AVONI GHARDE

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HIGHLIGHTS

- ✓ 4+ years in the field of Textile Fibers, Fabrics and Nonwovens Technology
- ✓ Expertise in Optimization, Testing and Analysis of Fibers, Polymers and Nonwoven Materials
- ✓ Experience in Investigation using Analytical Techniques such as SEM, FTIR, DSC, TGA, MVR, etc.
- ✓ Hands on experience with Equipment such as Solution Viscometry, Rheology Testing, Tensile Tester, Optical Analysis
- ✓ In-training experience on Brabender compounder
- ✓ Technical skillset in Characterization, Product analysis and Development
- ✓ Highly motivated, disciplined with an Ability to Work Independently and In Teams with Minimum Supervision
- ✓ Competent in Problem Solving, Communications, Networking, Time Management and a Skilled Task-Master

EXPERIENCE

Textile Auxiliaries R&D Intern – DyStar, LP   *May 2019 – August 2019*

Charlotte, NC

- Identified key opportunities for performance chemicals customers.
- Evaluated and tested water repellent and resin products on fabric substrates.

Laboratory Manager   *September 2018 – Present*

Wilson College of Textiles, North Carolina State University, Raleigh, NC

- Supervised laboratory safety and compliance with local, state and federal regulations, and maintained sanitation of instruments.
- Efficiently maintained/updated inventory of chemicals and supplies, SDS manual.

Graduate Research Assistant   *July 2017 – Present*

Wilson College of Textiles & The Nonwovens Institute, North Carolina State University, Raleigh, NC

- Effectively utilized analytical techniques to characterize carpet recycled Polyester and Nylon 6 pellets such as TGA, DSC, Melt Flow Index, SEM, Solution Viscometry, and FTIR.
- Successfully manufactured filaments on melt-spinning and melt-blowing production lines.

Research Intern - BASF   *May – July 2014*

Navi Mumbai (India)

- Analyzed enzyme application to reduce pilling effect.
- Completed comparative studies of softener classes and performance studies of resin finishes.

EDUCATION

Ph.D. Textile Technology Management co-major Fiber Polymer Science   *Expected Graduation: May 2020*

Wilson College of Textiles, North Carolina State University, Raleigh, NC   *GPA 3.90/4.00*

- Dissertation: Carpet Recycled Polymers - Characterization, Fiber Formation and Applications
- Graduate Certificate: Nonwoven Science and Technology
- NC State LEAD Awards: Outstanding Student Organization Officer
- Osborne Graduate Fellowship: Winner amongst 3 honourable nominees

B. Tech Fibres and Textiles Processing Technology   *August 2011 – June 2015*

Institute of Chemical Technology, Mumbai (India)   *CGPA 8.23/10.00*

- Senior Project: Optimization and Production of Electro-Spun Silk Fibroin Nanofibres

RELATED COURSEWORK

Physical Properties of Fibers and Polymers | Rheology | Fiber Formation | Characterization of Structure of Fiber Forming Polymers | Nonwovens Processing | Nonwovens Characterization Methods | Product Development | Apparel Technology Management | Textile Dyeing and Printing | Evaluation of Dyes and Specialty Chemicals | Global Textile and Apparel Business Dynamics | Environmental Aspects of Textiles Processes | Lean Six Sigma

PUBLICATIONS

- **Journal of Textile and Apparel, Technology and Management:**   *November 2016*
  Influence of Factors on Clothing Sales and its Future Trends - Regression Analysis and Time Series Forecast of Clothing Sales

LEADERSHIP & ACTIVITIES

- **Vice President:** Materials Research Society, NC State University Chapter   *September 2018 – October 2019*
- **President:** Textile Association of Graduate Students (TAGS at NC State University)   *April 2016 – July 2017*
- **Chair:** Teaching Effectiveness Committee (GSA at NC State University)   *September 2016 – July 2017*
- **Student Member:** Graduate Women in Science (GWIS), American Association of Textile Chemists and Colorists (AATCC), American Society for Testing and Materials (ASTM), Materials Research Society (MRS), Society of Plastics Engineers (SPE)
- **Cultural:** Indian Classical Dancer - trained for more than 12 years