

Lack of integration with the glass industry

The industrial production of glass in Brazil has also called the world 's attention along with the research related to new vitreous materials. In 2001, the installed capacity of the national glass industry was calculated in 2.6 million tons, this total consisting of the flat glass factories with 31.7% of the total - followed by the producers of glass packages with 31.1%. Together the seventy four companies in this sector have an income of around R\$ 2.65 billion per year and generate close to 12,000 jobs.

In spite of the excellent performance of the sector and the high level of scientific investigations, there does not exist a strong integration between the glass manufacturers and research centers. Few professionals with doctorate or master's degrees in this area are hired by the productivity sector. "The majority of the glass makers operate with foreign capital and maintain research centers in their country of origin", wrote Zanotto in an article named *the Glass industry and research in Brazil* , published last March in the magazine *Glass International* .

"This is probably the reason for the weak integration between the international companies and the research groups at Brazilian universities", he alerted. In the opinion of Zanotto, the relationship between researchers and the national glass industry is also not fruitful. "This is unsatisfactory because there is a lack of dialogue and cooperation."