

C O N T E N T S

CHAPTER		PAGES
	ACKNOWLEDGEMENTS	i
	CERTIFICATE	iii
	DECLARATION	iv
	LIST OF SYMBOLS	v
I	INTRODUCTION	1
	REFERENCES	22
II	SYNTHESIS OF NEW N-ARYLHYDROXAMIC ACIDS	
	Summary	38
	Introduction	39
	Experimental	48
	Results and Discussion	53
	References	77
III	PHYSICO-CHEMICAL PROPERTIES OF N-ARYLHYDROXAMIC ACIDS	
	Summary	83
	Introduction	84
	Experimental	87
	Results and Discussion	93
	References	113

CHAPTER	PAGE
IV ANALYTICAL APPLICATIONS OF N-ARYLHYDROXAMIC ACIDS	
Summary	117
Introduction	118
1. Solvent Extraction and Spectrophotometric Determination of Cerium	120
2. Solvent Extraction and Spectrophotometric Determination of Niobium	131
3. Solvent Extraction and Spectrophotometric Determination of Tantalum	142
4. Solvent Extraction and Spectrophotometric Determination of Titanium	156
5. Solvent Extraction and Spectrophotometric Determination of Vanadium	168
6. Solvent Extraction and Spectrophotometric Determination of Zirconium	183
References	193
APPENDIX	
I LIST OF PUBLICATIONS	199
II REPRINTS	