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CRYSTAL STUDIES OF SOME

ORGANIC NATURAL PRODUCTS AND

INORGANIC COMPOUNDS OF STRUCTURAL INTEREST

A thesis presented to the University of Auckland for the Degree of

Doctor of Philosophy

Kevin Laurie Brown

Department of Chemistry January 1972

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CONTENTS

	Page
	(remained below)
CHAPTER 1	
The Crystal Structure of phyllocladan-15-yl bromoacetate	
Abstract Introduction Structure Determination Results and Discussion	1 2 3 7
CHAPTER 2	
The Crystal Structure of Phebalin	÷
Abstract Introduction Structure Determination Results and Discussion	30 31 32 41
CHAPTER 3	
The Crystal Structure of 3,9-dibromobornan-2-one	
Abstract Introduction Structure Determination Results and Discussion	63 64 66 7 0
CHAPTER 4	
A Structural Study of Pithomycolide	
Abstract Introduction Experimental	86 87 92

		Page
CHAPTER 5		
The Crystal Structures of Two Gallium Compounds		
Abstract Introduction Structure Determination of $\mathrm{Ga_2Cl_6\{N(CH_3)_4\}_2}$ Results and Discussion for $\mathrm{Ga_2Cl_6\{N(CH_3)_4\}_2}$ Abstract Structure Determination of $\mathrm{Ga(SCN)_6\{N(n-butyl)_4\}_3}$ Results and Discussion for $\mathrm{Ga(SCN)_6\{N(n-butyl)_4\}_3}$		100 101 102 106 121 122 126
CHAPTER 6		
The Crystal Structure of a Mixed Valence Platinum Compound	¥	
Abstract Introduction Structure Determination Results and Discussion		135 136 140 145
References		170
Computing		175
Acknowledgements		176

ABSTRACT

The crystal structure of the bromo derivative of a cyclic diterpene has been determined. The crystals are of orthorhombic symmetry with $a = 9.00\text{\AA}$, $b = 31.46\text{\AA}$, $c = 7.31\text{\AA}$. The structure was solved by the normal heavy atom procedure, and refined by least-squares to a residual of R = 0.064.

The molecule is shown to be phyllocladan-15-yl bromoacetate, rather than to be a neo-atisirane derivative, as had been expected.