

LIST OF FIGURES

Figure	Page
1. Densities of Rare Earth Sesquisulfides	9
2. Tetrahedral Press and Control Panel	11
3. Tetrahedral Sample Assembly	13
4. Cubic Sample Assembly	14
5. Gd + 2 Sb Reaction Product Diagram	19
6. Tb + 2 Sb Reaction Product Diagram	20
7. Dy + 2 Sb Reaction Product Diagram	21
8. Ho + 2 Sb Reaction Product Diagram	22
9. Er + 2 Sb Reaction Product Diagram	23
10. Tm + 2 Sb Reaction Product Diagram	24
11. Y + 2 Sb Reaction Product Diagram	25
12. Polished Sb 200X	29
13. Polished Gd 200X	29
14. Polished High Pressure Orthorhombic GdSb ₂ 100X	30
15. Polished High Pressure Orthorhombic GdSb ₂ 500X	30
16. Polished LaSb ₂ Type GdSb ₂	31
17. Polished GdSb Plus Unknown Products, Type I . .	31
18. Densities of Rare Earth Diantimonides	39
19. Variation of Lattice Parameters With Ionic Radius of LaSb ₂ Type Rare Earth Diantimonides	50