

## Numerical Analysis of Thermoviscoelastic Behavior of Post-Restored Teeth Using a Generalized Approach

Hossein Ashrafi<sup>a</sup>, Hamed Keshmiri<sup>b</sup>, MohammadReza Bahadori<sup>b</sup>

<sup>a</sup> K. N. Toosi University of Technology, Tehran, Iran ; <sup>a</sup> Sharif University of Technology, Tehran, Iran

The objective of this study is to develop a general finite element formulation associated with an incremental adaptive procedure which established for analysis of the orthotropic Post-Restored Teeth. This paper concerns with development of a numerical algorithm for the solution of quasistatic initial / boundary value problems involving the linear media with thermal and mechanical deformations. A mathematical algorithm is then developed for a generalized finite element formulation to deal with the quasistatic thermoviscoelastic behavior of Teeth post-restoration problems.

110 .۳ آ فرو ۱ دی ۱۳۹۱ - دانشگاه صنعی امیرکبیر (بلی تکمیک تیران)

December 20-21, 2012, Amirkabir University of Technology (Tehran Polytechnic), Tehran, Iran. http://www.icbme.ir