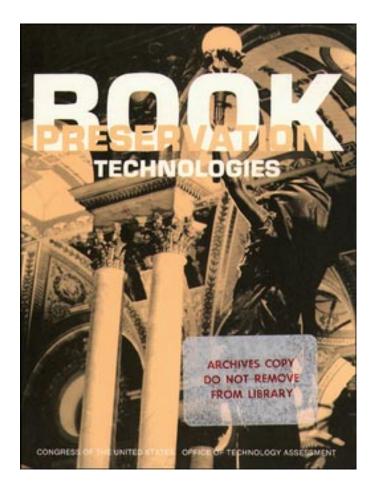
Book Preservation Technologies

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Foreword

Even in today's high-tech society, books are the principal records of human civilization. Over the centuries, books have become the most reliable and permanent records available, but, in the last century, that reliability has been threatened by the use of 'modern, acidic paper that becomes brittle and unusable in a relatively short time. Books printed since 1850 are deteriorating en masse in libraries the world over. Nowhere is this problem more severe than in the U.S. Library of Congress; a major preservation program addressing it was initiated in the early 1970s. The Library's mass deacidification process is now being tested at a pilot plant, and planning is underway to design and construct a full-scale facility that could treat about 1 million books each year.

This assessment analyzes the problem of acid deterioration of books and the program underway at the Library of Congress. The program at the Library involves the chemical treatment of books in a unique and effective process that, however, also presents some new engineering and safety concerns. Because of these concerns, the House of Representatives Committee on Appropriations requested this independent review of the Library's system and other available or potential processes. OTA has evaluated the Library's process and program with a focus on effectiveness and safety, and compared it to available alternatives. OTA has also developed information and analyses useful to other major libraries in the Nation that are faced with the same problem of preserving valuable books and papers.

OTA is grateful for the assistance provided by the assessment advisory panel, workshop participants, and other consultants, and acknowledges the full cooperation of the Library of Congress in responding to requests for information, arranging meetings with its consultants, and reviewing materials. OTA also appreciates the efforts made by the developers of other deacidification processes to make available the most up-to-date information.

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NOTE: OTA appreciates and is grateful for the valuable assistance and thoughtful critiques provided by the advisory panel members. The panel does not, however, necessarily approve, disapprove, or endorse this report. OTA assumes full responsibility for the report and the accuracy of its contents.

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