

**МІНІСТЕРСТВО ОСВІТИ І НАУКИ УКРАЇНИ
СУМСЬКИЙ ДЕРЖАВНИЙ УНІВЕРСИТЕТ
КАФЕДРА ІНОЗЕМНИХ МОВ
ЛІНГВІСТИЧНИЙ НАВЧАЛЬНО-МЕТОДИЧНИЙ ЦЕНТР**

**МАТЕРІАЛИ
VIII МІЖВУЗІВСЬКОЇ НАУКОВО-ПРАКТИЧНОЇ
КОНФЕРЕНЦІЇ
ЛІНГВІСТИЧНОГО НАВЧАЛЬНО-МЕТОДИЧНОГО ЦЕНТРУ
КАФЕДРИ ІНОЗЕМНИХ МОВ**

“TO LIVE IN A SAFER WORLD”

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The eighth scientific practical student`s, postgraduate`s and teacher`s
LSNC conference

TOOTH SENSOR

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Fear of the dentist can be a very serious issue for many children and adolescents. According to academic researches into Dental Fear and Anxiety, some young people hate dentist visits so much that they often refuse to co-operate, or worse - they don't even go to the dentist. Scientists at Princeton and Tufts have been working a thin tooth sensor that may limit the amount of times we will need to get our teeth checked.

The sensor will alert you when it detects any bacteria that could cause cavities, plaque buildup, or any other infections. The scientists say that the new sensor can recognize human oral activities, such as chewing, drinking, speaking and coughing. It also can help to better understand people's habits and identify potential health problems, such as if a person is smoking or drinking too much. The sensor is so small that it can either fit inside an artificial tooth or straddle a real one.

The most important part of the sensor is an accelerometer. Using an accelerometer to monitor different activities of the mouth, scientists use tiny wires within the sensor to carry data to a computer, though they say that future models of the sensor will use Bluetooth for wireless reporting.

The researchers presented their device at the International Symposium on Wearable Computers in Switzerland. They say that the tooth sensor is 93.8% accurate in recognizing oral activity. The information collected by the sensor could be very helpful to dentists, doctors and other scientists, since the device can provide information on teeth grinding, eating or drinking levels, and it could even measure stress levels.

Because the sensor is placed inside the mouth, safety is very important. All electronic parts are sealed and if the sensor is swallowed, it will pass through the body without causing harm.

Tooth sensors can become standard procedure in dental and health offices for health monitoring.