

PLEASE RETURN BY:

OMB No. 3145-0027: Approval Expires 1/31/2005

NOTICE – YOUR RESPONSE IS REQUIRED BY LAW. Title 13, United States Code, requires businesses and other organizations that receive this questionnaire to answer the questions and return the report to the U.S. Census Bureau. By the same law, **YOUR REPORT IS CONFIDENTIAL.** It may be seen only by persons sworn to uphold the confidentiality of Census Bureau information and may be used only for statistical purposes. Further, copies retained in respondents' files are immune from legal process.

FORM **RD-1**
(2-5-2003)

U.S. DEPARTMENT OF COMMERCE
Economics and Statistics Administration, U.S. CENSUS BUREAU
COLLECTING AND COMPILING AGENT FOR
THE NATIONAL SCIENCE FOUNDATION

SURVEY OF INDUSTRIAL RESEARCH AND DEVELOPMENT DURING 2002

In correspondence pertaining to this report refer to this **IDENTIFICATION NUMBER (ID) (11 digits)** ▶

RETURN TO

**U.S. Census Bureau
1201 East 10th Street
Jeffersonville, IN 47132-0001**

Name of person who supplied 2001 data

SAMPLE COPY
Do Not Submit.

MANDATORY REPORTING REQUIREMENTS

Data supplied in all items for 2002 on this form will satisfy the mandatory reporting requirements. (Title 13, U.S. Code.)

PLEASE READ ENCLOSED INSTRUCTIONS BEFORE COMPLETING THIS FORM.

(Please correct any error in name and address, including ZIP Code.)

THIS REPORT SHOULD COVER YOUR ENTIRE CONSOLIDATED DOMESTIC ENTERPRISE, INCLUDING ALL U.S. SUBSIDIARIES AND DIVISIONS.

The term "company" on this form refers to the consolidated domestic enterprise.

- Please complete this form by the date printed at the top of this page and return it in the envelope provided. Make a copy for your records.
- Report figures in thousands of dollars. Reasonable estimates are acceptable.
- Please read the enclosed instructions before completing this form.
- Explain significant changes in year-to-year data in the remarks section.

COVERAGE REVIEW

Was this company owned or controlled by another company on December 31, 2002?

- 001 Yes – See instructions for Coverage Review.
 No – Continue with item 1

Section I – GENERAL COMPANY DATA

Item 1 – RECEIPTS AND EMPLOYMENT FOR THE COMPANY

A. Sales, operating receipts and revenues from all domestic operations of the company, net of returns and allowances. (Report in thousands of dollars.)

EXCLUDE domestic intra-company transfers and sales by foreign subsidiaries.

INCLUDE receipts for sales of products and services provided to other companies, individuals, U.S. Government agencies, and foreign countries.

	2002			2001		
	Bil.	Mil.	Thou.	Bil.	Mil.	Thou.
102						

Number

Number

B. Domestic company employment in all activities during the pay period which includes the 12th of March 2002 (Item 1 of I.R.S. Form 941, if one Form 941 was filled for the entire company.)

112

Item 2 – NUMBER OF RESEARCH AND DEVELOPMENT SCIENTISTS AND ENGINEERS

Apportion on a full-time equivalent basis. See page 4 of the instruction booklet for more detail.

January 2003

January 2002

Number

Number

204

A. Federal research and development

205

B. Company and other research and development

206

C. TOTAL – Sum of lines 2A and 2B →

PLEASE CONTINUE ON REVERSE.

Section I – GENERAL COMPANY DATA – Continued

Item 3 – COSTS INCURRED FOR RESEARCH AND DEVELOPMENT <i>(Report in thousands of dollars)</i> Exclude outside the company <i>(reported in 3B)</i> and foreign R&D <i>(reported in 3C)</i> .	2002									2001								
	Federal funds			Company and other			Total ((1)+(2))			Federal funds			Company and other			Total ((4)+(5))		
	(1)			(2)			(3)			(4)			(5)			(6)		
	Bil.	Mil.	Thou.	Bil.	Mil.	Thou.	Bil.	Mil.	Thou.	Bil.	Mil.	Thou.	Bil.	Mil.	Thou.	Bil.	Mil.	Thou.
A. Performed within the company	304			305			306											
1. Basic research																		
2. Applied research	314			315			316											
3. Development	324			325			326											
4. Total – Sum of lines 1, 2, and 3.	344			345			346											
B. Outside the company – Federal funds and company funds for research and development performed by others outside the company within the 50 United States and DC <i>(Exclude from 3A.4. above)</i>	354			355			356											
C. Foreign – Company funds for research and development performed outside the 50 United States and DC by:				365														
1. Majority-owned foreign affiliates <i>(business enterprises located outside the 50 U.S. states and DC which are 50% or more owned or controlled by your company or your domestic affiliate) (Exclude from 3A.4. and 3B. above)</i>																		
2. Other organizations <i>(Exclude from 3A.4, 3B. and 3C.1. above)</i>				366														
D. TOTAL – Company and other funds, except Federal <i>(This line represents company sponsored research and development with the exception of "other funds.") – Sum of 3A.4, B, and C, (column (2))</i> →				375														
Item 4 – COMPANY AND OTHER FUNDS, EXCEPT FEDERAL, FOR RESEARCH AND DEVELOPMENT PERFORMED WITHIN THE COMPANY BUDGETED FOR THE YEAR 2003 (Comparable to the 2002 figure reported in Item 3A.4., column (2).)	2003																	
	Bil.	Mil.	Thou.															
	401																	

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(2-5-2003)

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AND DEVELOPMENT DURING 2002**

U.S. DEPARTMENT OF COMMERCE
Economics and Statistics Administration
U.S. CENSUS BUREAU
COLLECTING AND COMPILING AGENT FOR
THE NATIONAL SCIENCE FOUNDATION

**Refer to this
IDENTIFICATION
NUMBER (ID) (11 Digits)
in any correspondence
pertaining to this report**

Section II — RESEARCH AND DEVELOPMENT PERFORMED WITHIN THE DOMESTIC COMPANY

Item 5 – COSTS INCURRED FOR FEDERAL RESEARCH AND DEVELOPMENT PERFORMED WITHIN THE COMPANY BY PRINCIPAL GOVERNMENT AGENCY

Allocate the total Federal funds reported in Item 3A., line 4, column (1), into the following principal agencies:

	Key code	2002 (1)			2001 (2)		
		Bil.	Mil.	Thou.	Bil.	Mil.	Thou.
A. Department of Defense	11						
B. National Aeronautics and Space Administration	21						
C. Department of Energy	31						
D. Other Federal agencies	41						
E. TOTAL COSTS – Sum of lines A through D → <i>(This item should equal the total reported in Item 3A, line 4, column (1).)</i>	51						

Item 7 – COSTS INCURRED FOR RESEARCH AND DEVELOPMENT PERFORMED WITHIN THE COMPANY BY TECHNOLOGY AREA

Allocate the total reported in Item 3A, line 4, column (3), into the following technology areas:

	Key code	2002 (1)			Percentage of R&D attributable to nano-technology (2)	2001 (3)			Percentage of R&D attributable to nano-technology (4)
		Bil.	Mil.	Thou.		Bil.	Mil.	Thou.	
A. Biotechnology	11				%				
B. Software development	21				%				
C. Materials Synthesis and Processing	31				%				
D. Other technology areas not listed in 7A through 7C above.	41				%				
E. TOTAL COSTS – Sum of lines A through D (This item should equal the total reported in Item 3A, line 4, column (3).) →	51				%				

Item 6 – COSTS INCURRED FOR RESEARCH AND DEVELOPMENT PERFORMED WITHIN THE COMPANY BY MAJOR TYPE OF EXPENSE

Allocate the total reported in Item 3A., line 4, column (3), into the following major types of expense – *Exclude lines 3B. and 3C.*

	Key code	2002 (1)			2001 (2)		
		Bil.	Mil.	Thou.	Bil.	Mil.	Thou.
A. Wages and salaries of research and development personnel – <i>Include scientists and engineers, technicians, secretaries, and other personnel.</i>	11						
B. Employers' cost of fringe benefits – <i>Include taxable and non-taxable benefits, 401K plans, employers' contribution to health plans.</i>	21						
C. Costs of materials and supplies consumed – <i>Do not include in this item components, models, and other materials supplied by other research organizations.</i>	31						
D. Depreciation on R & D property and equipment	41						
E. Other costs – <i>Include service and supporting costs, and share of overhead.</i>	51						
F. TOTAL COSTS – Sum of lines A through E → <i>(This item should equal the total reported in Item 3A, line 4, column (3).)</i>	61						

Item 8 – COSTS INCURRED FOR RESEARCH AND DEVELOPMENT PERFORMED BY OTHERS OUTSIDE THE COMPANY BUT WITHIN THE UNITED STATES BY TYPE OF ORGANIZATION

Allocate the total company funds reported in Item 3B, column (2), by the following types of organization. *(Exclude Federal funds – Item 3B, column (1).)*

	Key code	2002 (1)			2001 (2)		
		Bil.	Mil.	Thou.	Bil.	Mil.	Thou.
A. For-profit company	11						
B. University or college	21						
C. Nonprofit organization (other than a university or college)	31						
D. TOTAL COSTS – Sum of lines A through C (This item should equal the total reported in Item 3B, column (2).) →	41						

Section II — RESEARCH AND DEVELOPMENT PERFORMED WITHIN THE DOMESTIC COMPANY — Continued

Item 9 — COST OF RESEARCH AND DEVELOPMENT PERFORMED WITHIN THE COMPANY BY STATE

Allocate the total reported in Item 3.A., line 4, columns (1) and (3), by the States in which your various research and development laboratories or facilities are located. Estimate the costs associated with each State.

Key code	State	2002						2001						Key code	State	2002						2001																												
		Federal funds			Total funds			Federal funds			Total funds					Federal funds			Total funds			Federal funds			Total funds																									
		(1)			(2)			(1)			(2)					(1)			(2)			(1)			(2)																									
9		Bil.	Mil.	Thou	Bil.	Mil.	Thou	Bil.	Mil.	Thou	Bil.	Mil.	Thou	9		Bil.	Mil.	Thou	Bil.	Mil.	Thou	Bil.	Mil.	Thou	Bil.	Mil.	Thou	Bil.	Mil.	Thou	Bil.	Mil.	Thou	Bil.	Mil.	Thou														
01	AL													27	MT																																			
02	AK													28	NE																																			
03	AZ													29	NV																																			
04	AR													30	NH																																			
05	CA													31	NJ																																			
06	CO													32	NM																																			
07	CT													33	NY																																			
08	DE													34	NC																																			
09	DC													35	ND																																			
10	FL													36	OH																																			
11	GA													37	OK																																			
12	HI													38	OR																																			
13	ID													39	PA																																			
14	IL													40	RI																																			
15	IN													41	SC																																			
16	IA													42	SD																																			
17	KS													43	TN																																			
18	KY													44	TX																																			
19	LA													45	UT																																			
20	ME													46	VT																																			
21	MD													47	VA																																			
22	MA													48	WA																																			
23	MI													49	WV																																			
24	MN													50	WI																																			
25	MS													51	WY																																			
26	MO																																																	
TOTAL COSTS — Sum of lines 1 through 52 →																954																																		
<i>(This item should equal the total reported in Item 3A, line 4, column (3).)</i>																																																		

FORM **RD-1**
(2-5-2003)

SURVEY OF INDUSTRIAL RESEARCH AND DEVELOPMENT DURING 2001 – Continued

U.S. DEPARTMENT OF COMMERCE
Economics and Statistics Administration
U.S. CENSUS BUREAU
COLLECTING AND COMPILING AGENT FOR
THE NATIONAL SCIENCE FOUNDATION

Refer to this IDENTIFICATION NUMBER (ID) (11 DIGITS) correspondence pertaining to this report

Section II — RESEARCH AND DEVELOPMENT PERFORMED WITHIN THE DOMESTIC COMPANY — Continued

Item 10 – ENERGY RESEARCH AND DEVELOPMENT PERFORMED WITHIN THE COMPANY

• Report expenditures for energy research and development by type of energy sources. Include the project cost or portion of project cost incurred for the purpose of increasing energy resources or capabilities. These expenditures should be included in Item 3.A., line 4, columns (1) and (3).
• Estimate expenditures for energy research by energy source for 2002.

A. Nuclear

B. Fossil fuels

C. Geothermal, solar, conservation and utilization

D. All other energy

E. TOTAL – Sum of lines A through D →

Key code	2002						2003						2001						
	Federal funds (1)			Total funds (2)			Projected Federal funds (3)			Projected total funds (4)			Federal funds (1)			Total funds (2)			
	Bil.	Mil.	Thou.	Bil.	Mil.	Thou.	Bil.	Mil.	Thou.	Bil.	Mil.	Thou.	Bil.	Mil.	Thou.	Bil.	Mil.	Thou.	
10																			
11																			
21																			
31																			
41																			
51																			

Section II — RESEARCH AND DEVELOPMENT PERFORMED WITHIN THE DOMESTIC COMPANY — Continued

Item 11 – COSTS INCURRED FOR RESEARCH AND DEVELOPMENT PERFORMED IN COLLABORATION WITH OTHERS BUT WITHIN THE UNITED STATES BY TYPE OF ORGANIZATION

Allocate company funds reported in Item 3, column (2), for research and development performed in collaboration with another company, or a university, college, or nonprofit organization by the type of organization.

(Exclude Federal funds –Item 3A, line 4 column (1))

A. For-Profit company

B. Federal laboratory

C. University or college

D. Nonprofit organization (other than a university or college)

E. TOTAL COSTS – →

Sum of lines A through H
(This item should not exceed the value in Item 3A, line 4, column (2).)

Key code	2002 (1)			2001 (2)		
	Bil.	Mil.	Thou.	Bil.	Mil.	Thou.
11						
01						
02						
03						
04						
10						

Section III – RESEARCH AND DEVELOPMENT PERFORMED OUTSIDE THE DOMESTIC COMPANY WITH COMPANY FUNDS

Item 12 – RESEARCH AND DEVELOPMENT BY COUNTRY AND PUERTO RICO

Report the amount of total research and development performed outside the domestic company with company funds, Item 3.C., column (2), for the countries (and Puerto Rico) with the largest expenditures. If necessary, write in countries not listed. Report the balance of foreign research and development on line H.

A. Canada

B. Germany

C. France

D. Japan

E. United Kingdom

F. Puerto Rico

G. Other — Specify →

H. Balance not distributed

I. TOTAL – Sum of lines A through H →

Key code	2002 (1)			2001 (2)		
	Bil.	Mil.	Thou.	Bil.	Mil.	Thou.
12						
01						
02						
03						
04						
05						
06						
07						
08						
10						

Section III – RESEARCH AND DEVELOPMENT PERFORMED OUTSIDE THE DOMESTIC COMPANY WITH COMPANY FUNDS – Continued

Item 13 – COVERAGE AND OPERATIONAL STATUS

A. Are research and development expenditures for the entire domestic enterprise, including subsidiaries, reported on this form?

Mark (X) one.

- Yes
 No – Please explain in the "Remarks" section below.

B. Is your company publicly or privately owned?

Mark (X) one.

- Publicly owned
 Privately owned

C. Does your company own or control (directly or indirectly) (50 percent or more of the voting stock of another domestic company?

Mark (X) appropriate boxes.

- Yes – Percent of ownership:
 50% More than 50%
 No

D. Does another domestic company own or control (directly or indirectly) 50 percent or more of the voting stock of your company?

Mark (X) appropriate boxes.

- Yes – Percent of ownership:
 50% more than 50%
 No

E. Does your company or do your domestic affiliates own or control (directly or indirectly) 10 percent of the voting stock of a foreign incorporated business or an equivalent interest in a foreign unincorporated business?

Mark (X) appropriate boxes.

- Yes – Percent of ownership
 10–49% 50% more than 50%
 No

F. Does a foreign entity (i.e., company, individual, etc. that resides outside the 50 U.S. states, DC, or the U.S. possessions) own or control (directly or indirectly) 10 percent or more of the voting stock of your company or your domestic affiliates.

Mark (X) appropriate boxes.

- Yes – Percent of ownership:
 10–49% 50% more than 50%
 No

REMARKS

THANK YOU FOR YOUR RESPONSE.

Item 14 – CERTIFICATION – This report is substantially accurate and has been prepared in accordance with instructions

Name of person to contact regarding this report	Telephone	Area code	Number	Extension
Signature of authorized official	Title			Date