SUSTAINABLE SEQUINS MADE FROM CELLULOSE

An Australian designer has developed biodegradable sequins that could help deliver a circular textile economy

Spotted: Elissa Brunato has developed a sequin with all the iridescent shimmeriness that looks amazing on evening wear but without any of the plastic. Unlike conventional sequins, which are made of synthetic resin or petroleum-based plastics, Brunato’s sequins are made from cellulose and are fully biodegradable.

To develop her sequins, Brunato worked with material scientists Hjalmar Granberg and Tiffany Abitbol from the RISE Research Institutes of Sweden. They developed the material using tree-based cellulose, which has a natural polymer structure that reflects light. According to Brunato: “The colour is a result of the material nano-structure, so there are no chemicals or colourants added to create the colorful shimmering effect.”

The sequins are formed by pouring liquid-based cellulose into a mould. Iridescent colours are embedded in the material structure of the cellulose using non-toxic materials. The resulting sequins are strong enough to be sewn into garments, but they will completely biodegrade over time.

Plastic sequins don’t easily biodegrade. When they do break down, they turn into micro-plastics — which have been shown to be harmful to almost all forms of life. The sequins can also end up in the oceans, where they are mistaken as food by sea life. As the average dress can have between 2,000 to 5,000 sequins on it, the new sequins represent a significant leap in reducing plastic.

Brunato joins a number of other designers who are working to make fashion more sustainable. At Springwise, we have recently covered sustainable fashion innovations such as T-shirts made from plants and couture textile made from seaweed.
Takeaway:

According to the non-profit Global Fashion Agenda, a majority of consumers now view sustainability as very important. Brunato’s sequins could help brands achieve this without banning sparkle from their clothes. Ultimately, materials like this could also help fashion companies develop a more circular economy for clothing, by reusing or recycling all of their materials.