Nanosafety in Thailand

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Since nanotechnology has emerged, it was predicted to create a new wave of industrial revolution. Even though a major economic impact from nanotechnology has yet to occur, nanomaterials, for example, carbon nanotubes, titanium dioxide, zinc oxide, nanosilver, and nanosilica, are used worldwide in many industries for various applications. With the new excitement and new opportunities of nanomaterials, "nanohype" and "nanotoxicity" was consequently developed. Thailand has no exception; new nanoproducts have been spread into the Thai market rapidly. Therefore, in order to minimize risk and maximize benefits, in the past few years, the National Nanotechnology Center (NANOTEC), as a funding agency under the umbrella of National Science and Technology Development Agency, has urged researchers to add the safety aspects to all nanomaterial R&D grant proposals. As of March 2007, nanosafety and nanoethics were being considered in the forums of local ISO TIS (Thai Industrial Standard). Moreover, the data of the nanomaterials safety program specifically designed to address human health and/ or environmental safety aspects will be evaluated in order to establish a nanosafety guideline. Currently, Nanomaterials Safety Projects have been established to address three essential issues: to support R&D in the area of nanosafety; to drive nanosafety policy into the national level; and to establish a nanostandard for industrial use. Moreover, the Nanosafety Strategic Plan is being developed by the Nanosafety Committee, comprising of representatives from Ministry of Science and Technology, Ministry of Public Health, Industrial Federation, and NGO. In the international level, Thailand has also participated in the working parties of international organizations such as OECD and ISO TC 229.