




**INSTITUTE OF HOME ECONOMICS**  
**UNIVERSITY OF DELHI**



Name	Dr Arti Nigam	Photograph
Designation	Associate Professor	
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Educational Qualifications: M.Sc. (Biotechnology) JNU, PhD (Microbiology) University of Delhi		
Teaching experience: 28 years		
Subjects/Papers Taught : Industrial Microbiology, Recombinant DNA Technology, Microbial Biotechnology, Cell biology , Instrumentation, Diagnostics , Biofertilizers, Applied Food Microbiology and Microbial Ecology		
Awards received : JRF & SRF from UGC Post Graduate Merit Scholarship from DBT		
Research Interest/Specialization : Industrial Microbiology, Microbial Biotechnology, Enzymes , Diagnostics , Biofertilizers and Probiotics		
ORCID No. 000-0002-0642-7932		
Research Projects		
Title	Funding agency/organization	Duration of Project
Evaluation of chemical and microbiological quality of the vermicompost prepared from different types of wastes using <i>Eisenia foetida</i> . Sanctioned grant 6.52 lakhs	UGC Major Project	3 Years (2008-2011)
Evaluation of microbial flora of Indian Fermented foods for the development of novel probiotics having antioxidant properties. Project code :304 Sanctioned grant 4.6 lakhs	DU Innovation Project	1 Year (2015-2016)

Research papers since 2010

1. Aggarwal, S., Sen, A., Rastogi A. and **Nigam A.** (2021) Evaluation of the probiotic potential of yeasts isolated from Indian fermented food items. *Research Journal of Biotechnology* .16 (10): 33-42 .<https://worldresearchersassociations.com/biotechcurrissue/6.pdf>
2. Vachher, M., Sen, A., Kapila, R. and **Nigam, A.** (2021) Microbial therapeutic enzymes: A promising area of biopharmaceuticals. *Current Research in Biotechnology*. 3: 195-208  
<https://doi.org/10.1016/j.crbiot.2021.05.0063>.
3. Vachher, M., Sen, A., Burman, A. and **Nigam, A.** (2021) Bacterial enzymes as diagnostic tools for various human pathogens. *Journal of Scientific Research*. 65(5): 105-115.  
[https://www.bhu.ac.in/research\\_pub/jsr/Current%20Issue.html](https://www.bhu.ac.in/research_pub/jsr/Current%20Issue.html)
4. Singh, T., **Nigam, A.** and Kapila, R. (2021). Innovations in Silkworm Rearing and Importance: Recent Advances. *Journal of the Textile Association*. 82(2): 87-90.
5. Sharma C, **Nigam, A.** and Singh R. (2021) Computational-approach understanding the structure-function prophecy of Fibrinolytic Protease RFEA1 from *Bacillus cereus* RSA1.  
*PeerJ* 9:e11570 <https://doi.org/10.7717/peerj.11570>
6. Sen, A., Kapila, R., Chaudhary, S. and **Nigam, A.** (2021 ) *Journal of the Textile Association*. volume 81(6) :312-318 Biotechnological Applications of Microbial Enzymes to Replace Chemicals in the Textile Industry- A Review. *Journal of the Textile Association*. volume 82(6)  
[https://issuu.com/textileassociationindia/docs/e-journal\\_-\\_jul-aug\\_21](https://issuu.com/textileassociationindia/docs/e-journal_-_jul-aug_21)
7. Kapila, R., Verma, G., Sen, A. and **Nigam, A.** (2021). Compositional Evaluation of Vermicompost Prepared from Different Types of Organic Wastes using *Eisenia fetida* and Studying its Effect on Crop Growth. *Indian Journal of Agricultural Research*.  
DOI:10.18805/IJARE.A5708.<https://arccjournals.com/journal/indian-journal-of-agricultural-research/A-5708>
8. Kapila, R., Verma, G., Sen, A., **Nigam, A.** (2021). Evaluation of Microbiological Quality of Vermicompost Prepared from Different Types of Organic Wastes using *Eisenia fetida*. *Agricultural Science Digest*. DOI: 10.18805/ag.D-5275.  
<https://arccjournals.com/journal/agricultural-science-digest/D-5275>
9. Sen, A., Oswalia, J., **Nigam, A.** (2021). Biodegradation of Synthetic Dyes in Effluents by Immobilised Microbial Cells and Enzymes. *Journal of the Textile Association*. volume 81(6) :312-318  
[https://issuu.com/textileassociationindia/docs/e-journal\\_-\\_mar-apr\\_21](https://issuu.com/textileassociationindia/docs/e-journal_-_mar-apr_21)
10. Chaudhary, S & **Nigam, A.** (2020). Antimicrobial Fabrics: An innovation In Textile Technology. *Journal of the Textile Association*. volume 81(4) :204-210  
[https://issuu.com/textileassociationindia/docs/e-journal\\_-\\_nov-dec\\_\\_20](https://issuu.com/textileassociationindia/docs/e-journal_-_nov-dec__20)
11. Keshan P, Rastogi A, Aggarwal S, **Nigam A,** Kapila R, Syed S.(2020) Effect of one-day training on Knowledge related to Biosafety and waste management among life-science Students .*Indian J Comm Health*.32(4):694-698.

[Doi https://doi.org/10.47203/IJCH.2020.v32i04.014](https://doi.org/10.47203/IJCH.2020.v32i04.014)

12. Gupta, S., Nigam, A., Singh, R. (2015). Purification and characterization of a *Bacillus subtilis* keratinase and its prospective application in feed industry. *Acta Biologica Szegediensis* 59(2):197-204

13. Singh, R., Nigam, A., Verma, G., Kapila, R. (2013). Vermicomposting- A technology for waste management and recycling and its relevance to horticulture. *International Journal of Innovative Horticulture*. 2(1):44-51

#### Books published/edited

##### **Book Authored** as First Author

Lab Manual in Biochemistry, Immunology and Biotechnology 2007, First Reprint 2008, Second reprint 2009

Lab Manual in Biochemistry, Immunology and Biotechnology ISBN-13:978-0-07-0617674

Published by International publishing company : Tata McGraw Hills

#### Association with Professional Societies

Life Member Association of Microbiologists of India

Life Member Microbiologists Society of India

#### Any other

##### **Research Guidance**

##### **Ph.D. guidance**

Amity Institute of Microbial Biotechnology

Co-Guide for Ph.D. in Microbial Biotechnology

Sonali Gupta 2011- 2015 Bacterial Keratinase : Production ,Purification and its properties

<https://shodhganga.inflibnet.ac.in/handle/10603/18839>

Chhavi Sharma. 2017-2021 Production, Purification and Molecular Characterization of Fibrinolytic Protease from *Bacillus sp.* Thesis Submitted.

Reeta Bhati 2017-2021 Isolation ,Characterization and Application of Arsenic Resistant Bacteria in Bioremediation. Ongoing

##### **M.Sc Dissertations** : 4

**Academic expert** at Amity Institute of Microbial Biotechnology

**Editorial Board Member** : European Journal of Sciences

Scientific European (SCIEU)

**College committee member** (2021): IQAC ,Admission, Academic, Covid Task Force, Examination, Building committee. Teacher incharge