## DEACIDIFICATION PANEL

Comments by Lois Olcott Price

In discussing deacidification--or alkalization--my colleagues (Elizabeth Kaiser Schulte, Debora Dyer Mayer, Hanna Szczepanowski, and Holly Maxson) and I found that none of us had a single blanket policy for any type of artifact on paper. Each artifact--manuscript, print, printed document, drawing, or watercolor is evaluated separately, although certain tendencies are evident based partially on the type of artifact. We also found that we could not discuss alkalization without discussing water washing and alkaline water washing. We found that we could, however, agree on certain criteria we each use in evaluating material although we may weigh the criteria differently in different cases.

Before discussing these criteria however, I will briefly define the procedures as we practice them. Washing refers to the use of calcinated deionized water with a pH between 7.0 and 8.0. Alkaline washing utilizes calcinated deionized water to which calcium hydroxide is added to produce a pH between 8.5 and 9.5. Alkalization, the addition of an alkaline reserve to the paper, is accomplished using magnesium bicarbonate (diluted to an appropriate level when necessary from a .1M solution) or methyl magnesium carbonate in a non-aqueous solvent.

The criteria we use for deciding which, if any, of these procedures is appropriate for a particular object fall into four major categories. First we look at the support and media and ask three major questions: Does it warrant treatment? Can its condition be significantly improved by treatment? Can it be treated safely? To answer these questions we assess the color and flexibility of the support, the solubility or friability of the media, and possible changes in color and texture that might occur during treatment. We very seldom take the pH of the paper because of the possibility of staining and, when using a flat head electrode, of leaving an impression.

The second category we consider is environment--what future preservation threatening conditions must the object withstand? Will the object return to an institution with adequate environmental controls and good storage or will it be subjected to high temperatures and humidity accompanied by dirt and urban pollution? Is the object likely to receive extensive exhibition or handling? What type of housing will the object have as a buffer against the environment?

The third category falls in the realm of connoisseurship. We consider the age and type of paper and anything we know about the artist and media in an effort to predict the subtle repercussions of any treatment, the present stability of the object, and the probable course of future deterioration with and without treatment. We also consider evidence of any previous restorations and whether treatment of the object might adversely effect any future scholarly inquiries.

The final category we consider is the type of object and its function. The objects we treat fall into three major groups, although there are always exceptions and borderline cases.

1. <u>Fine Arts</u>--works of art on paper such as drawings, prints, calligraphy, and paintings executed with conscious artistic or aesthetic intent. This category would also include books whose primary function is aesthetic.

2. Archival Material--material whose sole function was to record information and whose value still lies in the information it contains. This group consists primarily of printed and written documents, ledgers and account books, and most printed books.

3. <u>Historical Artifacts</u>--material that has both aesthetic and informational components or material whose original function was to record information but that has become, through historical circumstance, a cultural artifact or a rarity. This category includes many broadsides and most maps and architectural drawings as well as historically significant documents and autographs and most rare books.

Based on the criteria just outlined, we tend to make the following treatment decisions. Fine arts material is seldom if ever alkalized and decisions regarding washing and alkaline water washing are made individually for each item. Possible aesthetic repercussions weigh heavily in these decisions. Archival material is usually alkalized if possible. The future life of the object will usually be more rigorous in terms of handling and environment and aesthetic considerations are less critical. No generalizations could be made for historical artifacts since this group includes such a wide variety of material.

In conclusion we would like to emphasize that washing, alkaline water washing, and alkalization are major treatments. They are not reversible and should never be considered routine inspite of the frequency with which they may be performed.