

## List of Tables

Table		Page
2.1	Analysis major ions in standards for accuracy check	30
2.2	Sr and Ba analysis in standards for accuracy check	31
2.3	Sr and Ba analysis in G-2 and W-1 (ultrasonic nebulizer)	32
2.4	Results of Re Standard Calibration	34
2.5	Re blank contribution	36
2.6	Results of repeat Re analysis	36
2.7	Repeat measurements of Sr isotopes	39
2.8	Results of major ion analysis in reference standard G-2	41
2.9	Sr and Ba analysis in reference standard W-1 (pneumatic nebulizer)	41
3.1	$\delta D$ , $\delta^{18}O$ , deuterium excess data of the YRS in the Himalaya	50
3.2	$\delta D$ - $\delta^{18}O$ relation and deuterium excess in the Yamuna, Ganga and Indus	57
3.3	Altitude- $\delta^{18}O$ relation in River Systems in the Himalaya	64
4.1	Major ions, Sr, Ba and $^{87}Sr/^{86}Sr$ in the YRS, the Ganga and Spring waters	75
4.2	Chemical composition of bed sediments and granites from the YRS basin	78
4.3	Temporal variation in the Ganga and the Yamuna major ion chemistry	80
4.4	Chemical composition of rain and snow	91
4.5	Cation balance in selected streams of the YRS	100
4.6	Comparison of Sr concentration and $^{87}Sr/^{86}Sr$ in the Ganga and the Yamuna:	102
4.7	Sr/Ca and $^{87}Sr/^{86}Sr$ in the sedimentaries	104
4.8	Interrelation of Sr, Ba and $^{87}Sr/^{86}Sr$ with major ions	104
4.9	Sr mass balance in selected YRS streams	118
4.10	Weathering rates and $CO_2$ consumption in the river basins in the Himalaya	128
5.1	Dissolved Re in the Yamuna River System, the Ganga and mine waters	137
5.2	Re abundances in granites and Precambrian carbonates	142
5.3.	$C_{org}$ , Re, Os, U in black shales from the Lesser Himalaya	148
5.4	Ca, Na and Re abundances in various lithologies from the Lesser Himalaya	152
5.5	Re fluxes from the Yamuna and the Ganga at the base of the Himalaya	156
5.6	Uptake and release of $CO_2$ in the Yamuna and the Ganga basins in the	160