

A C K N O W L E D G E M E N T S

The present thesis embodies the results of research carried out by the author at the Department of Chemistry, University of North Bengal, Dist. Darjeeling.

The author at the very first opportunity records his heartfelt gratitude and sincerest thanks to Dr. H.N.Khastgir, Professor and Head of the Department of Chemistry, University^{of} North Bengal, under whose valuable suggestions, guidance and close attention, the present work was carried out.

The author is indebted to Prof. B.C.Das of the Institute de Chemie des Substances Naturelles, Gif-Sur-Yvette, France and to Dr. A.M.Duffield, Chemistry Department, Stanford University, Stanford, U.S.A for the mass spectra, to Prof. W.Klyne and Dr. P.M.Scopes of Chemistry Department, Westfield College, Hampstead, London for the ORD curves and their valuable suggestions.

The author's thanks are also due to Dr. T.R.Gobindachari, Ciba Research Centre, Bombay, to Dr. Nityanand, Central Drug Research Institute, Lucknow, for the NMR spectra, to Dr. S.C.Pakrashi, Indian Institute for Experimental Medicine for IR spectra, to Dr. A.Chatterjee, Jadavpur University for some of the analyses and to Dr. S.K. Sengupta, East India Pharmaceutical Works Ltd., Calcutta for optical rotations recorded in the thesis.

The author is grateful to Dr. H.T.Cheung, Department of Pharmacy, University of Sydney for an authentic specimen of ^{methyl} 2 α ,

(ii)

3 α -dihydroxy olean-12-en-28 oate, to Dr. P.Sengupta, Department of Chemistry, Kalyani University, Nadia, for an authentic specimen of methyl crategolate and to Dr. J.B.Thomson, Chemistry Department, University College, Belfield, Dublin for their sample of 16-oxo-taraxeryl acetate.

The author is also thankful to Dr. D.R.Misra, Dr. S.N.Bose and Mr. T.K.Roy of this Department for their co-operation and helpful discussions during the progress of the work.

The author is thankful to the Council of Scientific and Industrial Research, New Delhi and authorities of North Bengal University for granting research scholarships.

The author also expresses his grateful thanks to the authorities of Alfred Bernhardt Mikroanalytisches Laboratorium, West Germany, for the mikroanalyses recorded in the thesis.

Department of Chemistry,
University of North Bengal,
Dt. Darjeeling.

Kartik Chattopadhyay

March, 1974.