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NUS researchers develop self-healing electronic skin

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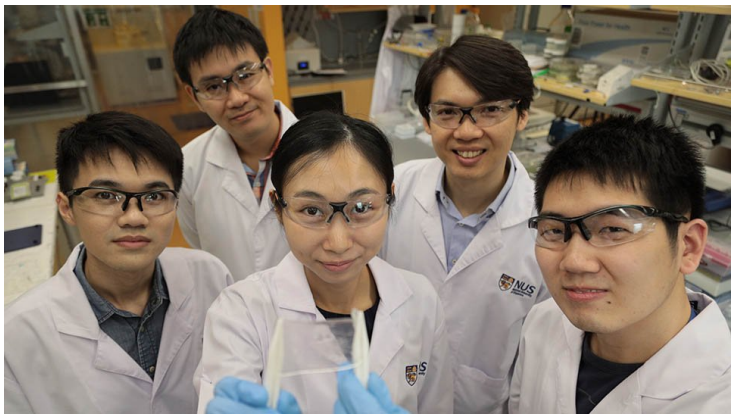

Scientists from National University of Singapore (NUS) have taken inspiration from underwater invertebrates like jellyfish to create an electronic skin with similar functionality.

Just like a jellyfish, the electronic skin is transparent, stretchable, touch-sensitive, and self-healing in aquatic environments. It can be used in everything from water-resistant touchscreens to aquatic soft robots.

The team, led by NUS Materials Science and Engineering Assistant Professor Benjamin Tee, worked with collaborators from Tsinghua University and the University of California Riverside spending just over a year to develop the material.

The electronic skin is created by printing the novel material into electronic circuits. As a soft and stretchable material, its electrical properties change when touched, pressed or strained.

Looking forward, the scientists are hoping to explore further possibilities of this material by making use of the comprehensive properties of the material to make novel optoelectronic devices.