

## Modal analysis of the honeycomb plates mechanical coupling used in the satellites design

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A detailed understanding of the dynamics of coupled structures is essential for the design and development of new structures and problem solving noise and vibration on existing structures. This understanding through the study of modal analysis, which allows describing, understanding and modeling the behavior of coupled structures. A modal analysis of a coupled system composed two sandwich plates of metal skins and honeycomb core for free vibrations is presented in this paper and comparative study with experimental methods. The results of this study show a good consistency observed between the results from the finite element model and the experimental model, accepting a relative error of about 4%.

### Biography

Salem Houria has completed his magister studies at the age of 28 years from University of Science and Technology Oran, USTO MB, and she is register in doctoral studies from the Same University. She has published more than 10 papers in reputed journals.

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