

GOVERNMENT FUNDING, COMPANIES AND APPLICATIONS IN NANOTECHNOLOGY WORLDWIDE 2007

The Technology Transfer Center (TTC), an Institute of Nanotechnology spin-out company, has just published the latest figures on:

- National government spending in nanotechnology worldwide in major countries with national nanotechnology strategies and initiatives;
- Number of nanotechnology companies in Europe and Asia-Pacific in 2007;
- Market application focus of companies in Europe and Asia-Pacific in 2007.

These figures have been taken from two recent TTC publications, Nanotechnology in Europe 2007 and Nanotechnology in Asia-Pacific 2007 (see www.nano.org.uk/reports.htm). Figures on North America will be available later in 2007.

GOVERNMENT FUNDING IN NANOTECHNOLOGY 2006-2010

Japan is likely to overtake the United States in terms of government funding for nanotechnology over the next few years. However, if State funding was added to the USA total then it would lead all countries by a comfortable margin. In Europe, the German yearly spend on nanotechnology far exceeds any other country and is roughly the same as all other European countries combined at around €330million per year.

The EU Seventh Framework Programme will be contributing approximately €600million per year until 2013; therefore as a whole, Europe has a larger yearly spend in nanotechnology than USA or Japan. Overall it would therefore seem that Europe compares favourably to other regions; however, Germany aside, no country has really embraced nanotechnology and its potential in the same manner as the USA and various Asia-Pacific countries.

Asia-Pacific governments are providing significant funds for nanoscience and nanotechnology; and have generally embraced the area with greater enthusiasm than their European counterparts. Nanotechnology has been designated a national S&T key technology area by most Asia-Pacific governments, alongside materials, medicine, the environment and ICT; all areas which nanoscience and nanotechnology underpin.

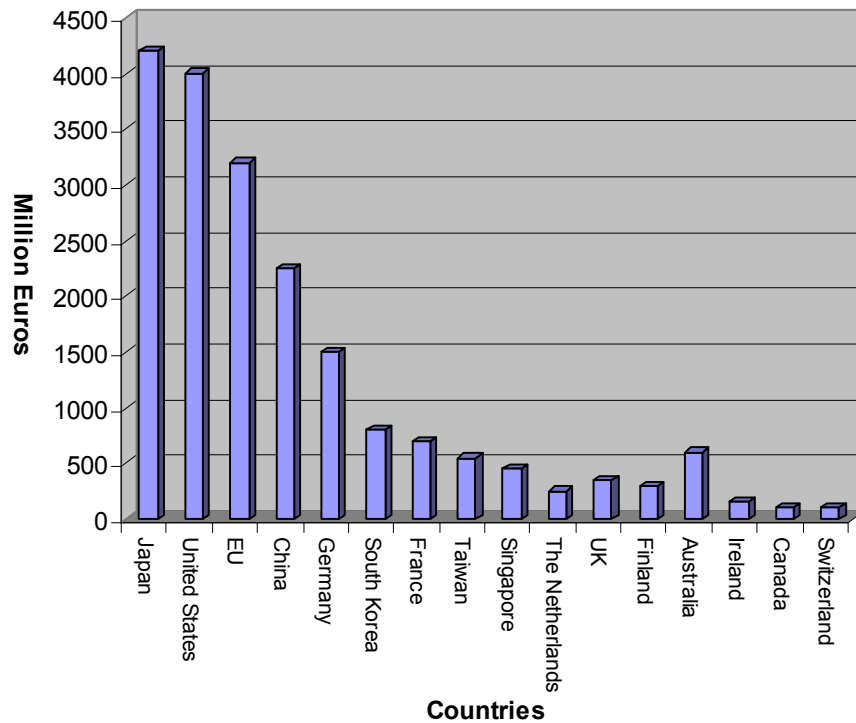


Figure 1: Projected Nanotechnology Funding Worldwide 2006-2010, in million euros (Source: Technology Transfer Centre, 2007).

NANOTECHNOLOGY COMPANIES IN EUROPE

There are now over 300 nanotechnology companies in Europe (see figure 2) exploring the plethora of opportunities across various sectors, over a third of which are based in Germany. Germany and the United Kingdom lead the way in Europe in nanotechnology in terms of SME activity and big business investment. Germany especially is noticeable for the willingness of its indigenous companies to embrace the potential of nanotechnology. There are nanotechnology R&D activities at scores of German based multinationals including Infineon, Daimler Chrysler, Schott, Carl Zeiss, Siemens, Osram, BASF, Bayer and Henkel.

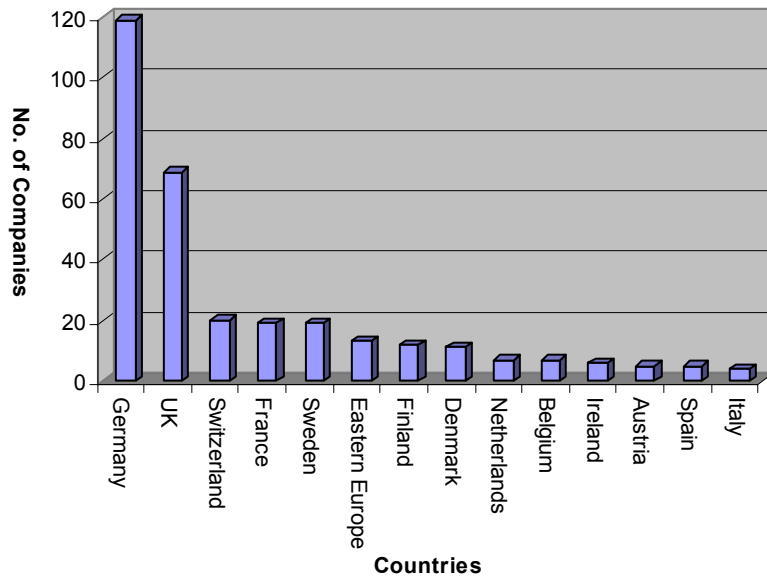


Figure 2: Total nanotechnology companies in Europe 2007 (Source: Technology Transfer Centre, 2007).

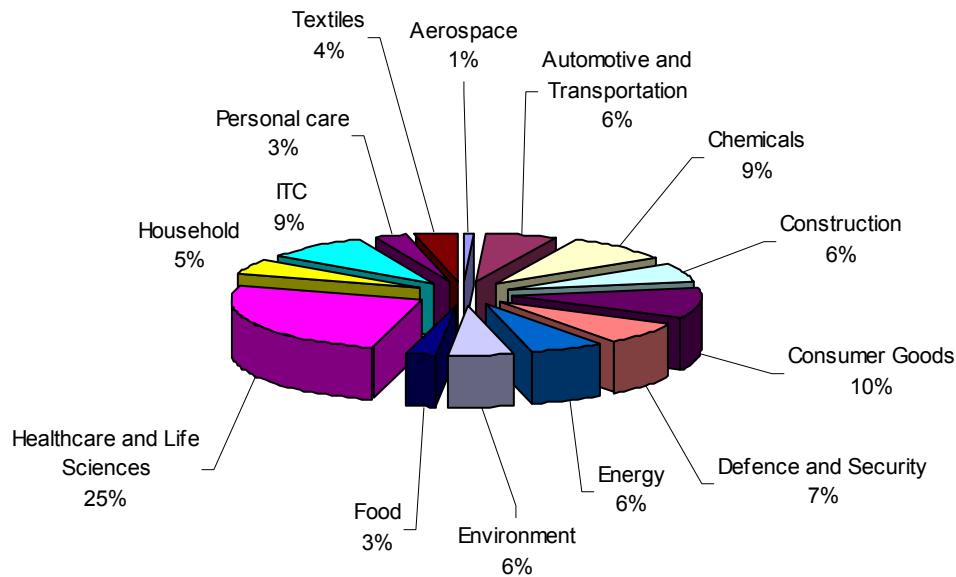


Figure 3: Market application focus of nanotechnology companies in Europe 2007 (Source: Technology Transfer Centre, 2007).¹

NANOTECHNOLOGY COMPANIES IN ASIA-PACIFIC

There are now over 250 nanotechnology companies in Asia-Pacific (see figure 4) exploring the plethora of opportunities across various sectors, over a third of which are based in China; although most of the Chinese companies are re-branded chemicals companies.

Japan, Taiwan and South Korea lead the way in terms of incorporating nanotechnology into products and processes. These countries are notable for the willingness of their indigenous companies to embrace the potential of nanotechnology (much like Germany in Europe). There are nanotechnology R&D activities at scores of Japanese and Korean based multinationals including Samsung, LG, Hitachi, Nikon and Fujitsu.

¹ This figure is for companies for whom nanotechnology products or platforms are a primary area of business (for example Smith and Nephew develop nanocrystalline wound dressings but are primarily a healthcare company, so have not been included; Degussa and BYK-Chemie however, have been included as they now have dedicated nanotechnology business units). These figures do not include tools and instrumentation companies.

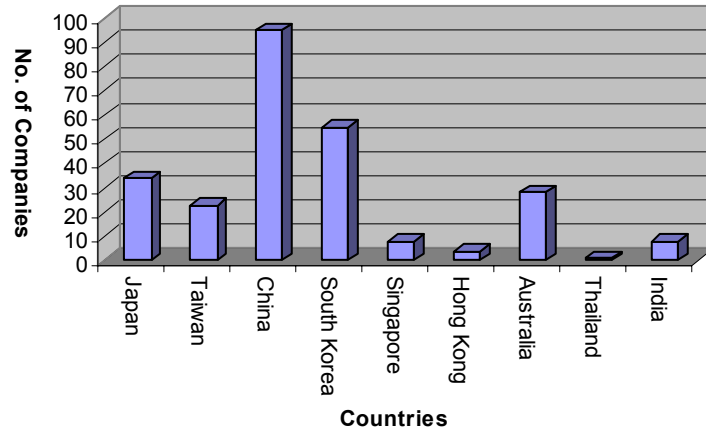


Figure 4: Nanotechnology companies in Asia Pacific 2007 (Source: Technology Transfer Centre, 2007).

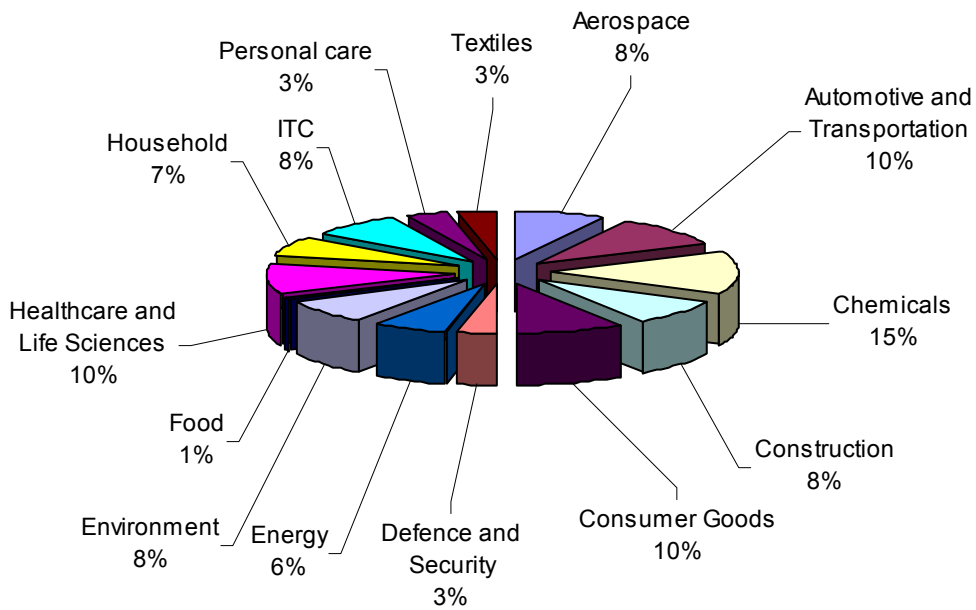


Figure 5: Market application focus of nanotechnology companies in Asia-Pacific 2007 (Source: Technology Transfer Centre, 2007).²

² This figure is for companies for whom nanotechnology products or platforms are a primary area of business (for example, Nikon are applying nanotechnology to semiconductors but this is only a small element of the finished product, so they have not been included ; Samsung however, have been included as they have dedicated nanotechnology business units). These figures do not include tools and instrumentation companies.

About the Technology Transfer Centre (TTC)

TTC is an Institute of Nanotechnology (www.nano.org.uk) spin-out company. Founded in 1999, TTC provides technology scouting and consultancy services for government bodies and some of the world's leading multinational companies. TTC produces leading-edge nanotechnology reports (www.nano.org.uk/reports.htm) and has produced roadmapping and foresighting exercises for ITRI Taiwan, BNFL, Scottish Enterprise, the European Commission, the Department of Trade and Industry and ITI Techmedia. TTC also runs the nanoposts.com service. Contact andy.garland@nanoposts.com, +44 (0) 1786 474768 for further information.