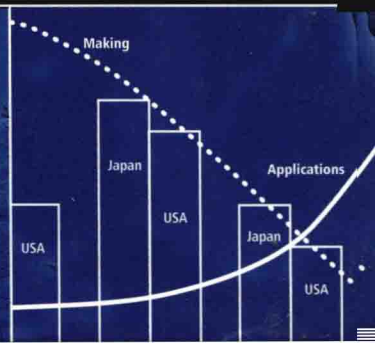


Editor **Jurgen Schulte**

NANOTECHNOLOGY

Global Strategies, Industry Trends and Applications

 **WILEY**



NANOTECHNOLOGY

Global Strategies, Industry Trends and Applications

Editor **Jurgen Schulte**

Asia Pacific Nanotechnology Forum

The rapid growth of miniaturisation to meet the demand for increasingly smart devices is driving global investment in a wide range of industries such as IT, electronics, energy, biotechnology and materials science.

Nanotechnology: Global Strategies, Industry Trends and Applications, written by experts from Asia, Europe and the USA, gives a comprehensive and important global perspective on nanotechnology.

The book is divided into 3 parts:

- ▶ *National Nanotechnology Initiatives in Asia, Europe and the USA* explores the current status of nanotechnology in China, Korea, Europe and the USA.
- ▶ *Investing in Nanotechnology* provides practical information about the opportunities and risks involved in nanotechnology and predictions for future growth.
- ▶ *Frontiers of Nanotechnology* discusses future applications of the technology and the real-world issues surrounding these.

Outlining developing trends, emerging opportunities, associated risks and future applications, this book is essential reading for professionals, prospective investors and policy makers who need an accessible introduction to the topic.



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Jürgen Schulte

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Foreword

In April 2000, the Japanese government established the National Strategy for Industrial Technology in order to identify challenges and solutions for Japanese industrial technology in the twenty-first century. The Second Science and Technology Basic Plan, a five year plan that started in 2001, is a part of this national strategy. According to this plan, a total of approximately \$200 billion will be invested in governmental research and development. One of the most significant policies of concern is the prioritization of research and development based on pressing national and social issues in areas such as life science, IT, environment, and nanotechnology and nanomaterials. Nanotechnology is expected to be a key technology underlying a wide range of industrial fields such as IT, energy, biotechnology, and medicine.

Japan's efforts in nanoscience and nanotechnology were initiated by the Atom Technology Project, a ten-year endeavor that started in 1992 and was sponsored by the Ministry of Economy, Trade and Industry (METI) and managed by a quasi-governmental organization which included METI's national institutes. The National Institute of Advanced Industrial Science and Technology (AIST), which was established by the reorganization of METI's national institutes, strives to promote research in nanotechnology based on the results of the Atom Technology Project.

Since nanotechnology is a precompetitive, interdisciplinary, and comprehensive research field, a global network is essential for the further promotion of research activities from nanotechnology to nano-industry. In addition, it is necessary to establish strong regional coordination in order to promote the strategies of the Asia Pacific region to the global standard.

We sincerely hope the Asia Pacific Nanotechnology Forum (APNF) will play the role of catalyst among the Asia Pacific countries.

Professor Hiroyuki Yoshikawa

President,

National Institute of Advanced Industrial Science and Technology

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