### DR. NITIN KAMBOJ

NameDr. Nitin KambojDesignationAssistant ProfessorDate of Joining18th October 2006DepartmentZoology and Environ

DepartmentZoology and Environmental SciencesPresent addressGurukula Kangri (Deemed to be<br/>University), Haridwar-249404

(Uttarakhand), India

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**Education Qualifications** 

**Ph. D.** Environmental Sciences from Gurukula

Kangri Vishwavidyalaya, Haridwar

(Uttarakhand)

Title "Environmental Impact Evaluation of

Torrents with Special Reference to Sabhawala Watershed in Doon Valley

(Uttarakhand)."

UGC- NET Environmental Sciences

M. Sc. Environmental Sciences from Gurukula

Kangri Vishwavidyalaya, Haridwar-

249404 (Uttarakhand)

32 (Annexure 1)

33 (Annexure 2)

20 (Annexure 3& 4)

(Annexure 10)

**B. Sc.** Environment & Water Management from

H.N.B.G.U, Srinagar-Garhwal (UK)

**Teaching Experiences** 

Ph.D. Classes Teaching

Post Graduate Classes Teaching

Under Graduate Classes Teaching

Research Experience

10 Years

15 Years

15 Years

Research Areas Environmental Aspects

Research Papers Published in Journals Research Papers Presented in Conferences Workshops/ Training Programs Attended Book published

Book published04 (Annexure 5)Book Chapter's Publications17 (Annexure 6)List of Seminar Publications01 (Annexure 7)List of Awards and Appreciation08 (Annexure 8)List of Ph.D. student(Annexure 9)

**List of M.Phill/M. Sc. Dissertation** 

**Academic Courses** 

General Orientation Course Academic Staff College, Shimla

University, Shimla

- 1. Academic Staff College, Punjabi University, Patiala (2010)
- 2. Academic Staff College, Sant Gadge Baba Amravati University, Amravati (2014)

Zoology and Environmental Science, Gurukula Kangri Vishwavidyalaya, Sponsored by UCOST Dehradun (2018)

# Research Methodology

**Refresher Course** 

## Field Experience

- JRF 1Year Field Work Experience in Wild Life Institute of India, Dehradun.
- SRF 2 Year and 6 Months Field Work Experience in CSWCR&TI (ICAR) Kaulagarh Road, Dehradun.

## Foreign Visit

• Mauritius to Attend an International Congress of Environmental Research, Reduit University of Mauritius during 11-18 September, 2010

### Members of the different academic societies

- Life Member of Human Welfare Societies.
- Life Member of Swami Vivekananda Educational Trust.
- Life Member of Applied and Natural Science Foundation.
- Life Member of Indian Association of Soil and Water Conservationists.
- Life Member of Environmental Conservation Journal.
- Life Member Foundation of Natural Science and Culture.

### Program organized

- As organizing secretary organized an International Conference of World Congress for Man and Nature "Global Climate & Biodiversity Conservation in the Department of Zoology and Environmental Sciences, Gurukula Kangri University, Haridwar (Uttarakhand) during 11-13 November, 2011.
- As a member organized National Conference on Status of Environment and Biodiversity: RIO + 20 and Role of Space Organized in the Department of Zoology and Environmental Sciences, Gurukula Kangri University, Haridwar (Uttarakhand) during 02-03 November, 2012.
- As organizing secretary organized work shop on "Our Himalayas: environmental challenges and solutions" on the occasion of Himalayan day organized under the auspices of Department of Zoology and Environmental Sciences, Gurukula Kangri University, Haridwar (Uttarakhand) during 9<sup>th</sup> September, 2015.
- As organizing secretary organized work shop on "Impact of Ozone Depletion on water resources" on the occasion of International Ozone Day organized under the Department of Zoology and Environmental Sciences, Gurukula Kangri Vishwavidyalaya, Haridwar (Uttarakhand) during 16 September, 2016.

- As organizing secretary organized work shop on "Aapada Prabandhan Chintan avam Goraeya Sanrakshan Abhiyan" on 20 March 2017 in Department of Zoology and Environmental Sciences at Gurukula Kangri Vishwavidyalaya, Haridwar.
- As Coordinator in workshop on International Ozone Day "Effect of ozone on earth's Environment & Control Measures" on 16 September, 2017 in Department of Zoology and Environmental Sciences at Gurukula Kangri Vishwavidyalaya, Haridwar.
- As a member of oral/ poster presentation Committee in workshop on International Ozone Day "Effect of Ozone on earth's Environment & Control Measures" on 16 September, 2017 in Department of Zoology and Environmental Sciences at Gurukula Kangri Vishwavidyalaya, Haridwar.
- As a member in organizing committee in XXVI International Bioacoustics Congress in Haridwar (Uttarakhand) during 08-13 October, 2017.
- As Convener organized a National workshop on "Ecosystem Restoration in Himalayan region for sustainable livelihood" organized by Department of Zoology and Environmental Sciences, Gurukula Kangri (Deemed to be University), Haridwar (Uttarakhand) on June 05, 2021.

# Other activities

• Organized ten days' camp of students at Gurukula Kangri village, Haridwar as NSS Programme Officer.

• Organized one-day camp of students at Gurukula Kangri village, Haridwar as NSS Programme Officer.

- Indian Medical Association awarded an appreciation letter in recognition of the outstanding voluntary services in the field of blood donation, blood group testing, and nation building and community services.
- Organized one-day camp and other activity camps of students in Haridwar as NCC Officer.
- Organized various voluntary blood donation camps as a representative of Gurukula Kangri University with Uttarakhand State AIDS Control Society and Directorate, Medical Health & Family Welfare, Uttarakhand.
- Worked as, a sector magistrate in election duties MLC of Uttarakhand 2017.
- Organized a one-day workshop on Himalayan day at Department of zoology and environmental Science, Gurukula Kangri Vishwavidyalaya, Haridwar as organizing secretary on 9 September 2018.
- Organized Ten Days National Workshop as an Executive Committee Members on "Research methodology in science & technology (Multi-disciplinary)" sponsored by UCOST, Dehradun and Department of Zoology and Environmental Sciences, Gurukula Kangri Vishwavidyalaya, Haridwar (Uttarakhand) on October 04-13, 2018.
- Successfully completed three MLC election (voting duty and counting duty) duties as Presiding Officer. Active Member of Local Committees of different universities such as sports selection, election and admission etc.

- Practical Examinee.
- Presently working as an active proctorial board member in the university campus.
- Presently working as Hostel Warden of Pandit Gurudut Vidyarathi hostel of Gurukula Kangri (Deemed to be University), Haridwar from Dec 2017 to till date.

#### Sessions Chaired in International/National conferences

- Chaired the session of International Congress of Environmental Research (ICER-10) as a coordinator during 16-18 September, 2010 organized by University of Sport, Gurukula Kangri University, Haridwar (Uttarakhand) during 9-10 December, 2010.
- Co-Chaired the session in 5<sup>th</sup> National Conference on present innovative & new paradigm in physical Educational organized by Department of Physical Education & Sport, Gurukula Kangri Vishwavidyalaya, Haridwar (Uttarakhand) during 29<sup>th</sup> August, 2014.
- Chaired the technical session of International conference on advances in the field of Health, Safety, Fire, environment, allied science and Engineering (HSFEA 2016) as a chair-person during 18-19 November, 2016 organized by University of Petroleum and Energy Studies (UPES) Dehradun in collaboration with the Springer Journal.
- Chaired the technical session of National conference on ASCMAP-2017 as a chairperson during 18 December, 2017 organized by University of Petroleum and Energy Studies (UPES) Dehradun.
- Chaired the technical session of International conference on advances in the field of Health, Safety, Fire, environment, allied science and Engineering (HSFEA 2018) as a chair-person during 16-17 November, 2018 organized by University of Petroleum and Energy Studies (UPES) Dehradun in collaboration with the Springer Journal.
- Chaired the technical session of National conference on Sustainable Management of Environment & Natural Resource Through Innovation in Science and Technology (SMTST 2020) during 07-08 August 2020 (Online mode) organized by University of Petroleum and Energy Studies (UPES) Dehradun in collaboration with the D.B.S. (P.G.) College, Dehradun.

#### **INVITED LECTURES**

- Invited speaker in Training Program on Advanced Experimentations organized by Department of Pharmaceuticals Sciences Faculty of Medical Sciences & Health Gurukula Kangri University, Haridwar (Uttarakhand) during June 20-30 2014.
- Invited lecture one-day national seminar / workshop on Environmental Awareness E-waste management organized by university of petroleum and energy studies Dehradun (Uttarakhand) on 4<sup>th</sup> April 2015.
- Invited key note speaker in national conference on recent advances in sciences, technology and management held in Phonics group of institutions, Roorkee during 29<sup>-30</sup> April 2017.

# **Annexure 1: List of Research Paper Published (32)**

- 1. Malik, D.S., Bharti, P.K., **Kamboj, N.**, and Yadav, R. (2007). Quantification of Heavy Metals Migration in Ground Water Regime Due to Discharge of Textile Industrial Effluents in Panipat Area, Haryana. *Pollution Research*, 26(4): 123-125.
- **2. Kamboj, N.**, Chopra, A.K., Malik, D.S. and Juyal, G.P. (2010). Watershed Characteristics of Shiwalik Torrents at Sabhawala in Doon Valley. *Environment Conservation Journal*, 11(1&2): 115-118.
- **3. Kamboj, N.** (2010). Effects of Vegetative Barriers for Channelization of Shiwalik Torrent at Sabhawala in Doon Valley. *Environment Conservation Journal*, 11(3): 99-102
- **4. Kamboj, N.** (2010). Seasonal Hill River Problems and Their Bio-Engineering Remedial Measures in Shiwalik Himalayas. *Environment Conservation Journal*, 11(3): 171-176.
- **5.** Sharma, V., **Kamboj**, **N.**, and Joshi. B.D. (2011). A Study on Planktonic Components of River Yamuna. *Environment Conservation Journal*, 12(1&2): 49-51.
- **6. Kamboj, N.**, Pandey, A., Shoaib, M. and Kumar, R. (2012). Environmental Impact Assessment of Illegal Ganga Mining at Kangri Village, District Haridwar (Uttarakhand) India. *Journal of Sustainable Environmental Research*, 1: 67-71.
- 7. **Kamboj**, N. (2012). Evaluation of Some Water Quality Parameters of River Ganga during Kanwer Mela-2011 at Haridwar, India. *Journal of Sustainable Environmental Research*, 1(2): 125-128.
- **8.** Kamboj, N. (2012). Physico-chemical and Metallic Contamination Analysis of Underground Water in SIDCUL Industrial Area, District Haridwar (U.K.), India. *Journal of Sustainable Environmental Research*, 1(2): 211-216.
- **9. Kamboj, N.**, Singh, J., Pandey, C.P. and Aswal, R.S. (2013). Physico-chemical Parameters of Industrial and Domestic Wastes at SIDCUL Area, Haridwar (Uttarakhand). *Journal of Sustainable Environmental Research*, 2(1): 125-131.
- **10. Kamboj, N.**, Kumar, R. and Aswal, R.S. (2013). Impact Assessment of Road Development Project on Flora and Fauna Recorded from Narshan to Dehradun (Uttarakhand) India. *Environment Conservation Journal*, 14(1&2): 81-86.
- **11. Kamboj, N.** and Choudhary, M. (2013). Impact of Solid Waste Disposal on Ground Water Quality near Gazipur Dumping Site, Delhi, India. *Journal of Applied and Natural Science*, 5(2): 306-312.
- **12.** Choudhary, M., **Kamboj**, **N.**, and Paul Chinmoy (2014). Potable water is a serious Environmental issue: A special study on Umiam area, of RI-Bhoi District, Meghalaya, India. *International Research Journal of Environmental Sciences*, 3(9): 37-42.
- **13. Kamboj**, N., Kumar, S. and Chaubey, A.K., (2015) Assessment of Physico-Chemical Parameter of Solani River at Roorkee, Uttarakhand, India. *International Journal of Current Research*, 7(6): 16670-16673.
- **14. Kamboj, N.**, Chaubey, A.K., Kumar, S. and Parasher, K.P. (2015) Quality Assessment of Municipal supplied water for drinking purpose, District Haridwar,

- Uttarakhand, India. Journal of Global Biosciences, 4(5): 2375-2379, (ISSN 2320-1355).
- **15. Kamboj, N**. and Aswal, R.S. (2015). Suitability of Ganga Canal Water for Drinking Purpose at Haridwar, Uttarakhand, India, *Journal of Environmental and Applied Bioresearch*, 03(03): 137 141
- **16. Kamboj, N.**, Rani, A., Bharti, M., Kamboj, V. and Sharma, S. (2016). Assessment of physiochemical Characteristics of ground water, Roorkee (Uttarakhand), India. *International Journal for Environmental Rehabilitation and Conservation*, 07(1): 94-99.
- **17. Kamboj, N.**, Kamboj, V., Bharti, M. and Sharma, S. (2016). Productive assessment of *Pisum sativum (l.)* by using organic fertilizers. *Environment Conservation Journal*, 17(3): 79-83.
- **18. Kamboj, N.**, Bharti, M., Kamboj, V., Rani A. and Sharma, S. (2016). A comparative study of physico-chemical and bacteriological parameters of three different ritual bathing Ghats of Ganga River in India. *ESSENCE- International Journal for Environmental Rehabilitation and Conservation*, 6 (2): 46-52.
- **19. Kamboj, N.**, Aswal, R.S. and Singh, P. (2017). Occurrence of metals in Ganga canal water at Haridwar (Uttarakhand), India: A case study. *Archives of Agriculture and Environmental Science*, 2(2):119-123.
- **20.** Kamboj, N. and Pandey, N. (2017). Spatial distribution of solid waste disposal sites in Allahabad city, Uttar Pradesh, India using GIS approach. *Archives of Agriculture and Environmental Science*, 2(4): 357-360, DOI: 10.26832/24566632.2017.020420.
- **21. Kamboj, N.,** Matta, G., Bharti, M., Kumar, A., Kamboj, V. and Gautam, R.K. (2017). Water quality categorization using WQI in rural areas of Haridwar, India. *ESSENCE- International Journal for Environmental Rehabilitation and Conservation*, 8(2): 108-116.
- **22.** Kamboj, V., **Kamboj, N.** and Sharma, S. (2017). Environmental impact of River Bed Mining- A Review. *International Journal of Scientific Research and Reviews*, 7(1): 504-520.
- **23. Kamboj, N.,** Sharma, S. and Kamboj, V. (2018). Study of Ground Water Quality in an Active Riverbed Mining Area in Mohand Rao Watershed, Haridwar (Uttarakhand), India. *International Journal of Current Research in Life Sciences*, 7(3):1410-1414.
- **24. Kamboj, N.** and Bharti, M. (2018). Impact of Different Land Uses on Soil Characteristics in Ranipur Rao Watershed in Haridwar, District, Uttarakhand. *International Journal of Creative Research Thoughts*, 6(1): 1147-1154.
- **25. Kamboj,** N., Aswal, R.S., Singh, P. and Dobhal, R. (2018). Evaluation of Physicochemical Characteristics of Ganga Canal at Haridwar. *Asian Journal of Water, Environment and Pollution*, 15(3): 125-133. DOI 10.3233/AJW-180051. (Scopus Index: 0.6)
- **26.** Sharma, S. and **Kamboj**, **N.** (2019). Impact of River Bed Mining on Floral Diversity in Mohand Rao Watershed of Haridwar Region (Uttarakhand), India. *Journal of Emerging Technologies and Innovative Research (JETIR)*, 6(1): 13-26.
- **27. Kamboj, N.** and Kamboj, V. (2019). Morphometric and meristic study of four freshwater fish species of river Ganga. *Indian Journal of Animal Science*, 89(4): 120-123 (SCI and Scopus Indexing; Impact Factor: 0.5 (JCR)).

- **28.** Kamboj, N. and Kamboj, V. (2019). Water Quality Assessment using overall index of Pollution in riverbed-mining area of Ganga-River Haridwar, India. *Water Science*, 33 (1): 65-74. (Taylor Francis)
- **29.** Bharti, M. and **Kamboj, N. (2020).** Occurrence and Diversity of mycofloral population in soil of two different land use types in Haridwar region (Uttarakhand), India. Journal of advanced scientific research, 11(1): 208-214.
- **30.** Kamboj, V. and **Kamboj, N.** (2020). Spatial and temporal variation of zooplankton assemblage in the mining impacted stretch of Ganga River, Uttarakhand, India. *Environmental Science and Pollution Research*, 27: 27135–27146, *DOI* 10.1007/s11356-020-09089-1. (JCR IF= 4.223, SCI and Scopus Index)
- **31. Kamboj, N.,** Kamboj, V. and Sharma, A.K. (2020). Length-weight Relationship of Selected Fish Species at Mining Bed Stretch of River Ganga at Haridwar. *Annals of Agri-Bio Research*, 25 (2): 251-254 (Scopus Index: 0.3)
- **32.** Bisht, A., **Kamboj**, **N.**, Kamboj, V. and Bisht, A. (2020). A review on the role of emerging anthropogenic activities in environmental degradation and emphasis on their mitigation. *Archives of Agriculture and Environmental Science*, 5(3): 419-425, <a href="https://dx.doi.org/10.26832/24566632.2020.0503025">https://dx.doi.org/10.26832/24566632.2020.0503025</a>.

# Annexure 2: List of Research Papers Presented in Local, National and International Conferences/ Seminars (33 Nos.)

- 1. Paper entitled "Current Status of Jatropha Plantation and Its Applications" presented in National Seminar on Medicinal Plants: Conservation, Cultivation and Utilization II organized by Department of Zoology and Environmental Sciences, Gurukula Kangri University, Haridwar (Uttarakhand) during 09-11 March, 2007.
- 2. Paper entitled "Impact of Climate Change on Biodiversity" presented in National Symposium on Impact of Trends in Climate Change on Bio-diversity and Faunistic Systems organized by Department of Zoology and Environmental Sciences, Gurukula Kangri University, Haridwar (Uttarakhand) during 19-20 February, 2010.
- 3. Paper entitled "Impact Assessment of Torrential Hazards in Relation to Bioengineering Remedial Measures at Sabhawala Watershed in Shiwalik Himalaya (India)" presented in International Congress of Environmental Research organized by University of Mauritius in collaboration with the Journal of Environmental Research and Development in Reduit, Mauritius during 16-18 September, 2010.
- 4. Paper entitled "Evaluation of Different Torrent Remedial Measures at Sabhawala Watershed in Shiwalik Himalaya (India)" presented in 5<sup>th</sup> Uttarakhand State Science and Technology Congress organized by Uttarakhand Council for Science and Technology (UCOST), Dehradun in association with Doon University, Dehradun (Uttarakhand) during 10-12 November, 2010.
- 5. Paper entitled "Sustainable Development of Tourism in the Himalayan State Uttarakhand" presented in 4<sup>th</sup> National Conference on Modern Trends & Directions of Physical Education & Sport organized by Department of Physical

- Education & Sports, Gurukula Kangri University, Haridwar (Uttarakhand) during 09-10 December, 2010.
- 6. Paper entitled "Some Vegetative Methods as a Nature's Free Tool for Controlling Soil Erosion Leading to Floods" presented in National Seminar on Environmental Management and Biodiversity Conservation organized by Omkaranand Institute of Management & Technology, Rishikesh (Uttarakhand) during 26-27 February, 2011.
- 7. Paper entitled "Abstract No. 95" presented in National Seminar on New Innovations in Parasitological Research and Prof. S.S. Lal Felicitation Symposium organized by Department of Zoology, D.A.V. (P.G.) College, Dehradun (Uttarakhand) during 29-30 March, 2011.
- 8. Paper entitled "Soil Erosion as a Serious Threat to Degrade the Land Resources and Its Management" presented in International Conference on World Congress for Man and Nature: Global Climate & Biodiversity Conservation organized by Department of Zoology and Environmental Sciences, Gurukula Kangri University, Haridwar (Uttarakhand) during 11-13 November, 2011.
- 9. Paper entitled "Ground Water Contamination due to Municipal Solid Waste Disposal in Delhi, India" presented in International Conference on Green Technology for Environmental Rehabilitation (GTER-2012) organized by Faculty of Engineering & Technology, Gurukula Kangri University, Haridwar (Uttarakhand) during 11-13 February, 2012.
- 10. Paper entitled "The Relation between Sport and Ecological Environment" presented in International Conference on Global Innovation, Strategies & Policies in Physical Education & Sport Sciences organized by Department of Physical Education & Sports, Gurukula Kangri University, Haridwar (Uttarakhand) during 24-26 February, 2012.
- 11. Paper entitled "Unsustainable River Bed Material Mining and Its EIA on Ganga at Kangri Village District Haridwar (Uttarakhand), India" presented in National Conference on Status of Environment and Biodiversity: RIO + 20 and Role of Space Technology organized by Department of Zoology and Environmental Sciences, Gurukula Kangri University, Haridwar (Uttarakhand) during 02-03 November, 2012.
- 12. Paper entitled "Road Widening and Its EIA on Flora and Fauna Recorded from Narshan to Dehradun" presented in 7<sup>th</sup> Uttarakhand State Science and Technology Congress organized by Uttarakhand Council for Science and Technology (UCOST), Dehradun in association with Graphic Era University, Dehradun, (Uttarakhand) during 21-23 November, 2012.
- 13. Paper entitled "Assessment of Physico-chemical Parameters of Industrial and Domestic Wastes at SIDCUL Region, Haridwar" presented in National Conference on Emerging Trends in Engineering and Sciences (ETES-2013) organized by Department of Mechanical Engineering, Faculty of Engineering and Technology, Gurukula Kangri University, Haridwar (Uttarakhand) during 09-10 November, 2013.
- 14. Paper entitled "Study of Physiological Characteristics of Ranipur Rao Watershed, Haridwar (Uttarakhand) and Controlling Measures" presented in 8<sup>th</sup> Uttarakhand State Science and Technology Congress organized by Uttarakhand Council for Science and Technology (UCOST), Dehradun in association with Uttarakhand

- Technical University, Dehradun and Doon University, Dehradun (Uttarakhand) during 26-28 December, 2013.
- 15. Paper entitled "Current Status of Shivalik Himalayan Watershed Ranipur Torrent" presented in National Symposium in "Innovations on Science and Technology for Inclusive Development" organized by Haridwar Chapter of the Indian Science Congress Association on February 16, 2014.
- 16. Paper entitled "A Study of Ranipur Rao affected Watershed by Seasonal Hill River and its Remedial Measures" presented in "National conference on recent advances in biosciences and drug discovery" organized by Department of Pharmaceutical Sciences, Faculty of Ayurved and Medical Sciences, Gurukula Kangri University, Haridwar (Uttarakhand) during 03-04 March, 2014.
- 17. Paper entitled "A comparative study between the outdoor exercise and Gym Exercise" presented in 5<sup>th</sup> National Conference on present innovative & new paradigm in physical Education & Sport Sciences organized by Department of Physical Education & Sports, Gurukula Kangri University, Haridwar (Uttarakhand) during 29<sup>th</sup> August 2014.
- 18. Paper entitled "Characterization of SIDCUL effluents in Ranipur Rao Haridwar, (UK)" presented in Regional Symposium on Technovation for Inclusive Human Development organized by Department of Mechanical Engineering, Faculty of Engineering and Technology, Gurukula Kangri University, Haridwar (Uttarakhand) during October 12, 2014.
- 19. Paper entitled "Shiwalik Himalaya Facing Serious Threats as Biodiversity Loss and Soil Erosion and Its Sustainable Management" presented in National Conference on threats to biodiversity and ecosystems: impacts of developmental projects and climate change and 25<sup>th</sup> all India congress of zoology organized by Department of Zoology and Environmental Sciences, Gurukula Kangri University, Haridwar (Uttarakhand) during 17 19 November, 2014.
- 20. Paper entitled "Environmental impact assessment of Ganga mining in Haridwar area Uttarakhand)" presented in National Conference on Science and Technology for Human Development organized by ISCA: Chapter Haridwar and AIHC&A, Gurukula Kangri University, Haridwar (Uttarakhand) during March 20-21, 2015.
- 21. Paper entitled "Effect of Environmental factor on the treatment of life-style disorder through yogic management" presented in National Conference on Yogic Management of Life Style Disorders organized by Department of human consciousness & yogic science, Gurukula Kangri Vishwavidyalaya, Haridwar (Uttarakhand) during 30 to 31march 2015.
- 22. Paper entitled "Physico-chemical parameter assessment of Solani River at Roorkee, Uttarakhand, India. Presented in National Conference on Science and Technology for indigenous development in India" held at faculty of Engineering and Technology, Gurukula Kangri Vishwavidyalaya, Haridwar September during 28-30, 2015.
- 23. Poster presentation entitled "A Study on metal pollution in Ganga canal water" presented in National conference on Monitoring and management of drinking water quality (MMDWQ) and XXVIII annual conference of nation environmental science academy at Uttarakhand state Council for Science and Technology (UCOST), Dehradun (Uttarakhand) during 21-23 December, 2015.

- 24. Paper presented entitled "Ground Evaluation and Management needs of some seasonal hill rivers of Shiwalik Himalayan watershed in Haridwar district, Uttarakhand" Presented in International Conference on Advances in Science, Engineering and Technology (ICASET-2016) organized by International Journal of Advance Research and Innovation MANU- International Council for Man and Nature during 29-30 January 2016.
- 25. Attended Symposium on Sanskritvaamyam shilpvigyanm (in special reference to aeronautical technology) organized by Sanskrit Department, in Department of Zoology and Environmental Sciences, Gurukula Kangri University, Haridwar (Uttarakhand) during 30 March, 2016.
- 26. Paper entitled "A comparative study of physico-chemical and bacteriological parameters of three different ritual bathing Ghats of Ganga River, India" presented in National Conference on Science and Technology for National Development organized by ISCA: CHAPTER Haridwar, Gurukula Kangri University, Haridwar (Uttarakhand) during November 20-22, 2016.
- 27. Paper entitled "Barriers for Channelization of seasonal Hill Rivers in Doon Valley" presented in National seminar on Reduce, Reuse and Recycle for Sustainable future organized by Himgiri Zee University, Dehradun (Uttarakhand) during 25 November 2016.
- 28. Paper entitled "Mode of riverbed mining and its surround impacts in Uttarakhand" presented in National conference on Recent advances in sciences, technology and management held in Phonics group of institutions, Roorkee during 29 30 April 2017.
- 29. Paper entitled "Seasonal and Spatial Variations in Ganga Canal Water Quality: a case Study of Haridwar district, Uttarakhand (India)" presented in National seminar on The role of Green Energy in Sustainable future organized by Himgiri Zee University, Dehradun (Uttarakhand) during 10 November 2017.
- 30. Presented a research paper entitled "Ecological assessment of riverbed mining in the Mohammed Rao watershed area, Dist. Haridwar" in National conference on ASCMAP-2017 at University of petroleum and energy studies on 18-12-2017.
- 31. Presented a research paper entitled "Assessment of Nutrient distribution as affected by Land use pattern in Haridwar region, UK in International conference on advances in the field of Health, Safety, Fire, environment, allied science and Engineering (HSFEA 2018) during 16-17 November, 2018 organized by University of Petroleum and Energy Studies (UPES) Dehradun in collaboration with the Springer Journal.
- 32. Presented a research paper entitled "Impact assessment of irrigational water on physico-chemical characteristics and nutrients dynamics of soil in different agricultural fields of district Haridwar" presented in National Conference on Science and Technology: rural development organized by ISCA: CHAPTER Haridwar, Gurukula Kangri University, Haridwar (Uttarakhand) during February 15-16, 2020.
- 33. Presented a research paper entitled "Seasonal variation in physico-chemical characteristics of the irrigational water used for agricultural fields of district Haridwar" in National colloquium/conference on medicinal plants, ecology, Himalaya & society at Dev Sanskriti Vishwavidyalaya held on 20-02-2020.

# **Annexure 3: List of Training Programme Attended**

- 1. Attended One Week Training Programme on "Fruits and Vegetables Conservation and Preservation" organized by Centre for Technology and Development (A Society for Economic and Social Studies, New Delhi), Field Station (UCOST-TRC), Sahaspur (Dehradun) during 13-19 October, 2008.
- 2. Attended One Day Training Camp on Haridwar Kumbh Mela-2010 organized by Sanskrit Dev University, Uttarakhand on 20 December, 2009.
- 3. Attended Regional Training Workshop on "Factoring Environmental Flows into Integrated Water Resources Management" organized by National Institute of Ecology, New Delhi jointly with Central Inland Fisheries Research Institute (ICAR), Barrackpore and supported by Cap-Net, Pretoria in Department of Zoology and Environmental Sciences, Gurukula Kangri University, Haridwar (Uttarakhand) during 06-11 December, 2012.
- 4. Attended a Training Programme on "Advanced Experimentations" organized by Department of Pharmaceuticals Sciences Faculty of Medical Sciences & Health Gurukula Kangri University, Haridwar (Uttarakhand) during June 20-30 2014.
- 5. Attended Saksham –IT Champion Training program at Gurukula Kangri University, Haridwar (Uttarakhand) during 22-23, September 2017.

# **Annexure 4: List of Workshops Programme Attended (16)**

- 1 Attended National Environmental Awareness Workshop on "Solid Waste Management" sponsored by DST-FIST & UGC-SAP and organized by Department of Zoology and Environmental Sciences, Gurukula Kangri University, Haridwar (Uttarakhand) on 10 April, 2007.
- 2 Attended One Day Workshop on "Untrained NSS Programme Officers Training Workshop" organized by Gurukula Kangri University, Haridwar (Uttarakhand) on 21 September, 2008.
- 3 Attended One Day Workshop on "Untrained NSS Programme Officers Training" organized by Uttarakhand Sanskrit University, Haridwar and Gurukula Sanskrit Mahavidyalaya, Haridwar (Uttarakhand) on 20 August, 2009.
- 4 Attended One Day Workshop on "Voluntary Blood Donation" organized by Uttarakhand State AIDS Control Society and Directorate, Medical Health & Family Welfare, Uttarakhand on 10 September, 2009.
- 5 Attended One Day Workshop on "Blood Donor motivation programme" organized by Uttarakhand State AIDS Control Society and Directorate, Medical Health & Family Welfare, Uttarakhand at center point hotel Rookie 21th December 2010
- 6 Attended National Workshop on "Biodiversity: Measurement, Assessment and Conservation" sponsored by University Grant Commission, New Delhi held at Maharishi Dayan and College, Sri Ganganagar (Haryana) during 21-23 February, 2012.
- 7 Attended National Workshop on "Taxonomic Keys and Identification Tools for Different Groups of Flora and Fauna" sponsored by Uttarakhand State Council for Science and Technology (UCOST), Dehradun and organized by Department of

- Zoology and Environmental Sciences, Gurukula Kangri University, Haridwar (Uttarakhand) during 29 October-03 November, 2012.
- 8 Attended National Workshop on "Recent Trends in Atmospheric and Environmental Sciences" organized by Department of Physics in collaboration with Department of Zoology and Environmental Sciences, Gurukula Kangri University, Haridwar (Uttarakhand) during 4-5 April, 2014.
- 9 Attended Workshop on "Application of Remote Sensing and GIS in Water Resources Management" sponsored by Uttarakhand State Council for Science and Technology (UCOST) & DOON UNIVERSITY, Dehradun and organized by Uttarakhand Space Application Center (USAC), Dehradun, 4-5 June 2014.
- 10 Attended two Week workshop on "environmental studies" conducted by Indian institute of technology of Bombay from 2- 12 June 2015 (this workshop was held under the national mission on education through ICT (MHRD)).
- 11 Attended One Day Workshop on "Modern Analytical Techniques in Environmental Science" organized by School of Environment & Natural Resources, Doon University, Dehradun (Uttarakhand) on May 17<sup>th</sup>, 2016.
- 12 Attended National Workshop on "Research methodology in science & technology (Multi-disciplinary)" sponsored by UCOST, Dehradun and organized by Department of Zoology and Environmental Sciences, Gurukula Kangri Vishwavidyalaya, Haridwar (Uttarakhand) on October 04-13, 2018.
- 13 Attend a workshop on "Myth and Reality of Drinking Water Treatment" organized by University of Petroleum and Energy Studies, Dehradun on 15 November 2019.
- 14 Attend a workshop organized by DST and ACS at UCOST Dehradun on 25 November 2019.
- 15 Attended a workshop on "Academic Writing and Research Ethics" organized by Faculty of Management Studies and IPR Cell, Gurukula Kangri Vishwavidyalaya Haridwar on 25 February 2020.
- 16 Attended a National workshop on "Ecosystem Restoration in Himalayan region for sustainable livelihood" organized by Department of Zoology and Environmental Sciences, Gurukula Kangri (Deemed to be University), Haridwar (Uttarakhand) on June 05, 2021.

### Annexure 5: List of Books (04)

- 1. Book entitled "Paryavarniya Aadyan (Hindi version)" published by Pratibha Prakashan, Dehradun.
- 2. Book entitled "Environmental Studies" published by Pratibha Prakashan, Dehradun.
- 3. Book entitled "A text book of Environment and Ecology" published by Savera Publishing House, New Delhi; ISBN: 81908080811-7.
- 4. Edited Book entitled "Advances in Environmental Pollution Management: Wastewater Impacts and Treatment Technologies" published by Agro Environ Media, Haridwar; ISBN: 978-81-942017-4-8 (e-book), 978-81-942017-3-1 (Paperback); DOI: 10.26832/aesa-2020-aepm

# **Annexure 6: Book Chapter's published (17)**

- 1. Multifacial application of Drug Plants (2008) edited chapter entitled "An overview of Jatropha plantation and its application" published by Daya publishing House, New Delhi; ISBN 978-8170355502: 295-299.
- 2. Water Pollution and Management (2012) edited chapter entitled "Watershed Management through Bioengineering Measures of Torrent at Doon Valley, Shiwalik Himalaya" published by Biotech Books, New Delhi, ISBN 978-81-7622-227-3: 298-230.PP
- 3. Biodiversity Conservation and Environment Management (2012) edited chapter entitled "Some Vegetative Methods as a Nature's Tool for Controlling Soil Erosion Leading to Floods" published by Biotech Books, New Delhi, ISBN 978-81-7622-262-4: 191-198.
- 4. Environment Management (2013) edited chapter entitled "Soil Erosion: A Serious Threat to Degrade the Land Resources and Its Management" published by Daya Publishing House, New Delhi, ISBN 978-81-7035-822-0: 161-165.
- 5. Environment Health: Human Welfare in Present Scenario (2016) edited chapter entitled "Assessment of the Ground Water Quality of Roorkee City in relation to Human Health" published by ABS Books, New Delhi, ISBN 978-93-86088-822-15-4: 68-77.
- 6. Inorganic Toxicity: Environment & Human Health (2018) edited book chapter entitled "Inorganic Toxicity: Aluminum" published by Lap Lambert Academic Publication, ISBN: 978-613-9-90485-3.
- 7. In: Contaminants in Agriculture and Environment: Health Risks and Remediation (2019) edited book chapter entitled "Riverbed mining as a threat to in-stream agricultural flood-plain and biodiversity of Ganges River, India" published by Agriculture and Environmental Science Academy, ISBN: 978-81-942017-0-0. DOI: 10.26832/AESA-2019-CAE-0151-019.
- 8. **Kamboj**, N., Bisht, A., Kamboj, V., Pandey, N. and Bisht, A. (2020). Role of natural disasters in environmental degradation: An overview. In: Environmental Degradation: Causes and Remediation Strategies, Volume 1, Eds. Kumar, V., Singh, J. and Kumar, P., pp. 21-35, <a href="https://doi.org/10.26832/aesa-2020-edcrs-02">https://doi.org/10.26832/aesa-2020-edcrs-02</a>.
- 9. Kamboj, V., **Kamboj**, N. and Sharma, A.K. (2020). A review on general characteristics, classification and degradation of river systems. In: Environmental Degradation: Causes and Remediation Strategies, Volume 1, Eds. Kumar, V., Singh, J. and Kumar, P., pp. 47-62, <a href="https://doi.org/10.26832/aesa-2020-edcrs-04">https://doi.org/10.26832/aesa-2020-edcrs-04</a>.
- 10. **Kamboj, N.,** Bisht, A., Kamboj, V. and Bisht, A. (2020). Leachate disposal induced groundwater pollution: A threat to drinking water scarcity and its management. In: Advances in Environmental Pollution Management: Wastewater Impacts and Treatment Technologies, Volume 1, Eds. Kumar, V., Kamboj, N., Payum, T., Singh, J. and Kumar, P., pp. 54-76, <a href="https://doi.org/10.26832/aesa-2020-aepm-05">https://doi.org/10.26832/aesa-2020-aepm-05</a>.
- 11. Sharma, S., **Kamboj**, **N.** and Kamboj, V. (2020). Factors affecting watershed ecosystem: A case study of Mohand Rao watershed in Uttarakhand, India. In: Advances in Environmental Pollution Management: Wastewater Impacts and

- Treatment Technologies, Volume 1, Eds. Kumar, V., Kamboj, N., Payum, T., Singh, J. and Kumar, P., pp. 100-112, <a href="https://doi.org/10.26832/aesa-2020-aepm-07">https://doi.org/10.26832/aesa-2020-aepm-07</a>
- 12. Bharti, M., **Kamboj, N.** and Kamboj, V. (2020). Effect of untreated wastewater on soil quality: A case study in Ranipur Rao watershed in Haridwar region (Uttarakhand), India. In: Advances in Environmental Pollution Management: Wastewater Impacts and Treatment Technologies, Volume 1, Eds. Kumar, V., Kamboj, N., Payum, T., Singh, J. and Kumar, P., pp. 145-157, https://doi.org/10.26832/aesa-2020-aepm-010
- 13. Pandey, N., **Kamboj, N.,** Bharti, M., Kamboj, V., Sharma, S. and Bisht, A. (2020). An overview on enormous effect of hazardous wastes on water components and their management. In: Advances in Environmental Pollution Management: Wastewater Impacts and Treatment Technologies, Volume 1, Eds. Kumar, V., Kamboj, N., Payum, T., Singh, J. and Kumar, P., pp. 158-173, https://doi.org/10.26832/aesa-2020-aepm-011
- 14. Kamboj, V., **Kamboj, N.** and Bisht, A. (2020). An overview of water quality indices as promising tools for assessing the quality of water resources. In: Advances in Environmental Pollution Management: Wastewater Impacts and Treatment Technologies, Volume 1, Eds. Kumar, V., Kamboj, N., Payum, T., Singh, J. and Kumar, P., pp. 188-214, <a href="https://doi.org/10.26832/aesa-2020-aepm-013">https://doi.org/10.26832/aesa-2020-aepm-013</a>
- 15. Kamboj, V., Bisht, A. and **Kamboj**, N. (2021). Riparian Flora Checklist at Mining Impacted Area of Ganga River at Haridwar (India). In: Current Research & Innovations in Life Sciences, Eds. Sharma, A.K., Thakur, R., Sharma, M. and Sharma, M., pp. 37-42.
- 16. Bisht, A., Bisht, A., **Kamboj**, N. and Kamboj, V. (2021). An overview of high valued medicinal plants from rich diversity of Himalayas. In: Current Research & Innovations in Life Science, Eds. Sharma, A.K., Thakur, R., Sharma, M. and Sharma, M., pp. 82-95.
- 17. **Kamboj,** N., Kumar, A., Kumar, M. and Kamboj, V. (2021). A Review on Population Dynamics and Status of Avifauna in Hastinapur Wildlife. In: Current Research & Innovations in Life Sciences, Eds. Sharma, A.K., Thakur, R., Sharma, M. and Sharma, M., pp. 112-119.

### **Annexure 7: List of Seminar Proceedings Published**

1. **Kamboj, N.** Aswal, R.S., Singh, P., and Singh, R. (2018). Chemometric Techniques: A Comparative Study of Drinking Water Sources of Dehradun and Haridwar, Uttarakhand (India). Advances in Health and Environment Safety, Springer, ISBN 9789811071218: 345-351.

# **Annexure 8: List of Awards and Appreciation (08)**

1. Indian Medical Association awarded in recognition of the outstanding voluntary services in the field of blood donation, blood group testing, and nation building and community services 2009.

- 2. Received Appreciation award in recognition of the outstanding benevolent act of voluntary blood donation, 2012.
- 3. Received award of Appreciation from the president of Zoological society of India for outstanding services during 25<sup>th</sup> all India congress of zoology 2014.
- 4. Indian Society for Human Welfare awarded for expertise and outstanding performance in the field of Environmental Awareness and community services, 2015.
- 5. Uttaranchal Cheritable Hospital awarded in recognition of the outstanding performance in the field of Plantation and Environmental protection.
- 6. Swami Vivekananda Polytechnic awarded in recognition of the outstanding performance in the field of Plantation and Environmental protection.
- 7. Received award of Appreciation from international council for man and nature ICASET 2016.
- 8. Received Appreciation award by University of Petroleum and Energy Studies (UPES) Dehradun in collaboration with the Springer Journal in International conference on advances in the field of Health, Safety, Fire, environment, Allied science and Engineering (HSFEA 2016) during 18-19 November, 2016.
- 9. Received Award of Special Recognition by National Human Rights Conservation society in recognition of the outstanding voluntary services in the field of Environmental awareness and community services 2017.
- 10. Received Appreciation award by University of Petroleum and Energy Studies (UPES) Dehradun in collaboration with the Springer Journal in International conference on advances in the field of Health, Safety, Fire, environment, Allied science and Engineering (HSFEA 2018) during 16-17 November, 2018.

## Annexure 9: List of Ph.D. Guidance

S. No	Name of Research Scholar	Thesis Tittle	Year of admission	Year of registrati on after RDC	Thesis Status (Awarded/ Submitted)	Fellowship Detail
1.	Ravinder Singh Aswal	Seasonal variations in the physico-chemical and bacteriological characteristics of Ganga Canal water at district Haridwar, Uttarakhand, India	2012	30-08- 2013	Awarded (23-09-2017)	DST Project collaboration with UCOST, Dehradun
2.	Manisha Bharti	Soil nutrient dynamics of different land use patterns of Ranipur Rao, Shiwalik watershed at Haridwar (Uttarakhand)	2015	09-04- 2016	Pursuing	RGNF, UGC (New Delhi) Letter No. F1- 17.1/2017- 18/RGNF- 2017-18-SC- UTI-30512

3.	Shalini Sharma	Impact of river bed mining on ecological characteristics of Mohand Rao Watershed in the Foothills of Himalaya in district Haridwar (Uttarakhand)	16-08-2016	01-04- 2017	Awarded (20-07-2019)	NA
4.	Vishal Kamboj	Impact of river bed mining on aquatic habitat in Ganga river at Haridwar (Uttarakhand)	11-08-2016	01-04- 2017	Awarded (12-03-2021)	DST- INSPIRE fellowship (IF 160805)
5.	Neeraj Pandey	Effect of different types of irrigational water on soil nutrient dynamics in agricultural fields of Haridwar (Uttarakhand)	29-08-2017	04-04- 2018	Pursuing	NA
6.	Aditi Bisht	Municipal solid waste characterization and its route optimization using Geographical information system in the city of Haridwar, Uttarakhand	16-10-2019	12-09- 2020	Pursuing	NA
7.	Amrit Kumar		08-12-2020		Pursuing	NA

## Annexure 10: List of M. Phil./ M.Sc. dissertation Thesis guidance

- 1. M.Sc. dissertation entitled "A Study on Solid Waste Components of Saraswati Sugar Mill, Yamuna Nagar (Haryana)" submitted by Sandeep Kumar in 2009.
- 2. M.Sc. dissertation entitled "Physico-chemical Studies of Effluents at Akums Drugs and Pharmaceutical Limited, SIDCUL, Haridwar" submitted by Amit Mishra in 2009.
- 3. M.Sc. dissertation entitled "A Comparative Study of Physico-chemical Properties of Treated and Untreated Effluent of Shivam Automobile Limited, Haridwar" submitted by Rohit Chaudhary in 2010.
- 4. M.Sc. dissertation entitled "Assessment of Physico-chemical Parameters of River Ganga in Haridwar City, Uttarakhand State, India During Kanwer Mela 2011" submitted by Robin Singh Rathi in 2011.
- 5. M.Sc. dissertation entitled "Assessment of Physico-chemical and Heavy Metal Contamination in Ground Water in SIDCUL Industrial Area, Haridwar, Uttarakhand" submitted by Mohd. Shoaib in 2012.
- 6. Arunima Pandey in 2012 in M. Phil. thesis entitled "Environmental Impact Evaluation of Illegal Ganga Mining with Special Reference to Shayampur

- Kangri, District Haridwar (Uttarakhand), India" to the C.M.J. University, Shillong, Meghalaya, submitted.
- 7. M.Sc. dissertation entitled "EIA of highway brodification narshan to Dehradun, Haridwar, Uttarakhand" submitted by Retesh kumar in 2012.
- 8. M.Sc. dissertation entitled "Environmental Impact Evaluation of Shiwalik Hill Seasonal River Ranipur Rao Watershed in District Haridwar, Uttarakhand, India" submitted by Chetan Prakash Pandey in 2013.
- 9. M.Sc. dissertation entitled "The Assessment of Physico-chemical Parameters of Industrial and Domestic Waste with Special Reference to Seasonal River Ranipur Rao in SIDCUL Area, Haridwar, Uttarakhand" submitted by Jogendra Singh in 2013.
- 10. M.Sc. dissertation entitled "Role of instrumentation in environmental monitoring" submitted by Kamal Kant Sharama in 2014.
- 11. M.Sc. dissertation entitled "'Irrigation Water Quality Assessment of Ganga Canal, Haridwar (Uttarakhand) India "by Chander Kant Prasher in 2015.
- 12. M.Sc. dissertation entitled "'Physico-chemical cauterization of ground water at Roorkee Region Uttarakhand by Rakshak Jain in 2016.
- 13. M.Sc. dissertation entitled "Physico-chemical characterization of Ganga Canal during Ardh Kumbh 2016 at Haridwar Uttarakhand" by Shagun in 2016.
- 14. M.Sc. dissertation entitled "Productive assessment of *Pisum sativum by* using Vermicomposting and FYM fertilizer Haridwar Uttarakhand" by Vishal Kamboj in 2016.
- 15. M.Sc. dissertation entitled "Study on Stone Crushers and their environmental impacts in Shiwalik Himalayan Watershed in District Haridwar Uttarakhand" by Sachin Kumar in 2017.
- 16. M.Sc. dissertation entitled "Study on Riverbed Mining Plan and Process of Ganga and Seasonal hill rivers Riverbed mining in Shiwalik Himalayan Watershed in District Haridwar Uttarakhand" by Pawan Chauhan in 2017.
- 17. M.Sc. dissertation entitled "Impact of Riverbed Mining on livelihood of communities in the Banjarewala village of Sukhrao watershed, district Haridwar by Matul in 2018.
- 18. M.Sc. dissertation entitled "Influence of paper mill effulents on selected agricultural crop species: *Pisum sativum, Vigna radiate & Triticum aestivum*" by Rajat Awasthi in 2018.
- 19. M.Sc. dissertation entitled "Assessment of physico-chemical and biological properties of ice used for various purposes in Haridwar city (Uttarakhand)" by Vivek Singhal in 2019.
- 20. M.Sc. dissertation entitled "Assessment of physico-chemical characteristics of groundwater of Bahadrabad city, Haridwar (Uttarakhand)" by Vishal Bhardwaj in 2020.
- 21. M.Sc. dissertation entitled "Analysis of physicochemical parameter of waste water in FMCG company" by Anurag Pathak in 2020.