

Colaboration on Biomass Conversion enhances SBQ and ACS activities

The Brazilian Chemical Society (SBQ) and the American Chemical Society (ACS) have had a fruitful collaboration in the past years, highlighted by a number of joint symposia, workshops, exchange visits etc. About two years ago, a new possibility of collaboration arose with a project coordinated by Bradley Miller from the ACS International Activities Office, submitted to the National Science Foundation (NSF). This project aimed at increasing the collaboration between both countries in the biofuel area. On the occasion of its application, SBQ strongly supported that project, and the final approval came out by the end of 2005. Among the activities expected for this project were the visits of scientists from USA to Brazil, one workshop, on-line conferences, in addition to the visit of US students to Brazil and Brazilian students to the US.

In May of 2006, Bradley Miller visited Brazil during the 29th SBQ Annual Meeting and, at that time, a draft of the procedures and the activities for the project started to be delineated. During his visit, Miller contacted a number of Brazilians who were attending the meeting and some topics were raised and selected to be more deeply discussed in the workshop: (i) *Moving to a Bio-Economy - Opportunities for Bilateral Collaboration*; (ii) *Crop-Base/Naturally Occurring Biomass Feedstocks: Thermochemical and Enzymatic Perspectives*; (iii) *Biorefining/Storage/Transportation*; and (iv) *Byproducts and Value-Added Co-Products*.

In a partnership among the ACS, SBQ and the Brazilian Agricultural Research Corporation (EMBRAPA), this symposium was intended to bring together key Brazilian and US researchers and innovators active in the area of biomass conversion science. The main objective was to catalyze bilateral scientific networks and to develop a roadmap for enhanced and sustained research collaboration between the two countries. This workshop was convened with the support of the US National Science Foundation (NSF) Discovery Corps Program and was dedicated to and held in honor of Professor Alan MacDiarmid and his contributions to Brazil/US science and research collaboration in biomass conversion. Having a vast and diversified program, the workshop promoted a high level discussion among the participants in all topics, as expected. The possibilities of collaboration among those working in the area were also discussed.

All the activities, including the visit of the American scientists to Brazil and the workshop were widely covered by the media. In Brazil, the event was emphasized several times in the SBQ and FAPESP electronic bulletins in addition to some newspapers. In the US, the information on these

activities were released by the ACS publications such as *Chemical and Engineering News* and the *Environmental Science and Technology* which sent two journalists to Brazil to cover an extensive program. Through the blog cenbrazil.wordpress.com they could update all the news everyday. Right after the workshop, a summary of the activities was released in the *Chem. Eng. News* **2007**, 85, 9, (<http://pubs.acs.org/cen/news/85/i23/8523notw4.html>). Finally, in its edition of last July 25, the *Chem. Eng. News* **2007**, 85, 15, had a cover report about the visits and workshop entitled: *Biofuel Bonanza-Brazil has become a model and an ally for U.S. in the pursuit of sustainable bioethanol, biodiesel, and bioelectricity* (<http://pubs.acs.org/cen/coverstory/85/8526cover.html>). In the 10-page report, the two journalists who had been in Brazil during the visit and the workshop held in Águas de Lindóia as part of the 29th SBQ Annual Meeting highlighted the importance of Brazil in the international scenario of Bioenergy.

It is also important to mention the student exchange visits for this project. So, during the visit of the American scientists one graduate student who was the winner of the best poster on biomass conversion, presented at the ACS meeting, came to Brazil together with US delegation. In the workshop held in Brazil, the winner of the best poster was also selected to present her work in the ACS Annual meeting to be held in Boston this coming August.

In 2005, during the III National Conference on Science and Technology, the late Nobel Prize Alan MacDiarmid was emphatic to state that Brazil had the leadership in the biofuel area, however it was imperative to continue with a strong program to keep that hegemony. Recently, the Brazil and the US presidents Luis Inácio Lula da Silva and George W. Bush made it clear that the biofuel area is strategic for both countries and for the whole world.

These collaborations between SBQ and ACS are a definite demonstration of the key role of Chemistry in this area and how scientists from both countries might work to strengthen this strategic field, in an effort to diminish the world dependence on fossil biofuels. It is also important to mention that this project can not be an isolated initiative, but it demands a follow-up to develop a roadmap for the enhancement of the research collaboration between the two countries. To achieve these goals it is important to have a clear policy of the Brazilian government for the bionergy area.

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