CURRICULUM VITAE

PROF. MINAKSHI SHARMA

Department of Zoology,

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Research Area: Animal Biochemistry, Enzymology, Nano Biosensors & Green nanotechnology

EDUCATIONAL QUALIFICATIONS

Degree	Year of passing	University/Institution
Ph.D	2005	M.D.University
PG*	1994	M.D.University
UG	1992	M.D.University
Others -NET qualified	1995	CSIR NET qualified

^{*} Gold Medalist in PG

PhD Title- "Development of an Enzymatic Sensor for Triglycerides Determination"

CAREER PROFILE

Designation	Institution	Duration
Asstt. Professor	University, college, M.D.University, Rohtak	1996 to 2009
Reader	Deptt. of Zoology, M.D.University, Rohtak	2009 to 2012
Associate professor	M.D.University, Rohtak	2012 to 2015
Professor	M.D.University, Rohtak	2015 till date

❖ Awarded with the prestigious **DR.** SARVEPALLI RADHAKRISHNAN RENOWNED **PROFESSOR** & RESEARCH EXCELLENCE AWARD 2024.

ADMINISTRATIVE EXPERIENCE AT OWN UNIVERSITY

- 1. **Head** of the Department (3rd Term) of Zoology, M.D.University, Rohtak from **15.06. 2024** to till date.
- 2. **Head** of the Department (2nd Term) of Zoology, M.D.University, Rohtak from **15.06.2018** to **15.06.2021**
- 3. **Head** of the Department (1st Term) of Zoology, M.D.University, Rohtak from **15.06.2012** to **14.06.2015**.
- 4. **Acted as Chairperson**, UG Board of Zoology, M.D.Univ. Rohtak.
- 5. **Acted as Chairperson**, PG Board of Zoology M.D.Univ. Rohtak.
- 6. Acted as Chairperson, DRC Zoology, M.D.Univ. Rohtak.
- 7. **Coordinator of DST-FIST programme** in Zoology (2012-2015).
- 8. **Member Academic Council** of M.D. University, Rohtak from 16th June 2009 to contd.
- 9. **University/Vice Chancellor nominee** for appointment of Assistant. Prof., Principal, and for UGC -Teacher fellowship.
- 10. Convener and member of Inspection committees for various Universities maintained colleges.
- 11. Duty of University observer in the election of the governing body for various Universities maintained colleges.
- 12. Member of the Academic Council of the University
- 13. Member of the Central Purchase Committee (CPC) at the University level.
- 14. Member of the Committee for Entrance Examination for various M.Sc. courses in the Faculty of Life--Sciences.
- 15. **Member of the screening committee** for Faculty positions in Life Sciences.
- 16. Superintendent-in-Chief /Centre Superintendent for P.G. Examination.
- 17. Acted as Member of Campus Sports Committee, M.D. University, Rohtak.
- 18. Member of No. of committees constituted by M.D.University, Rohtak, for grant of affiliation/ Degree Colleges/ Engineering Colleges.
- 19. Member of the Departmental Promotion Committee of M.D. University, Rohtak.
- 20. **Co-convener- World Wildlife Day** on March 3rd, 2024, organized by the Department of Zoology, M.D.University Rohtak.
- 21. **Organizer** in one week workshop on Research Methodology held on May 6-10, 2024, Faculty of Life Sciences, M.D. University, Rohtak
- 22. Act as Co-convenor for organizing: 03 National Seminar at M.D. University, Rohtak

As Convener (w.e.f. June 2012 to June 2015) published proceedings of National Seminars with ISBN Number;

Title of the Book	Publisher	ISBN No.	Year of Publication
Proceedings of National Seminar, "Promising Trends in Science Galaxy"	Department of Zoology	978-81-920945-3-3.	2013
Proceedings of National Seminar, "Next Generation Sciences: vision 2020 and Beyond"	Department of Zoology	978-81-920945-4-0	2014
Proceedings of National Seminar "Innovative Research in Life Sciences"	Department of Zoology	978-81-920945-5-7	2015

ASSIGNMENTS OUTSIDE M.D. UNIVERSITY, ROHTAK

- 1. Member of the PG Board of Zoology in other Universities.
- 2. External Examiner for PhD thesis evaluation in various Universities.
- 3. External Practical Examiner for PG Practical in various Universities.
- 4. Outside expert at Screening Committee for the Appointment of Assistant Professor in various Universities.
- 5. Judge in District, Inter District, State level Science Exhibition by various colleges.

LIFE MEMBERSHIP IN ACADEMIC BODIES

- 1. Indian Science Congress Association, Kolkata.
- 2. Indian Academy of Environment Biology, Lucknow
- 3. Indian Academy of Environment Sciences, Haridwar.
- 4. Association of Microbiologists of India
- 5. National Academy of Biological Sciences

TEACHING & RESEARCH EXPERIENCE AT UNIVERSITY LEVEL- (M.Sc. and Ph.D.)

1. No. of Ph.D. Awarded under my supervision	07
2. No. of PhD registered & working	03
3. No. of PhD registrations under process	03
4. No. of research papers published	76
5. No. of Book chapter published	07
6. No. of Dissertations completed	62
7. No. of Conferences/Seminar/Symposia	60

PHD AWARD STATUS OF RESEARCH SCHOLARS:

Supervised/Associated with the research work of multiple PhD scholars in advanced bioanalytical and nanotechnology research. Below is the status of PhD awards for students:

S.No.	Name of	Research Title	Research
	Student		Status
1.	Sandip Kumar	DNA-based detection of	PhD awarded
	Dash	Human brain meningitis	
		(Neisseria meningitides)	
2.	Mamta	Enzyme-based nanosensor for	PhD awarded
	Sharma	detection of galactose in	
		biological fluids	
3.	Ritu	Impact of Metal Oxide	PhD awarded
		Nanoparticles on Enzyme	
		(Xanthine oxidase) Activity	
		and Serum Proteins	
4.	Shelly	Improved Enzyme Based	PhD awarded
		Nanosensor for Detection of	
		Nitrate	
5.	Rekha	Role of GUT Microbiota in	PhD awarded
		Colorectal Cancer and	
		Development of Sensor for	
		detection of Gut Metabolites	
6.	Jyoti	Electrochemical sensing of	PhD awarded
		serum acetylcholine using	
		AChENPs/ChONPs	
		immobilized onto PtNPs/GNs	
		nanocomposite modified PG	
		electrode	

7.	Sarita	Development of AuNPs-	PhD awarded	
		GrNs/COxNPs		
		nanocomposite based		
		nanosensor for detection of		
		cytochrome c		
8.	Shatrughan	Fabrication of an improved	Under	
	Yadav	Acrylamide nanosensor using	process	
		HbNPs decorated TiO ₂ /GQDs		
		nanocomposite modified PG		
		electrode.		
9.	Shikha	Enzymatic nanosensor for	Under	
		Folic Acid based on	process	
		DHFR/PtNPs/GrNs modified		
		ITO electrode		
10.	Preeti	An improved nanosensor	Under	
		based on	process	
		GNFs/AuNPs/tyrosinase/PG		
		electrode for detection of		
		alkaline phosphatase.		
11.	Rohit	Ph.D. registration under proces	s	
12.	Sheetal	Ph.D. registration under process		
13.	Monika	Ph.D. registration under proces	S	

PEER REVIEWER FOR THE FOLLOWING RENOWNED RESEARCH JOURNALS

- Journal of Food Composition and Analysis
- Int. J. Nano Dimension
- Microchemical Journal
- Biosensor and Bioelectronics
- Analytical Biochemistry

INVITATIONS FROM ABROAD

- Member in the group of authors with Nova Science Publishers Inc, New York
- Presentation of research work at de Montreal, Montreal University (Canada), (August 2009).
- Presentation of research work in international conference in Rome, Italy (June 2019)

PROJECTS UNDERTAKEN

Title of project	Duration	Funding agency	Status
Preparation of triglyceride biosensor	3 years	DBT, N Delhi	Completed
CNT based potentiometric biosensor for nitrate determination	3 years	UGC, N. Delhi	Completed

PUBLICATIONS:

NCBI GENE SEQUENCES:

Sandip K Dash, Shashi Khare, **Minakshi, Sharma**, Ashok Kumar, Neisseria meningitidis, strain MC58 outer membrane protein (rmpM) gene partial cds. NCBI GenBank, 2010, HQ712170.

Sandip K Dash, Shashi Khare, **Minakshi, Sharma**, Ashok Kumar, *Neisseria meningitidis*, strain MC58 outer membrane protein (*Omp85*) gene partial cds. NCBI GenBank, 2010, HQ712171

RESEARCH PAPERS:

- 1. Aafria, S., & Sharma, M. (2025). Development of a rapid and ultrasensitive acrylamide nanosensor based on TiO2 NPs/GQDs nanocomposite. *Journal of Food Composition and Analysis*, 107188. **IF-4.0**
- 2. Sharma, S., & Sharma, M. (2025). Electrochemical biosensor platform with graphene nanosheets decorated ITO electrode for folic acid sensing. *Journal of the Indian Chemical Society*, 102(1), 101548. IF-3.2
- **3.** Yadav, S., Sehrawat, N., & **Sharma**, M. (2024). An improved amperometric cholesterol biosensor based on cholesterol oxidase nanostructures for pre-diagnosis of myocardial infarction. *Journal of the Indian Chemical Society*, 101(11), 101415. **IF-3.2**
- 4. Sharma, S., Sain, R., Yadav, S., & **Sharma, M**. (2024). Fabrication of an amperometric urea biosensor based on chitosan modified pencil graphite electrode. *Microchemical Journal*, 205, 111415. **IF-4.9**

- 5. Aafria, S., & **Sharma**, **M**. (2024). Graphene quantum dots mediated acrylamide biosensing. *Microchemical Journal*, 110956. **IF-4.9**
- 6. Yadav, S., Sehrawat, N., Sharma, S., **Sharma, M.,** & Yadav, S. (2024). Lab-to-Fab based biosensing methods based on graphene and its derivatives for food safety monitoring. *Food Control*, 110536. **IF-5.6**
- 7. Yadav, S., Sehrawat, N., & **Sharma, M.** (2024). Evaluation of phytochemicals, anti-oxidative properties and synergistic effects of green fabricated AuNPs-GrNs nanocomposites against selected Gram-positive and Gram-negative bacterial strains. *International Journal of Nano Dimension*, 15(3).
- 8. Ahlawat, J., **Sharma**, M., & Pundir, C. S. (2024). Advances in xanthine biosensors and sensors: A review. *Enzyme and Microbial Technology*, 110377. Yadav, S., & Sharma, M. (2024). **IF-3.4**
- 9. Sarita, Y., Richa, G., & **Minakshi**, S. Menstrual Distress and Its Impact on Quality of Life of Adolescents and Middle-Aged Women. *Clin Case Rep Int.* 2024; 8, 1644.
- Yadav, S., & Sharma, M. (2023). Construction of a cytochrome c nanosensor based on nano-engineered cytochrome oxidase enzyme covalently immobilized on AuNPs-GrNs nanocomposite-modified pencil graphite electrode. *Journal of Materials Science*, 1-25.
 IF-3.5
- 11. Yadav, S., Kumari, P., Sharma, S., Aafria, S., Batra B., & **Sharma, M.** (2023). Analytical techniques developed for the determination of glycodelin biomarker: A Mini-Review. *Microchemical Journal*, Volume 195, 109394, https://doi.org/10.1016/j.microc.2023.109394. **IF-4.9**
- 12. Jalandra, R., Lakshmi, G. B. V. S., Dhiman, T. K., **Sharma, M**., Kumar, A., & Solanki, P. R. (2023). MIP-Based Sensor for Detection of Gut Microbiota Derived Trimethylamine. *Journal of The Electrochemical Society*, 170(2), 027504. **IF-3.1**
- 13. Jalandra, R., Makharia, G. K., **Sharma, M.,** & Emp; Kumar, A. (2023). Inflammatory and deleterious role of gut microbiota-derived trimethylamine on colon cells. *Frontiers in Immunology*, 13, 1101429.
- 14. Ahlawat, J., **Sharma, M.,** & Eamp; Pundir, C. S. (2023). Advances in Biosensor Development for detection of Acetylcholine. *Microchemical Journal*, 108620. **IF-4.9**
- Ahlawat, J., Sharma, M., & Dundir, C. S. (2023). An Amperometric Acetylcholine Biosensor Based on Co-Immobilization of Enzyme Nanoparticles onto Nanocomposite. *Biosensors*, 13(3), 386. IF-4.9
- 16. Dahiya, T., Ravina, Mann, A., Mohan, H., Sharma, M., Pundir, C. S., & Damp; Rana, J. S. (2023). Impedimetric immunosensor based on chitosan-modified gold wire with Au@ rGO nanocomposite for the detection of brain natriuretic peptide (BNP). *Journal of Materials Science*, 58(11), 4739-4752. IF-3.5
- 17. Dahiya, T., **Sharma, M.,** Rathee, R., Pundir, C. S., & Dahiya, T., Sharma, J. S. (2023). An impedimetric immunosensor based on chitosan—Au nanoparticles-reduced graphene

- oxide nanosheet composite modified PG electrode for detection of brain natriuretic peptide. *3 Biotech*, 13(8), 280. **IF-2.6**
- 18. Yadav, S., Sawarni, N., Dahiya, T., Rana, J. S., Sharma, M., & Emp; Batra, B. (2023). Nanoagriculture: Advantages and Drawbacks. In Agricultural and Environmental Nanotechnology: Novel Technologies and their Ecological Impact (pp. 3-42). Singapore: Springer Nature Singapore.
- 19. Aafria, S., Batra, B., Lamba, P., Yadav, S., Rana, J. S., & Darma, M. (2023). Efficient removal of synthetic dye by employing H2O2/nZVI-rGO nanocomposite system. *Environmental Nanotechnology, Monitoring & Management*, 20, 100808.
- 20. Batra, B., Yadav, S., Kalra, V., **Sharma, M.,** & Eamp; Rana, J. S. (2023). An electrochemical biosensor for the determination of folic acid in pregnant women based on DHFR/c- MWCNTs/TiO2NPs modified gold electrode. *Sensors International*, 4, 100235.
- 21. Aafria, S., Kumari, P., Sharma, S., Yadav, S., Batra, B., Rana, J. S., &Sharma, M. Electrochemical biosensing of Uric Acid: A Review, *Microchemical Journal*, Volume 182, 107945(2022), IF-5.30
- 22. Yadav, S., Sawarni, N., Kumari, P., & Sharma, M. Advancement in Analytical techniques fabricated for the quantitation of cytochrome c. *Process Biochemistry* Volume 122, 315-330,(2022), IF-4.88
- 23. Yadav, S., Jangra, R., Sharma, B. R., & **Sharma**, M.: Current Advancement in Biosensing techniques for determination of Alanine aminotransferase and Aspartate aminotransferase- a Mini Review, *Process Biochemistry*. Vol. 114, 71-76. (2022)IF-4.88
- 24. Singh, S., **Sharma**, **M**., Singh, G.:Graphene oxide nanoparticles decorated pencil lead as urea sensing electrode, *Asian Journal of Chemistry* Vol. 33(11), 2857–2863.(**2021**) **IF-0.535**
- 25. Bhawna Batra, Vinay Narwal, Sumit, Jyoti Ahlawat, Minakshi Sharma, An amperometric cholesterol biosensor based on immobilization of cholesterol oxidase onto titanium dioxide nanoparticles, *Sensors International*, Volume 2, 2021, 100111, ISSN 2666-3511.
- 26. Vinay Narwal, Bhawna Batra, Vijay Kalra, Rekha Jalandra, Jyoti Ahlawat, Ritu Hooda, **Minakshi Sharma,** J.S. Rana, Bilirubin detection by different methods with special emphasis on biosensing: A review, *Sensing and Bio-Sensing Research*, Volume 33,2021, 100436, ISSN 2214-1804. (**Impact Factor 4.12**)
- 27. Jalandra R, Dalal N, Yadav AK, Verma D, Sharma M, Singh R, Khosla A, Kumar A, Solanki PR. Emerging role of trimethylamine-N-oxide (TMAO) in colorectal cancer. *Appl Microbiol Biotechnol.* 2021 Oct;105(20):7651-7660. doi: 10.1007/s00253-021-11582-7. **2021**. (Impact Factor-5.56)
- 28. Dalal N, Jalandra R, Bayal N, Yadav AK, Harshulika, Sharma M, Makharia GK, Kumar P, Singh R, Solanki PR, Kumar A. Gut microbiota-derived metabolites in CRC

- progression and causation. *J Cancer Res Clin Oncol*. Volume 147(11):3141-3155. 2021 (Impact Factor-4.32)
- 29. Twinkle Dahiya, Sarita Yadav, Neelam Yadav, Avantika Mann, **Minakshi Sharma**, J.S. Rana, Monitoring of BNP cardiac biomarker with major emphasis on biosensing methods: A review, *Sensors International*, Volume 2, **2021**, 100103, ISSN 2666-3511.
- 30. Saravjeet Singh Minakshi Sharma, Geeta Singh:Recent advancements in urea biosensors for biomedical applications, *IET Nanobiotechnology*, **2021,***15:4*,358-379.(**Impact Factor 2.05**)
- 31. Dalal N, Jalandra R, **Sharma M**, Parkash H, Makharia GK, Solanki P, Singh R, Kumar A, OMICS technologies for improved diagnosis and treatment of colorectal cancer: Technical advancement and major perspectives. **Biomed Pharmacother. 2020,** 131, 110648 (**Impact Factor 7.41**)
- 32. Jalandra R, Yadav AK, Verma D, Dalal N, **Sharma M**, Singh R, Kumar A, Solanki P (2020) Strategies and perspectives to develop SARS-COV-2 detection methods and diagnostics. **Biomed Pharmacother**. 2020, 129,110446 (**Impact Factor 7.41**)
- 33. Batra, B., Sangwan, S., Ahlawat, J., &Sharma, M. Electrochemical sensing of cytochrome c using graphene oxide nanoparticles as platform. *International Journal of Biological Macromolecules.* 2020, 165, 1455–1462.(Impact Factor 8.02)
- 34. Shelly and **Minakshi Sharma**, Fabrication of Enzyme Nanoparticles-based Nanosensor for detection of Nitrate Content in Drinking Water, **Asian Journal of Pharmceutics2020**, 14 (1) .(**Impact Factor 0.46**)
- 35. Shelly and **Minakshi Sharma**, Nitrate Reductase Nanoparticles: Synthesis and Characterization, **International Journal of Research in Pharmaceutical Sciences2020**, 11 (3) 1-7.(**Impact Factor 0.60**)
- 36. Ritu Hooda and **Minakshi Sharma**, Green Synthesis, Characterization and Antibacterial Activity of Iron Oxide Nanoparticles, **Plant Archives**, **2020**, 20 (1) 1196-1200 (**Impact Factor 0.27**)
- 37. Ritu Hooda and **Minakshi Sharma**, In Vitro Effect of Iron Oxide Nanoparticles on Xanthine Oxidase Activity, **Plant Archives**, **2020**, 20 (1) 2114-2118(**Impact Factor 0.27**)
- 38. Bhawna Batra, Vinay Narwal, Vijay Kalra, **Minakshi Sharma**, JS Rana. Folic AcidBiosensors: A Review. Volume 92, 343-35, **Process Biochemistry,2019(Impact Factor 4.88)**
- 39. Mamta Sharma, Pooja Yadav, **Minakshi Sharma** Novel electrochemical sensing of galactose using GalOxNPs/CHIT modified pencil graphite electrode. *Carbohydrate Research* 2019, 483: 107749. ISSN: 0008-6215 (**Impact factor 2.97**)
- 40. Narwal V., Deswal R., Batra B., Kalra V., Hooda R., **Sharma M.**, Rana J.S. Cholesterol biosensors: A review. *Steroids* **2019**, 143 : 6-17. ISSN No. 0039-128X (**Impact factor 2.76**)

- 41. Mamta Sharma, Versha Gatum and **Minakshi Sharma:** Design and characterization of GALOx/PbONPs/GE based galactose biosensor, *Advanced Science Letter*, **2018**,(24): 853-858. (**Impact factor 1.25**)
- 42. Mamta Sharma and **Minakshi Sharma:** Amperometric galactose biosensor based on silver nanoparticles/carboxylated multiwalled carbon nanotubes/polyaninine composite film, *Int. J of Recent Scientific Research*, **2017**, 8 (8):18976-18983.
- 43. Mamta Sharmaand **Minakshi Sharma:** Galactose oxidase nanoparticles based nanosensor for amperometric determination of galactose, *Int. J Pharma Bio Sci.* **2016**, 7 (3): 872-879. (**Impact factor-0.8**)
- 44. Mamta Sharmaand **Minakshi Sharma:** Galactose oxidase nanoaggregates: Preparation and characterization, *Oriental J. of Chemistry*, **2016**, Vol. 32, No (1), 509-513. (Impact factor **0.16**)
- 45. Mamta sharma & **Minakshi Sharma**: Physiological Analysis of Drinking Water of Faridabad city, Haryana, *J. Chemical Biological and Physical Sci.* **2015**:5(2):2230-2235.
- 46. **Minakshi Sharma**, Mamta sharma and C.S.Pundir: Nitrate Reductase-NADH/cMWCNT based electrochemical sensor for nitrate determination, *Int. J. of Res. in Advent Tech.* **2015**:3(5)5-14. (**Impact factor 0.4**)
- 47. Ritu, Mamta Sharma, Shelly & Minakshi Sharma: Aspartame determination in soft drinks, *Int.J. of Res. in Emerging Sci. & Tech.* 2015:2(4) 41-44.
- 48. Mamta sharma & Minakshi Sharma: Microbial Analysis of water at Bhiwani City, Haryana. *Int. J. of Advanced Multidisciplinary Res.* 2015:3(4) 159-166.
- 49. Mamta sharma & Minakshi Sharma: Biosensor for clinical diagnosis, *Int.J. of Advanced Multidisciplinary Res*, **2015**:3(4) 329-343.
- 50. Mamta Sharma, **Minakshi Sharma** & C.S.Pundir: Further Purification And Characterization of Nitrate Reductase from Corn Leaves (Zea mays HQPM-4)*In.J. of Recent Scientific Research*, **2015**:6(4) 3755-3759.
- 51. Ritu Hooda, Mamta Sharma, Renu Rani and **Minakshi Sharma:** Physicochemical analysis of water samples of RO purifiers and simple water filters of Rohtak city (Haryana), proceedings of national seminar on "innovative research in life sciences" 2015,75-78, ISBN:978-81-920945-5-7.
- 52. **Sharma M.**Amperometric Biosensor For Nitrate Determination In Drinking Water :A Review—In Proc.Advances in applied Physical and Chemical Science—A sustainable Apporoach: 122/2014/ISBN:978-93-83083-72-5,(19-20th August, **2014**)
- 53. **Minakshi Sharma**, Mamta sharma and C.S.Pundir: Nitrate determination in drinking water by nitrate Reductase Based Biosensor, *Journal of Basic and Applied Engg. Res.* **2014**:1(14); 107-112.
- 54. Dash, S.K., Sharma, M., Kumar, A., Khare, S., Kumar, A.Carbon composite-based DNA sensor for detection of bacterial meningitis caused by Neisseria meningitidis *J. Solid State Electrochemistry*, Vol. 18(10),2647–2659 (2014), IF-2.74

- 55. Dash, S.K., Sharma, M., Khare, S., Kumar, A.Carbon-Mercaptooctadecane/Carboxylated Multi-walled Carbon Nanotubes Composite Based Genosensor for Detection of Bacterial Meningitis, *Indian Journal of Microbiology*, 54(2), 170–177, (2014) IF-2.46
- 56. Dash,S.K., **Sharma,M.**, Khare,S., Kumar,A.CarbonMercaptooctadecane/Carboxylated Multi-walled Carbon Nanotubes Composite Based Genosensor for Detection of Bacterial Meningitis, *Indian Journal of Microbiology*, 54(2), 170–177, (**2014**), **IF-2.46**
- 57. Dash SK, **Sharma M**, Khare S, Kumar A, *Omp85* genosensor for detection of human brain bacterial meningitis. *Biotechnol Lett.* **2013**, 35:929-935. (**IF-2.71**)
- 58. Dash SK, **Sharma M,** Khare S, Kumar A, *rmpM* genosensor for detection of human brain bacterial meningitis in cerebrospinal fluid. *Appl Biochem Biotechnol***2013.** doi: 10.1007/s12010-013-0339-3. (**IF-3.09**)
- 59. **Sharma M.**Concept of Triglycerides Biosensor--.. *In Proc* "*Promising Trends in Science Galaxy*": 168/2013/ISBN: 978-81-920945-3-3,(August **2013**).
- 60. **Sharma M.**Purification of nitrate reductase from Zea Mays by affinity chromatography *In Proc –Promising Trends in Science Galaxy: 130/2013/ISBN: 978-81-920945-3-3*, (August **2013**).
- 61. Dash SK, **Sharma M,** Khare S, Kumar A, Quick diagnosis of human brain meningitis using *Omp85* gene ampilicon as a genetic marker. *Indian J. Microbiol*, 2013, 53(2):238-240. (**Impact factor-2.46**)
- 62. Dash SK, **Sharma M**, Kumar A, Diagnostic techniques and treatment of meningitis. In Meningitis: Causes, Diagnosis and Treatment. Houllis G, Karachalios M, Eds. Nova Science Publishers Inc, New York, **2012**, pp 203-223.
- 63. Sandip K Dash, **Minakshi Sharma**, Shashi Khare, Ashok Kumar. rmpM Gene as a genetic marker for human bacterial meningitis. *Cellular and Molecular Biology*. Volume 58, 26-30 (**2012**). (**Impact factor-1.20**)
- 64. Dash SK, Sharma M, Khare S, Kumar A, *rmpM* gene as a genetic marker for human bacterial meningitis. *Cell Mol Biol* (Noisy-le-Grand, France) **2012**, 58:26-30. (**Impact factor-1.20**)
- 65. **Sharma M**, Yadav S, Dash SK,Kumar A, Nanotechnology in enzyme sensors: A review. Proceedings of National Seminar on Challenges in Combating Diseases: Cause to Cure, **2012.**
- 66. **Minakshi Sharma**, Meenu, Sandeep Yadav. A review on biosensors. *Reviewed proceedings of National seminar on "challenges in combating diseases: Cause to cure"* (2012) 230-241. [ISBN: 978-81-920945-2-6].
- 67. **Minakshi Sharma**, Sandeep Yadav, Sandip K Dash, Ashok Kumar. Nanotechnology in enzyme sensors: A review. *Reviewed proceedings of National seminar on "challenges in combating diseases: Cause to cure"* (2012) 261-266. [ISBN: 978-81-920945-2-6].
- 68. **Minakshi Sharma** and Meenu. Role of biosensors in clinical diagnosis of diseases. *Internet: Application in Research* (**2011**) 168-174 [ISBN: 978-81-920945-1-9].

- 69. **Minakshi Sharma**, Sandip K Das, Meenu, Ashok Kumar. Application of carbon nanotubes for development of genosensor. *Internet: Application in Research*(2011) 19-23. [ISBN: 978-81-920945-1-9].
- 70. **Minakshi Sharma** and Meenu. Enzyme based biosensors for aspartate determination in soft drinks and fruit juices. *Internet: Application in Research*(2011) 146-148 [ISBN: 978-81-920945-1-9].
- 71. Narang J. **Minakshi**, Bhambi M. & Pundir C.S. Fabrication of an Amperometric Triglyceride biosensorbased on PVC membrane, *Analytical letters*, Vol. 43: 1–11, **2010(Impact factor-2.26)**
- 72. **Minakshi** and Meenu: Biosensors for nitrate determination in drinking water and biological fluid. Natl. *Seminar on Computing Life: Raw to Refined*, Volume- 1 Pp-69-74.**2010**
- 73. **Minakshi** & C.S. Pundir. Co-immobilization of lipase, glycerol kinase, glycerol-3-phosphate oxidase and peroxidase on to aryl amine glass beads affixed on plastic strip for determination of triglycerides in serum, *Indian Journal of Biochemistry and Biophysics*, Vol. 45: 111-115. **2008** (Impact factor-1.47)
- 74. **Minakshi** & C.S. Pundir. construction of an amperometric enzymic sensor for triglyceride determination, *sensor and actuators B: Chemical*, Vol. 133: 251-255. **2008.** (**Impact factor-9.22**)
- 75. M. Bhambi, **Minakshi**& C.S. Pundir. Preparation of oxygen meter based biosensor for determination of triglyceride in serum, *Sensors & Transducers*; Vol. 67: 561-567, **2006.** (**Impact factor-0.98**)
- 76. **Minakshi** & C.S. Pundir. Preparation of reusable enzyme strip for determination of serum triglyceride, *Indian Journal of Chemical Technology*, Vol. 12; 539-542, **2005**. (**Impact factor-0.76**)

LIST OF CONFERENCES/ SEMINAR/ WORKSHOPS ATTENDED:

- 1. 2nd World Virtual Summit on Catalysis & Chemical Engineering held on September 23, 2024.
- One Day Workshop on "LOCF Based Teaching Learning in context of NEP 2020" (09th May, 2024)
- 3. NATIONAL SEMINAR ON ETHICS AND NECERSSITY OF LABORATORY ANIMALS EXPERIMENTATION, (May 04, 2024)
- 4. NATIONAL SEMINAR ON RECENT ADVANCES IN NANOBIOSENSING FABRICATION TECHNOLOGY (April 10, 2024)
- 5. World Virtual Summit on Catalysis & Chemical Engineering held during March 25-26, 2024.
- 6. SCIENCE CONCLAVE 2023 on science for Every one, 28-29 November 2023

- 7. Promoting IPR in University system on 3rd June, 2023
- 8. One-week national workshop on "Bioprospecting Natural Products for Human and Socio-Economic Developments, January 9-14, 2023, MDU Rohtak.
- 9. 63rd annual International Conference of Association of Microbiologists of India (AMI) 2nd-4th February, 2023, MDU Rohtak.
- 10. International conference on Biotechnology and Human Welfare: Vision 2030 and Beyond (ICBHW-2023) March 3-4, 2023, Department of Biotechnology, Chaudhary Devi Lal University, Sirsa (Haryana).
- 11. One day workshop on Curriculum and Credit Framework for Undergraduate Programmes, 8th April, 2023, MDU Rohtak.
- 12. One day national conference on "Promoting IPR in University System" 3rd June, 2023, MDU Rohtak.
- 13. 5th World Nanotechnology Summit (World Nano-2023), June 21-22, 2023, Valencia, Spain.
- 14. International conference on Advanced Nanotechnology & Nanomaterials, August 07-08, 2023.
- 15. One day National Seminar on Future Universities, 26th September, 2023, MDU, Rohtak.
- 16. National workshop on "Extramural Research Funding: Opportunities & Challenges" October 14-15, 2022, MDU Rohtak.
- 17. One day workshop on NAAC documentation for UTDs, 14th November, 2022, MDU Rohtak.
- 18. Two days international webinar on the topic "Recent advances in science & technology" in collaboration with ISCA Rohtak Chapter held on February 18-19,2021.
- 19. National conference on "Current Understanding of the Pathogenesis of Human Genetic diseases" held in hybrid mode on Feb 23^{rd,} 2021.
- 20. 2nd capacity building national webinar cum workshop on Ethics in Biomedical Research and GCP guidelines held on 15 March 2021.
- 21. Two days' national conference on "Natural Products and Human: Opportunities and challenges in present scenario" 9-10th April, 2021.
- 22. 4th international conference on Biosensors and Bioelectronics held on May 21-22, 2021.
- 23. One-day workshop on "Annual quality assurance report framework Nov 18, 2021.
- 24. International Conference on Electrochemistry in industry, Health and Environment (EIHE 2020) DAE, BARC, Mumbai, India Jan 21-25, 2020.

- 25. International Workshop on Intellectual Property Rights organized by CBT with IPR Cell, MDU, Rohtak on February 11, 2019
- 26. International Seminar On Sustainable Environment and Agriculture Under Global Climate Change organized by Dept. of EVS, MDU, Rohtak on February 21, 2019
- 27. International Conference On Materials Research and Nanotechnology in Rome, Italy on June 10-12, 2019
- 28. International Conference On "Sustainable Agriculture, Energy, Environment And Technology (Icsaeet-2018)" February 24-25, 2018
- 29. International conference on "Emerging Area of Environmental Science and Engineering" organized by Dept of Environmental Science & Engineering, Guru Jambheswar University of Science & Technology, Hisar on February 16-18, 2017.
- 30. National conference on "Biodiversity: Status and Significance" organized by Dept. of Botany, MDU Rohtak on March 21, 2017.
- 31. National seminar on "Current Scenario in Forensic Investigative Techniques" organized by Deptt. of Genetics, MDU Rohtak on September 7, 2017.
- 32. National conference on "Emerging Trends in Biochemistry" organized by Dept. of Biochemistry, MDU Rohtak on September 15-16, 2017.
- 33. National conference on "Genetics Diversity and Therapeutic Potential of Natural Products" organized by Deptt. of Genetics, MDU Rohtak on 17 th September 2016.
- 34. International conference on "Recent Advances in Nanoscience & Nanotechnology-2016" organized by Special Centre for Nanoscience, Jawaharlal Nehru University, New Delhi, India on December 19-20, 2016.
- 35. 3rd International conference on" Applied Science, Environ. Engg. and Clean tech. for Sustainable, Development. 25th -26th April, 2015
- 36. National Seminar on "Entrepreneurship Development in Food Processing Sector" 25th March, 2015
- 37. National Conference cum Workshop on "Molecular Modeling and Drug Design20-21 March, 2015
- 38. National Conference on Therapeutic Potential of Natural Products : Current Innovations & Future Trends19th March, 2015
- 39. National Conference on "Applied Physics and Material Science" Feb. 5-6, 2015
- 40. National conference on "Pollution mitigation for a sustainable future" Feb. 27-28, 2014.
- 41. National Workshop on "Genomics in Crop Improvement, Feb. 27-28, 2014.

- 42. 54th Annual Conference of Association of Microbiologists of India (AMI) Nov. 17-20, 2013.
- 43. 7th Annual Convention of ABAP & International Conference on "Plant Biotech., Molecular medicine & Human Health, Oct. 18-20, 2013.
- 44. 2nd National Seminars on "Microbes in Human Welfare". March 24th, 2012 by Association of Microbiologists of India-Rohtak unit, M.D. University, Rohtak
- 45. National Seminar on "Combating Diseases: Cause to Cure "March 23, 2012 at Department of Zoology, M.D.University, Rohtak
- 46. National Seminar on "Recent Advancements in Application of Genetics". March, 20th, 2012. Department of Biochemistry. M. D. University, Rohtak.
- 47. Science Conclave-2011, Interaction of innovative young minds with eminent scientists. December 2-3, 2011. M. D. University, Rohtak.
- 48. National Seminar on "Environmental and Health Issues": In a changing climatic Scenario on October 14-15, 2011 at Department of Environmental Sciences, M.D.University, Rohtak.
- 49. National Conference on "Biodiversity: Challenges and Opportunities "on February,18-19, 2011at Department of Botany, M.D.University, Rohtak
- 50. National Seminar on "Internet: its application in research" on March 26, 2011. at Department of Zoology, M.D.University, Rohtak
- 51. India-Japan Seminar on October 30, 2010 at Department of Biochemistry M.D. University, Rohtak.
- 52. National workshop on Bioinformatics on September 14-16, 2010 at Centre for Biotechnology, MDU, Rohtak
- 53. International conference on biosensor from June 14-17, 2009 at De Montreal University, Montreal-Cananda.
- 54. Biological Science-A Current Perspective" March 12 -13, 2008, Dept of Botany and Zoology, Pt. NRS Govt College, Rohtak
- 55. Water risks life, 2007 at Deptt. of Bio-Sciences, M.D. University, Rohtak.
- 56. Workshop attended on 25/10/2007 at Department of Environmental Sciences and Engg. G.J.U, Hisar.
- 57. Refresher Course from 17/09/2007 to 06/10/2007 at Academic Staff College, Kurukshetra University, Kurukshetra.
- 58. Workshop attended from 21/08/2007 to 22/08/2007 at Advance centre for Biotechnology M.D.University Rohtak

- 59. DST sponsored National Workshop on "Immobilized enzyme technology for Sensors" organized by Dept of Biochemistry and Genetics, M. D. University, Rohtak from Aug. 24 to Sept. 2, 2007.
- 60. Workshop on Patent Awareness on 21/12/2005 at Deptt. of Bio-Sciences, M.D.University, Rohtak.

BOOK CHAPTERS PUBLISHED:

S.No.	Title of book chapter	Title of book	ISSN/ISBN No.	Publisher
1.	Chitosan based Nanocomposite in food Packaging	Bio-based Materials for Food Packaging	9789811319099 (online) 9789811319082 (print)	Springer, Singapore (2018)
2.	Alginate-Based Biomaterials for Bio- Medical Applications	Alginates: Applications in the Biomedical and Food Industries	ISBN: 9781119487982	John Wiley & Sons (2019)
3.	Nanoparticles in Biomedical Applications.	Green Nanoparticles. Nanotechnology in the Life Sciences	Print ISBN 978-3-030-39245-1 Online ISBN 978-3-030-39246-8	Springer, Cham (2020)
4.	Nanoagriculture: Advantages and Drawbacks	Agricultural and Environmental Nanotechnology	Print ISBN 978-981-19-5453-5 Online ISBN 978-981-19-5454-2	Springer, Singapore (2023)
5.	Biosensor development using functionalized 2D nanomaterials	Functionalized Nanomaterials for Biosensing and Bioelectronics Applications	ISBN: 978-0-12-823829- 5	Woodhead Publishing (2024)
6.	Advantages of functionalized nanomaterials for biosensor technology	Functionalized Nanomaterials for Biosensing and Bioelectronics Applications: Trends and Challenges	ISBN: 978-012823829-5	Woodhead Publishing (2024)
7.	Advanced Molecular Techniques in the Identification of Phytopathogenic Fungi	Molecular and Biotechnological Tools for Plant Disease Management	ISBN: 978-981-97-7510- 1	Springer, Singapore (2025)