



# ADHESIVE COMPENDIUM FOR CONSERVATION

WRITTEN AND COMPILED BY  
JANE L. DOWN



Canadian  
Conservation Institute

Institut canadien  
de conservation

Canada<sup>131</sup>

## PREFACE

This book has grown out of a few ideas, suggestions and needs over the years. For instance, the Canadian Conservation Institute has received numerous requests for its unpublished adhesive workshop manuals, which were only available to workshop participants. Several people have suggested that these manuals be published as a book. Also, many others have suggested that I write an adhesive book to capture my knowledge before I retire. And, too, I noticed that in answering the hundreds of adhesive-related questions over the years, I relied on many sources, not just one: my own research, published research by others, industrial polymer and adhesive handbooks, conservation handbooks such as Horie's *Materials for Conservation*, manufacturers' data sheets, material safety data sheets and online sources like CAMEO (Conservation & Art Material Encyclopedia Online). It has always been my wish to bring together much of this important information on adhesives into a single source for conservation use. Although I have tried to be as comprehensive as possible with the adhesives most used in conservation, it became obvious that, with a book this size, I could not be all encompassing. For instance, the book emphasizes adhesives more than consolidants because consolidation is complex and beyond the scope of this book to discuss in more than the basic way that it is mentioned throughout. Also, it had to be decided which adhesives could be included and which ones could not, so certain non-recommended, little-used adhesives are only briefly mentioned.

The book is organized with the theoretical information first. This gives information on liquid and solid adhesive properties, bonding and consolidation. This is followed by technical and aging information on each adhesive class: adhesive facts, characteristics and handling properties, and reviews of relevant aging studies. The book is completed by a chapter devoted to discussing how adhesives are chosen for each conservation specialty. This last chapter was written by colleagues who are experts in their fields, and I am indebted to them for agreeing to contribute their knowledge to this project.

The book is intended for practicing conservators or conservation students. If the reader wants general or theoretical information on adhesion and bonding, go to the first five chapters; specific property or aging information (e.g. solubility, aging studies, chemistry, characteristics) on an adhesive or class of adhesives, go to Chapter 6; or to know what to consider when choosing an adhesive for a specific treatment and some suggestions of frequently used products, go to Chapter 7.

This book is my legacy to conservation. It is my sincere wish that it is useful and helps conservators make wise adhesive choices in their work to preserve our cultural heritage for future generations.

Jane L. Down  
Senior Conservation Scientist, Canadian Conservation Institute