

# In Focus: Textiles

A look from Lumiton.



## TECHNOLOGY

### Tech Start-up Lumiton Introduces Light-Energized Apparel

- Lumiton created its sunlight-activated Wear Healthy fabrics and yarns that promote wellness and health benefits.

BY TRACEY GREENSTEIN

**Start-up Lumiton** said it has created Light-Energized Apparel, an activewear line that the company said offers health, wellness and performance benefits through the infusion of proprietary laser technology. Lumiton is “dedicated to applying the scientific principles of light to fundamentally alter apparel,” the company said.

The Charlotte, N.C.-based firm is focused on the promotion of its Wear Healthy fabrics and yarns that are infused with

laser dyes that become “energized” from absorbing sunlight and produce red and near-infrared light. The company said the light wavelengths are clinically proven to deliver a slew of health benefits for the wearer, including increased collagen, reduced pain and inflammation, muscle growth and recovery and increased cellular energy. Lumiton’s Wear Healthy fabrics also provide UV protection of SPF 50-plus and “a shade-like environment for the body,” allowing it to heat up less than the average rate, according to the firm. Its apparel is made in the U.S. and pointed toward activewear consumers.

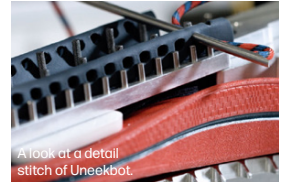
“Lumiton is technical innovation at its best,” said Faramarz Farahi, a professor of optics and physics at UNC Charlotte and Lumiton scientific adviser. “The broader scientific community has shown the

benefits of light on the human body, and Lumiton’s innovation brings this light to everyone, everywhere through an item as universal as clothing.”

The performance apparel market saw an uptick of 5 percent from 2017, reaching \$26.3 billion in 2018, with outdoor specialty apparel up 2 percent this year totaling \$2.5 billion, according to a report by The NPD Group. And the increased demand for performance apparel aligns with consumers’ desire for a more balanced lifestyle. Marisa Nicholson, Outdoor Retailer vice president and show director, said “Consumer spending on outdoor recreation totals \$887 billion annually in the U.S. It’s a significant component in our nation’s economy, which can spur investment, and the industry is growing along with an ongoing emphasis on healthy lifestyles and healthy communities. More people are getting outside and outdoor recreation is becoming more accessible. As a result, there’s an increase in demand for the apparel associated with such pursuits.”

Marco Scipioni, Ph.D., professor of physics at Queens University of Charlotte and Lumiton cofounder, said, “Clinical study after clinical study prove body cells can use light energy to drive health and performance. Until now, the modern solution to access this healthy light has been laser and LED ‘treatments,’ which are costly and time-consuming. Lumiton offers a new approach.” And Gates Hinds, a Lumiton cofounder, said, “When you think about the importance of sunlight, it is not surprising body cells are made to use light energy. Between living indoors, wearing clothes and blocking UV, we don’t receive healthy light as nature intended. Lumiton empowers people to nurture a healthier relationship with light.”

Lumiton launched a Kickstarter campaign earlier this week and will unveil its collection of “clothing basics” in the fall, including tank tops, pants, accessories and a line of performance sleeves; its SunShift athletic T-shirt is available for purchase. The company’s technology is optimized by sunlight where outdoor light is plentiful and powerful, but can also work indoors with reduced efficiency.



A look at a detail stitch of Uneekbot.

## FIELD NOTES

### Sustainability Ushers in a Better, Brighter Industry

**Keen**, a Portland, Ore.-based footwear company, has built the “World’s Smallest Shoe Factory,” a mobile trailer that is home to a consumer-facing robot that enables customized manufacturing and consumer interaction in real time.

Aptly named the Uneekbot, its robot can manufacture a pair of personalized sneakers from its Uneek line in less than eight minutes using precise technology, based on 40,000 lines of code. As the Uneekbot is housed in a trailer, the robot and members of the Keen team are nearing the end of a nationwide road trip that included stops at U.S. college campuses to introduce the Uneekbot to students who can view the robot’s manufacturing process. Its Uneekbot tour will have visited 15 cities by the end of the year.

Keen said “the idea is to meet the next generation of innovators and designers while highlighting Keen’s innovative and entrepreneurial spirit,” and that its concept illustrates how the firm is “leveraging tech to clean up the supply chain and build shoes in a more sustainable and clean way.”

And in tech, it’s always about staying ahead of the curve, according to Swiss textile company **Schoeller Textil AG**. The firm recently celebrated a 150-year anniversary, and attributes its long-lasting success to sustainable technologies and products that fuel the industry forward. Schoeller is known for its “C-change” membrane technology, the world’s first intelligent membrane, as well as its new PFC-free technologies based on renewable raw materials. And the firm recently won the Design Prize Switzerland award in the textile category, for its heatable “E-soft-shell” product. Schoeller’s chief executive officer, Siegfried Winkelbeiner, said today “as ever, Schoeller strives to deliver what our brand partners’ end users need to differentiate themselves. We work to stay ahead of the curve on all fronts – providing our customers with what they need, sometimes even before they know they need it.”

As a result, brands, too, are increasingly more invested in leveraging new technologies that can speed up supply chains. “AI is bringing increased transparency to production and the design process, while 3-D printing is being applied to fabrics and production schemes to save on samples and reduce lead times,” according to a recent report by **Trendalytics**. The report also noted the importance of technology in sustainability: “Blockchain technology promises to be the future of what advanced traceability could look like. Bringing automation to the materials and dye step of the life cycle also greatly reduces water waste and dye pollution,” researchers noted.

Collaborations such as Avery Dennison x Evrything created Janela, a smart label that tracks clothing through every step of the supply chain via cloud-based technology and Tommy Hilfiker x IBM x FIT, which uses AI for trend intelligence and calendar restructuring, all according to the same report.

**EDITOR’S NOTE:** WWD Field Notes is a column featuring the latest technology, B2B and business solution news.

## TEXTILES

### Unifi Names New Head Of Global Corporate Sustainability

- The firm’s vice president of global corporate sustainability will develop and execute its green initiatives.

BY TRACEY GREENSTEIN

**Green fiber firm Unifi** said it has appointed Helen M. Sahi as vice president of global corporate sustainability to help develop and drive sustainability initiatives for the company. Sahi will ensure that Unifi’s eco-oriented efforts are “evaluated through a robust set of metrics.”

Sahi has nearly three decades of experience, including helping sizable corporations such as Avery Dennison Corporation and Bank of America create

and achieve sustainability goals, the company said. Unifi also noted Sahi’s successes in building partnerships with NGOs and other external organizations to advance their sustainability efforts. Sahi said that the firm “has a great sustainability story to tell” and that “Through their brand partnerships, Unifi’s Repreve has become the leading global branded recycled fiber with a goal of transforming 30 billion plastic bottles into fibers by 2022.” She added, “I have great respect for Unifi’s commitment to sustainable innovation and I am eager to start working closely with the team.”

And Richard Gerstein, executive vice president of global branded premium value-added products and chief marketing and innovation officer, said that Sahi’s



Unifi’s Repreve plant.

background “includes significant responsibility and success in the technical, strategic and partnership aspects of sustainability policies and initiatives, and her vast experiences will help drive Unifi’s sustainability strategy and key programs across our global operations.”

Gerstein continued, “We look forward to Helen further developing our relationships with chief sustainability officers throughout the textile and apparel supply chain and advancing the use of sustainability metrics into our operations, product line management and innovation initiatives.”