

Table IV-11. Average compositions (ppm) of the bulk Allende (CV3), Semarkona (LL3) and Qingzhen (EH3) and their chondrules; and the enrichment factors of elements (E_{Al}^i) for chondrules relative to CI.

Allende		Semarkona		Qingzhen		E_{Al}^i			
CV3		LL3		EH3		CV3	LL3	EH3	
Bulk	Chondru.	Bulk	Chondru.	Bulk	Chondru.				
Lithophiles									
Hf	0.21		(0.15)	0.18	0.13	0.2		0.8	1.04
Sc	11.2	12.8	(8.4)	10.9	4.4	8.3	0.87	1	0.89
Al	17900	21800	13200	16200	8200	13900	1	1	1
Ti	980	1120	660	840	479	574	1.05	1.06	0.85
Lu	0.052		(0.033)	0.046	0.021	0.039		0.98	0.97
Sm	0.29	0.39	(0.2)	0.24	0.11	0.24	1.02	0.87	0.99
La	0.46	0.64	(0.32)	0.38	0.19	0.37	1.07	0.86	0.97
Yb	0.3	0.44	(0.22)	0.29	0.2	0.25	1.08	0.96	0.98
Eu	0.12	0.12	(0.076)	0.1	0.037	0.059	0.87	0.97	0.65
Ca	18100	19000	16400	17000	9800	12300	0.82	0.98	0.83
V	100	135	(75)	101	55	58	0.97	0.98	0.65
Mg	147000	206000	168000	218000	125000	217000	0.84	1.19	1.38
Si	160000	194000	211000	199000	171000	243000	0.73	1.01	1.43
Cr	3650	4310	3800	4550	2390	2400	0.64	0.91	0.56
Mn	1440	1470	2740	3920	2050	1960	0.31	1.1	0.64
K	295	394	910	799	353	235	0.28	0.76	0.26
Na	3310	4670	7100	6730	5900	10300	0.38	0.73	1.3
Siderophiles and Chacophiles									
Os	0.86	0.91	0.45	0.26	0.75	0.1	0.73	0.28	0.13
Ir	0.84	0.78	0.26	0.14	0.67	0.06	0.67	0.16	0.08
Ru			0.76	0.53	1.04	0.26		0.4	0.23
Co	662	446	505	157	880	55	0.35	0.16	0.07
Ni	13800	9330	12000	3380	16900	1110	0.34	0.17	0.06
Fe	233000	131000	153000	111000	279000	39900	0.28	0.32	0.14
Au	0.15	0.1	0.12	0.05	0.28	0.18	0.27	0.2	0.77
As	1.6	0.83	1.4	0.65	3.7	0.37	0.18	0.19	0.12
Ga	6.2	3	4	2.4	18.3	3.7	0.12	0.13	0.23
Se	8.4	10.4	12.9	4.8	21	12.6	0.21	0.13	0.4
Zn	102	65	40	13	94	94	0.08	0.02	0.19
Br	1.7	2.6	(0.6)	0.6	3	9.2	0.28	0.09	1.58

Data sources: Allende (Rubin and Wasson, 1987), Semarkona (Grossman and Wasson, 1983, 1985), Qingzhen (Grossman et al., 1985). Additional data in parentheses and for bulk rocks are based on Huss et al (1981), Wang and Xie (1977), and Table IV-5. The elements are listed in the decreasing order of $T_{C,50}$ in each group.