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## Gold, silver nanoparticle dyes give fabrics a rainbow of unexpected colours



From ANI

Washington, June 14: Researchers in New Zealand have shown that adding nanoparticles made of pure gold and silver to fine Marino wool can help create a rainbow of unexpected colours, something that may be of interest to high-end, couture fashion designers.

The researchers demonstrated the first scarf dyed with gold nanoparticles at the Nano Science and Technology Institute convention in Boston last week.

"We want to create a fashion icon, like Louis Vutton or Gucci, where the logo will speak for itself," Discovery News quoted James Johnston, the lead researcher from Victoria University in New Zealand, as saying.

"You could say that you are clothed in pure gold or silver," added Johnston.

The researcher revealed that upon being dyed with gold nanoparticles, any fabric could obtain colours ranging from purple to yellow and everything in between.

On the other hand, they said, silver nanoparticles could create bright yellows, greens and oranges.

The researchers even said that it was possible to combine and mix colours to create new ones.

According to them, varying the amount of gold or silver nanoparticles determined the shade's intensity.

They said that the colour of the wool would depend upon the type of precious metal used, the size of the nanoparticles, and in some cases, their shape.

A red wine colour is created by spherical gold nanoparticles about 10 nanometres, and as their size increases to 100 nanometres, the colour turns red, then purple, blue, and finishes off in various shades of gray.

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