

P r e f a c e

In this issue of the Brazilian Journal of Chemical Engineering, selected papers from the VI Brazilian Congress of Applied Thermodynamics (CBTermo) are published.

The CBTermo is a scientific congress that brings together researchers and professionals working on the development and application of thermodynamics to fields of technological and industrial interest. The event began in 2000 as an integral part of the XIII Brazilian Congress of Chemical Engineering (COBEQ). The event was repeated in 2004 with the XV COBEQ and, subsequently, the CBTermo was part of all successive editions of COBEQ until 2010. In 2010, the organizing committee, together with several academic and industrial representatives, concluded that the Brazilian scientific community in applied thermodynamics was strong and large enough to justify an independent national congress with a wider scope, more attractive to researchers from such fields as chemistry, physics, biology, food engineering, and mechanical engineering, among others. As a result, in 2011, CBTermo was organized independent of COBEQ for the first time.

The scientific areas of interest represented at CBTermo include fluid properties, phase equilibria, molecular simulation, quantum chemistry, colloids and interfaces, thermal studies and calorimetry, and educational aspects of thermodynamics. The main applications are in such fields as oil, gas and fuels, new materials, the environment, biomolecules and biotechnology, separation processes, and renewable energy.

The organizing committee of the VI CBTermo was presided by Dr. Silvana Mattedi (Federal University of Bahia) as chair and Dr. Márcio Luís Lyra Paredes (Rio de Janeiro State University) as vice-chair. The scientific committee was presided by Dr. Martín Aznar (University of Campinas).

During the VI CBTermo, 26 oral presentations were delivered and 139 posters were presented. The papers published in this issue were selected from these presentations and were peer-reviewed by the same criteria as all other papers submitted to the Brazilian Journal of Chemical Engineering.

We are confident that this special issue is a representative sample of the quality and variety of Brazilian research in applied thermodynamics – and we are glad to announce that, with this edition, Dr. Martín Aznar joins the Editorial Board of the BJChE.

Dr. Martín Aznar

Chair of the Scientific Committee – VI CBTermo
Guest Editor

Dr. Pedro de Alcântara Pessoa Filho

Section Editor (Thermodynamics) of the Braz. J. Chem. Eng.