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Special Applications of the Second Law of Thermodynamics: From a Cell to Society

Guest Editors:

Prof. Dr. Carlos Eduardo Keutenedjian Mady

Department of Mechanical Engineering, Centro Universitário da FEI, São Bernardo do Campo 09850-901, Brazil

Prof. Dr. Monica Carvalho

Department of Renewable Energy Engineering, Federal University of Paraíba (UFPB), Joao Pessoa 58051-970, Brazil

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Message from the Guest Editors

Dear Colleagues,

The main objective of this Special Issue on "Applications of the Second Law of Thermodynamics: From a Cell to Society" is to showcase to the scientific world different applications of the concepts of entropy generation or destroyed exergy as a tool of diagnosis of different energy conversion systems, from pathologies to a rational use of energy in society. Irreversibilities are inherent to any process, and an increase in this physical quantity indicates a possible misfunctioning in biological systems and may be used as a tool even for diagnosing some illnesses. Also of interest is the demonstration of how society can properly use its natural resources, including methods to progress toward a more sustainable society. This Special Issue invites articles that explain the malfunctioning/better function of "aging systems", including small systems, the human body (sports, thermal comfort, hypothermia, hyperthermia), corporations, cities, sectors and society, and other thermodynamic systems.

Prof. Dr. Carlos Eduardo Keutenedjian Mady Prof. Dr. Monica Carvalho *Guest Editors*







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Editor-in-Chief

Prof. Dr. Kevin H. Knuth

Department of Physics, University at Albany, 1400 Washington Avenue, Albany, NY 12222, USA

Message from the Editor-in-Chief

The concept of entropy is traditionally a quantity in physics that has to do with temperature. However, it is now clear that entropy is deeply related to information theory and the process of inference. As such, entropic techniques have found broad application in the sciences.

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Entropy Editorial Office MDPI, Grosspeteranlage 5 4052 Basel, Switzerland Tel: +41 61 683 77 34 www.mdpi.com mdpi.com/journal/entropy entropy@mdpi.com %@Entropy_MDPI