

## Foreword

Computers, the Internet, nanotechnology and biotechnology have changed the world forever. While computers and the Internet have cut the distance between the producer and supplier and the innovator and consumer, they have also changed business processes themselves. In a similar vein, nanotechnology and biotechnology have enabled rapid innovation in many industries ranging from healthcare to aerospace through to the future of our very living. The advent of such disruptive technologies and devices have brought tremendous amount of tangible benefits to the population at large. However, several questions arise which include, but not limited to: Can innovation be induced? Can we learn from others' experience on innovation? How can nation states foster innovation? How does one build an innovative organization? How would diversity facilitate innovation? What kind of tools would aid innovation? What are the human resource challenges and work environment practices that could foster innovation? How can innovation be taken through its life cycle so that productization and commercialization become possible?

The book on *Innovation in Business and Enterprise: Technologies and Frameworks* is timely and appropriate. It addresses a number of the issues raised above – from theory that explains the basis and urge for innovation to frameworks that can foster innovation. Factors that contribute to innovation at organization levels have also been brought out, along with papers on tools that can facilitate and compress the innovation cycle. Mechanisms for building innovation at the national level, the processes and the interactions among the social, cultural and technological aspects have also been brought out in this book through case studies on several disciplines. These case studies have all been drawn from a number of countries, thereby providing a plethora of viewpoints on processes that encourage innovation and their long-term sustainability. The impact of human resource and their management is critical to creating a nation of innovation and so are mechanisms to foster entrepreneurship and inculcate a culture of continued learning. The topics are as interesting and exciting as the papers themselves.

This book on *Innovation in Business and Enterprise: Technologies and Frameworks* will be an excellent resource for educators and researchers and is a valuable addition to every library. I therefore commend the efforts of Prof. Hakim and the contributing authors in creating this wonderful book and dedicating it to the scientific and business communities.

*V. Lakshmi Narasimhan, PhD*  
*East Carolina University*  
*Greenville, NC*

**Lakshmi Narasimhan** is presently a Professor of Software Engineering in the Department of Computer Science at East Carolina University, USA. He has published over 180 papers in the areas of Software Engineering, Information security and Information Engineering. In particular, his research interests are in computer architecture, parallel and distributed computing, software testing, data mining, Software process, asset management systems and Standards, and information management & fusion. His papers have appeared in such archival journals as the various IEEE Transactions and IEE Proceedings. He has also been the technical chair of two other conferences and has been on the technical panel of over 60 leading International Conferences. He has consulted to a number of industries and educational institutions on various IT and Software Engineering projects, including Boeing Aerospace and DoD. Prof. Narasimhan is a Senior Member of the IEEE, ACM, Fellow of ACS, IEAust and IEE (UK). He is a Technical Member of various Standards bodies such as, ISO, ANSI and IEEE.