10.1007/s10661-011-2033-7) (ISSN: **Print: 0167-6369; Online: 1573-2959; Impact factor- 1.436**).
12. **Vinod Kumar** and Chopra, A.K. (2012). Monitoring of physico-chemical and microbiological characteristics of municipal wastewater at treatment plant, Haridwar (Uttarakhand) India. *Journal of Environmental Science and Technology*, 5(2):109-118 (DOI: 10.3923/jest.2012.109.118) (ISSN 1994-7887).
13. **Vinod Kumar** and Chopra, A.K. (2012). Effect of paper mill effluent irrigation on agronomical characteristics of *Vigna radiata* (L.) in two different seasons. *Communications in Soil Science and Plant Analysis*, 43(16):2142-2166. DOI: 10.1080/00103624.2012.697236 (ISSN: **Print: 0010-3624; Online: 1532-2416; Impact factor- 0.432**).
14. **Vinod Kumar** and Chopra, A.K. (2012). Effects of Textile Effluents Disposal on water quality of Sub Canal of Upper Ganga Canal at Haridwar (Uttarakhand), India. *Journal of Chemical and Pharmaceutical Research*, 4(9):4206-4211 (ISSN 0975-7384).
15. **Vinod Kumar** and Chopra, A.K. (2012). Hydrological characteristics of abandoned Old Ganga Canal at Haridwar (Uttarakhand) India. *Journal of Chemical and Pharmaceutical Research*, 4(11):4774-4782 (ISSN 0975-7384).
16. **Vinod Kumar**, Chopra, A.K. and Sachin Srivastava (2012). Effect of sugar mill effluent irrigation on soil characteristics, germination, vegetative growth and yield of *Vicia faba* (L.). *Journal of Sustainable Environmental Research*, 1(2):221-227. (ISSN 2278-196X).
17. **Vinod Kumar** and Chopra, A.K. (2012). Translocation of micronutrients in French bean (*Phaseolus vulgaris* L.) grown on soil amended with paper mill sludge. *Journal of Chemical and Pharmaceutical Research*, 4(11):4822-4829. (ISSN 0975-7384).
18. **Vinod Kumar**, Chopra, A.K. and Sachin Srivastava (2013). Assessment of metals in vegetables irrigated with biomethanated textile effluent at Haridwar (Uttarakhand), India. *Asian Journal of Plant Science & Research*, 3(1): 120-128. (ISSN 2249 – 7412).

19. **Vinod Kumar** and Chopra, A.K. (2013). Ferti-irrigational effect of paper mill effluent on agronomical characteristics of *Abelmoschus esculentus* L. (Okra). *Pakistan Journal of Biological Sciences*, 16 (22): 1426-1437. (**Online ISSN: 1028-8880, Scopus Indexed**)
20. Chopra, A.K., Sachin Srivastava, **Vinod Kumar** and Chakresh Pathak (2013). Agropotentiality of distillery effluent on soil and agronomical characteristics of *Abelmoschus esculentus* L. (Okra). *Environmental Monitoring and Assessment*, 185: 6635-6644. (DOI 10.1007/s10661-012-3052-8) (**ISSN: Print: 0167-6369; Online: 1573-2959; Impact factor- 1.436**).
21. **Vinod Kumar** and Chopra, A.K. (2013). Response of sweet sorghum after fertigation with sugar mill effluent in two seasons. *Sugar Tech*, DOI 10.1007/s12355-013-0226-9 (**ISSN: Print: 0972-1525; Online: 0974-0740; Impact factor- 0.496**).
22. **Vinod Kumar** and Chopra, A.K. (2013). Enrichment and translocation of heavy metals in soil and *Vicia faba* L. (Faba bean) after fertigation with distillery effluent. *International Journal of Agricultural Policy and Research*, 1(5): 131-141. (**E-ISSN 2350-1561; Impact factor- 1.26**).
23. **Vinod Kumar** and Chopra, A.K. (2013). Distribution, enrichment and accumulation of heavy metals in soil and *Trigonella foenum-graecum* L. (Fenugreek) after fertigation with paper mill effluent, *Open Journal of Metals*, 3: 8-20. doi:10.4236/ojmetal.2013.32A1002. (**ISSN Print: 2164-2761; Online: 2164-277X; Impact factor- 0.20**).
24. **Vinod Kumar** and Chopra, A.K. (2013). The effects of sugar mill effluent on hybrid cultivar of faba bean (*Vicia faba* L.) and soil properties. *International Journal of Biotechnology Research*, 1(6): 91-102. (**E-ISSN 2328-3505; Impact factor-0.76**).
25. **Vinod Kumar** and Chopra, A.K. (2013). Response of high yield variety of Mung bean (*Vigna radiata* L.) after fertigation with distillery effluent in two seasons. *International Journal of Biotechnology Research*, 1(7): 111-125. (**E-ISSN 2328-3505; Impact factor-0.76**).
26. **Vinod Kumar** and Chopra, A.K. (2013). Reduction of weeds and improvement of soil quality and yield of wheat by tillage in Northern Great Plains of Ganga River in India. *International Journal of Agricultural Science Research*, 2(8): 249-257. (**E-ISSN 2327-3321; Impact factor-0.58**).

27. **Vinod Kumar** and Chopra, A.K. (2013). Accumulation and translocation of metals in soil and different parts of French bean (*Phaseolus vulgaris* L.) Amended with sewage sludge. *Bulletin of Environmental Contamination and Toxicology*, 92 (1): 103-108. DOI: 10.1007/s00128-013-1142-0 (ISSN: **Print 0007-4861; Online: 1432-0800; Impact factor: 1.105**).
28. **Vinod Kumar** and Chopra, A.K. (2014). Response of French bean to fertigation with wine from molasses distillery effluent in two seasons. *International Journal of Vegetable Science*, 20 (2): 104-123. DOI: 10.1080/19315260.2012.749970 (ISSN: **Print 1931-5260; Online: 1931-5279**).
29. **Vinod Kumar** and Chopra, A.K. (2014). Fertigational impact of sugar mill effluent on agronomical practices of Mung bean (*Vigna radiata* L.) in two seasons. *International Journal of Agricultural Science Research*, 3(4): 052-068. (E-ISSN **2327-3321; Impact factor-0.58**).
30. **Vinod Kumar** and Chopra, A.K. (2014). Toxic element contamination in soil and spinach (*Spinacia oleracea* L.) after fertigation with sugar mill effluent. *International Research Journal of Public and Environmental Health*, 1(4): 95-109. (E-ISSN **2360-8803**).
31. **Vinod Kumar** and Chopra, A.K. (2014). Fertigational effects of sugar mill effluent on agronomical characteristics of high yield cultivar of sugarcane (*Saccharum officinarum* L.) in two Seasons. *Acta Advances in Agriculture Sciences*, 2(9): 17-39.
32. **Vinod Kumar** and Chopra, A.K. (2014). Ferti-irrigation effect of paper mill effluent on agronomical practices of *Phaseolus vulgaris* (L.) in two different seasons. *Communications in Soil Science and Plant Analysis*, 45:2151–217 (ISSN: **Print: 0010-3624; Online: 1532-2416; Impact factor- 0.432**).
33. **Vinod Kumar** and Chopra, A.K. (2014). Ferti-irrigational impact of sugar mill effluent on agronomical characteristics of *Phaseolus vulgaris* (L.) in two seasons. *Environmental Monitoring and Assessment*, DOI 10.1007/s10661-014-3974-4 (ISSN: **Print: 0167-6369; Online: 1573-2959; Impact factor- 1.436**).
34. **Vinod Kumar** and Chopra, A.K. (2014). Pearl millet (*Pennisetum Glaucum* L.) response after ferti-Irrigation with sugar mill effluent in two seasons. *International Journal of Recycling of Organic Waste in Agriculture*, 67: DOI: 10.1007/s40093-014-0067-x

- 35. Vinod Kumar** (2014). Sugar mill effluent utilization in the cultivation of maize (*Zea mays* L.) in two seasons. *Journal of Waste Management*, <http://dx.doi.org/10.1155/2014/408509>
- 36. Vinod Kumar** (2014). Fertigation response of *Abelmoschus esculentus* L. (Okra) with sugar mill effluent in two different seasons. *International Journal of Agricultural Science Research*, 3(9): 164-180. (E-ISSN 2327-3321; Impact factor-0.58).
- 37. Vinod Kumar** and Chopra, A.K. (2014). Ferti-irrigational response of hybrid cultivar of Indian mustard (*Brassica juncea* L.) to distillery effluent in two seasons. *Analytical Chemistry Letters*, 4(3): 190-206, DOI: 10.1080/22297928.2014.969616 (ISSN: Print 2229-7928; Online: 2230-7532).
- 38. Vinod Kumar** and Chopra, A.K. (2014). Fertigation with agro-residue based paper mill effluent on a high yield spinach variety. *International Journal of Vegetable Science*, (ISSN: Print 1931-5260; Online: 1931-5279). (Accepted).
- 39. Vinod Kumar**, Chopra, A.K. and Srivastava S. (2014). Contamination of heavy metals in spinach (*Spinacia oleracea* L.) grown in sewage sludge amended soil. *Brazilian Journal of Botany* (Communicated).
- 40. Vinod Kumar**, Chopra, A.K. and Srivastava S. (2014). Distribution, enrichment and accumulation of heavy metals in soil and *Vigna mungo* L. Hepper (Black gram) after irrigation with distillery wastewater. *Journal of Environment and Health Sciences* (Communicated).
- 41. Vinod Kumar** and Chopra, A.K. (2014). Treatment efficiency of newly constructed sewage treatment plant under Ganga Action Plan at Haridwar. *Research Journal in Engineering and Applied Sciences* (Uttarakhand), India (Communicated).

Enclosure “C”
(Journals/Proceedings/Books chapters)

- 1. Vinod Kumar** and Chopra, A.K. (2008). Bio-environmental Management of Malaria with use of herbal plants. In: Multifacial Application of Drug Plants, Proceeding of National Seminar on Medicinal plants: Conservation, Cultivation and Utilization II, 301-308.
- 2. Vinod Kumar** and Chopra, A.K. (2008). Bioterrorism: A New Threat to Humanity and Life supporting System. Bioterrorism and Biological Warfare, Pointer Publisher, Jaipur, 330-37, pp. 368.
- 3. Vinod Kumar**, A.K. Chopra (2013). Contamination of heavy metals in vegetables irrigated with textile effluent at Haridwar (Uttarakhand). Climate Change Effects on Agriculture and Economy, Biotech Books, New Delhi, 73-80.

Enclosure “D”
(Seminars/ Conferences/Workshops attended/participated)

1. Actively participated in IInd National Seminar on Medicinal plants: Conservation, Cultivation and Utilization, 9th-11th March, 2007 held at the Department of Zoology and Environmental Science, Gurukula Kangri University, Haridwar (Uttarakhand).
2. Participated in Poster presentation in National Environmental Awareness Workshop on "Solid Waste Management" 10th April, 2007 held at the Department of Zoology and Environmental Science, Gurukula Kangri University, Haridwar (Uttarakhand).
3. Participated in Poster presentation in IInd Uttarakhand Science Congress-15th-17th November, 2007 held at Uttarakhand Academy of Administration, Nainital (Uttarakhand).
4. Participated in Workshop on Molecular and Applied Microbiology, 10th-19th February, 2008 held at the Department of Botany and Microbiology, Gurukula Kangri University, Haridwar (Uttarakhand).
5. Participated in oral presentation in IIIrd J&K Science Congress-26th 28th February, 2008 held at University of Jammu, Jammu (J&K).
6. Actively participated in national workshop on Techniques in water and waste water treatment, 25th-26th March, 2008 held at the Department of Zoology and Environmental Science, Gurukula Kangri University, Haridwar (Uttarakhand).
7. Participated in oral presentation in IIIrd Uttarakhand Science Congress-10th and 11th November, 2008 held at IIT Roorkee, Roorkee, Haridwar (Uttarakhand).
8. Participated in oral presentation in National seminar on “Managing Climate Change: Molecules to Communities”, March 21-22, 2009 held at the Department of Zoology Kurukshetra University, Kurukshetra (Haryana).
9. Actively participated in National seminar on “Environmental Management and Biodiversity Conservation”, February 26-27, 2011 held at the Omkarananda Institute of Management and Technology, Rishikesh, Dehradun (Uttarakhand).
10. Participated in oral presentation in National seminar on “Innovations and Applications in Engineering and Applied Sciences”, November 9-10, 2011 held at the Faculty of Engineering and Technology, Gurukula Kangri University, Haridwar (Uttarakhand).

- 11.** Participated in oral presentation in International conference on “Global Innovations, Strategies & Policies in Physical Education & Sports Sciences”, February 24-26, 2012 held at Department of Physical Education, Gurukula Kangri University, Haridwar (Uttarakhand).
- 12.** Participated in 18th Orientation Programme at Academic Staff College, Kumaun University, Nainital, Uttarakhand”, from April 3, 2012 to April 30, 2012.
- 13.** Actively participated in national workshop on “Taxonomic keys and identification tools of different groups of flora and fauna”, 29th October, 2012 to 3rd November, 2012 held at the Department of Zoology and Environmental Science, Gurukula Kangri University, Haridwar (Uttarakhand).
- 14.** Participated in oral presentation in 2nd International Science Congress (ISC-2012) on "Science and Technology- Challenges of 21st Century", on 8th December, 2012 to 9th December, 2012 held at Bon Maharaj Engineering College, Vrindavan, Mathura (Uttar Pradesh).
- 15.** Participated in oral presentation in National conference on Emerging Trends in Engineering and Sciences on 9th to 10th November, 2013 at Faculty of Engineering and Technology, Gurukula Kangri University, Haridwar (Uttarakhand).
- 16.** Participated in oral presentation in 8th Uttarakhand State Science & Technology Congress-2013 on 26th -28th December, 2013 held at Doon University, Dehradun, (Uttarakhand).
- 17.** Actively participated and presented a research paper in National seminar on “Economic Upgradation: Environmental Degradation” on January 24-25, 2014 held at Omkarananda Institute of Management and Technology, Rishikesh, Dehradun (Uttarakhand).
- 18.** Participated in 19th Refresher Course in the subject of Environmental Science at Academic Staff College, Jawaharlal Nehru University, New Delhi”, from February 10, 2014 to March 7, 2014.
- 19.** Presented a research paper in 5th National conference on “Present Innovative Approaches & New Paradigm in Physical Education” on August 29, 2014 organized by Department of Physical Education, Gurukula Kangri University, Haridwar (Uttarakhand).

- 20.** Presented a research paper in Regional Symposium on Technovations for Inclusive Human Development on October 12, 2014 organized by Faculty of Engineering & Technology, Gurukula Kangri University, Haridwar (Uttarakhand).
- 21.** Actively participated in workshop on “Isolation & Characterization of Fungi”, 8th November, 2014 held at the Department of Botany and Microbiology, Gurukula Kangri University, Haridwar (Uttarakhand).
- 22.**

Enclosure “E”
(Members of Scientific Bodies/ Societies)

Members of Scientific Societies

1. As founder member of Applied and Natural Science Foundation, No.1 Professors’ Colony, Gurukula Kangri University, Haridwar.
2. As Joint Organizing Secretary member of the World Congress for Man and Nature: Global Climate Change and Biodiversity Conservation held at Department of Zoology and Environmental Science, Gurukula Kangri University, Haridwar, on 11th to 13rd November, 2011.
3. Editorial board member of Journal of Applied and Natural Science, published by Applied and Natural Science Foundation, No.1 Professors’ Colony, Gurukula Kangri University, Haridwar since the year 2012.
4. As UGC Research Fellow from 18/1/2008 to 14/12/2009 at the Department of Zoology and Environmental Science, Gurukula Kangri University, Haridwar.
5. As fellow of Applied and Natural Science Foundation, No.1 Professors’ Colony, Gurukula Kangri University, Haridwar since the year 2012.
6. Editorial Board member of International Journal of Plant Physiology and Biochemistry, Academic Journals, Victoria Island, Lagos since the year 2012.
7. Editorial Board member of Journal of Agricultural Science, Canadian Center of Science and Education, 1120 Finch Avenue West Suite 701-309 Toronto, ON., M3J 3H7 Canada since the year 2012.
8. Life member of Journal of Sustainable Environmental Research, published by Foundation of Natural Science and Culture, Gurukula Kangri University, Haridwar (Uttarakhand), India since the year 2012.
9. Life member of the Indian Science Congress Association 14, Dr. Biresh Guha Street, Kolkata- 700 017, India (Membership No. L23448) since the year 2014.
10. Life member of Indian Science Congress Association, Haridwar Chapter, Gurukula Kangri University, Haridwar (Uttarakhand), India since the year 2014.
11. Editorial Board member of International Journal of Agricultural Science and Natural Resources, American Association for Science and Technology, 1521 Concord Pike Suite 301, Wilmington, New Castle De 19803 USA since the year 2014.
