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EDITORIAL

For a second consecutive year, Revista Facultad de Ingeniería Universidad de Antioquia has worked together with the organizers of the Ibero-American Congress of Smart Cities ICSC-CITIES to publish their best articles. The 2019 edition of the congress was held in Soria, Spain, between October 7 and 9, where close to one hundred research works were presented. The authors of 24 works were invited to write extended versions of their articles reporting completed or updated experiments to provide more comprehensive answers to their research questions. After following our standard peer-review process, 12 articles were selected for publication at redin.

In redin issue #101, we include 5 articles from ICSC-CITIES and 5 other articles from different sources. The common denominator of the ICSC-CITIES papers is energy efficiency. In one work, researchers analyze the angle and ratio of double-glass facades, as well as other weather variables to mathematically model the heating energy savings achieved. Results are useful for increasing the energy efficiency of buildings in locations where heating energy consumption is significant. A second article presents an algorithm for advising people when to use their appliances. It takes into account the varying energy prices and particular user requirements in order to compute the time periods when the use of appliances will generate the minimum cost. Two other articles deal with two of the most popular renewable energy sources: solar and wind. In solar panels, one of the biggest challenges is surface deterioration. Here, authors present a low-cost solution for monitoring damages in solar panels through a thermography procedure that uses a basic camera. Authors of the other article propose a reconfiguration of an existent generator design in order to increase its reliability in isolated sites. Lastly, an article that deals with cities' response to climate change is presented. They take Madrid as a case study and put special focus on nature-based solutions, although the manuscript is actually broader than that.

Of the other 5 regular papers, 3 of them are environment-related works. First, the biogas production from rice straw waste is studied. In a second article, authors investigate the use of lemon peel for removing water pollutants. And third, a computational model is built for preventing flooding in a Tunja neighborhood, Colombia. The last two articles in this issue of redin deal with nanomaterials for improving the coating of silicon wafers and with a study of inventory costs in supply chain design.

Most of the articles in this issue, and most of the articles recently published in redin, show widespread efforts from all fields of engineering to deal with today's environmental-related challenges. Paradoxically, some of the issues we face today are the result of short sight engineering practices of the past (and the present).

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