

Science and Technology

Japan ranks second among major industrialized countries, following the U.S.A., in terms of expenditure on science and technology, and this expenditure supports its position as a technology-based country. Researchers in the fields of science and technology (including social sciences and humanities) as of the end of March 2006 totaled 820,000. The total research and development (R&D) expenditure in fiscal 2005 was the highest ever, amounting to 17.8 trillion yen, or 3.53 percent of Japan's GDP.

Table 8.1
Trends in Research and Development

Year	Researchers ¹⁾ (1,000)	Females (%)	Fiscal year	R&D expenditures (billion yen)	GDP ²⁾ (billion yen)	Ratio of R&D expenditures to GDP (%)
1997	a) 721	a) 9.8	1996	a) 15,079	506,480	a) 2.98
1998	731	10.2	1997	15,742	510,466	3.08
1999	757	10.1	1998	16,140	501,384	3.22
2000	762	10.6	1999	16,011	496,606	3.22
2001	751	10.9	2000	16,289	502,783	3.24
2002	a) 756	a) 10.7	2001	a) 16,528	492,347	a) 3.36
2003	757	11.2	2002	16,675	488,724	3.41
2004	787	11.6	2003	16,804	493,622	3.40
2005	791	11.9	2004	16,938	496,229	3.41
2006	820	11.9	2005	17,845	505,121	3.53

1) In full time equivalent, with the number of researchers partly engaged in R&D recalculated based on the real R&D hours consumed by them. 2) Chained 2000.

a) The coverage was expanded.

Source: Statistics Bureau, MIC.

As of the end of March 2006, the number of researchers in business enterprises amounted to 482,000 persons, while the number of researchers in universities and colleges was 296,000 persons. In terms of R&D expenditures in fiscal 2005, business enterprises spent 12.7 trillion yen (71.4 percent of total R&D expenditures), while universities and colleges spent 3.4 trillion yen (19.1 percent).

R&D expenditure on natural sciences can be categorized into three types: basic research, applied research and development. Business enterprises constituted a large portion of 74.1 percent on development in fiscal 2005.