



Smithsonian Center for Materials Research and Education

Topics in Conservation Science Lecture

Material Identification Using Raman Spectroscopy: Teeth, Bone, and Other Curiosities



netsuke
Gourd in String Bag
Suzuki Tokoku, Japan, 1846-1913
Los Angeles County Museum of Art

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This presentation will highlight results of analysis conducted at the Los Angeles County Museum of Art on the effects of laser radiation on ivory and the identification of minute amounts of inlay and colorant materials used on Japanese netsuke.

The utility of Raman spectroscopy will be shown for the identification of organic and inorganic materials that are commonly encountered in artifact and natural history collections. An overview of Raman spectroscopy will be presented and illustrated with particular emphasis on tooth and bone. Parameters (such as wavelength selection) that are relevant to planning conservation research projects will be addressed.

SCMRE Theater · Museum Support Center · 4210 Silver Hill Road
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