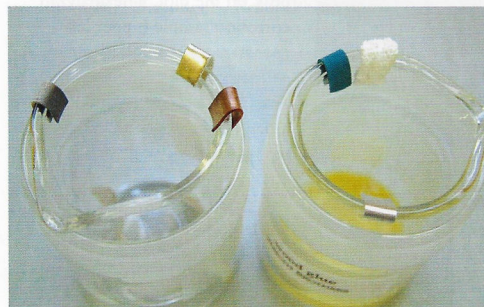
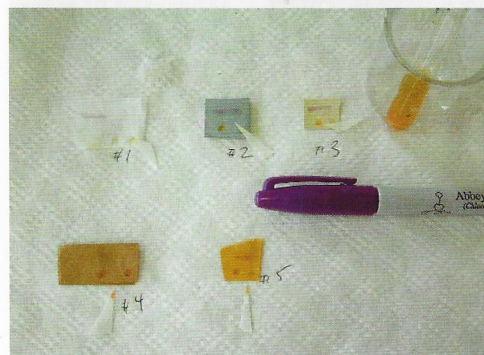


**PLATE 4.2** Preparation of metal coupons for an Oddy test. The coupons in the top row illustrate corrosion of metal caused by off-gassing from the tested material. Those in the lower row are cleaned with abrasives to expose surface that will react to the environment. Cleaning of the metal coupons exposes a fresh, reactive metal surface. (Photo © H. Szczepanowska 2004)

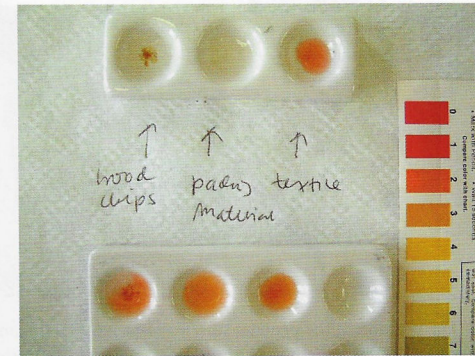


**PLATE 4.3** The results of an Oddy test. Color deposits of corrosion on metal coupons indicate severe off-gassing of the tested material. Note the deposits and discoloration on each metal coupon: heavy white on lead and green on copper. (Photo © H. Szczepanowska 2004)

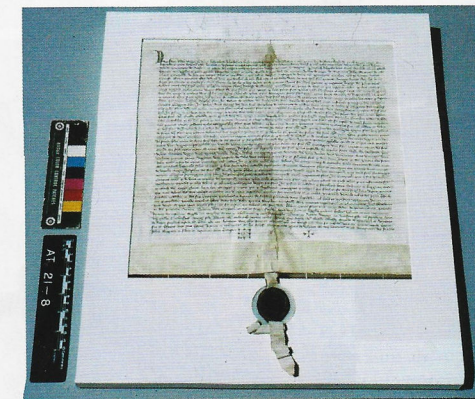


**PLATE 4.4A** Test of acidity with a pH pencil, a purple felt tip. A color change from purple to yellow or orange indicates acidic content of the tested materials. This test can be used only on materials considered for packing or construction, and not on artworks or museum objects, because the pencil mark is irreversible and visible as

a stain. (Photo taken during a course on materials identification, Dr. Nancy Odegaard and Scot Carroll, 2004, with permission. Photo © H. Szczepanowska 2004)



**PLATE 4.4B** Test of acidity level in a water solution, using pencil indicator. Change of color is compared with an indicator chart which refers to a specific pH level. The three solutions in this photograph are of pH 2, which is highly acidic. Neutral level is pH 7. Below pH 7, materials are acidic; above pH 7, materials are alkaline. Wood chips, packing material and a piece of textile were tested on the illustrated example. All indicated high acidity, near pH 2. (Photo taken during a course on materials identification, Dr. Nancy Odegaard and Scot Carroll, 2004, with permission. Photo © H. Szczepanowska 2004)



**PLATE 4.5** Parchment document with pendant seal (the documents shown in Figures 4.4a and c; and the seals in Figures 3.14b and c) after conservation, prepared for long-term storage or exhibit. The pendant seals are supported by securing them to the front or verso of the window-mat, according to the original configuration of the seal attachment. (Document with beeswax seal of the Grand Commander on this Side of the Sea, Raimondo Berengario, dated 1362; document No. 8 in vol. 21, Bullae Originale... 1336-1373, Archives of the Order of St. John of Jerusalem, National Library of Malta, Valletta. Photo © H. Szczepanowska, 1991, fig. 11c, p. 90)