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The following work is a dissertation submitted by Donna Lillian Midwinter for the Degree of Master of the Canberra College of Advanced Education, Materials Conservation.

Title of dissertation: Conservation internship in the Materials Conservation Laboratory, The Australian Museum.

July, 1982.

I would like to thank Miss Sue Walston, Dr. Paula Casey, David Horton-James, Karen Coote and Sue Phillips for their encouragement and advice throughout the duration of my internship.

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Information and dye samples obtained from Hoechst Australia Ltd., Sandoz Australia Pty. Ltd. and Ciba-Geigy Australia Ltd. were greatly appreciated.

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Summary of work carried out

The internship requirements for Master of Applied Science in Materials Conservation were completed in the Materials Conservation laboratory of the Australian Museum under the direction of Miss Sue Walston between November 30th, 1981 and July 9th, 1982.

The work programme focused upon the preparation of artefacts for a permanent gallery display entitled "The Abelam, a people of Papua New Guinea". Wooden carvings, shell ornaments, bone implements, ceramic and coconut bowls, and wooden spears were the most common artefact types requiring treatment, prior to display. Many objects were decorated with pigments, shells, beads or feathers and were secured with plied fibre string. Artefacts were photographed, condition and proposed treatment reports were written, practical work was carried out and final treatment reports were finished.

Upon completion of the gallery, the Materials Conservation laboratory staff reviewed their role in the overall gallery plan. As a group, the problems affecting the conservation and display of artefacts were identified and analysed. A flow chart of exhibition guidelines for Materials Conservation was prepared for use when planning future galleries.

The relative humidity and temperature were monitored regularly in various areas throughout the

museum. Accurate readings were obtained using a sling psychrometer and thermohygrographs. Each week the modes of the relative humidity charts were calculated, analysed and recorded.

While treating objects for the Abelam gallery, the need for specifically coloured support materials became evident. Dye types capable of permanently colouring a diverse range of cellulosic materials were investigated. Trichromatic colour cards were prepared for each material.

A flood occurred in the Aboriginal gallery which required immediate action by the conservation staff. Affected artefacts were transported to the laboratory, stabilized and reports on their condition were written.

A workshop on microscopic examination of cellulosic materials was organized by Mary-Lou Florian, Conservation Scientist with the British Columbia Provincial Museum, Canada. She also gave a lecture at the Forestry Commission of N.S.W. on Conservation of Aboriginal carved trees and Canadian totem poles.

Dr. P. Casey presented information on fungi to the Australian Museum Conservation staff.

A technical meeting on the topic of inter-laboratory co-operation was attended at the conservation unit of the Museum of Applied Arts and Sciences. The conservation facility at the Art Gallery of N.S.W. and the Nickleson Museum, University of Sydney, were viewed.

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