

Dr. Rajinder Singh

Professor

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Updated: 25 /11/ 2024

Professional Milieu

- Professor, Punjabi University, Patiala (2019 onwards)
- Former Dean Academics at Uttar Pradesh State Institute of Forensic Science, Lucknow
- Former Professor-Incharge, Sophisticated Instrumentation Centre, Punjabi University, Patiala
- Former Head, Dept. of Forensic Science, Punjabi University, Patiala
- Associate Professor, Punjabi University, Patiala (2016-2019)
- Assistant Professor, Punjabi University, Patiala (2003-2016)
- JRF-UGC, Department of Forensic Science, Punjabi University, Patiala (2001-2003)
- **Teaching experience: 21 years**

Educational Background

- **Ph.D. (Forensic Science)**, Punjabi University, Patiala (2008) in collaboration with Wildlife Institute of India (WII), Dehradun.
- **M.Sc. (Forensic Science) GOLD MEDALIST**, Punjabi University, Patiala (1999-2001)
- **Ph.D. Thesis Title:** Hair Characterization of Schedule-I Felids of the Wildlife (Protection) Act-1972 using Morphometric, Protein and DNA techniques: Implications in Wildlife Forensics

Research Interests

Research Experience: 22 years

- **FORENSIC BIOLOGY INCLUDING DNA FORENSICS**
 - Human and non-human DNA Testing
 - Wildlife Forensics
 - Forensic Diatomology
 - Forensic Entomology
 - Forensic Botany
- **FORENSIC CHEMISTRY**
 - Body Fluids
 - Trace Cosmetics Evidence, Inks, Paints *etc.*

Professional Recognitions

- Visiting Professor at College of Medicine and Forensics, Xi'an Jiaotong University, Shaanxi, China since Oct. 2016
- Chair Professor at Criminal Justice College in East China University of Political Science and Law at Shanghai, China (Oct. 2017 to Oct. 2020)
- Visiting faculty at LNJN-National Institute of Criminology and Forensic Science, NFSU, Ministry of Home Affairs, Govt. of India, New Delhi
- Visiting faculty at Central Academy for Police Training (CAPT), Bhopal and Central Detective Training Institute (CDTI), Jaipur and Chandigarh, BPR&D, Ministry of Home Affairs, Govt. of India, New Delhi.
- Expert Consultant at Advanced Institute for Wildlife Conservation (AIWC), Vandalur, Chennai, Govt. of Tamil Nadu
- Member of Advisory Board of "The Silk Road Forensic Consortium (SRFC)", at Xi'an, Shaanxi, China
- Vice-President, Indo-Pacific Academy of Forensic Odontology (INPAFO) 2020-22
- Subject expert in UPSC and other State Public Service Commissions.
- Subject expert (External) in Board of studies, Research degree committees, Recruitment boards of many Public and Private Universities.
- Resource Person in many conferences/symposia/workshops of national and international repute.

Publications and Conferences

• Research Papers	91
• Ph.D	07 (awarded) 05 (Pursuing)
• M.Sc. Dissertations	90 (Completed)
• Book /Book Chapters	04
• DNA Sequences contributed in NCBI (GenBank)	06
• Awards	21
• Invited Talks/ Resource person in Conferences	66
• Session Chaired	09
• Conferences organized	13
• Skill development courses/workshops	10

REVIEWER IN JOURNALS (SELECTED)

- **SCIENTIFIC REPORTS**- Nature Publishing Group *IF: 5.133*
 - **Forensic Science International** (Elsevier)- *IF: 2.676*
 - **Journal of Forensic Sciences** -The official publication of the American Academy of Forensic Sciences (Wiley)- *IF: 1.832*
 - **Science & Justice**- Journal of "The Chartered Society of Forensic Sciences" (Elsevier)- *IF: 2.124*
 - **International Journal of Legal Medicine** (Springer)- *IF: 2.2*
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- **Journal of Forensic and Legal Medicine** (Elsevier)- *IF: 1.691*
- **Analytical Sciences**-Published by "The Japan Society for Analytical Chemistry" *IF: 2.081*
- **Microchemical Journal** (Elsevier)- *IF: 5.304*
- **Molecules**- *IF: 4.927*
- **Journal of Raman Spectroscopy** (Wiley)- *IF: 2.4*
- **Infrared Physics and Technology** (Elsevier)- *IF: 2.997*
- **Forensic Chemistry** (Elsevier)- *IF: 3.096*
- **Phytochemical Analysis** (Wiley)- *IF: 3.024*
- **Applied Biochemistry and Biotechnology** (Springer)- *IF: 3.094*
- **Applied Sciences** (Springer Nature)-*IF: 2.6*
- **Science of Nature** (Springer Nature)-*IF: 2.1*
- **Scientia Agricola**- Published by University of Sao Polo, Brazil (SCI) *IF: 1.625*

RESEARCH PAPPERS

1. Yadav A, Nimi C, Sharma S, Bhan S, Kaur S, **Singh R.** (2004) Analysis of hair styling wax residues on human hair: A forensic investigation with ATR-FTIR spectroscopy and chemometric interpretation. *Forensic Science International*. Impact Factor: 2.2, UGC CARE list- Group A. <https://doi.org/10.1016/j.forsciint.2024.112308>
2. Jose SA, Thiyagarajan KB, Baskar C, **Singh R**, Vasanthakumari D, Udhayan A. (2024) Discrimination of mongoose hair from domestic cattle, human hair, and synthetic fiber using FTIR spectroscopy and chemometric analysis: A rapid, cost-effective, and field-deployable tool for wildlife forensics. *Royal Society of Chemistry (RSC) Advances* Vol.14, 36937-36944. Impact Factor: 3.9. DOI: <https://doi.org/10.1039/D4RA06981A> .
3. Yadav A, Sharma S, Singh V, Kapoor M, **Singh R.** (2004) Forensic identification and differentiation of some protected timber species using ATR-FTIR spectroscopy and chemometrics. *Frontiers in Analytical Science*. Vol. (4): 1508509. <https://doi.org/10.3389/frans.2024.1508509>
4. Jose SA, Thiyagarajan KB, Ganesan S, Amarnath CB, Baskar CB, **Singh R**, Kumari DV, Ganesan, MG, Udhayan A. (2024) Development of FTIR spectral library for the identification of Asian Elephant Ivory: An innovative approach in wildlife forensics. *Discover Applied Sciences*. Vol. 6, 586. Impact Factor: 2.8. DOI: <https://doi.org/10.1007/s42452-024-06282-6>
5. Yadv A, Nimi C, Bhatia D, **Singh R** (2024). Estimation of age and sex from fingernail clippings by using ATR-FTIR spectroscopy coupled with chemometric interpretation. *International Journal of Legal Medicine*. DOI: <https://doi.org/10.1007/s00414-024-03275-3> Impact Factor: 2.2, UGC CARE list- Group A
6. Yadav A, Sharma S, Gupta L, Singh V, **Singh R** (2024). Current Perspectives in the Forensic Analysis of Timbers using Vibrational Spectroscopy: A Review. *Journal of Wildlife Science*. Vol. 1 (2) 01-12. Wildlife Institute of India (WII), Dehradun (Publisher). <https://doi.org/10.63033/JWLS.KRNG5178>.
7. Bhatia D, Sharma CP, Sharma S, **Singh R** (2024) Species discrimination from hair using ATR-FTIR spectroscopy: Application in wildlife forensics. *Science & Justice*. Impact Factor: 2.124, UGC CARE list- Group A <https://doi.org/10.1016/j.scijus.2024.04.002>

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8. Shrama S, Bhasin R, Nimi C, **Singh R.** (2024) Forensic discrimination of condom lubricants using ATR-FTIR Spectroscopy in combination with chemometrics- Effect of matices, pre-coital and post-coital conditions. *Forensic Science, Medicine and Pathology*. Impact Factor: 1.8, UGC CARE list- Group A <https://doi.org/10.1007/s12024-024-00802-x>
 9. Nimi C, Rani N, **Singh R.** (2024) Forensic aspects of condom evidence: Analysis, interpretation, and recent trends. *Forensic Science International*. Impact Factor: 2.2, UGC CARE list- Group A <https://doi.org/10.1016/j.forsciint.2024.111988>
 10. Sharma S, Kaur G, Nimi C, **Singh R.** (2024) Forensic discrimination of white architectural paints via ATR FT-IR spectroscopy and chemometrics. *Arab Journal of Forensic Sciences & Forensic Medicine*. Vol. 6 (Special issue) 125-144 UGC CARE list- Group B <https://doi.org/10.26735/GCNC4529>
 11. Sangwan P, Nimi C, **Singh R,** Sharma N. (2024) Discrimination of Soil samples collected from Haryana (India) using non-destructive ATR-FTIR spectroscopy coupled with multivariate statistical analysis. *Indian Journal of Science and Technology*. Vol. 17 (11):1087-1096. UGC CARE list- Group A. DOI: <https://doi.org/10.17485/IJST/v17i11.2930>
 12. Sharma S, Bhatia D, **Singh R.** (2024) Study on the effect of environmental temperature and humidity on the analysis of bodily fluids using ATR-FTIR Spectroscopy. *Journal of South India Medicolegal Association*. Vol. 16 (01) 58-79.
 13. Bhatia D, Nimi C, Sharma S, Das AK, **Singh R.** (2023) Rapid and non-destructive approach for characterization and differentiation of sealing wax using ATR-FTIR spectroscopy. *Journal of Forensic Sciences*. Impact Factor: 1.832, UGC CARE list- Group A. DOI: <https://doi.org/10.1111/1556-4029.15367>
 14. Nimi C, Yadav A, Sharma S, Singh P, **Singh R.** (2023) Implementing ATR-FTIR spectroscopy and chemometrics for the forensic examination of sexual lubricants and its traces. *Forensic Chemistry*. Vol.36,100533. Impact Factor: 3.096, UGC CARE list- Group A DOI: <https://doi.org/10.1016/j.forc.2023.100533>
 15. Sharma S, Sharma S, Singh R (2023) Application of ATR FT-IR Spectroscopy and Chemometrics for the Differentiation of Brown Shoe Polish Stains as Forensic Evidence. *Journal of Punjab Academy of Forensic Medicine and Toxicology*. Vol. 23 (1) 105-113. UGC CARE list- Group A. DOI: <https://doi.org/10.5958/0974-083X.2023.00018.3>
 16. Sharma S, Kaur G, Kumar A, **Singh R** (2023) Trends in the analysis of abrin poisoning for forensic purposes. *Journal of Forensic and Legal Medicine*. Vol. 98, 102564. Impact Factor: 1.691. UGC CARE list- Group A. <https://doi.org/10.1016/j.jflm.2023.102564>
 17. Yadav A, Nimi C, Sharma S, Kaur J, **Singh R** (2023) A comprehensive ATR-FTIR spectroscopic analysis for the identification and differentiation of Lip Balms. *Journal of Forensic Sciences*. Impact Factor: 1.832, UGC CARE list- Group A. DOI:10.1111/1556-4029.15326
 18. Nimi C, Chopi R, **Singh R** (2023) Application of ATR-FTIR Spectroscopy and chemometrics to the forensic examination of duct tapes. *Forensic Chemistry*. Vol.32,100461. Impact Factor: 3.096, UGC CARE list- Group A. <https://doi.org/10.1016/j.forc.2022.100461>
 19. Sharma CP, Sharma S, **Singh R** (2022) Species discrimination from blood traces using ATR FT-IR spectroscopy and chemometrics: Application in wildlife forensics. *Forensic Science International: Animals and Environments*. Vol. 3, 100060. DOI: [10.1016/j.fsiae.2022.100060](https://doi.org/10.1016/j.fsiae.2022.100060)
 20. Sharma CP, Sharma S, Rawat GS, **Singh R** (2022) Rapid and non-destructive differentiation of Shahtoosh from Pashmina/Cashmere wool using ATR FT-IR Spectroscopy. *Science & Justice* (62) 349-357. Impact Factor: 2.124, 5 Years Impact Factor: 2.075. UGC CARE list- Group A <https://doi.org/10.1016/j.scijus.2022.04.002>
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21. Nimi C, Chophi R, **Singh R** (2022) Discrimination of Electrical Tapes Using ATR-FTIR Spectroscopy and chemometrics. *Journal of Forensic Sciences*. Impact Factor: 1.832, UGC CARE list- Group A. <https://doi.org/10.1111/1556-4029.14998>
 22. Sharma S, Kaur H, **Singh R** (2022) Sex discrimination from urine traces for forensic purposes using Attenuated Total Reflectance Fourier Transform Infrared Spectroscopy and multivariate data analysis. *International Journal of Legal Medicine*. Impact Factor: 2.791, UGC CARE list- Group A. <https://doi.org/10.1007/s00414-022-02782-5>
 23. Rani N, Chophi R, Nimi C, **Singh R** (2022) Quick screening of hand sanitizers for adulterants and quantification of ethanol content using attenuated total reflectance spectroscopy. *Journal of Forensic Medicine and Toxicology* Vol. 34 (1) 65-71. SCOPUS. <http://doi.org/10.5958/0974-4568.2022.00013.8>
 24. Sharma S, Sharma A, Singh SP, **Singh R** (2022) Study on carcass decomposition, insect succession in aquatic habitat and its application in the estimation of post-mortem submersion interval (PMIS). *Journal of Punjab Academy of Forensic Medicine and Toxicology* Vol. 22 (1) 25-31. SCOPUS. <http://doi.org/10.5958/0974-083X.2022.00005.X>
 25. Sharma S, **Singh R** (2022) A novel and non-destructive approach for the analysis of unusual writing material (*Kohl/Kajal*) on unusual writing surfaces using ATR FT-IR spectroscopy. *International Research Journal on Police Science*. Vol. 7(1&2)1-13. ISSN-2454-597X
 26. Sharma S, Chophi R, Garg D, **Singh R** (2021) On the spectroscopic investigation of stamp inks using ATR-FTIR and Chemometrics: Application in forensic document examination to Forensic Chemistry. *Forensic Chemistry*. Vol. 26, 100377. Impact Factor: 3.096, UGC CARE list- Group A <https://doi.org/10.1016/j.forc.2021.100377>
 27. Sharma S, Sharma S, **Singh R** (2021) Forensic differentiation of *Amanita* mushrooms using ATR-FTIR spectroscopy coupled with chemometrics. *International Journal of Medical Toxicology & Legal Medicine*. Vol. 24 (3-4) 278-287. DOI: [10.5958/0974-4614.2021.00094.2](https://doi.org/10.5958/0974-4614.2021.00094.2) SCOPUS, UGC-CARE List Group-1
 28. Sharma S, Chophi R, Josan JK, **Singh R** (2021) Rapid and non-destructive analysis of eye-cosmetics using ATR-FTIR spectroscopy and chemometrics. *Forensic Science International*. Impact Factor: 2.676. UGC CARE list- Group A. <https://doi.org/10.1016/j.forsciint.2021.111062>
 29. Chophi R, Sharma S, Singh R. (2021) Elemental profile of lipstick by AAS technique: Health risk investigation. *Environmental Forensics*. Impact Factor: 1.880. UGC CARE list- Group A <https://doi.org/10.1080/15275922.2021.1976318>
 30. Yadav A, Bhatia D, Josan JK, **Singh R** (2021) Forensic aspects of DNA Methylation: A Review. *Indian Journal of Physical Anthropology and Human Genetics*. Vol. 40 (1):1-15. ISBN: 0378-8156, UGC Serial No. 20846
 31. Sharma S, Josan JK, Singh K, **Singh R** (2021) ATR-FTIR Spectroscopy: a confirmatory and non-destructive approach for the identification and discrimination of blood stains from look-alike non- blood substances. *Indian Journal of Physical Anthropology and Human Genetics*. Vol. 40, (1): 23-37. ISBN: 0378-8156, UGC Serial No. 20846
 32. Sharma S, Chophi R, Kaur C, **Singh R** (2021) Chemometric analysis on ATR FT-IR spectra of spray paint samples for forensic purposes. *Journal of Forensic Sciences*. Vol. 66, 2190-2200. <https://doi.org/10.1111/1556-4029.14806> Impact Factor: 1.832, UGC CARE list- Group A.
 33. Chophi R, Sharma S, **Singh R** (2021) Discrimination of nail polish using attenuated total reflection infrared spectroscopy and chemometrics. *Australian Journal of Forensic Sciences*. 53:3, 325-336. <https://doi.org/10.1080/00450618.2020.1713212> Impact Factor: 1.210, UGC CARE list- Group A
 34. Sharma S, Chophi R, Josan JK, **Singh R** (2021) Detection of bloodstains using Attenuated Total Reflectance Fourier Transform Infrared spectroscopy supported with PCA and PCA-LDA".
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- Medicine, Science and The Law.* <https://doi.org/10.1177/00258024211010926>. Impact Factor: 2.051. UGC CARE list- Group A
35. Sharma S, **Singh R** (2021) Forensic analysis of wild toxic and edible Amanita mushrooms by Gas Chromatography-Mass Spectrometry. *Arab Journal of Forensic Sciences & Forensic Medicine*. Vol. 3 (1) 31-49. UGC CARE list- Group B
 36. Sharma S, Aydin M, Bansal G, Kaya E, **Singh R** (2021) Determination of amatoxin concentration in heat-treated samples of Amanita phalloides by high-performance liquid chromatography: a forensic approach. *Journal of Forensic and Legal Medicine*. <https://doi.org/10.1016/j.jflm.2020.102111>. Impact Factor: 1.691. UGC CARE list- Group A
 37. Jossan JK, Sharma S, **Singh R** (2021) Evaluating the Effect of Chemical Treatment on DNA Recovery and Amplification from Grass-Stained Cloth. *Journal of Scientific Research (BHU)*. Vol. 65 (1) 105-110. UGC CARE list- Group D
 38. Chophi R, Sharma S, **Singh R** (2020) Discrimination of vermilion (sindoor) using attenuated total reflectance Fourier-transform infrared spectroscopy in combination with PCA and PCA-LDA. *Journal of Forensic Sciences*. DOI: [10.1111/1556-4029.14609](https://doi.org/10.1111/1556-4029.14609). Impact Factor: 1.832, UGC CARE list- Group A
 39. Sharma S, **Singh R** (2020) Detection of vaginal fluid stains on common substrates via ATR FT-IR spectroscopy. *International Journal of Legal Medicine*. 134:1591-1602. DOI: [10.1007/s00414-020-02333-w](https://doi.org/10.1007/s00414-020-02333-w). Impact Factor: 2.791, UGC CARE list-Group A
 40. Chophi R, **Singh R** (2020) A review on heavy metal profiling from teeth for forensic purposes. *Journal of Indo-Pacific Academy of Forensic Odontology*. Vol. 9 (2) 117-127.
 41. Jossan JK, Sharma S, Priyanka, **Singh R** (2020) A Novel Approach for Forensic Differentiation of Grass Stains using ATR FT-IR Spectroscopy and Chemometrics. *Arab Journal of Forensic Sciences & Forensic Medicine*. Vol. 2 (2) 128-139. UGC CARE list- Group B
 42. Sharma S, Sharma S, **Singh R** (2020) ATR FT-IR Spectroscopy: A novel and non-destructive approach for the detection of blood on a single fiber. *Arab Journal of Forensic Sciences & Forensic Medicine*. 2 (1) 27-41. DOI: 10.26735/AYFK5009, UGC CARE list- Group B
 43. Sharma S, Chophi R, Kaur H, **Singh R** (2020) Differentiation of cosmetic foundation creams using Attenuated Total Reflection (ATR) Fourier Transform Infrared (FT-IR) spectroscopy: A rapid and non-destructive approach in trace evidence analysis. *Journal of Forensic Sciences*. 65 (3): 751-761. DOI: 10.1111/1556-4029.14257 Impact Factor: 1.832, UGC CARE list- Group A
 44. Sharma S, Sharma S, **Singh R** (2020) Forensic Differentiation of Black Shoe Polish Stains using Attenuated Total Reflection - Fourier Transform Infrared Spectroscopy and Chemometrics. *Arab Journal of Forensic Sciences & Forensic Medicine*; 2 (1) 4-15. DOI: 10.26735/KAMK2533. UGC CARE list- Group B
 45. Sharma S, Sharma S, Sharma A, **Singh R** (2020) Effect of seasonal and altitudinal variation on insect succession and rabbit carcass decomposition in West Himalayan region of India. *Anil Aggrawal's Internet Journal of Forensic Medicine and Toxicology*. 23 (2). SCOPUS. UGC CARE list- Group A
 46. Chophi R, Sharma S, **Singh R** (2020) Forensic analysis of red lipsticks using ATR-FTIR spectroscopy and chemometrics. *Forensic Chemistry*. 17: 100209 DOI: 10.1016/j.forc.2019.100209 Impact Factor: 3.096, UGC CARE list- Group A
 47. Sharma S, **Singh R** (2020) Detection and discrimination of seminal fluid using Attenuated Total Reflectance Fourier Transform Infrared (ATR FT-IR) spectroscopy combined with chemometrics. *International Journal of Legal Medicine*; 134: 411-432 DOI: 10.1007/s00414-019-02222-x Impact Factor: 2.791, UGC CARE list-Group A
 48. Sharma S, Chophi R, **Singh R** (2020) Forensic discrimination of menstrual blood and peripheral blood using attenuated total reflectance (ATR)- Fourier transform infrared (FTIR) spectroscopy
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- and chemometrics. *International Journal of Legal Medicine*; 134: 63–77. DOI: 10.1007/s00414-019-02134- Impact Factor: 2.791, UGC CARE list-Group A
49. Sharma S, Chophi R, Kumar R, Sharma V, **Singh R** (2019) Differentiation of locally manufactured *Kajal* by Attenuated Total Reflectance Fourier Transform Infrared Spectroscopy supported by chemometric analysis. *Forensic Science International*, 303: 109930. DOI: [10.1016/j.forsciint.2019.109930](https://doi.org/10.1016/j.forsciint.2019.109930). Impact Factor: 2.676. UGC CARE list- Group A
50. Sharma CP, Sharma S, Sharma V, **Singh R** (2019) Rapid and non-destructive identification of claws using ATR FT-IR spectroscopy- A novel approach in wildlife forensics. *Science & Justice*; 59: 622-629. DOI: [10.1016/j.scijus.2019.08.002](https://doi.org/10.1016/j.scijus.2019.08.002) Impact Factor: 2.124, 5 Years Impact Factor: 2.075. UGC CARE list- Group A
51. Kaur A, **Singh R** (2019) Diatomological mapping of eight waterbodies of Himachal Pradesh by using Scanning Electron Microscopy- A forensic perspective. *Anil Aggrawal's Internet Journal of Forensic Medicine and Toxicology*. 23 (1). SCOPUS. UGC CARE list- Group A
52. **Singh R**, Singh R, Sharma S (2019) Determination of Geographical of Cannabis- A Review. *The Indian Police Journal*. 66:110-121 BPRD, Ministry of Home Affairs, Govt. of India. UGC CARE list- Group B
53. Chophi R, Sharma S, Sharma S, **Singh R** (2019) Forensic entomotoxicology: Current concepts, trends and Challenges. *Journal of Forensic and Legal Medicine*. 3 (67):28-36. doi: 10.1016/j.jflm.2019.07.010. Impact Factor: 1.691. UGC CARE list- Group A
54. Chophi R, Sharma S, Sharma S, **Singh R** (2019) Trends in the forensic analysis of cosmetic evidence. *Forensic Chemistry*, 14: 100165. Impact Factor: 3.096, DOI: [10.1016/j.forc.2019.100165](https://doi.org/10.1016/j.forc.2019.100165) UGC CARE list- Group A
55. Kaur A, Singh R, **Singh R**. (2018) Effect of Altitudinal and Seasonal Factors on Diatomological Mapping of Waterbodies: Implication in Drowning Investigations. *Arab Journal of Forensic Sciences & Forensic Medicine*; Vol 01 (8): 1013-24 UGC CARE list- Group B
56. **Singh R**, Sharma S, Sharma S. (2018) Forensic Analysis of Fungal Evidence: A Systematic Approach. *Journal of Indian Society of Toxicology*; 14 (01):45-54.
57. Kaur A, Jasuja OP, **Singh R**. (2018) Diatomological mapping of Renuka lake in Himachal Pradesh: Significant in forensic investigation of drowning deaths. *Anil Aggrawal's Internet Journal of Forensic Medicine and Toxicology* [serial online], Vol. 19, No. 2
58. Sharma M, Sharma S, **Singh R**. (2016) Soil Differentiation of Five Districts of Himachal Pradesh Using Testate Amoebae Species Composition. *International Journal of Medical Toxicology & Legal Medicine*; Vol 19 (1-2): 27-32. SCOPUS, UGC-CARE List Group-1
59. **Singh R**, Zolawmsangi, Jasuja OP. (2016) A Preliminary Study on the Diatom Flora of Various Drowning Sites in Mizoram Rivers. *Anil Aggrawal's Internet Journal of Forensic Medicine and Toxicology* [serial online], 17(2) July - December 2016
60. **Singh R**, Sharma S, Sharma A. (2016) Determination of post-burial interval using entomology: A review. *Journal of Forensic and Legal Medicine* ; 42: 37–40. Impact Factor: 1.691. UGC CARE list- Group A
61. Priyanka, **Singh R**. (2016) A High Performance Thin Layer Chromatographic (HPTLC) method for species identification of grass leaf stains. *International Journal of Current Research*; 8 (08):36505-15.
62. Sharma S, **Singh R**. (2016) Mushroom poisoning: from toxicity to forensic analysis. *Journal of Indian Society of Toxicology*; 12(1):43-48.
63. **Singh R**. Forensic analysis of hair in wildlife investigations. Compendium: National Conference on New Horizons of Veterinary and Medical Forensic Medicine, Clinical Veterinary Medicine, Ethics & Jurisprudence, Rajasthan University of Veterinary and Animal Sciences, Bikaner (Rajasthan), 5th-6th March, 2016.
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64. Sharma S, **Singh R.** Forensic Entomotoxicology- New tool in solving mysteries of poisoning. Compendium: National Conference on New Horizons of Veterinary and Medical Forensic Medicine, Clinical Veterinary Medicine, Ethics & Jurisprudence, Rajasthan University of Veterinary and Animal Sciences, Bikaner (Rajasthan), 5th-6th March, 2016.
 65. Sharma S, **Singh R.** Use of Forensic Entomology in determining post-mortem interval: issues and challenges. Compendium: National Conference on New Horizons of Veterinary and Medical Forensic Medicine, Clinical Veterinary Medicine, Ethics & Jurisprudence, Rajasthan University of Veterinary and Animal Sciences, Bikaner (Rajasthan), 5th-6th March, 2016.
 66. Kumar P, Gupta R, **Singh R,** Jasuja O.P. (2015) Effects of latent fingerprint development reagents on subsequent forensic DNA typing: A review, *Journal of Forensic and Legal Medicine*; 32: 64-69. Impact Factor: 1.691. UGC CARE list- Group A
 67. Sharma S, **Chandel RS.** (2014) Forensic Aquatic Entomology: A Review, *Indian Police Journal*; Bureau of Police Research and Development (BPRD). 61(1):226-237
 68. Kaur R, Sharma S, **Singh R.** (2014) A Study on Occupational Marks on Teeth of Tailors. *Journal Indo-Pacific Academy of Forensic Odontology*; Vol. 5 (2).
 69. Priyanka, **Singh R.** (2013) Species identification from feathers of some protected bird species using light microscopy, *Turkish Journal of Forensic Sciences*; 12(3):16-27
 70. Kaur A, Priyanka, **Singh R.** (2013) Knot tying behaviour in selective groups of Punjabi population, *Scientific Investigator*; Central Detective Training School, BPRD. 1(6).
 71. **Chandel RS,** Bhatia T, Priyanka (2013) Examination of Sindoor (Vermillion) stains on white cotton fabric using thin layer chromatography, *Problems of Forensic Science*, 95:615-624
 72. **Chandel RS,** Jindal P. (2013) Developing of good solvent system for the species identification of grass leaf stains by thin layer chromatography, *Malaysian Journal of Forensic Science*; 4(1):20-29
 73. Priyanka, **Singh R.** (2013) Forensic Palynology: Role of Pollen Grains in Forensic Investigations (*in Hindi*). *Police Vigyaan* (BPRD, MHA, New Delhi). 31 (125) 45-48. ISSN No. 2230-7044, Peer reviewed
 74. Jossan JK, **Singh R.** (2013) Importance and Analysis of Blood Spattering in Forensic Science (*in Punjabi*). *Vigyaan De Nakash*, Punjabi University, Patiala (45) 20-23.
 75. Priyanka, Jossan JK, **Singh R.** (2013) Importance of Forensic ornithology in Criminal Investigations (*in Punjabi*). *Vigyaan De Nakash*, Punjabi University, Patiala (45) 54-56,
 76. Kang K, Jasuja OP, **Singh R.** (2012) Examination of brown shoe polish stains on white cotton fabric using thin layer chromatography, *Journal of Criminology and Criminalistics*; XXXIII(2): 102-109
 77. Bansal N, **Chandel RS,** Jasuja OP. (2011) Third molar and age determination: state of the art. *Journal of Indo-Pacific Academy of Forensic Odontology*, 2(02):3-8.
 78. Vaishya S, **Chandel RS,** Singh R. (2010) A New Thin Layer Chromatographic System for the Analysis of Some Commercially Available Mosquito Repellants. *Journal of the Indian Society of Toxicology*, 26 (2):11-15.
 79. **Chandel RS,** Thakar MK, Goyal SP, Sahajpal V. (2008) Forensic Hair Characterization of Six Endangered Felid Species of India. *Journal of Forensic Identification*, 58(3):317-330.
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82. Singh R, **Singh R**, Thakar MK. (2006) Diatomological studies from three water bodies of Jaipur. *Indian Internet Journal of Forensic Medicine & Toxicology*, 4(3).
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84. Singh R, **Singh R**, Thakar MK. (2006) Extraction Methods of Diatoms – A Review. *Indian Internet Journal of Forensic Medicine & Toxicology*, 4(2).
85. **Singh R**, Singh R, Kumar S, Thakar MK (2006) Forensic Analysis of Diatoms- A Review. *Anil Aggrawal's Internet Journal of Forensic Medicine and Toxicology*, 2006; Vol. 7 (2).
86. Singh R, **Singh R**, Thakar, MK (2005) Drowning Associated Diatoms, *Indian Internet Journal of Forensic Medicine & Toxicology*, 3(3).
87. Kumar M, **Singh R**, Singh R (2005) Cyanide poisoning (*in Punjabi*). *Vigyaan De Nakash*, Punjabi University, Patiala (42).
88. Singh R, Kumar M, **Singh R** (2005) Importance of Diatom Test in Forensic Science (*in Punjabi*). *Vigyaan De Nakash*, Punjabi University, Patiala (42).
89. Goyal P, Sahajpal V, **Singh R**, Goyal SP, Thakar MK (2005) Electrophoretic Differentiation of Protected Birds Species based on their Sarcoplasmic Protein Profiles, *Turkish Journal of Forensic Sciences*, 4(3): 23-29
90. **Singh R**, Kaur J, Thakar MK. (2003) Detection of argemone oil in the adulterated mustard oil by using colour tests and thin layer chromatography, *Anil Aggrawal's Internet Journal of Forensic Medicine and Toxicology*. www.geradts.com/~anil,
91. **Singh R**, Thakar MK, Kumar LA. (2002) Identification of nitrites in the Gunshot residues (GSR)- Sensitivities of Griess and Modified Griess reagents: A comparative study, *Indian Journal of Criminology and Criminalistics*, Vol. XXIII (3): 223-233.

DNA Sequences contributed in NCBI (GenBank)

1. *EU362123 *Panthera tigris tigris*, cytochrome b gene, partial sequence; mitochondrial, 2008.
2. *EU362124 *Panthera pardus*, cytochrome b gene, partial sequence; mitochondrial, 2008.
3. *EU362125 *Felis chaus*, cytochrome b gene, partial sequence; mitochondrial, 2008.
4. *EU362126 *Panthera uncia uncia*, cytochrome b gene, partial sequence; mitochondrial, 2008.
5. *EU434732 *Prionailurus bengalensis*, cytochrome b gene, partial sequence; mitochondrial, 2009.
6. *EU434733 *Lynx lynx*, cytochrome b gene, partial sequence; mitochondrial, 2009.

BOOKS/BOOK CHAPTERS

1. Handbook of DNA Profiling, eBook ISBN 978-981-15-9364-2 (**Springer Nature, 2021**). Chapter- Use of DNA Barcoding for Plant Species Identification https://doi.org/10.1007/978-981-15-9364-2_60-1
2. Forensic DNA Typing: Principles, Applications and Advancements ISBN 978-981-15-6655-4 (**Springer, 2020**). Chapter- DNA Barcoding in Forensic Mycology: Concepts, Limitations, and Future Prospects https://doi.org/10.1007/978-981-15-6655-4_22
3. Handbook of Forensic Odontology ISBN: 978-81-88132-85-0, Century Publications, New Delhi (2018)
4. Hair Examination of Wild Cats - Forensic Perspective. ISBN No. 978-3-659-46726-4, Lambert Academy Publishing (2013)

Research Supervision

Ph.D. SUPERVISION Completed (07)

- Dr. Priyanka (UGC-SRF) [2016]
- Dr. Amandeep Kaur (UGC-SRF) [2019]

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- Dr. Sweety Sharma (UGC-SRF) [2021]
 - Dr. Spriha Sharma (UGC-BSR SRF) [2022]
 - Dr. Jaskirandeep Kaur Jossan (UGC-BSR SRF) [2022]
 - Dr. Sahil Sharma (UGC-BSR SRF) [2022]
 - Dr. Rito Chophi (UGC-SRF) [2022]
 - **Currently working (05)**
 - Ms. Nimi Chongtham (UGC-SRF) **Registered**
 - Ms. Aarti Yadav (UGC-SRF) **Registered**
 - Mr. Dimple Bhatia (UGC-SRF) **Registered**
 - Ms. Nisha Rani (UGC-SRF) **Registered**
 - Mr. Ajit Kumar (UGC-JRF) **Enrolled**

M.PHIL (01)

- Mr. Manish Sharma

M.Sc. Dissertations (90)

Awards/Achievements

1. Awarded with **Junior Research Fellowship** by **University Grants Commission, Ministry of Human Resource Development, Govt. of India** for qualifying UGC-NET held in June 2001.
 2. Awarded with **Gold medal** for standing **first class first** in M.Sc. Forensic Science in the academic session 1999-2001 by Punjabi University, Patiala.
 3. Awarded with **University Scholarship** for standing **first class first** in M.Sc. Forensic Science in the academic session 1999-2001 by Punjabi University, Patiala.
 4. "**Forensic Leadership Excellence Award in Research**" in the **15th International Forensic Science Conference** organised by International Association of Scientists and Researchers held at Sardar Vallabh Bhai Patel Chest Institute, University of Delhi (23rd-25th August 2024)
 5. Our research paper titled '**Implementing ATR-FTIR spectroscopy and chemometrics for the forensic identification and differentiation of sexual lubricants and their traces**' presented by Ms. Chongtham Nimi (SRF-UGC) was adjudged as **The Best Research Paper (1st prize)** in the oral presentation (Professional) category in the **15th International Forensic Science Conference** organised by International Association of Scientists and Researchers held at Sardar Vallabh Bhai Patel Chest Institute, University of Delhi (23rd-25th August 2024)
 6. Our research paper titled "**Estimation of age and sex from fingernail clippings using ATR-FTIR spectroscopy and chemometric interpretation**" presented by Ms. Arti Yadav (SRF-UGC) and Ms. Nisha Rani (SRF-UGC) was adjudged as **The Best Research Paper (1st prize)** in the poster presentation (Professional) category in the **15th International Forensic Science Conference** organised by International Association of Scientists and Researchers held at Sardar Vallabh Bhai Patel Chest Institute, University of Delhi (23rd-25th August 2024)
 7. Our research paper titled "**Differentiation of Royal Bengal Tiger and Indian Leopard bones using ATR-FTIR spectroscopy: A forensic tool for wildlife conservation**" presented by Mr. Dimple Bhatia (SRF-UGC) was adjudged as **The Best Research Paper (Joint 1st prize)** in the poster presentation (Professional) category in the **15th International**
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Forensic Science Conference organised by International Association of Scientists and Researchers held at Sardar Vallabh Bhai Patel Chest Institute, University of Delhi (23rd-25th August 2024)

8. Our research paper titled *"A comprehensive ATR-FTIR spectroscopic analysis for the identification and differentiation of lip balms"* was adjudged as **The Best Research Paper (2nd prize)** presented by Ms. Arti Yadav (SRF-UGC) in the oral presentation category in the 1st International Conference on 'Forensics, Security and Law' organized by the Institute of Forensic Science, Amity University, Noida on 3rd-4th April, 2024.
 9. Our research paper titled *"Forensic analysis of cigarette butts using ATR-FTIR spectroscopy and chemometrics"* was adjudged as **The Best Research Paper (2nd prize)** presented by Ms. Nisha Rani (JRF-UGC) in the poster presentation category in the 1st International Conference on 'Forensics, Security and Law' organized by the Institute of Forensic Science, Amity University, Noida on 3rd-4th April, 2024.
 10. Our research paper titled *"Species discrimination from hair using ATR-FTIR spectroscopy coupled with chemometrics: Implications in Wildlife Forensics"* was adjudged as **The Best Research Paper (1st prize)** presented by Mr. Dimple Bhatia (SRF-UGC) in the poster presentation category in the International Conference on "Trends in Forensic, Law, and Criminology Empowering Criminal Justice in 21st Century and Beyond" organized by the Centre for Studies and Research in Forensic Sciences & School of Forensic Sciences, West Bengal National University of Juridical Sciences, Kolkata on 20th-22nd March 2024.
 11. Our research paper titled *'A rapid, non-destructive and eco-friendly approach to the forensic analysis of sexual lubricants using ATR-FTIR spectroscopy and chemometrics'* was adjudged as **The Best Research Paper (3rd prize)** presented by Ms. Chongtham Nimi (SRF-UGC) in the poster presentation category in the National Conference on 'Chemistry for the Sustainable Future' organized by the Department of Chemistry, Punjabi University, Patiala on 22nd-23rd February 2024.
 12. Our research paper titled *'Discrimination of duct tapes using ATR-FTIR spectroscopy and chemometrics'* was adjudged as **The Best Research Paper (1st prize)** presented by Ms. Chongtham Nimi (SRF-UGC) in the poster presentation category in the National Seminar on 'Exploring New Frontiers in Forensic Science and Anthropology' organized by the Department of Anthropology, University of Delhi, New Delhi on 1st-2nd February, 2024.
 13. **"Forensic Excellence Award"** in the 4th International Forensic Science Conference held at Sardar Vallabh Bhai Patel Chest Institute, University of Delhi (01/12/2023-03/12/2023).
 14. Our research paper entitled *"A non-destructive and quick approach to detect timber adulteration"* presented by Ms. Arti Yadav (JRF-UGC) was adjudged as **The Best Research Paper (1st Prize)** in the poster paper category in the national conference on "Recent Trends and Advancements in Forensic Science" (RTAFS-2023) organized by Department of Forensic Science, Punjabi University, Patiala, Punjab, India on March 16-18, 2023.
 15. Our research paper entitled *"Rapid and non-destructive approach for characterization and differentiation of sealing wax using ATR-FTIR spectroscopy"* presented by Mr. Dimple Bhatia (JRF-UGC) was adjudged as **The Best Research Paper (3rd Prize)** in the poster paper category in the national conference on "Recent Trends and Advancements in
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- Forensic Science” (RTAFS-2023) organized by Department of Forensic Science, Punjabi University, Patiala, Punjab, India on March 16-18, 2023
16. Our research paper entitled **“ATR FT-IR Spectroscopy: A potential tool for the analysis of vaginal fluid in a nono-destructive manner”** presented by Dr. Sweety Sharma was adjudged as **The Best Research Paper (1st Prize)** in the poster paper category in the in the 25th All India Forensic Science Conference, organized by the National Forensic Science University (NFSU) and Directorate of Forensic Science Services (DFSS), MHA, at Gandhi Nagar, Gujarat, Feb. 2-4th, 2023.
 17. Our research paper entitled **“Discrimination of brown packaging tapes using ATR FT-IR Spectroscopy and chemometrics”** presented by my research student Ms. Chongtham Nimi (SRF-UGC) was adjudged as **The Best Research Paper (1st Prize)** in the research scholar category in the in the National Conference organized by School of Forensic Science, West Bengal National University of Juridical Sciences, Kolkata on 6th-7th, 2022.
 18. Our research paper entitled **“ATR FT-IR Spectroscopy: A novel and non-destructive approach for the detection of seminal fluid stains”** presented by my research student Ms. Sweety Sharma (SRF-UGC) was adjudged as **The Best Research Paper (1st Prize)** in the oral presentations category in the NATIONAL CONFERENCE ON “CHALLENGES AND INNOVATIONS IN CRIMINAL JUSTICE SYSTEM (FORENSICON-2019)” organised by Department of Forensic Science, Bundelkhand University, Jhansi (21/02/2019-22/02/2019).
 19. Our research paper entitled **“DNA recovery from chemically treated grass stains using modified phenol chloroform extraction method”** presented by my research student Miss Jaskirandeep Kaur (SRF-UGC) was adjudged as **The 2nd Best Research Paper** in the oral presentations category in INTERNATIONAL CONFERENCE ON ADVANCES IN FORENSIC DNA TECHNOLOGY, organised by Department of Forensic Science, Bundelkhand University, Jhansi (22/02/2018-24/02/2018).
 20. Our research paper entitled **“Diatomological studies on Pondoh Dam in Himachal Pradesh by using Light and Scanning Electron Microscopy: A Forensic Perspective”** presented by my research student Miss Amandeep Kaur (SRF-UGC) was adjudged as **The Best Research Paper** in the oral presentations category in the NATIONAL CONFERENCE ON FORENSIC SCIENCE: AN INTERFACE BETWEEN SCIENCE, LAW AND JUSTICE organised by The Govt. Institute of Forensic Science at Nagpur on 23/12/2017
 21. Our research paper entitled **“Detection of blood traces on cotton fibers using ATR FT-IR Spectroscopy”** presented by my research student Ms. Sweety Sharma (JRF-UGC) was adjudged as **The Best Research Paper** in the oral presentations category in The UGC-NATIONAL CONFERENCE ON CURRENT SCENARIO IN FORENSIC INVESTIGATIVE TECHNIQUES organized by the Department of Genetics, Maharishi Dayanand University, Rohtak (07/09/2017)
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Conferences/ Seminars/ Workshops

➤ KEY NOTE ADDRESS/INVITED TALK /EXPERT LECTURE/ RESOURCE PERSON

1. Delivered a keynote address in the **15th International Forensic Science Conference** organised by International Association of Scientists and Researchers held at Sardar Vallabh Bhai Patel Chest Institute, University of Delhi (23rd-25th August 2024)
 2. Delivered an invited talk to the forest officers across the country at Central Detective Training Institute (CDTI) at Chandigarh on 12/06/2024.
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3. Delivered an invited talk to the research scholars and faculty members of the Faculty of Life Sciences, Maharishi Dayanand University (MDU), Rohtak on 06/05/2024.
 4. Delivered the keynote address in the "1st International Conference on Forensics, Global Security, and Law organised by the Institute of Forensic Science, Amity University, Noida (3rd and 4th April, 2024).
 5. Delivered an invited talk to the Forensic Scientists of Forensic Science services, Govt. of Tamil Nadu on 15/03/2024 at Advanced Institute of Wildlife Conservation (AIWC) at Vandalur, Chennai
 6. Delivered an invited talk on 30/01/2024 in the 50th **Faculty Induction Programme** for University and College teachers organized by the UGC- Human Resource Development Centre (HRDC), Punjabi University, Patiala (09/01/2024-06/02/2024).
 7. Delivered a keynote address in the "**Two days workshop on Trichotaxonomy**" organized by the **Zoological Survey of India (ZSI), Kolkatta** (10-12th, January, 2024).
 8. Delivered a keynote address in the **4th International Forensic Science Conference** held at Sardar Vallabh Bhai Patel Chest Institute, University of Delhi (01/12/2023-03/12/2023).
 9. Delivered an invited talk in the National Seminar on the theme "**Forensic Science in Criminal Investigations and Administration of Justice**" organized by the *Department of Law, Himachal Pradesh University, Shimla* on 22nd March, 2023.
 10. Delivered an invited talk on 13/02/2023 in the training course on "**Advanced Technologies in Forensic Science**" to senior police officers across the country organized by the *Central Detective Training Institute (CDTI), BPR&D at Jaipur*.
 11. Delivered an invited talk on 16/11/2022 in the **UGC refresher course on "Life Science"** for University and College teachers organized by the UGC- Human Resource Development Centre (HRDC), Punjabi University, Patiala (12/11/2022-25/11/2022).
 12. Delivered an invited lecture to directly recruited fresh DySP officers from Gujarat, Rajasthan, Uttarakhand and Tripura at *Central Academy for Police Training (CAPT), Bhopal*, BPRD, Ministry of Home Affairs, Govt. of India (23/09/2022).
 13. Delivered an invited lecture to Judicial officers, Public Prosecutors, Officers working for Criminal Justice System from all over the country in "**Forensic Science and Forensic Medicine**" organized by National Forensic Science University, Delhi (19/09/2022-23/09/2022) on 22/09/2022.
 14. Keynote address in the International Association of Scientists and Researchers (IASR) "**International Conference on Forensic Science-2022**" organised from 25th to 28th August, 2022.
 15. Delivered an invited talk on 23/07/2022 in the 47th **Faculty Induction Programme** for University and College teachers organized by the UGC- Human Resource Development Centre (HRDC), Punjabi University, Patiala (01/07/2022-29/07/2022).
 16. Delivered an invited lecture to Judicial officers, Public Prosecutors, Officers working for Criminal Justice System from all over the country in "**Recent Trends in Criminology and Forensic Science**" organized by National Forensic Science University, Delhi (06/06/2022-10/06/2022) on 10/06/2022.
 17. Delivered an invited talk in the "**8th Conference of Indo-Pacific Academy of Forensic Odontology (INPAFO-2022)**" held at Chandigarh University 26th to 27th May, 2022.
 18. Delivered an invited talk on "Current trends and challenges in Wildlife Forensics" in the **National Conference** organized by School of Forensic Science, West Bengal National University of Juridical Sciences, Kolkata on 07/05/2022.
 19. Delivered an invited talk in the 2nd seven days online Faculty Development programme on "**Current Trends in Forensic Science Research and Teaching (Classroom to Expert witness Box)**" organized by the Amity Academic Staff College, Amity University, Noida (08/03/2022).
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20. Delivered an expert talk on 25/02/2022 in the **Science Week Festival** organized by the Department of Biotectnology, Punjabi University, Patiala in association with Punjab State Council for Science and Technology (PSCST), Chandigarh (22/02/2022-28/02/2022)
 21. Delivered an invited talk on 23/02/2022 in the **Faculty Induction Programme** for University and College teachers organized by the UGC- Human Resource Development Centre (HRDC), Punjabi University, Patiala (14/02/2022-17/03/2022).
 22. Delivered an invited talk on 16/02/2022 in the **Refresher Course in Life Sciences** for University and College teachers organized by the UGC- Human Resource Development Centre (HRDC), Punjabi University, Patiala (05/02/2022-18/02/2022).
 23. Keynote speaker in the 1st International Conference in Forensic Science-2022 on "**Forensics and Technology: Moving Forward Together**" organised by the Department of Forensic Science, Jain Deemed to be University, Bangalore (10th to 12th Feb. 2022).
 24. Keynote speaker in the 9th International eConference-2021 on "**Forensic Chemistry and Toxicology**" organised by International Association of Scientists and Researchers on 29th September, 2021.
 25. Resource person in the Refresher course organised by the Academic Staff College, Amity University, Noida on "**Emerging Trends and Challenges in the interdisciplinary Research & Teaching in Science, Technology & Intellectual Property Rights**" 16th to 30th June, 2021
 26. Key Note Speaker in the Five days '**Online Short Term Certificate Course on Forensic Science**' organized by the Department of Applied Chemistry, Karunya Institute of Technology and Sciences, Coimbatore, Tamil Nadu. (22/04/2021)
 27. Delivered an Invited talk (online) in the 4th International Scientific and Practical Conference on "Theoretical and Practical Issues of Forensic Examination" **organized by The Russian State University of Justice**, Moscow, Russia on March 25-26, 2021.
 28. Delivered an invited talk in the seven days online Faculty Development programme on "**Recent Advances in Forensic Science and Technology (Crime Scene to Court Room)**" organized by the Amity Academic Staff College, Amity University, Noida (22/03/2021)
 29. Delivered an invited talk in the **45th Faculty Induction programme** for University and College teachers organized by the Academic Staff College, Punjabi University, Patiala (28/10/2020)
 30. Delivered an invited talk in the 45th Faculty Induction programme for University and College teachers organized by the Academic Staff College, Punjabi University, Patiala (24/10/2020)
 31. Delivered an invited talk (online) in the International conference on Research and Innovations in Physical, Biological and Social Sciences for Sustainable Development organized by Kamla Nehru Institute of Physical & Social Sciences, Sultanpur (U.P) on 27/06/2020 to 28/06/2020.
 32. UGC Orientation Course for University and College teachers organized by the Academic Staff College, Punjabi University, Patiala (17/03/2020) on "Wildlife Crime - concerns, trends and challenges".
 33. Delivered an invited talk in the 4th Silk Road Forensic Consortium (SFRC) Conference at Kunming, China (20/10/2019-21/10/2019) on 20/10/2019.
 34. Delivered an invited talk in the 3rd International Forensic investigation, and Education conference in Rugao city, Jiangsu, China (17/10/2019-18/10/2019) on 18/10/2019.
 35. Delivered an Invited talk in the 3rd International Research and Practice Conference on "**Matters of Theory and Practice of Forensic Investigation**" **organized by The Russian State University of Justice** in association with the Public Centre of Expert Assessments and Association of Experts for the Promotion of Expert Services on March 28-30, 2019 in the city of Moscow, Russia.
 36. **8th Induction course in Forensic Science to Judicial officers, Public Prosecutors, Officers working for Criminal Justice System** from all over the country organized by LNIN-National Institute of Criminology and Forensic Science, Ministry of Home Affairs, Govt. of India, New Delhi
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- (25/02/2019-15/03/2019) on *“Collection of evidence in wildlife cases and their analysis in criminal investigation and trials”* on 11/03/2019.
37. Delivered an Invited talk on *“Effects of altitude and seasonal variation on carcass decomposition and insect succession: implications in forensic entomology”* in National Conference on ***“Challenges and Innovations in Criminal Justice System (FORENSICON-2019)”*** organised by Department of Forensic Science, Bundelkhand University, Jhansi (21/02/2019-22/02/2019).
 38. Delivered an invited talk on *“Forensic DNA Profiling from Teeth- implications in Disaster Victim Identification”* in **The 6th INPAFO World Conference** organised at Velvet Clark Exotica, Zirakpur, Chandigarh (16/02/2019- 17/02/2019).
 39. Deliver an invited talk on *“Wildlife Forensics: Present Scenario and Challenges”* in the **3rd Silk Road Forensic Consortium (SFRC) Conference at Yantai, China** (17/09/2018-18/09/2018).
 40. Delivered an invited lecture on *“Forensic Botany”* to Judicial officers, Public Prosecutors, Officers working for Criminal Justice System from all over the country in ***“Induction course in Forensic Science”*** organized by LNJN-National Institute of Criminology and Forensic Science, Ministry of Home Affairs, Govt. of India, New Delhi (05/03/2018-23/03/2018) on 08/03/2018.
 41. Delivered an Invited talk on *“Wildlife Crime: Trends, concerns and Challenges”* in **International Conference on Advances in Forensic DNA Technology** organised by Department of Forensic Science, Bundelkhand University, Jhansi (22/02/2018-24/02/2018).
 42. Delivered an invited lecture on *“Sampling and analysis of Teeth DNA in Forensic Investigations”* in **INPAFOCON-2017 organised by Department of Forensic Medicine and Toxicology, Govt. Medical College and Hospital, Sector-32, Chandigarh** on 18/11/2017.
 43. **5th Induction course in Forensic Science to Judicial officers, Public Prosecutors, Officers working for Criminal Justice System** from all over the country organized by LNJN-National Institute of Criminology and Forensic Science, Ministry of Home Affairs, Govt. of India, New Delhi (06/11/2017-24/11/2017) on *“Collection of evidence in wildlife cases and their analysis in criminal investigation and trials”* on 09/11/2017.
 44. **2nd “Silk Road Forensic Consortium (SRFC) Conference” in Xi’an, Shaanxi** (06/11/2017-07/11/2017) on *“Wildlife Crime: Trends, concerns and Challenges”* on 07/11/2017.
 45. **The Belt and Road” International Symposium on Forensic Science in Shanghai** (03/11/2017-04/11/2017) organized by East China University of Political Science and Law, Shanghai on *“Species Identification from hair in wildlife investigations: a systematic approach”* on 04/11/2017.
 46. **2nd International Forensic investigation, and Education conference in Rugao city, Jiangsu** (01/11/2017-02/11/2017) on *“Species Identification from hair in wildlife investigations: a systematic approach”* on 02/11/2017.
 47. **Induction Course on Wildlife Crime and Forensic Science to Judicial officers, Public Prosecutors, Officers working for Criminal Justice System** from all over the country and neighbouring countries organized by LNJN- National Institute of Criminology and Forensic Science, MHA, Delhi (23/10/2017- 27/10/2017) on *“Identification of Plants and their parts and products in wildlife crime and trade”* on 26/10/2017.
 48. Invited lecture in **UGC-National Conference on “Current Scenario in Forensic Investigative Techniques”** on 07/09/2017 organized by the Department of Genetics, Maharishi Dayanand University, Rohtak on *“Wildlife DNA Forensics-concerns, issues and challenges”*.
 49. **Induction course in Forensic Science to Judicial officers, Public Prosecutors, Officers working for Criminal Justice System** from all over the country organized by LNJN-National Institute of Criminology and Forensic Science, Ministry of Home Affairs, Govt. of India, New Delhi (20/02/2017-10/03/2017) on *“Wildlife Forensics”* on 06/03/2017.
 50. One day workshop on ***“Molecular Approaches to Taxonomy of Organisms, & Human Identity & Paternity Disputes”*** organized by Shri Guru Gobind Singh (SGGS) College, Sector-26,
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- Chandigarh (18/02/2017) on "Identification of Human and human remains using DNA markers in Forensic investigations"
51. Delivered a talk on "*Wildlife Forensics*" at **All India Radio (AIR), Jalandhar** 3rd feb 2017
 52. **Induction course in Forensic Science to Judicial officers, Public Prosecutors, Officers working for Criminal Justice System** from all over the country organized by LNJN-National Institute of Criminology and Forensic Science, Ministry of Home Affairs, Govt. of India, New Delhi (02/12/2016) on "*Wildlife Forensics*".
 53. **Frontier Symposium of Forensic Sciences, organized by Silk Road Forensic Consortium- 2016, held in Xi'an, Shaanxi, China** (October 30-31, 2016) on "*Wildlife DNA Forensics-concerns, issues and challenges in India*".
 54. **National Conference on New Horizons of Veterinary and Medical Forensic Medicine** (5/03/16-06/03/16) "*Identification of wildlife parts/products in wildlife investigation*", Bikaner, Rajasthan.
 55. **Course on Wildlife Crime and Forensic Science to Judicial officers, Public Prosecutors, Officers working for Criminal Justice System** from all over the country and neighbouring countries organized by LNJN- National Institute of Criminology and Forensic Science, MHA, Delhi (10/02/2016- 12/02/2016) on "*DNA in Wildlife Forensics*".
 56. **Course on Wildlife Crime and Forensic Science to Judicial officers, Public Prosecutors, Officers working for Criminal Justice System** from all over the country and neighbouring countries organized by LNJN- National Institute of Criminology and Forensic Science, MHA, Delhi (12/02/2015) on "*Identification of Plants and their parts and products in Forensic Investigations*".
 57. **48th UGC Refresher course for University and College teachers** at UGC-Human Resource Development Centre, Punjabi University, Patiala (15/12/2014) on *Wildlife Trade-A Challenge in Forensics*.
 58. **Induction course in Forensic Science to Judicial officers, Public Prosecutors, Officers working for Criminal Justice System** from all over the country organized by LNJN-National Institute of Criminology and Forensic Science, Ministry of Home Affairs, Govt. of India, New Delhi (21/11/2014) on "*Wildlife Forensics*".
 59. **DST Sponsored National workshop on Importance and Role of Forensic Science** (17-18 Nov. 2014) "*Forensic examination of Hair Evidence*" organized by Asian Educational Institute, Patiala
 60. **INPAFO symposium-2014** on "*Mass Disaster Victim Identification*" (11/08/2014) organized by Gian Sagar Dental College, Banur, Patiala.
 61. **3rd annual scientific conference of INPAFO** on "*Role of Dental DNA in Mass Disaster Victim Identification*" organized by Department of Forensic Science, Punjabi University, Patiala from 19/01/2014 to 20/01/2014
 62. **Course on Wildlife Crime and Forensic Science; LNJN- National Institute of Criminology and Forensic Science, MHA, Delhi** (11/11/2013 to 16/11/2013) on "*Identification of parts and products of wild animals in Forensic Investigations*".
 63. **Course on Wildlife Crime and Forensic Science; LNJN- National Institute of Criminology and Forensic Science, MHA, Delhi** (11/11/2013 to 16/11/2013) on "*Identification of Plants and their parts and products in Forensic Investigations*".
 64. **UGC Orientation Course for University and College teachers** organized by the Academic Staff College, Punjabi University, Patiala (23/05/2013) on "*An introduction to Forensic Science*".
 65. **Course on Wildlife Crime and Forensic Science; LNJN-National Institute of Criminology and Forensic Science, MHA, Delhi** (09/07/2012 to 13/07/2012) on "*Identification of Plants and their parts and products in Forensic Investigations*".
 66. **Course on Wildlife Crime and Forensic Science organized by LNJN- National Institute of Criminology and Forensic Science, MHA, Delhi** (09/05/2011 to 13/05/2011) on "*Identification of Plants and Plant materials in Forensic Investigations*".
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➤ SESSION CHAIRED

1. Chaired a scientific session in the 15th **International Forensic Science Conference** organised by International Association of Scientists and Researchers at Sardar Vallabh Bhai Patel Chest Institute, University of Delhi (23/08/2024-25/08/2024)
2. Chaired a scientific session in the **1st International Conference on Forensics, Global security, and Law** organised by the Institute of Forensic Science at Amity University, Noida on 03-04-2024 to 04/04/2024.
3. Chaired a scientific session in the **4th International Forensic Science Conference** held at Sardar Vallabh Bhai Patel Chest Institute, University of Delhi (01/12/2023-03/12/2023).
4. Chaired a scientific session in the **“8th Conference of Indo-Pacific Academy of Forensic Odontology (INPAFO-2022)”** held at Chandigarh University 26th to 27th May, 2022.
5. Chaired a scientific session in the 1st International Conference in Forensic Science-2022 on **“Forensics Chemistry and Toxicology”** organised by the Department of Forensic Science, Jain Deemed to be University, Bangalore (10th to 12th Feb. 2022).
6. Chaired a scientific session in the 10th International eConference-2021 on **“Crime Science Investigation”** organised by International Association of Scientists and Researchers on 30-31th October, 2021.
7. Chaired a scientific session in the **Indian Anthropology Congress-2021 “Anthropology: Theory to Application”** organised by the Department of Anthropology, University of Delhi and Indian National Confederation and Academy of Anthropologists (INCAA) from Feb. 21-25, 2021.
8. Chaired a scientific session in the National Conference on **“Challenges and Innovations in Criminal Justice System (FORENSICON-2019)”** organised by Department of Forensic Science, Bundelkhand University, Jhansi (21/02/2019-22/02/2019).
9. Chaired a scientific session in International Conference on **Advances in Forensic DNA Technology** organised by Department of Forensic Science, Bundelkhand University, Jhansi (22/02/2018-24/02/2018) as invited speaker.

➤ SKILL DEVELOPMENT COURSES/WORKSHOPS

1. **Science, Technology and Emerging Trends in Governance** organized by Indian Institute of Public Administration (IIPA), New Delhi (15-02-2016 to 19-02-2016) sponsored by DST.
 2. **Relevance of Research in Society** organized by UGC-Human Resource Development Centre (HRDC), Punjabi University, Patiala (22.12.2015 to 28.12.2015) sponsored by UGC
 3. **Recent Advances in Molecular Markers and Population Genomics** organized by National Bureau of Fish Genetic Resources (NBFGR), Lucknow (10-03-2015 to 19-03-2015) sponsored by Indian Council of Agriculture Research (ICAR)
 4. **Workshop on Imaging and Video Technology**, LNJN- National Institute of Criminology and Forensic Science (22/03/2011-24/03/2011).
 5. **Refresher Course in Environmental Sciences**, Academic Staff College, Punjabi University, Patiala (10/11/2010- 30/11/2010).
 6. **Workshop on DNA Database and its Uses in Crime Investigation**; LNJN- National Institute of Criminology and Forensic Science (07/09/2010-09/09/2010)
 7. The **“Appreciation Course in Parliamentary Processes and Procedures”** organized by the Bureau of Parliamentary Studies and Training, Lok Sabha Secretariat, New Delhi from 15th Sept. 2008 to 19th Sept. 2008.
 8. **12th Refresher Course on Criminology and Forensic Science** (Sponsored by UGC) from 7th Sept. 2006 to 27th Sept. 2006 organized by the L.N.J.N. National Institute of Criminology and Forensic Science, Ministry of Home Affairs, Govt. of India, Delhi
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9. **UGC Sponsored Orientation Programme organized by National Institute of Advanced Studies, Bangalore** from 28th Dec. 2005 to 17th Jan. 2006.
 10. Training on **“Ground Water Management, Rainwater Harvesting and Artificial Recharge to Ground water”** held from 1st Dec. 2004 to 3rd Dec. 2004 at Central Ground Water Board, North Western Region, Chandigarh.

➤ CONFERENCES/SYMPOSIA ORGANIZED & ATTENDED

1. **Organising secretary of the “National Conference on Recent Trends and Advances in Forensic Science”** organized by the Department of Forensic Science, Punjabi University, Patiala on 16th-18th March, 2023.
2. **International Fingerprint Research Group meeting (IFRG)** organized by Department of Forensic Science, Punjabi University, Patiala from October 19 to 23, 2015
3. **UGC-SAP Seminar on Forensic Toxicology** organized by Department of Forensic Science, Punjabi University, Patiala on 05/09/2015.
4. **International Symposium on Emerging Paradigms in Forensic Science**, Organized by Department of Forensic Science, Punjabi University, Patiala. (07/03/2013- 09/03/2013).
5. **National Symposium on Education and Research in Forensic Science: Issues and Challenges**; Department of Forensic Science, Punjabi University, Patiala.
6. **International Symposium in Advances in Fingerprint Identification**, organized by Department of Forensic Science, Punjabi University, Patiala, 2008.
7. **National symposium on Cyber Forensic and Computer crimes** organized by Department of Forensic Science, Punjabi University, Patiala 2006.
8. **National workshop on Forensic Facial Reconstruction** organized by Department of Forensic Science, Punjabi University, Patiala, 2005.
9. **International symposium on Forensic Science** organized by Department of Forensic Science, Punjabi University, Patiala, 2002.
10. **XVIII All India Forensic Science Conference** organized by Directorate of Forensic Science, Ministry of Home Affairs, Govt. Of India, 2007 at Kolkata.
11. **XV All India Forensic Science Conference** organized by Directorate of Forensic Science, Ministry of Home Affairs, Govt. Of India Forensic Science Laboratory, Harayana, Madhuban, 2004.
12. **XIII All India Forensic Science Conference** organized by Directorate of Forensic Science, Ministry of Home Affairs, Govt. Of India at Mumbai, Maharashtra, 2003.

Administrative/ Other responsibilities

- Teaching and research experience: 21 yrs
 - Head, Dept. of Forensic Science, Punjabi University, Patiala (12-08-2019 to 11-08-2022)
 - Member, Prevention of Sexual Harassment of Women at Workplace Cell (18/09/2024 onwards)
 - Member, Board of Studies, Dept. of Forensic Science, Punjabi University, Patiala
 - Member, Research Board, Dept. of Forensic Science, Punjabi University, Patiala
 - Member, Academic and Administrative Council, Dept. of Forensic Science, Punjabi University, Patiala
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- External subject expert in the Board of Studies and Research Degree Committee of many leading Public and Private Universities of the country.
 - Senior Warden and Warden, Boys Hostel, Punjabi University, Patiala (01/06/2008-30/09/2017)
 - Vice-President, Indo-Pacific Academy of Forensic Odontology (2020-2022)
 - Treasurer, Indo-Pacific Academy of Forensic Odontology (2008-2019)
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25-11-2024

**Sd/-
(Dr. Rajinder Singh)**
