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X-RAY STRUCTURAL INVESTIGATIONS
OF BROMO-OXODITERPENOIDS AND THE
NICKEL(II) CHELATE OF A
PYRIDOXAL-AMINO ACID INTERMEDIATE

A Thesis Presented to
The University of Auckland
for the Degree of
Doctor of Philosophy

by

John Franklin Cutfield

June, 1970.

This thesis is presented in two parts.

PART A is concerned with the crystal structure of nickel(II) pyridoxylidene L-valine.

PART B embodies the structural studies of three 6-bromo-7-oxoditerpenoids and the subsequent determination of the stereochemistry of two of these compounds.

PART A

Abstract

The crystal structure of bis-(pyridoxylidene-L-valine)nickel(II) hydrate (referred to as nickel(II) pyridoxylidene L-valine) has been determined but the difficulty in detecting small deviations from body-centred symmetry, and in locating all solvent molecules, has precluded an accurate analysis. Octahedral coordination to the nickel atom is achieved by the attachment of two Schiff base units. The fused ring system of each unit reveals distortions from planarity.

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