

### SPENDING

Two-fifths of reporting companies upped R&D spending in 2003

	CHEMICAL CAPITAL SPENDING			CHEMICAL R&D SPENDING		
	2003 (\$ MILLIONS)	CHANGE FROM 2002	% OF CHEMICAL SALES	2003 (\$ MILLIONS)	CHANGE FROM 2002	% OF CHEMICAL SALES
Dow Chemical	\$1,100.0	-32.2%	3.4%	\$981.0	-8.0%	3.0%
BASF	2,594.5	-14.3	8.4	904.1	-3.2	2.9
DuPont	1,713.0	33.8	5.7	1,349.0	6.7	4.5
Bayer	1,345.4	-25.3	6.2	1,299.0	10.3	6.0
Total	1,261.6	-9.9	6.5	na	na	na
ExxonMobil	692.0	-27.5	3.4	na	na	na
BP	775.0	-5.8	4.8	na	na	na
Shell	587.0	-13.7	3.9	na	na	na
Mitsubishi Chemical	392.1	-20.2	3.0	na	na	na
Degussa	890.5	-18.1	6.9	401.7	-1.9	3.1
Akzo Nobel	419.8	-2.1	3.9	363.2	6.6	3.4
SABIC	2,230.1	71.7	21.6	na	na	na
China Petroleum & Chemical	887.4	-0.9	9.1	na	na	na
ICI	251.7	-28.4	2.6	245.1	1.4	2.6
Mitsui Chemicals	394.7	-33.4	4.2	283.6	-11.4	3.4
Formosa Plastics Group	na	na	na	na	na	na
Dainippon Ink & Chemicals	394.3	6.0	4.7	129.2	16.1	1.6
General Electric	na	na	na	885.0	-4.5	10.6
Air Liquide	930.1	-12.5	10.1	106.7	2.4	1.2
Sumitomo Chemical	645.3	-31.2	8.0	389.8	na	6.9
Toray Industries	na	na	na	na	na	na
Shin-Etsu	878.3	55.3	12.4	227.0	-3.5	5.3
Chevron Phillips	223.0	-29.0	3.2	55.0	17.0	0.8
Huntsman Corp.	191.0	172.1	2.7	65.6	175.6	0.9
DSM	460.5	-19.1	6.7	303.2	6.8	4.4
PPG Industries	217.0	-8.8	3.3	306.0	5.9	4.6
Equistar Chemicals	106.0	-10.2	1.6	38.0	0.0	0.6
Reliance Industries	94.2	-62.9	1.4	na	na	na
Clariant	223.7	-11.2	3.5	228.9	-12.5	3.6
Rhodia	263.6	-37.7	4.3	211.6	-7.0	3.4
Air Products	613.0	-2.4	10.2	121.0	0.0	2.0
BOC	385.5	-26.9	6.4	65.2	-15.1	1.1
Sasol	409.6	-22.0	7.0	49.7	4.7	0.9
Eastman Chemical	230.0	-46.1	4.0	173.0	8.8	3.0
Rohm and Haas	339.0	-16.7	6.0	238.0	-8.5	4.2
Asahi Kasei	481.6	-10.5	8.6	na	na	na
Praxair	983.0	97.4	17.5	75.0	8.7	1.3
Syngenta	221.0	33.9	4.0	454.0	6.8	8.2
Solvay	348.5	-31.7	6.4	95.0	-18.4	1.7
Norsk Hydro	159.1	-27.0	3.0	16.7	-22.4	0.3
ENI	159.5	-43.4	3.1	na	na	na
Ineos Group	na	na	na	na	na	na
Ciba Specialty	173.2	-6.8	3.5	208.9	-4.4	4.2
Celanese	209.3	-15.1	4.5	89.4	14.5	1.9
LG Chem	132.2	10.4	3.0	58.1	16.7	1.5
Teijin	302.2	-36.9	7.0	na	na	na
Borealis	134.6	15.5	3.2	45.3	2.6	1.1
Nova Chemicals	130.0	83.1	3.3	45.0	15.4	1.1
Lyondell Chemical	268.0	1,118.2	7.1	37.0	23.3	1.0
Hitachi Chemical	208.1	14.9	5.5	na	na	na

na = not available.