INSTITUTE OF HOME ECONOMICS

UNIVERSITY OF DELHI

Name	Dr. Charu Gupta	Photograph
Designation	Professor	
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Educational Qualifications: Ph.D (Economics), M.Sc. (Fabric and Apparel Science), B.Sc. (Hon) Home Science, University of Delhi

Teaching experience: 31 years

Papers Taught: Textile Processing, Dyeing, Printing and Color Measurement, Fashion Merchandise Retail, Fabric Construction, Sustainability in Textiles and Fashion.

Research Interest/Specialization: Natural dyes, Microbial dyes, Textile wet processing, Sustainability in textiles.

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Research Projects

Title	Funding agency/organization	Duration of Project
Designing of knitted saree blouse and stole	UGC	3 years (2002-2005)
Isolation and identification of pigment-producing fungi for use as a textile dye	DU – Research Council	1 year (2012-2013)
Optimization and characterization of microbial dyes for dyeing different textile substrates	DU – Research Council	1 year (2013-2014)
Developing a sourcing database and analyzing the dynamics of the Indian home furnishing industry: retail and consumer perspectives	DU – Research Council	1 year (2013-2014)
Recycling of Pre-consumer textile waste using water-soluble films for developing an eco-friendly label	DU – Research Council	1 year (2015-2016)
Degumming of silk using Microbial Protease	DU – R &D Grant	1 year (2015-2016)

Sales Force Training of Managers and Salesmen	Tribal Cooperative Marketing Development Federation of India, Ministry of Tribal Affairs, GOI	3 months (2020)
Dyeing and optimization of microbial dyes on textile substrates	The Energy Resource Institute (TERI), Gurugram	5 months (2024)

Research papers

1. Agrawal, A., Aggarwal, S., Gupta, C. (2025). "Fermenting kasim with diverse sugars-A novel approach to an ancient natural dye" *Journal of Textiles and Engineer,* 32(137), 35-43.
2. Jain, P., Gupta, C. (2021). "A sustainable journey of handmade paper: from past to present" *Problems of Sustainable Development,*16(2) pp 234 -244, e-ISSN: 2080-1971.
3. Saroj, D., Charu, G., Parmar, M. S., Shankar, L. J., Needhi, S., & Neha, K. (2019). Mechanical properties of reinforced polyester and epoxy composites of corn (Zea mays) stalk fibre. *Indian Journal of Agricultural Sciences*, *89*(5), 873-876.
4. Chaudhary, H., Gupta, D., & Gupta, C. (2017). Multifunctional dyeing and finishing of polyester with Sericin and Basic dyes. *The Journal of The Textile Institute*, *108*(3), 314-324.
5. Sudha, Gupta, C., & Aggarwal, S. (2017). Optimization and extraction of extra and intracellular color from Penicillium minioluteum for application on protein fibers. *Fibers and Polymers*, *18*(4), 741-748.
6. Sudha, Gupta, C., & Aggarwal, S. (2017). Eco-benign wet processing of leather: from dyeing to after treatment. *Int J Home Sci*, *3*, 693-697.
7. Naaz, S., Gupta, C., Agarwal, S. (2017). Microbial Protease: A degumming Agent. *International Journal of Recent Research and Applied Sciences,* 4 (6), 90-94.
8. Devi, S., Gupta, C., Parmar, M. S., Jat, S. L., & Sisodia, N. (2017). Eco-Fibers: Product of Agri-Bio-Waste Recycling. *Journal of Humanities and Social Science*, *22*(9), 51-58.
9. Devi, S., Gupta, C., Jat, S. L., & Parmar, M. S. (2017). Crop residue recycling for economic and environmental sustainability: The case of India. *Open Agriculture*, *2*(1), 486-494.
10. Chaudhry, H., Gupta, C., Gupta, D. (2017). Eco-friendly technologies of hydrolysis for polyester modification – Part I. *Asian Dyer,* 14 (3), 47-52.
11. Chaudhry, H., Gupta, C., Gupta, D. (2017). Eco-friendly technologies of hydrolysis for polyester modification Part II. *Asian Dyer,* 14 (4), 51-55.
12. Chaudhry, H., Gupta, C., Gupta, D. (2017). Application of Box and Behnken design to optimise the parameters for chemical modification of polyester using sodium hydroxide. *Manmade textiles in India,* XLV No.11, 373-378.
13. Gupta, C., Vaid, N., & Jain, A. (2016). Recycling pre-consumer textile waste using water soluble film technology for promoting environmental sustainability. *International Journal of Science and Research*, *5*(11), 1001-1006.
14. Gupta, C., & Aggarwal, S. (2016). Natural Approach to Improving Light Fastness of a Leather Dyed with a Microbial Colorant. *Journal of the American Leather Chemists Association*, *111*(09), 315-324.
15. Gupta, C., & Aggarwal, S. (2016). Dyeing wet blue goat nappa skin with a microbial colorant obtained from Penicillium minioluteum. *Journal of Cleaner Production*, *127*, 585-590.
16. Jain, P., & Gupta, C. (2016). Textile recycling practices in Índia: a review. *International Journal of Textile and Fashion Technology*, *6*(6), 21-36.
17. Gupta, D., Chaudhary, H., & Gupta, C. (2015). Sericin-based bioactive coating for polyester fabric. *Indian Journal of Fibre & Textile Research (IJFTR)*, *40*(1), 70-80.
18. Gupta, D., Chaudhary, H., Gupta, C. (2014). "Topographical changes in polyester after chemical, physical and enzymatic hydrolysis". *The Journal of The Textile Institute*, 106(7), 690–698.
19. Gupta, D., Chaudhary, H., Gupta, C. (2014). "Sericin-based polyester textile for medical applications". *The Journal of The Textile Institute*, 106(4), 366–376.
20. Gupta, D., Agrawal, A., Chaudhary, H., Gulrajani, M., Gupta, C. (2013). "Cleaner process for extraction of sericin using infrared". *Journal of Cleaner Production*, 52(1), 488-494.
21. Gupta, C., Nagpal, N., Aggarwal, S., & Jain, P. (2011). "Bioremediation of reactive textile dyes by microbes". *Asian Dyer*, October–November, 44–49.
22. Sharma, D., Gupta, C., Aggarwal, S., Nagpal, N. (2011). "Pigment extraction from fungus for textile dyeing". *Indian Journal of Fibre & Textile Research (IJFTR),* 37(1), 68-73.

Association with Professional Societies
1. Member, Textile Association of India 2. Home Science Association of India