

Now, stitch antenna to your dress or coat; Hope for health, defence sectors

The new invention can lead to revolutionary changes in the health and defence sectors.

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Published: Oct 8, 2017, 07:42 AM IST

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Antenna. Photo: Mathrubhumi

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Kochi: Now, antennas can be stitched to our dress, coat pocket or jacket. The scientists of National Institute for Interdisciplinary Science and Technology (NIIST) in Thiruvananthapuram developed a

stitchable antenna in cooperation with Cochin University of Science and Technology (CUSAT).

The new invention can lead to revolutionary changes in the health and defence sectors. Preliminary phase of the development of the antenna has been completed, said Dr. K. P. Surendran, scientist at Material Science and Technology wing of NIIST. Production of the antenna on an industrial scale is the next target. He claimed that the antenna that can be stitched to dress is the first of its kind in the country.

The invention is of great help to the soldiers, who are assigned duty in remote places where even mobile signal is unavailable. In such cases, the antenna can be used to assess the health condition of the soldiers, said Dr. P. Mohanan, former Professor of Electronics in CUSAT.

Discussions with the defence department regarding the practicability of the invention has already commenced. Major hospitals across the country also have taken interest in the new concept, as it can be linked with sensors. The antenna can be used for tele medicine and environment-related observations.

The antenna cannot be detected when it is stitched to the clothes. Presently, they have developed an antenna of 3 cm length and 4 cm width. The size can be reduced. The scientists have also developed a special silver ink for the antenna. It has a frequency of 3.3 GHz. The Smart Materials and Structures journal of the Institute of Physics has published about the invention. The research was jointly completed by Dr. Surendran and Roshni S. Babu.