

TABLE OF CONTENTS

1	INTRODUCTION	10
1.1	PUBLIC FUNDING OF NANOTECHNOLOGY	10
1.2	COMMERCIALISATION OF NANOTECHNOLOGY	14
2	JAPAN	20
2.1	GOVERNMENT BODIES	21
2.1.1	Council for Science and Technology Policy (CSTP)	21
2.1.2	Ministry for Education & Science (MEXT)	22
2.1.3	Ministry for Economy Trade & Industry (METI)	24
2.1.4	Ministry for Health, Labour and Welfare (MHLW)	25
2.1.5	Ministry of the Environment (MOE)	25
2.1.6	Japan External Trade Organization (JETRO)	25
2.1.7	Ministry of Agriculture, Forestry and Fisheries (MAFF)	26
2.2	RESEARCH CENTERS	27
2.2.1	National Institute for Materials Science (NIMS)	27
2.2.1.1	Nanomaterials Laboratory	27
2.2.1.2	Advanced Materials Laboratory	28
2.2.1.3	Advanced Nano Characterization Center	28
2.2.1.4	Quantum Dot Research Center	29
2.2.2	National Institute of Advanced Industrial Science and Technology (AIST)	29
2.2.3	Institute of Multidisciplinary Research for Advanced Materials (IMRAM)	30
2.2.4	Communications Research Laboratory	30
2.2.5	Himeji Institute of Technology	31
2.2.6	Japan Advanced Institute of Science and Technology (JAIST)	31
2.2.7	Kanagawa Institute of Technology	31
2.2.8	Nippon Institute of Technology	32
2.2.9	Tokyo Institute of Technology	32
2.3	NETWORKS	33
2.4	UNIVERSITIES	34
2.4.1	Chuo University	35
2.4.2	Gunma University	35
2.4.3	Hiroshima University	35
2.4.4	Hokkaido University	35
2.4.5	University of Hyogo	36
2.4.6	Kyoto University	36

2.4.7	Kyushu University	36
2.4.8	Nagoya University	37
2.4.9	Osaka University	37
2.4.10	University of Shiga Prefecture	37
2.4.11	Shizuoka University.....	37
2.4.12	Ritsumeikan University.....	38
2.4.13	Tohoku University	38
2.4.14	University of Tokushima.....	38
2.4.15	Tokyo University.....	38
2.4.16	Toyohashi University of Technology	39
2.4.17	Waseda University	39
2.4.18	Yokohama University	40
2.5	COMPANIES.....	41
2.5.1	Nanomaterials and nanostructures	41
2.5.2	Tools and instrumentation.....	45
3	TAIWAN.....	47
3.1	GOVERNMENT BODIES.....	48
3.1.1	Ministry of Economic Affairs (MOEA).....	48
3.1.2	National Science Council (NSC)	49
3.1.2.1	National Applied Research Laboratories (NARL).....	49
3.1.3	Ministry of Education (MOE)	50
3.1.4	Atomic Energy Council (ACE).....	50
3.1.5	Department of Health (DOH)	50
3.1.6	Environmental Protection Agency (EPA)	51
3.1.7	Council of Labour Affairs (CLA)	51
3.2	RESEARCH CENTERS	52
3.2.1	Academia Sinica	52
3.2.2	Development Center for Biotechnology (DCB)	53
3.2.3	Industrial Technology Research Institute (ITRI)	53
3.2.4	Metal Industries Research and Development Center	55
3.2.5	National Center for High Performance Computing (NCHC)	55
3.2.6	National Health Research Institute	55
3.2.7	National Synchrotron Radiation Research Center	56
3.3	NETWORKS.....	56
3.4	UNIVERSITIES	58
3.4.1	Feng Chia University.....	58
3.4.2	Huafan University.....	58

3.4.3	National Chaio Tung University	58
3.4.4	National Chung-Cheng University.....	59
3.4.5	National Chung Hsing University	59
3.4.6	National Cheng-Kung University.....	59
3.4.7	National Dong Hwa University	60
3.4.8	National Sun Yatsen University	60
3.4.9	National Taipei University of Technology.....	60
3.4.10	National Taiwan University	61
3.4.11	National Yunlin University	61
3.4.12	Southern Taiwan University of Technology	61
3.4.13	Tatung University	61
3.4.14	University System of Taiwan.....	61
3.5	COMPANIES.....	63
3.5.1	Nanomaterials and nanostructures	63
3.5.2	Tools and instrumentation.....	65
4	CHINA.....	67
4.1	GOVERNMENT BODIES.....	67
4.1.1	Ministry of Education (MOE).....	68
4.1.2	Ministry of Science and Technology (MOST)	69
4.1.3	National Science Foundation of China (NSFC)	70
4.2	RESEARCH CENTERS	70
4.2.1	National Nanotechnology Centers	70
4.2.2	Chinese Academy of Sciences (CAS)	71
4.2.3	Other centers	73
4.3	NETWORKS.....	74
4.4	UNIVERSITIES	75
4.4.1	Beijing University of Technology.....	75
4.4.2	East China College of Metallurgy.....	75
4.4.3	Fudan University	75
4.4.4	Guangzhou Southern University	75
4.4.5	He Nan Polytechnic University.....	76
4.4.6	Hunan University	76
4.4.7	Nanjing University	76
4.4.8	North University of China	77
4.4.9	Peking University	77
4.4.10	Shanghai University	77
4.4.11	Shanghai Jiao Tong University	77

4.4.12	Shandong University	77
4.4.13	TsingHua University	78
4.4.14	University of Science and Technology of China	78
4.4.15	University of Science and Technology Beijing	78
4.4.16	Wuhan University of Technology	78
4.4.17	Xi An Electronics Science and Technology University	79
4.4.18	Zhengzhou University	79
4.5	COMPANIES	81
4.5.1	Nanomaterials and nanostructures	81
4.5.2	Tools and instrumentation	91
5	SOUTH KOREA	94
5.1	GOVERNMENT BODIES	95
5.1.1	National Nanotechnology Projects	97
5.1.2	Ministry of Science and Technology (MOST)	97
5.1.2.1	Korea Science and Engineering Foundation (KOSEF)	98
5.1.2.2	Korea Research Council of Fundamental Science & Technology (KRCF)	99
5.1.3	Ministry Of Education and Human Resource (MOE)	99
5.1.4	Ministry Of Commerce, Industry and Energy (MOCIE)	99
5.1.5	Ministry of Information and Communication (MIC)	100
5.1.6	Ministry of Health & Welfare (MOHW)	100
5.1.7	Ministry Of Environment (MOE)	101
5.1.8	Ministry of Defense (MOD)	101
5.1.9	MOA (Ministry Of Agriculture)	102
5.1.10	OGPC (Office for Government, Policy Coordination)	102
5.1.11	Korea Research Institute of Standards and Science	102
5.1.12	Korea Food & Drug Administration (KFDA)	103
5.2	RESEARCH CENTERS	103
5.2.1	National Nanofab Centers/Facilities	103
5.2.2	Electronics and Telecommunications Research Institute (ETRI)	104
5.2.3	Gwangju Institute of Science and Technology	105
5.2.4	Korea Advanced Institute of Science and Technology (KAIST)	105
5.2.5	Korea Basic Science Institute (KBSI)	106
5.2.6	Korea Research Institute of Bioscience & Biotechnology (KRIBB)	106
5.2.7	Korea Institute of Ceramic Eng & Tech	107
5.2.8	Korea Research Institute of Chemical Technology (KRICT)	107
5.2.9	Korea Electronics Technology Institute (KETI)	107
5.2.10	Korea Institute of Industrial Technology (KITECH)	107

5.2.11	Korean Institute of Machinery and Materials (KIMM).....	108
5.2.12	Korea Institute of Science and Technology (KIST).....	108
5.2.13	Korea Institute of Science and Technology Information (KISTI).....	109
5.2.14	Korea Research Institute of Standards and Science (KRISS).....	110
5.3	NETWORKS.....	110
5.4	UNIVERSITIES	111
5.4.1	Ajou University	111
5.4.2	Chonbuk University	112
5.4.3	Chonnam National University	112
5.4.4	Chungnam National University	112
5.4.5	Ewha Women's University	112
5.4.6	Gwanju Institute of Science and Technology.....	113
5.4.7	Hanyang University	113
5.4.8	Inha University	113
5.4.9	Inje University.....	114
5.4.10	Konyang University	114
5.4.11	Kyungwon University.....	114
5.4.12	Kookmin University	115
5.4.13	Korea University.....	115
5.4.14	Kwangwoon University.....	115
5.4.15	Kyungpook National University	116
5.4.16	Pohang University of Science and Technology	116
5.4.17	Pusan National University	116
5.4.18	Seoul National University	117
5.4.19	Soonchunhyang University	118
5.4.20	Sungkyunkwan University.....	118
5.4.21	Yonsei University	119
5.5	COMPANIES.....	120
5.5.1	Nanomaterials and nanostructures	120
5.5.2	Tools and instrumentation.....	124
6	SINGAPORE	127
6.1	GOVERNMENT BODIES.....	127
6.1.1	A*STAR.....	127
6.1.2	Economic Development Board (EDB).....	129
6.2	RESEARCH CENTERS	129
6.3	UNIVERSITIES	130
6.3.1	National University of Singapore (NUS).....	130

6.3.2	Nanyang Technological University (NTU).....	130
6.3.3	Ngee Ann Polytechnic.....	131
6.4	NETWORKS.....	132
6.5	COMPANIES.....	132
6.5.1	Nanomaterials and nanostructures.....	132
6.5.2	Tools and instrumentation.....	133
7	HONG KONG	134
7.1	GOVERNMENT BODIES.....	134
7.1.1	Research Grant Council (RGC).....	134
7.1.2	Innovation and Technology Commission (ITC).....	135
7.2	RESEARCH CENTERS	135
7.3	NETWORKS.....	136
7.4	UNIVERSITIES	136
7.4.1	Hong Kong Polytechnic University.....	136
7.4.2	Hong Kong University of Science and Technology.....	136
7.4.3	City University of Hong Kong.....	136
7.5	COMPANIES.....	137
7.5.1	Nanomaterials and nanostructures.....	137
7.5.2	Tools and instrumentation.....	138
8	AUSTRALIA	139
8.1	GOVERNMENT BODIES.....	141
8.1.1	Australian Research Council (ARC).....	141
8.1.2	Department of Education, Science and Training (DEST).....	142
8.1.3	Department of Industry Tourism and Resources (DITR).....	142
8.1.4	State Initiatives.....	143
8.2	NETWORKS.....	144
8.2.1	Nanostructural Analysis Network Organization (NANO).....	145
8.3	RESEARCH CENTERS	145
8.3.1	Australian Nuclear Science and Technology Organization (ANSTO).....	145
8.3.2	Australian Synchrotron.....	146
8.3.3	Commonwealth Scientific and Industrial Research Organization (CSIRO).....	146
8.3.4	Defense Science and Technology Organization (DSTO).....	148
8.3.5	Ian Wark Research Institute (IRWI).....	148
8.4	UNIVERSITIES	148
8.4.1	University of Adelaide.....	149
8.4.2	Australian National University, Canberra.....	149

8.4.3	Curtin University of Technology	150
8.4.4	Deakin University	150
8.4.5	Flinders University.....	151
8.4.6	Griffith University.....	151
8.4.7	La Trobe University	151
8.4.8	University of Melbourne	152
8.4.9	Monash University.....	152
8.4.10	University of New South Wales.....	153
8.4.11	Queensland University of Technology	153
8.4.12	University of Queensland	154
8.4.13	Royal Melbourne Institute for Technology	154
8.4.14	Swinburne University	155
8.4.15	University of Technology, Sydney.....	156
8.4.16	University of Technology, Sydney.....	157
8.5	COMPANIES.....	158
8.5.1	Nanomaterials and nanostructures	158
8.5.2	Tools and instrumentation.....	163
9	THAILAND.....	165
9.1	GOVERNMENT BODIES.....	170
9.1.1	Ministry of Science and Technology (MOST)	170
9.2	RESEARCH CENTERS	170
9.3	UNIVERSITIES	171
10	INDIA	173
10.1	GOVERNMENT BODIES.....	174
10.1.1	Ministry of Science and Technology	174
10.1.2	Ministry of Communications and Information Technology	175
10.2	RESEARCH CENTERS	176
10.3	NETWORKS.....	178
10.4	UNIVERSITIES	179
10.5	COMPANIES.....	181
10.5.1	Nanomaterials and nanostructures	181
10.5.2	Tools and instrumentation.....	182
11	MALAYSIA	183
11.1	GOVERNMENT BODIES.....	183
11.2	RESEARCH CENTERS	183

11.3	UNIVERSITIES	184
12	VIETNAM	185
12.1	GOVERNMENT BODIES	185
12.1.1	Ministry of Science and Technology (VAST)	185
12.1.2	Ministry of Education and Training (MoET).....	185
13	INDONESIA	186
13.1	GOVERNMENT BODIES	186
13.2	RESEARCH CENTERS	186
13.3	UNIVERSITIES	186
14	GLOSSARY	189