



Photocuring device for dental resins



> **Description** The proposed technology consists of a device for photocuring dental resins equipped with an electronic light intensity controller, which allows for the control of a number of variations in light intensity parameters during the polymerization process.

> **Problem** The materials most widely used in direct dental restorations today are composite resins, with a predominance of photocurable resins. Dental restorations made of composite resins produce excellent aesthetic results; however, during and after the polymerization process, these resins often exhibit unsatisfactory mechanical behavior, particularly high polymerization shrinkage rates.

> **Benefits** This newly developed technology consists of a LED photocuring device that enables the intensity of light to be electronically controlled during photocuring in the dental resin polymerization process. The device thus allows the user to obtain better polymerization results, and hence, restorations, and particularly, significantly reduced shrinkage stress.