National Nanotechnology Programs of Japan - Research, Development and Assessment -

UK/Japan Workshop on Health, Environmental and Societal Issues of Nanotechnologies

July 11, 2005

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National Institute for Materials Science (NIMS)
Science Council of Japan

Science/Technology Policy of Japan

2001 Council for Science and Technology Policy (CSTP)

2001 2nd Science and Technology Basic Plan (2001-2005)

➡ Four Prioritized Areas
- Information Technology
- Biotechnology
- Environment
- ***Nanotechnology・Materials***

Prioritized Fields in Nanotechnology•Materials

By Council of Science and Technology Policy Sep. 21, 2001

Nano-Devices & Materials

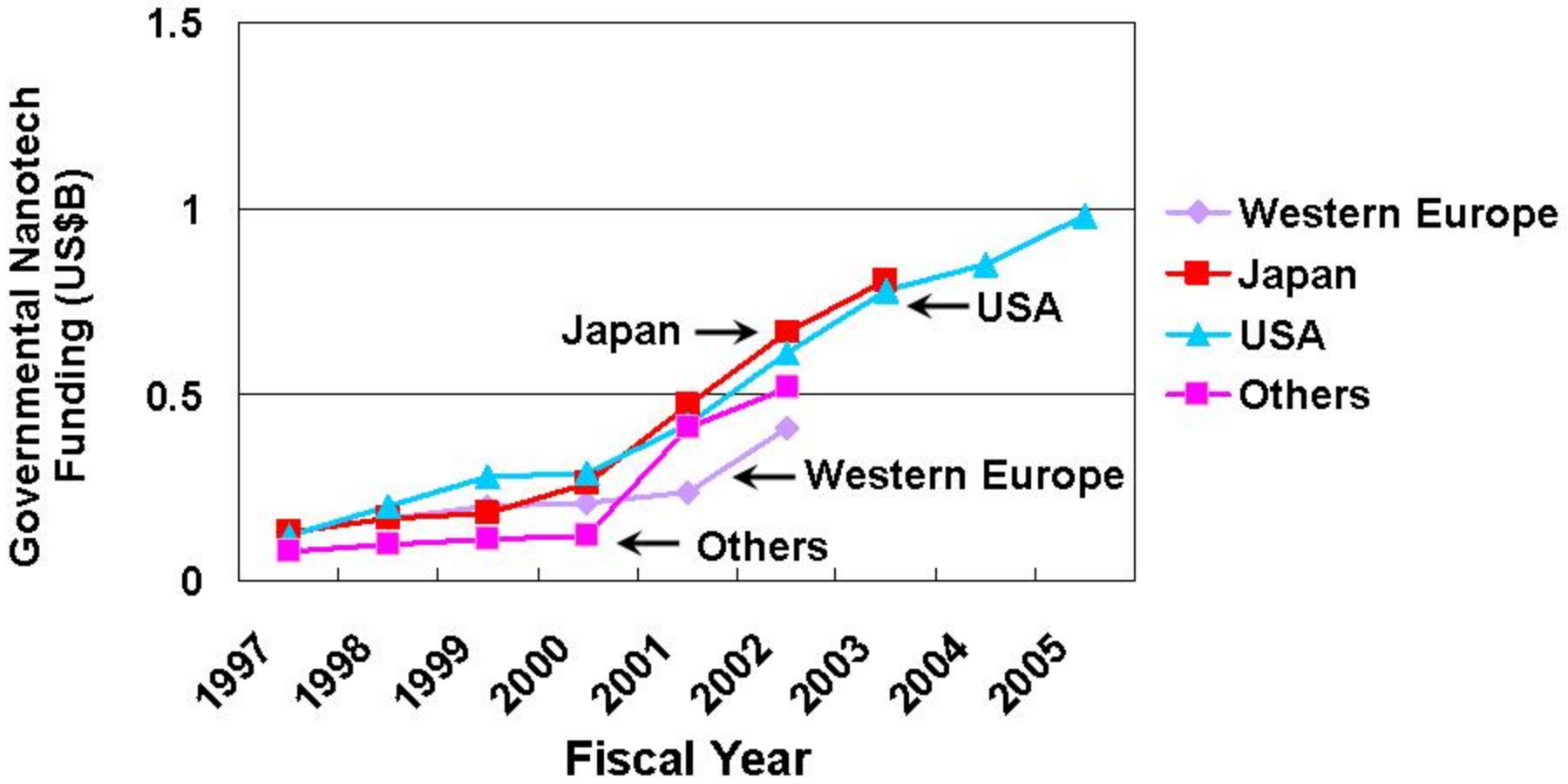
Materials for Environment & Energy

Nano-Biology

Generic Technologies
such as Fabrication, Measurement,
Analysis, Simulation, etc.

Novel Materials Having
Innovative Functions

Worldwide Government Funding For Nanotechnology R&D (US$B)



(sources) The International Outlook of Nanotechnology Funding: a briefing note by M. C. Roco, NSF, April 2003

Institutes for Nanotechnology Research, Development and Assessment

CSTP
NTPT

METI

Flagship type R&D
NEDO (FA)
AIST (RI)

Industries
NBCI

MEXT

Basic research
JSPS (FA)
Universities

Long term challenge
JST (FA)

Generic technology
NIMS (RI)
RIKEN (RI)

MHLW

Safety of foods & drugs
NIHS (RI)

Occupational health
NIIH (RI)

MOE

Environmental Protection
NIES (RI)

FA: Funding Agency
RI: National Research Institute

Nanotechnology Programs

R&D for Industrial Application

- Nanotechnology Program (METI/NEDO)
- Nanotechnology Virtual Laboratories (MEXT/JST)
- Inter-ministry Project (DDS, Medical devices, Manufacturing & measurement)
- R&D Projects for Economic Revitalization
  (Focus 21 (METI), Advanced Medical Technology (MHLW), Leading Project (MEXT), …)

Generic Technology Development

- Nanoscale modeling & simulation (MEXT)
- Instruments for characterization (MEXT)

Industry-University-Government Network

- Knowledge Cluster Initiative (MEXT)
- Industrial Cluster Project (METI)
- CITY AREA (MEXT)

Human Resource Development

- 21st Century COE Program (MEXT/JSPS)

Integrated Support

- Nanotechnology Support Project (MEXT)

Efforts for Nanotechnology Assessment in Japan

FY 2004

Start of Debate and Networking on the issues of Nanotechnology

- METI: Nanotechnology Policy Study Committee
- AIST: Nanotechnology and Society
- JSA: Nanotechnology Standardization
- NIMS: Nanotechnology Risk Assessment
- CBIMS: Nanomaterial Risk Study

AIST, NIMS, NIES and NIHS: First Symposium on Nanotechnology and Society, Feb. 1, 2005

FY 2005

- MEXT: Facilitation of Public Acceptance of Nanotechnology
- METI: Standardization of Testing Methods for Evaluation of Safety of Nanoparticles

RS and SCJ: UK/Japan Workshop on Health, Environmental and Societal Issues of Nanotechnologies, July 11-12, 2005