



## Editorial – Issue 20 – April 2014

Exactly ten years ago the works for the creation of this journal initiated. After a period of about six months of work on the structure of the periodic, the first edition was launched in October 2004. With the gradual maturity attained, the journal was indexed in the so-called “Portal da Capes”, a publication base of one of the Brazilian agencies, having been included in the evaluation system “Qualis” in twelve areas of knowledge, due to its interdisciplinary nature, keeping its focus on energy-related applications. Its scientific committee has now 40 renowned scientists from Brazilian and foreign institutions, which guarantee the quality of publications by rigorous scientific evaluation criteria. The evaluation process also ensures an unbiased procedure by the so-called “double-blind reviewing process” in which authors do not know who evaluates and reviewers do not know the authors, thus avoiding any sort of bias. The result and recognition of the journal are a reflection of the quality of work performed by all these people, including authors, as well as the sponsor of the periodic, Companhia Paranaense de Energia, and its leaders, who, aware of the requirements of the scientific process, make every effort to safeguard them.

During the last ten years, the editorials have been focused on technology innovation as a means of acquiring competitive advantage in enterprises of the energy sector and other related organizations, always aiming at the quality of energy supply and the benefits to society. Since this is a significant issue that marks the tenth anniversary of the journal, excerpts of editorials from some editions since 2004 were referred to in order to highlight its main goals, which consist not only of disseminating high quality scientific papers and fostering knowledge generation in the power sector, but also of stimulating creative development and innovative applications which will certainly boost the development of the country.

The attitude towards innovation was addressed in issue 1 and supplemented in issue 5: “The key to generating the benefits to society which the journal aspires consists of innovation as the result of works whose raw material is permeated by the power of creation. The challenge that lies before us is to develop a culture focused on imagination, the creation of knowledge and its development in an organized and systematic way, thus generating innovation and the evolution of society”. “However, a turnaround in the mindset of companies whose mission requires an attitude of constant evolution is still necessary, in order to break old rules and thoughts and to assimilate a new mindset for innovation”.

The intellectual blackout and its impacts on society were addressed in a context of fear for possible “blackouts” in issue 11, as a way to alert to this imminent danger in the country: “The intellectual blackout is more subtle, since its effects are not at first glance as powerful as the energy blackout. The intellectual class, composed of thinkers and scientists, can be aware of the evolution of this process that would culminate in a blackout that inevitably would be felt throughout society. What are the main causes of intellectual blackout? The problem is not the intellectual capacity itself, neither their ability to generate knowledge, but in the shackles established by management models, the various regulations in all instances, be they procedural, supervisory or even related to business”.

Make innovation attractive to entrepreneurs, stimulating it effectively rather than rhetorically, and reward it instead of punishing it, was the theme of the editorial of the 15th edition, whose nature still seems not to have been understood in the country. “Fostering innovation should aim at attracting entrepreneurs, not only enabling them to undertake, but also to reap the fruits of their visionary work. Only then, with a mechanism which faces innovation as a natural business, the country will be able to emerge as a major force in science and technology and in the generation of disruptive innovations, bringing wealth to its citizens”.

This roundup of excerpts of the previous editorials demonstrates the concern of this periodic to promote the scientific development of the energy sector and therefore of the country by means of relevant projects, change in attitude and effective investment in innovation.

The first paper of this edition of Espaço Energia addresses the issue of energy access in remote areas, specifically in the state of Tocantins, making contributions through the adoption of techniques and methods to assist in the supply planning for this type of region in the country. The second paper investigates the addition of materials considered more sustainable, such as coconut and sisal fibres, to concrete in the manufacture of poles and crossarms, thus reducing the consumption of cement. The third paper also discusses the use of composite materials, natural fibres and thermoplastic resin, used to develop injection boxes for electricity metres,



analysing properties such as resistance to bending and impact, as well as mechanical properties. The fourth paper discusses regulatory risks to the power sector brought by the Law 12783/2013, which had a significant impact on utility companies of energy generation, transmission and distribution. The paper also analyses the impacts of the law on risk perception by investors. The last paper of this issue proposes a model for optimizing the operation of the national interconnected system that considers the trading rules of a wind farm and a small hydroelectric plant, with the aim of, by comparison with the conventional method used for power generation optimization, proposing mechanisms for reducing economic and financial risks associated with the randomness of wind in eolic energy production.

We hope the papers published in this issue are of great value to all readers. I would like to give special thanks to my colleague Márcio Luís Bloot (“meneer Bloot”), which has greatly contributed to the journal and, in particular, to this issue.

Klaus de Geus  
*Editor-in-chief*