

Scientists of the St. Petersburg State Electrotechnical University "LETI" have created a device for identifying caries without an X-ray. It uses lasers, which makes the diagnosis safe and convenient for patients of any age.

The device operates on the basis of semiconductor lasers with wavelengths of about 400 and 650 nanometers. They cause a glow to the tooth tissues, allowing even hidden damage, inconspicuous during a normal examination. Data is transmitted to a computer where the program analyzes the state of enamel and dentin.

According to Professor Lati Andrei Ulvova, the device is compact and easy to use. Unlike an X-ray, it has no contraindications and can be used directly in the dentist's chair.

Caries is one of the most common dental diseases, and its early diagnosis is important for successful treatment.