Francesca Casadio

"The Interface of Art and Science in the Museum: Disclosing a 4th Dimension of Art Preservation and Connoisseurship"

Dr. Francesca Casadio joined the Art Institute of Chicago as its first A.W. Mellon Conservation Scientist in July 2003, establishing and directing a conservation science program. She received her Ph.D. in chemistry from the University of Milan, Italy. Most recently, Dr. Casadio has conducted analytical research for the preservation of the façade of the Duomo, the Gothic Cathedral in Milan. Prior to her appointment to the Art Institute of Chicago, Dr. Casadio was research fellow in the Science Department at the Getty Conservation Institute, Los Angeles, then at the Italian National Council of Research in Milano where she was involved in a comprehensive study to assess the conditions of Michelangelo's *David*.

Drawing form her most recent experience at the Art Institute and past experiences in Italy, Dr. Casadio will discuss examples of applications of scientific analysis to the field of Cultural Heritage, including:

- The use of instrumental analysis to address fundamental questions regarding artists' techniques, and as an aid to unraveling paint technology, as with the fascinating pre-Columbian pigment Maya Blue.
- The investigation into deterioration of artifacts, the design of innovative conservation materials and the testing of their durability, exemplified with the case study of the conservation of the façade of the gothic Cathedral of Milan.
- Development of fine-tuned conservation strategies for the cleaning of Michelangelo's David.
- The study of the effect of environmental parameters on objects in exhibitions and storage to help design compatible display cases.
- The role of scientific analysis in matters of authentication and dating.

Future trends that increasingly see science as a tool for virtual restoration will be discussed.

3:00 p.m. • Wednesday, November 3, 2004 The APS Auditorium, Building 402 Argonne National Laboratory

