



A wearable technology for leather products

Evolution Leather Consulting, a start-up from Turkey but based in London, has patented a process for producing photoluminescent leather and is working with a tanner to develop a new range called GloTech Leather.



As the name suggests, GloTech Leather is a new idea that adds wearable glow-in-the-dark technology to leather, a material that the start-up company behind the patented technology, Evolution Leather Consulting, believes is “superior to all others”.

Patent-owners Evrim Kadioglu and Gülfidan Uzunlar are working with a tanning partner in Turkey, Cevahir Deri, to make the leather, which they have already put on show at the February edition of Lineapelle in Milan. They had a facility on the stand to reproduce darkroom conditions to allow visitors to see the photoluminescent effect clearly. GloTech Leather retains all of the qualities of leather, such as durability, breathability and flexibility, with the added quality of glowing in the dark.

Ms Kadioglu has explained to *World Leather* that the idea works by applying to a piece of leather a photoluminescent substance at the finishing stage. This substance absorbs natural and artificial light, with the extra energy levels from this light causing the electrons in the photoluminescent substance to become unstable. “As the electrons return from this unstable state back to a stable state, they emit energy,” she says. “This event is called luminescence.” She says Evolution Leather has achieved the effect using a water-based pigment and water-based binders.

She explains that achieving a bright glowing effect without

compromising the quality of the finished leather was one of the start-up’s main technical challenges and that, working with Cevahir Deri, they set about finding a “perfectly balanced chemical formula”, which, when they found it, became “the key to our success”.

A short charging time with either natural or artificial light will allow the leather to glow for four hours at a time. However, the glowing effect will last for up to 40 years; therefore, the photoluminescence is, like the leather itself, built to last. The material can be applied to a range of applications, Evolution Leather Consulting has said, including footwear, automotive, accessories, interior design and home products.

Evrim Kadioglu says she has been fascinated by leather as a material since she was a child, and describes seeing the leather industry’s ability to transform waste into one of the most luxurious materials as “a magical experience”. Later, she developed a passion for engineering too and regards GloTech Leather as a combination of the two.

Before launching Evolution Leather Consulting she worked at several leather manufacturing companies, leather chemicals suppliers and finished product manufacturers, including at luxury fashion houses, giving her what she describes as a strong understanding of the complete leathergoods supply chain. 🌐