

Growth Acceleration Program: Science Education

Today Brazil occupies the honorable 15th place on the list of countries publishing the greatest number of scientific articles in the world, which means that Brazil is nearing the 2% mark in worldwide scientific production. If the number of scientific publications is expressive, the number of patent requests made by universities to the INPI (*Instituto Nacional de Propriedade Industrial* - National Industrial Property Institute), although having risen significantly over the last five years, is still quite low. This means that Brazil has a solid scientific basis, thanks mainly to its Master and PhD degree programs, while it is still lacking in technology. The ties that bind the transformation of scientific knowledge and competitive technology remain.

There can be no doubt that Brazilian science is on the right track, as can be seen by the CAPES (Coordination of Improvement of the Personnel of Higher Education - *Coordenação de Aperfeiçoamento de Pessoal de Nível Superior*) post-graduate evaluation pertaining to 2004-2006. However, to sustain this growth, it is paramount that just as soon as possible the government adopt a program for basic education and the maintenance and incentive to federal institutions for higher learning, even though these institutions suffer from structural defects which urgently need to be corrected. It is no longer possible to accept universities lacking plans, methods, qualified administrators and being directed by those who allot no reward for academic merit. Perspectives for universities and the Brazilian academic community, however, are positive and advances are foreseeable, especially with the Innovation Law (*Lei da Inovação*) already in effect, as well as with the recently announced GAC, the Growth Acceleration Program (PAC - *Programa de Aceleração do Crescimento*). The GAC promises investments in the amount of 41 billion reais (ca. 23 billion USD) by the year 2010, with increases in both the number and value of master's and doctorate scholarships/grants for the CNPq (National Council for Scientific and Technological Development - *Conselho Nacional de Desenvolvimento Científico e Tecnológico*) and CAPES. The GAC also fixes the rate of increase in participation by the private sector as up to 0.65% of the GNP and general investment of this sector as 1.5%. Besides incentive to research in strategic areas such as biofuel, pharmaceuticals, national defense and the nuclear program, support to science teaching and promotion of social development is also anticipated. Good news is always welcomed; what is not understandable is either the curtailment of the sectoral funds, which, according to the Ministry for Science and Technology, will be held until 2010, or the lack of emphasis upon innovation in the private sector.

The special issue of *Química Nova* commemorating the 30th anniversary of the Brazilian Chemical Society has gathered together a series of articles which clearly shows that Brazilian Chemistry is doing very well. The Brazilian Chemical industry ranks 9th in the world;¹ Brazil has good examples of entrepreneurship in the pharmaceutical area;² there are two scientific periodicals of unquestionable quality;³ the Brazilian Chemical community has wisely used the resources entrusted to them by the CNPq/NAS (National Academy of Science) and PADCT (Support to Scientific and Technological Development Program)⁴ and has excellent Master and PhD degree programs,⁵ but it still has its Achilles tendon: the Graduate course,⁶ which is not quite up to the desired standard. It is time for the Brazilian Chemical Society to show, once again, that it is structured and qualified to both face, the challenge of building the profile of a Brazilian professional Chemist, prepared to deal with ever increasing globalization and improve the teaching of chemical sciences in elementary as well as at the high-school levels. Let us methodically search out those PAC resources which were recently announced by the government. The Brazilian Society of Chemistry will be naming 2008 as the *Year of Chemical Sciences Teaching and Recognition of Teaching Licenses and Degrees*. It is inconceivable that Brazilian students remain among the worst classified, as recently announced by PISA (Programme for International Student Assessment) in the most widespread science exam testing 15-year-old students worldwide. Poorly prepared science teachers are among the main reasons for the weak performance by Brazilian students tested by PISA. The Brazilian Chemical Society must assume the responsibility to change this picture, which has left all of us, Brazilians, shame-faced.

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Editor

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