

*PaCOS*, realizado en marzo de 2006 en la Costa de Sauípe, Bahía. Así se presenta un panorama de los desarrollos actualmente existentes en el Brasil en pilas a combustible de óxido sólido. El Cuarto Seminario de la *Red PaCOS* se realizará en el Centro de Tecnología de la Caña de Azúcar, en Piracicaba, S.P., del 25 al 27 de abril de 2007.

Caso tenga interés por los trabajos de la *Red PaCOS*, no dude en visitar su página en <http://www.redepacos.coppe.ufrj.br> y agregarse a ese esfuerzo de desarrollo científico y tecnológico que crece rápidamente en el Brasil y que está abierto para incrementarse colaborando con esfuerzos análogos que pueden estar ocurriendo en este momento en otros países de Latino-América.

Cordialmente,

Paulo Emílio V. de Miranda

Editor-Jefe

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### Articles From PaCOS Network Third Workshop

The Solid Oxide Fuel Cell Cooperative Network – *PaCOS Network* – belonging to the Program on Science, Technology and Innovation for the Hydrogen Economy, from the Ministry of Science and Technology, was created in 2004 and congregates nowadays activities of more than 80 researchers from universities and research centers located in the southern, southeastern and northeastern Brazilian regions. *PaCOS Network* has the objective to foster the development of solid oxide fuel cells in Brazil and to strengthen the research and development groups that work in this and correlated areas. Recently the *PaCOS Network* Structuring Project, financed by Finep (<http://www.finep.gov.br>) and CNPq (<http://www.cnpq.br>), with a budget of R\$4.600.000,00 was approved. This will allow the cooperative development of raw materials, components and devices for the energetic utilization they are made for.

It is important to point out that solid oxide fuel cells are devices that convert to electric energy and heat, with efficiencies ranging from 60 to 80% (when the heat is used for co-generation), the chemical energy contained in various fuels, including pure hydrogen, ethanol and also methane that is present in natural gas, industrial syn-gas and several biogases, produced by the gasification or the biodigestion of biomasses. The alcohol and the hydrocarbon mentioned may be used by the ethanol or methane direct oxidation on the fuel cell anode or after a pre-reforming is be performed to convert them previously into hydrogen.

Materia Journal publishes in the present number, among others, papers that were selected among the ones presented at the *PaCOS Network* Third Workshop that was held in March 2006 in *Costa do Sauípe, Bahia*. Therefore, it gives a broad view of the developments existent nowadays in Brazil on solid oxide fuel cells. The Forth *PaCOS Network* Workshop will be held at the Sugar Cane Technology Center, in Piracicaba, S.P., from April 25<sup>th</sup>. To 27<sup>th</sup>., 2007.

If you are interested on the work developed by *PaCOS Network* do not hesitate to visit its homepage at <http://www.redepacos.coppe.ufrj.br> to contribute to this effort of scientific and technological development that increases rapidly in Brazil, which is open to make synergy with similar efforts that might be happening nowadays in other Latin-American countries.

Cordially,

Paulo Emílio V. de Miranda

Editor-in-Chief

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