# Article information:

Hygro-thermo-mechanical bending behavior of advanced functionally graded ceramic metal plate resting on a viscoelastic foundation - ScienceDirect
<https://www.sciencedirect.com/science/article/pii/S2352012421004938>

# Article summary:

1. This article studies the bending behavior of an advanced functionally graded ceramic–metal plate subjected to a hygro-thermo-mechanical load and resting on a viscoelastic foundation.

2. A three-parameter viscous foundation model is used to study the bending response utilizing the damping coefficient in addition to Winkler’s and Pasternak’s parameters.

3. A parametric investigation is established to discuss the effects of the power-law gradient index, temperature rise and moisture concentration, elastic foundation coefficients, and the viscoelastic damping coefficient on the FGM plate's bending response.

# Article rating:

Appears well balanced: The article presents the information in a reliable and balanced way, without biases and prejudices. The claims made in the article are well supported and, where applicable, all sides of the argument are given opportunity to present their point of view. The article appears trustworthy and reliable.

# Article analysis:

This article provides a detailed analysis of the hygro-thermo-mechanical bending behavior of an advanced functionally graded ceramic–metal plate resting on a viscoelastic foundation. The authors provide a comprehensive overview of their research methodology, including their use of a three-parameter viscous foundation model to study the bending response utilizing the damping coefficient in addition to Winkler’s and Pasternak’s parameters. The authors also provide a thorough parametric investigation to discuss the effects of various factors on the FGM plate's bending response.

The article appears to be well researched and reliable, as it provides detailed information about its research methodology and results. Furthermore, it cites existing literature in order to validate its findings, which adds credibility to its claims. Additionally, there does not appear to be any bias or partiality in this article; rather, it presents both sides equally by providing an overview of both positive and negative aspects related to FGMs.

In conclusion, this article appears trustworthy and reliable due its comprehensive research methodology and lack of bias or partiality in its presentation of information.

# Topics for further research:

* Functionally Graded Materials
* Hygro-Thermo-Mechanical Behavior
* Viscoelastic Foundation Model
* Damping Coefficient
* Winkler's Parameter
* Pasternak's Parameter

# Report location:

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