

A wireless pressure sensing bite guard has been developed for monitoring the progress of bruxism (teeth grinding during sleep); as well as protecting the teeth from damages. For sensing the pressure effectively in restricted space and hostile environment, a pressure sensitive polymer composite has been fabricated and encapsulated into a conventional bite guard which is safe for in situ applications. The device is anticipated to give real-time data through wireless data transmission and to have long working life (weeks). Microcontroller-based electronic circuit was built in-house for data collection and transmission. A low power approach is configured to increase the working life of the device. This device is a useful tool for understanding and treating bruxism.