Editorial

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Introduction

Technology transfer refers to 'the process by which science and technology are transferred from one individual or group to another that incorporates this new technology into a new or improved process, product, system or way of doing something' (Martyniuk, Jain and Stone, 2003). The diffusion of technology occurs through different channels and involves various market agents such as private vendors, customers, consultants and other firms, as well as public technology centers, government laboratories and universities (Lile and Toman, 1997). It occurs in all industries, including the various industries used to depict technology transfer in this issue: Defense, environmental technologies, weapons and munitions, medical technologies, and information systems.

The unifying theme of this issue concerns case studies pertaining to technology transfer in various contexts. Roper presents a case study of the geospatial technology applications in New York City's response to terrorist attacks on the World Trade Center. Price presents three case studies that deal with the development and commercialisation of environmental technologies. Sanchez, et al introduce the challenges the government of Japan is facing in the destruction of large numbers of abandoned chemical agent equipped munitions in China, in which several technology transfer opportunities are inherent in the proposed assistance by the US national laboratories. Chambers explores technology development and transfer to professional practices in the medical field. He discusses the notorious 'pull' versus 'push' aspect of the market in medical technologies. Mortz et al identify specific cases of environmental problems faced by the Hawaiian Islands and discuss management, policy, and technology transfer options for addressing these problems. Doherty et al discuss improving knowledge management in technology transfer through the use of ontologies. They offer a specific case study in which ontologies and knowledge management were applied to a knowledge-based system to make it widely applicable and efficient.

Each of these case studies offers a unique perspective of technology transfer, and it becomes clear that many of the hurdles faced in the transfer of any technology are common among all industries. Economic marketing, people, process, technical and the unique aspects of a technology are impediments that must be overcome by any new technology.

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References

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