## **Accepted Manuscript**

Thermodynamics-based finite strain viscoelastic-viscoplastic model coupled with damage for asphalt material.

F. Chen, R. Balieu, N. Kringos

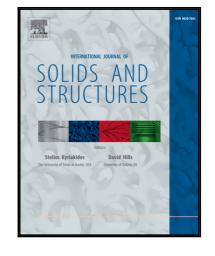
PII: S0020-7683(17)30424-9 DOI: 10.1016/j.ijsolstr.2017.09.014

Reference: SAS 9731

To appear in: International Journal of Solids and Structures

Received date: 11 October 2016 Revised date: 25 April 2017

Accepted date: 11 September 2017



Please cite this article as: F. Chen, R. Balieu, N. Kringos, Thermodynamics-based finite strain viscoelastic-viscoplastic model coupled with damage for asphalt material., *International Journal of Solids and Structures* (2017), doi: 10.1016/j.ijsolstr.2017.09.014

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.

#### ACCEPTED MANUSCRIPT

### Highlights

- A thermodynamics-based model under the finite strain framework is proposed.
- Thermo-viscoelastic-viscoplastic behaviors coupled with damage are well predicted.
- The response difference between in tension and in compression is captured.
- Permanent deformation damage of a practical pavement structure is simulated.

#### Download English Version:

# https://daneshyari.com/en/article/6748502

Download Persian Version:

https://daneshyari.com/article/6748502

<u>Daneshyari.com</u>