
Swimwear remains dry

Swimwear sticks wet and cold to the body after hardly being out of the water. This can be avoided by a newly developed fabric, which protects from wetness by a thin air layer. Two water insects, the fishing spider and the stream dwelling bug acted as a stimulus for this development.



Herbal and animal surfaces which remain dry under water occur rather often in nature. Special surface structures cause a thin air layer which can protect them from a direct contact with water – occasionally for several days. This, for example, applies to the fishing spider: numerous short, bent hair form – like a bow of a grapple – an air layer, which permanently remain on the surface thus keeping off the water.

Inspired by nature as a model a textile was developed which remains dry under water. A first prototype can already stay under water for four days without becoming wet. When immersed in water special textile surface structures generate a silvery air layer which encloses the textile thus keeping it dry.

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