

14th COSTAM Annual Public Lecture 2004

The 14th Annual Public Lecture was presented by Dr Paul S. Teng, Deputy Director General (Research), World Fish Center, Penang, Malaysia. The lecture entitled “Building Innovation and Entrepreneurship in Science and Technology: The Science plus Paradigm”. The lecture was delivered at the dinner function. It was an interesting and enlightening lecture indeed and for that reason, I attached the abstract of the lecture together with this report.

Abstract

Building Innovation and Entrepreneurship in Science and Technology: The Science Plus Paradigm

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Innovation has become a core business process in many enterprises and is considered key to remain competitive in a globalised economy. Public sector, R&D and educational institutions involved in science and technology are subject to the same drivers as private cooperation with respect to product and service differentiation, and market definition. The innovation and entrepreneurship (“I&E”) paradigm enshrines thinking and tools to convert new ideas into opportunities for growth. Education institution face increasing challenges to incorporate “I&E” into their curriculum so that their graduates have skill sets that positively differentiate them in the market place. An illustrative set of “I&E” skill to add value to scientist capacity to compete would include; i) Basis science entrepreneurial skill such as ‘Grantsmanship’ (How to write, submit and win a competitive grant) and ‘Resource Mobilisation’ (How to develop an integrated money (RM) strategy and plan); ii) Adding value to a proposal, such as etiquette and protocols for success in relationship building, and “Risk Communication” theory and tools; iii) Product development, such as defining the pathway of product concept to blockbuster, and developing and keeping “Freedom to Operate” (FTO), and iv) Sourcing ideas and innovation, such as nurturing innovation, and nurturing and entrepreneurial environment and culture. In a science and technology environment, a “Science Plus” grounding renders competitive advantage, especially in new entrepreneurial areas such as the life science and nano-technology. At various levels in the life science R&D, and education systems, the role for “Sparks” and “Shapers” require recognition, nurturing, and room for expression. Innovation is also increasingly about teamwork, and the creative combination of disciplines and perspectives purposefully assembled. Firms that innovate on impulse are poor performers. Successful life science companies have built mechanisms to promote and tap innovation. Innovation management audits help reveal deficiencies in organizations, some of which may be corrected by skills development or structural change in the organization. Scientists and science managers in Malaysia stand to increase their international competitiveness by improving skills in “I&E”.

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