

Experts Urge Brazil to Urgently Fund Nanotech R&D

Contributed by Marina Lemle
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Public and private institutions must work closely together if Brazil is to take full advantage of nanotechnology as a tool for industrial development. So concluded participants at a recent seminar, during the Nanotec 2005 international nanotechnology conference in São Paulo.

Following their participation in the seminar, the Federation of Industries of the State of São Paulo and the Institute of Industrial Development Studies (IEDI) published on their Internet sites an open letter calling on Brazil's government agencies, universities and the private sector to commit to and fund nanotechnology research and development.

The letter says the experiences of other countries show that public-private partnerships could enable Brazil to take advantage of nanotechnology, if the government is ready to face the new reality and the private sector "accepts the challenge with entrepreneurial spirit".

It encourages academic institutions and companies to share information, infrastructure and skills, and to create strategic partnerships in nanotechnology research and development. It also highlights the need for Brazil to identify short-, medium- and long-term opportunities for creating and using nanotechnologies.

Noting that the US National Science Foundation predicts the world market for nanotechnology products will soon be worth a trillion dollars, the letter warns that temporary difficulties, such as Brazil's high interest rates and tax policy, should not delay "urgent action".

Delaying would raise the "risk of losing the opportunity and, once again, make [Brazil] mainly depend on imported technology", states the letter.

IEDI's executive director, Julio Gomes de Almeida, says nanotechnologies will have a wide range of applications that will affect all sectors of the economy, but especially the life sciences.

He said that Brazil has quality researchers and institutions, and a good publication record in nanotechnology. But he warned that while Brazil has a proven talent for absorbing and adapting new technologies, it lacks home-grown innovation.

"Nanotechnology research is expensive and needs more public funding," said Gomes de Almeida.

"Government and industry should improve their dialogue", he suggested, adding that the conference seminar had stimulated private sector interest in investing in innovation and new technologies.

"Innovation is the soul of industrial competitiveness", argued Paulo Skaf, president of the Federation of Industries of the State of São Paulo during his speech at the conference seminar.

Mark Welland, head of the Nanoscience Centre at the University of Cambridge, United Kingdom, told the seminar about the British experience and also recommended public and private entities work together to tackle the "immense" challenges of nanotechnology.

Nanotechnology involves the research and manipulation of materials at the atomic scale to create, for example, new medical and cosmetic products, scratch-proof paints, ultra resistant plastics and 'intelligent' threads and fabrics that repel stains and moisture or do not fade.

The scientists who attended the international conference in São Paulo focused their discussions on nanotechnology applications that could boost Brazil's development and international competitiveness, such as in renewable energy, water treatment, drug development and electronics.

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