SESSION: Introduction to X-Ray Fluorescence Analysis

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SESSION OUTLINE

ABSTRACT
The session will provide an introduction to the technique of X-ray fluorescence analysis. The capabilities, advantages and disadvantages of the technique will be discussed along with the application of the technique to photography.

LEARNING OBJECTIVES
As a result of this session, participants should be able to:

- Understand the benefits and drawbacks of XRF analysis
- Understand what information XRF analysis can and can not provide about photographic materials

CONTENT OUTLINE

- PowerPoint presentation "X-ray Fluorescence Analysis" will provide an introduction and overview of the technique.
- Examples of major photographic processes will be shown and analyzed using an XRF instrument. These case studies will illustrate the use of the XRF instrument and will demonstrate the chemical characteristics and XRF signatures of each process.
- During the distance mentoring phase students will be asked to:
  - Identify photographs from their personal and/or institutional collections that pose difficult process identification questions.
  - Document the characteristics of the photographs and provide a tentative process ID of the images based on their observations and the reasoning they used to arrive at their conclusion.
  - Bring these examples to the Module 2 in 2009 session where XRF will be used in order to identify the photographic process used to generate each image.
BIBLIOGRAPHY

📖 = Essential reading material
🌐 = Available online