Editorial

A bill proposing a new Science, Technology and Innovation National Code is under scrutiny in the Brazilian House of Representatives and Senate (PL 2177/2011). It brings significant changes in the way R&D, innovation and science and technology activities are addressed, giving them greater flexibility and breaking down cultural barriers and bureaucracy which still prove insurmountable. At first glance, the document seems to break down an important paradigm in terms of innovation, regarding it as an economic activity and allowing innovative entrepreneurs to actually reap the rewards of their ideas and the products they develop. Former development programmes put an emphasis on establishing strong restrictions to the proponents, assuming that one cannot profit from innovations generated within such programmes.

Apparently this concept is gradually changing in the country. Innovation promotion should aim at attracting entrepreneurs, providing them not only with basic terms but also with ways of reaping the rewards of their visionary work. By establishing a mechanism which deals with innovation as a natural business, the country will be able to dawn as a science and technology power and in the generation of disruptive innovations, bringing wealth to society.

The new science and technology and innovation code is, therefore, quite welcome, and its mentors receive from this scientific vehicle as a science and technology, innovation and entrepreneurship promoter all due support. We are certain that this is a major step towards the development of Brazil.

This issue of Espaço Energia received a record number of submissions, which required a more rigorous paper selection process, maintaining its usual evaluation quality, and taking the approval rating to around 22%. The role of this scientific vehicle is thus reassured with regard not only to knowledge generated in research works, studies and applications in the energy field, but also to the quality of its publications.

The first paper provides an evaluation of the degradation of insulating materials in transformers, the insulating paper, particularly, and their impact on equipment life. The work then proposes an analytical methodology based on chromatographic techniques for increasing the reliability of results obtained in the evaluations and thus assist in the management of preventive maintenance. On the same theme, namely, isolation in transformers, the second paper approaches the implementation of a new adsorbent material to remove water from the mineral insulating oil in operational energised transformers, also reporting the testing for the recovery of adsorbent materials and their reuse. Furthermore, the paper proposes the use of a molecular sieve to remove water from the insulating oil with remote online monitoring. The third paper discusses the production of methane from anaerobic digestion, analysing three calculation methods when applied to two sewage treatment plants in order to determine the most effective. The fourth and final paper deals with the perceived power quality and interruption costs for medium and high voltage customers, in the context of a particular power distribution utility, in search for optimal solutions to mitigate the impacts brought by this scenario.

Finally, we would like to thank all committee members who have been acting and contributing to the evolution of this scientific journal. We also thank all readers who have demonstrated great interest and are the main motivation of this work.

Klaus de Geus
Editor