



Innovation trajectories: an IPEN's nanotechnology competence roadmapping to match's market mechanisms

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The main objective of this work is to present general framework of the impact of technological innovation in the IPEN's nanotechnology competence. The innovation are vital to improvement offer through chains front-to-end in health, environment, food and agriculture, energy, chemistry, education, entertainment and arts: treat supranational levels, offers accessible global technology. The pool innovation perspective in IPEN's nanotechnology competence is a natural consequence of investments in Research and Development (R&D), between and among Universities and Public Research Institutions and multiple benefits arising from results, towards Awards in Science and policy disclosure. Geographically IPEN is held at São Paulo, Capital, one of the 10 biggest cities of the globe with high density on population and market demand. The innovation impact measures depend of (1) quality of diversified technology knowledge and (2) quality of diversified country industry knowledge that can be more specified. From this big view picture, the IPEN Technology Transference Office took account both dimensional innovation impact measures and listed detail in four (4) dimensional approach performance indicators over 5 years casting potential benefits outcomes in areas: a) human resource, b) services and products, c) research, teach and educational, d) intellectuals property, patents, projects, creativity and inventiveness. Regarding on Key Innovation Indicators and Policy of Impact Measures, the methodology applied to the present study consists oh the three main stages. First stage is a review with bibliometric analysis of market dynamics and technological management approach. The second stage was characterized by the data collection on management system from IPEN in labeled activities on nanotechnology. The third stage was marked to the understanding of the structure and the dynamics of nanotechnology markets, especially their sometimes acute response in innovation. The case study in IPEN's in nanotechnology market built a preliminary assessment from a suitable a roadmapping system. Roadmapping is one of the most widely used tools as predictive exercise, supporting systematic planning and standardized strategy development. Many countries have developed standardization of roadmaps in various areas reported in intelligent systems, identifying significant opportunities and challenges associated with standardization in complex areas. IPEN's nanotechnology competence in numbers is an inspirational approach engine and large influence in cultural and Institutional policymaking in Science, Technology and Innovation (S&T&I). The unique strengthen link can be matched from the S&T&I policy in term "technology transfer" in capacity building from push or/and pull innovation models. The central competence framework aimed at advancing knowledge necessary that would eventually lead to innovation trajectories and with strong security cultural insertion gauge to country succeed in international competition through innovation and growth, high-quality products and services, and research and education. Strategic differentiation could lead disruption in technology and development of new markets. The solutions by market-driven provide improvement at total quality managing front-to-end of technology transfer.