Lingyi Bi

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EDUCATION

DREXEL UNIVERSITY, Philadelphia, PA   March 2021- Present
Materials Science and Engineering PhD student, co-advised by Prof. Yury Gogotsi and Prof. Genevieve Dion
    Focus: MXene-functionalized textiles and wearables

BROWN UNIVERSITY, Providence, RI
MSc., Innovation Management and Entrepreneurship, GPA: 3.71/4.0   Aug 2014-May 2015

DONGHUA UNIVERSITY (former China Textile University), Shanghai, China
BSc., Textile Engineering, GPA: 3.82/4.0   Sep 2008-Jul 2012
    Honors: Twice China National Scholarship, graduated from Textile Elite Class (top 5%)

    UNDERGRADUATE RESEARCH: Led a team of 4 members on 3 research projects:
- Research on Enhancement of PET Fiber Conductivity by Graphene
- An Exploration to Conformational Changes of Soy Proteins using Different Solvent Systems
- Preparation and Properties Research of Buckypaper Reinforced PMR-polyimide Composite

INDUSTRY EXPERIENCE

DROPEL FABRICS, New York, NY   Oct 2015- May 2020
Technology Production Manager   Aug 2018- May 2020
- Experiment with non-fluorinated hydrophobic resins, surfactants, catalysts to impart lasting functions -- stain repellency and non-iron functions in particular -- to natural fabrics, allowing them to function in par with synthetics thus reducing plastic use
- To maximize the performance and durability on final fabric, design the chemical recipes and judiciously select fiber, yarn, fabric construction, dyestuff, and processing parameters; subject fabrics to industry testing methods (ISO, AATCC, GB, etc.) and evaluate results against standards for intended use
- Acquire IP where applicable along the development process; design pilot runs to ensure smooth transfer of development from lab to mass production; troubleshoot production quality problems via root-cause analysis
- Invent new testing methods to best replicate the use of functional fabrics in everyday wear – existing methods were designed for sportswear – by working closely with clients such as Walmart; evaluate tests in their accuracy, precision, and sensitivity
- Define company's technology roadmap with CTO by analyzing competitors, investigating latest concepts, assessing technology maturity, interviewing experts, lead licensing initiatives with academic collaborators
- Established successful processes and document formats to streamline fabric development and create a database for analysis and development, cutting development L/T by 50%
- Designed an internal lab including testing items, equipment, manpower, calibration, and related training programs

GLOBAL BRANDS GROUP, New York, NY
Production Coordinator   Sep 2015- Jul 2018
- Allocated orders of 7 million pcs for fashion brands Kenneth Cole, Jones New York and Ellen Tracy to vendors in Asia, Middle East and Central America achieving $1.5 million negotiation gain by leveraging multiple brands, scrutinizing cost breakdowns, sourcing material alternatives, adjusting garment construction optimizing maker efficiency
- Transformed designs from sketch to production through proto review and pre-production with design, tech design, sales, merchandise, fabric teams and factories, focusing on manufacturability assessment, cost engineering and sampling allocation, moving 150 knit styles/ 450 cues every season through the development pipeline

DECATHLON GROUP, Shanghai, China
Quality Production Leader   Aug 2012-Aug 2014
- Developed 20+ performance fabrics via surface modification, coating and lamination for outdoors at visits to suppliers' production facilities, set functional requirements and user tests with French R&D hub and third-party labs
- Co-led company's global-scale project eliminating hazardous pre-fluorinated chemicals (PFCs) by switching to C6 chemicals and exploring PFC-free technologies between headquarters in France, factories and chemical suppliers
Certified Social Responsibility Auditor (of factory worker conditions) - volunteer

PUBLICATION

Temeng. K., Bi, L., "Process for Hydrophobic Treatment Of Cotton Yarns", U.S. Provisional Pat.#62/788,161, January 4, 2019.