

Table 8. Compositional Change of Selected Elements in a Neutron Environment

Material	% Change after 10 years in a thermal neutron flux of 10^{14}n/cm²sec
Iron	0.2% converted to Mn.
Nickel	0.5%
Chromium	1.5%
Platinum	1.8%; 1% converted to Hg, 0.3% to Au
Copper	10%; 5% to Ni; 5% to Zn
Tungsten	19%; 6.5% to Re, 12.4% to Os
Rhenium	91%; 91% converted to Osmium (20% of the rhenium is converted in 1 year)
Rhodium	99%; rhodium is converted to Pd (20% conversion in 6 months)