For this 2020, a strange year for everyone, Lámpsakos presents its 24th edition, composed of five research articles from different areas of knowledge within Engineering and two case reports, in addition to its editorial that in this publication has been oriented “On the analysis of information in the current technological revolution” [1], this always supported by current events. The author of this manuscript is an expert researcher who shares with us the wealth of information that underlies the data.

According to, “Analysis of bolted ultra-high performance concrete joints” [2], the authors present to analyze the influence of edge distance and elastic properties of ultra-high performance concrete plates (UHPC), in the development of failures in bolted connections. The work is enriched with equations of closed form, used to measure the stress concentrations in the connection.

Exposing a method consisting of the technique proposed by Ishikawa, followed by the implementation of the Delphi methodology and ending with the third round of Delphi, using the freehand elicitation method, within a tool for industrial use such as control charts. in the field of health, this is what the authors describe in the article entitled “Bayesian control letter associated with non-conformities in medical records” [3]. Those who expose the advantage of the case of non-conformities in the medical records, where they argue that the limits are self-adjusting without requiring restarting the process of construction of the control letter.

We continue with “Numerical analysis of the over-expanded flow in the experimental ula-2 conical nozzle out of design” [4], whose purpose is to describe the process and the behavior of the over-expanded flow field in the ULA-2 experimental conical nozzle, on a group of throat length supersonic nozzles, which have been designed and manufactured at the University of Los Andes, Venezuela, by the Group of Atmospheric and Space Sciences (GCAE). In the manuscript, the authors conclude that there is an influence of the throat length on the development of the flow in that section, but without representing a significant impact on the outflow velocity.

“Analysis of cultivation areas and bodies of water by calculating radiometric indices with Sentinel-2 images” [5] presents an association between agriculture
and satellite image processing, using Sentinel-2 an Earth observation program that consists of 13 spectral bands. The article describes a multitemporal analysis based on the Vegetation Index of Normalized Difference and Water Index of Normalized Difference obtained with images from the Sentinel-2 satellite, for the identification of changes that occur in an area of southeastern Mexico in the period 2018-2020.

As an imminent concern to reincorporate non-biodegradable elements and make them reusable, the authors of “Evaluation of the mechanical properties of bricks made with glass and plastic waste. analysis of carbon dioxide emissions” presents a study of the mechanical properties of bricks containing aggregates, glass, and polyethylene terephthalate pellets. In their manuscript, the authors make an evaluative comparison of the properties of the brick against the variation of the percentage of each one of the aggregates, in the bricks [6].

At the close of the 24th edition, another case study is presented, this time related to the Pablo Tobón Uribe Hospital, in the city of Medellín, Colombia. The manuscript “Automated creation of international patients with AUTOIT: an application case” [7], describes the process of automating the creation of patients that contains the management of electronic medical records of foreign patients, through a platform called Web Cheking. The automation described is achieved with the AutoIt language, which allows generating, validating, consolidating in the information system, achieving agility in the processes, and avoiding duplication in the data, according to the authors.

REFERENCIAS


