



American Chemical Society

Central Wisconsin Section



## Using Nuclear Chemistry to Study Antique Watermarks

by

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Wednesday, February 13, 2002

7:30 PM at the Lignotech USA R&D Building  
Rothschild

5:30 Dinner, Tony Roma's Restaurant

### Abstract:

The watermarks in paper made by laying pulp on a bed of wire are unique to the papermaker. These watermarks are difficult to study and especially to compare. Beta-radiography is a method that produces permanent images of the watermarks. The watermarks can then be studied and easily compared. This talk will describe the method and discuss some of the results. The talk could also be titled "*How Nuclear Chemistry Helped the English Professor*".

### The Speaker:

I am a native Texan from the small town of Seagraves. My degrees are a B.S. in chemistry and physics from Baylor University (1969) and Ph.D. in chemistry from Texas A&M University (1975). I was a postdoctoral research fellow at Texas A&M and at Baylor, where I served as assistant director of the First Year Chemistry Program and as manager of the College of Science Learning Resources Center. At Baylor University, I have taught mathematics and physics and am presently teaching chemistry and archaeology. I also taught at two junior colleges: Blinn Junior College and McLennan Community College. I have authored or co-authored papers in chemical research and chemical education, books on problem solving, and lab manuals. The latest are *Chemical Investigations for Changing Times* (8th Ed.) and the solutions manuals to Hill and Petrucci, both by Prentice Hall, and a mystery novel for use in a chemistry class. My current research areas are chemical education, cleaning and restoration of metals, and the use of beta radiography to study watermarks in antique books.

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The dinner and mixer at 5:30 will be at Tony Roma's. One should take exit 185 off I-39/51 to the light. Right at the light. Right at the next light. Tony Roma's is on the left. Dinner reservations should be made by contacting **John Hollis** at 715-359-3021 or email [jwhtheman@aol.com](mailto:jwhtheman@aol.com) **before noon on Wednesday, February 13**. The talk will be at 7:30 PM at the Lignotech USA R&D Building in Rothschild. One should take exit 185 off I-39/51. Turn right and go to the light. Proceed straight into Rothschild. Turn left into the Lignotech Building, the first in the Lignotech Weyerhaeuser complex.