

IASST team develops healing bandage

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A group of researchers at the Institute of Advanced Study in Science and Technology (IASST), Guwahati, has fabricated a smart bandage material that can heal wounds better and faster and has antimicrobial properties.

The bandage is made of cotton patch coated with chitosan-based hydrogel that is loaded with curcumin and graphene oxide. The researchers used curcumin as a model drug and the same can be replaced with other antimicrobials.

The nanosize of graphene oxide allows large amount of drug to be loaded on to the patch. According to the research team, graphene oxide also increases the strength of the patch especially when it gets wet.

Currently, there is no control over drug release. The team is trying to address this by using different nanomaterials. The researchers want to make sure that like graphene oxide, the chosen nanomaterial is biocompatible and does not get released into the wound.