

# Past and Present Research Systems of Green Chemistry

September 14-16, 2015 Orlando, USA

## Integrated planning as basis of a model of energy and water integrated management for green industry

Tania Forster Carneiro, Mauro D Berni and Ivo L Dorileo  
State University of Campinas, Brazil

Integrated management of energy and water in industry sector, as substitute of integrated planning applied on ambit of a restrict economic sector. To achieve this goal, it's describe the ways in which these resources are used in industry and how they can be managed through appropriate management measures and second assist in preparation of programs standards of efficiency on the use of these resources. This approach presents two case studies: of the water and sanitation distribution industry – dependent of electricity for bombing – and – of the sugar industry – intensive in water. The results will be associated and used in case studies on sanitation and distribution of water and sugar industries, indicating opportunities of integrated management and efficiency use natural resources. The increase of industries activities and complexity of relations between the energy resources and water in productive methods turn the operational procedures from industry a relevant question in relation both to strategy linked to the availability and energy reserves and of water, specifically, about the environmental issues of different characteristics such as waste disposal. A model structure can be obtained including energy efficiency patterns and a final use of water, action plans, training (of specialists teams), documentation, information, education, ordinance, economic, financial and fiscal incentives, assessment and certification tools.

### Biography

Tania Forster Carneiro is a Professor in Bioengineering and Biotechnology - Research Line - biological treatment of industrial waste. Graduated in Agronomy from the Federal University of Lavras (1997), Master in Plant Physiology, Federal University of Viçosa (2001), PhD in Chemical Engineering from the University of Cádiz- Spain (2005) and Post-doctorate in Food Engineering at UNICAMP (2011). Experience in Bioengineering area, Sanitation and Environment, working mainly in the following research areas: Energy Use Waste with High Load Organic; Applied Microbiology Sanitary Engineering; Supercritical Technology: Hydrolysis and Gasification.

[taniaforsterc@gmail.com](mailto:taniaforsterc@gmail.com)