

## EVALUATION OF THE INFLUENCE FOR THE COMPONENTS OF A MULTILAYERED HONEYCOMB COMPOSITE MATERIAL SUBJECTED TO COMPLEX STATIC LOADING

Raul CORMOS<sup>1</sup>, Horia Alexandru PETRESCU<sup>2</sup>,  
Sorin DRĂGHICI<sup>3</sup>, Anton HADAR<sup>4</sup>

**Rezumat:** Scopul acestui articol este studiul influenței componentelor unui material compozit multistrat cu miez de tip fagure asupra modului de preluare a unei sarcini statice complexe, în domeniul liniar elastic. Pentru efectuarea acestui studiu s-a folosit simularea numerică, iar rezultatele obținute au fost validate pe cale experimentală.

**Abstract:** The purpose of this article is the evaluation of the influence of the components of a multilayered honeycomb composite material, as to the load carrying capacity, when the material is subjected to a complex static loading, in the linear elastic domain. The numerical simulation approach was used for this study, and the results were validated experimentally.

**Keywords:** multilayered honeycomb structure components, numerical simulation, experimental validation.

---

<sup>1</sup> PhD candidate, Raul CORMOS, Strength of Materials Department, Faculty IMST, Politehnica University of Bucharest, Bucharest, Romania.

<sup>2</sup> As. Prof. PhD. eng. Horia Alexandru PETRESCU, Strength of Materials Department, Faculty IMST, Politehnica University of Bucharest, Bucharest, Romania.

<sup>3</sup> As. Prof. PhD. eng. Sorin Drăghici, Strength of Materials Department, Faculty IMST, Politehnica University of Bucharest, Bucharest, Romania.

<sup>4</sup> Prof. PhD. eng. Anton HADAR, coordinator, Corresponding member of AOSR.

---