

IMD world competitiveness yearbook 2005

some infrastructure surveys

TEK research



QUALIFIED ENGINEERS

2005

Qualified engineers

are not available in your
labor market



are available in your labor
market

Ranking		
1	INDIA	8.64
2	FINLAND	8.46
3	CHILE	8.06
4	HUNGARY	7.82
4	ISRAEL	7.82
6	ICELAND	7.80
7	CANADA	7.69
8	MAHARASHTRA	7.58
9	SINGAPORE	7.56
10	JORDAN	7.53
11	BAVARIA	7.52
12	SWITZERLAND	7.48
13	DENMARK	7.37
14	TURKEY	7.22
15	ILE-DE-FRANCE	7.21
16	USA	7.20
17	SAO PAULO	7.18
18	FRANCE	7.11
19	SWEDEN	7.08
20	PHILIPPINES	7.07
21	TAIWAN	6.95
22	BELGIUM	6.93
23	RHONE-ALPS	6.91
24	AUSTRIA	6.91
25	LOMBARDY	6.88
26	CATALONIA	6.83
27	COLOMBIA	6.83
28	NORWAY	6.77
29	JAPAN	6.76
30	HONG KONG	6.74
31	AUSTRALIA	6.67
31	CZECH REPUBLIC	6.67
33	GREECE	6.63
34	ARGENTINA	6.60
34	IRELAND	6.60
36	VENEZUELA	6.58
37	RUSSIA	6.46
38	NETHERLANDS	6.41
39	ROMANIA	6.38
40	GERMANY	6.37
41	BRAZIL	6.34
42	MALAYSIA	6.34
43	PORTUGAL	6.21
44	SPAIN	6.15
45	KOREA	6.09
46	SLOVAK REPUBLIC	6.09
47	ITALY	6.05
48	THAILAND	5.72
49	NEW ZEALAND	5.54
50	MEXICO	5.15
51	POLAND	5.12
52	LUXEMBOURG	4.88
53	ZHEJIANG	4.50
54	UNITED KINGDOM	4.37
55	INDONESIA	4.21
56	SCOTLAND	4.21
57	CHINA MAINLAND	4.00
57	SOUTH AFRICA	4.00
59	ESTONIA	3.89
60	SLOVENIA	3.66

TECHNOLOGICAL COOPERATION

2005

Technological cooperation is

lacking between companies  developed between companies

Ranking		
1	FINLAND	8.30
2	ICELAND	7.87
3	BAYARIA	7.76
4	ISRAEL	7.58
5	CANADA	7.53
6	HONG KONG	7.53
7	USA	7.50
8	SINGAPORE	7.43
9	SWEDEN	7.33
10	DENMARK	7.32
11	NETHERLANDS	7.12
12	GERMANY	7.03
13	AUSTRIA	6.98
14	SWITZERLAND	6.92
15	TAIWAN	6.91
16	JAPAN	6.83
17	AUSTRALIA	6.79
18	INDIA	6.68
19	KOREA	6.65
20	NORWAY	6.49
21	HUNGARY	6.32
22	CZECH REPUBLIC	6.30
23	SLOVAK REPUBLIC	6.09
24	CHILE	6.03
25	NEW ZEALAND	5.96
26	FRANCE	5.93
27	BELGIUM	5.90
28	MAHARASHTRA	5.76
29	RHONE-ALPS	5.75
30	IRELAND	5.73
31	PHILIPPINES	5.71
32	ILE-DE-FRANCE	5.71
33	LOMBARDY	5.56
34	ESTONIA	5.50
35	THAILAND	5.44
36	LUXEMBOURG	5.44
37	MALAYSIA	5.43
38	BRAZIL	5.43
39	UNITED KINGDOM	5.42
40	SAO PAULO	5.41
41	SOUTH AFRICA	5.33
42	VENEZUELA	5.25
43	JORDAN	5.24
44	CATALONIA	5.09
45	ZHEJIANG	5.02
46	ARGENTINA	4.95
47	TURKEY	4.91
48	RUSSIA	4.74
49	GREECE	4.72
50	COLOMBIA	4.64
51	SCOTLAND	4.53
52	SPAIN	4.51
53	ROMANIA	4.50
54	SLOVENIA	4.32
55	ITALY	4.32
56	PORTUGAL	4.20
57	CHINA MAINLAND	4.17
58	POLAND	3.94
59	INDONESIA	3.86
60	MEXICO	3.84

TOTAL EXPENDITURE ON R&D

2003

Percentage of GDP

Ranking		%
1	ISRAEL	4.35
2	SWEDEN	4.27 ²
3	FINLAND	3.44 ¹
4	ILE-DE-FRANCE	3.36 ²
5	JAPAN	3.12 ¹
6	ICELAND	3.10 ¹
7	BAVARIA	3.00 ²
8	KOREA	2.64
9	USA	2.59
10	SWITZERLAND	2.57 ³
11	DENMARK	2.54 ¹
12	GERMANY	2.51
13	TAIWAN	2.45
14	RHONE-ALPS	2.38 ²
15	BELGIUM	2.33
16	FRANCE	2.26 ¹
17	AUSTRIA	2.17
18	SINGAPORE	2.13
19	NETHERLANDS	1.88 ²
20	UNITED KINGDOM	1.88 ¹
21	CANADA	1.85
22	SCOTLAND	1.72 ¹
23	LUXEMBOURG	1.71 ³
24	NORWAY	1.67 ¹
25	AUSTRALIA	1.59 ³
26	SLOVENIA	1.50
27	CATALONIA	1.34
28	CHINA MAINLAND	1.31
29	RUSSIA	1.28
30	LOMBARDY	1.27 ¹
31	CZECH REPUBLIC	1.26
32	NEW ZEALAND	1.25 ²
33	IRELAND	1.13 ²
34	ITALY	1.11 ²
35	BRAZIL	1.04 ³
35	SAO PAULO	1.04 ³
37	SPAIN	1.02 ¹
38	HUNGARY	0.95
39	PORTUGAL	0.94 ¹
40	INDIA	0.84 ²
40	MAHARASHTRA	0.84 ²
42	ESTONIA	0.83
43	ZHEJIANG	0.80
44	SOUTH AFRICA	0.74 ²
45	MALAYSIA	0.69 ¹
46	CHILE	0.69
47	TURKEY	0.66 ¹
48	GREECE	0.65 ²
49	HONG KONG	0.60 ¹
50	POLAND	0.59 ¹
51	SLOVAK REPUBLIC	0.58 ¹
52	VENEZUELA	0.46 ²
53	COLOMBIA	0.40 ³
54	MEXICO	0.40
55	ARGENTINA	0.39 ¹
56	ROMANIA	0.38 ¹
57	JORDAN	0.34 ¹
58	THAILAND	0.26
59	PHILIPPINES	0.14 ¹
60	INDONESIA	0.04 ²

Notes & Sources : see Appendix I

BUSINESS EXPENDITURE ON R&D

2003

US\$ millions

Ranking		US\$ millions
1	USA	196,112
2	JAPAN	92,393 ¹
3	GERMANY	41,707
4	FRANCE	24,066
5	UNITED KINGDOM	19,720 ¹
6	KOREA	12,183
7	CHINA MAINLAND	11,598
8	ILE-DE-FRANCE	8,774 ²
9	CANADA	8,634
10	ITALY	8,065
11	BAVARIA	7,773 ²
12	SWEDEN	7,268 ²
13	BELGIUM	5,246
14	SWITZERLAND	4,671 ³
15	TAIWAN	4,373
16	NETHERLANDS	4,301 ¹
17	RUSSIA	3,947
18	SPAIN	3,683 ¹
19	ISRAEL	3,563
20	FINLAND	3,179 ¹
21	DENMARK	3,016 ¹
22	AUSTRALIA	2,874 ²
23	BRAZIL	2,492 ³
24	LOMBARDY	2,109 ¹
25	RHONE-ALPS	2,005 ²
26	NORWAY	1,830 ¹
27	CATALONIA	1,411
28	SINGAPORE	1,195
29	SAO PAULO	1,159 ³
30	SCOTLAND	960 ¹
31	INDIA	851 ²
32	IRELAND	823 ²
33	MEXICO	743 ²
34	CZECH REPUBLIC	699
35	SOUTH AFRICA	477 ²
36	ZHEJIANG	465
37	MALAYSIA	443 ¹
38	PORTUGAL	393 ¹
39	GREECE	351
40	TURKEY	350 ¹
41	HONG KONG	322 ¹
42	LUXEMBOURG	310 ³
43	HUNGARY	288
44	SLOVENIA	253
45	POLAND	240 ¹
46	NEW ZEALAND	220 ²
47	COLOMBIA	160 ³
48	ICELAND	151 ¹
49	THAILAND	143
50	CHILE	137
51	MAHARASHTRA	109 ²
52	SLOVAK REPUBLIC	105
53	ROMANIA	105 ¹
54	ARGENTINA	104 ¹
55	PHILIPPINES	71 ¹
56	ESTONIA	26
57	JORDAN	9 ¹
-	AUSTRIA	-
-	INDONESIA	-
-	VENEZUELA	-

Notes & Sources : see Appendix I