2012
MICROSCOPY COURSE SCHEDULE

McCrone Research Institute
2820 S. Michigan Avenue
Chicago, IL 60616-3230

Forensic and Trace Evidence Courses

Applied Polarized Light Microscopy (PLM) / Forensic Microscopy
March 12–16; June 4–8;
July 30–August 3; October 1–5; December 10–14

Hair and Fiber Microscopy
September 24–28

Advanced Applied Polarized Light Microscopy / Advanced Forensic Microscopy *
March 26–30

Microscopy of Explosives*
April 30–May 4; August 27–31

Microscopy of Illicit Drugs and Excipients
June 11–15

Forensic Dust Analysis* (NEW)
March 19–23

Forensic Paint Microscopy* (NEW)
September 17–21

Comparative Microscopy of Soils*
April 9–13

Methods Courses

Fluorescence Microscopy
May 7–9; August 21–23

Scanning Electron Microscopy and X-Ray Microanalysis
April 30–May 4; August 27–31

Practical Infrared Microspectroscopy—FTIR
June 11–15; September 10–14

Raman Microscopy
September 17–19

Sample Preparation and Manipulation for Microanalysis
April 2–6; October 29–November 2

Microchemical Methods
October 8–12

On Your Site Courses

Custom design a one-week intensive course that we will teach at your facility.

Environmental Courses

Microscopical Identification of Asbestos (PLM)
February 27–March 2; June 18–22; August 6–10;
October 8–12; December 3–7

Advanced Asbestos Identification (PLM) ‡
March 5–9; August 13–17; October 15–19

Asbestos Fiber Counting (NIOSH 582) (PCM)
February 20–24; August 20–24; October 22–26

Indoor Air Quality: Fungal Spore Identification
April 16–20; July 23–27; October 29–November 2

Advanced Indoor Air Quality: Fungal Spore Identification†
August 14–16

Indoor Air Quality: House Dust
November 6–8

Specialty Courses

Microscope Cleaning, Maintenance, and Adjustment
July 23–24; November 26–27

Microscopy of Food
May 7–11; November 5–9

Microscopy of Extraneous and Foreign Matter in Food (NEW)
November 12–16

Digital Imaging and Photomicrography
March 12–14

Microscopy for the Conservator of Art and Artifacts
November 26–30

Microscopy for the Identification of Pigments and Fibers in Art and Artifacts (Held at Campbell Center)
June 25–29

Chemical Microscopy (Held at Cornell University)
July 23–27

Microscopy for Conservators (Held at New York University)
May 21–25

Polymer Microscopy
April 9-13

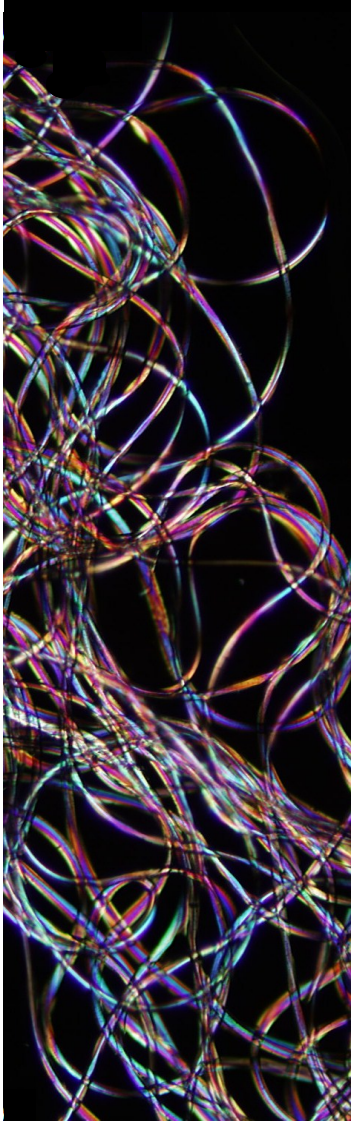
PREREQUISITES: * Applied Polarized Light Microscopy † Indoor Air Quality ‡ Microscopical Identification of Asbestos

WWW.MCRI.ORG
e-mail registrar@mcri.org, call 312-842-7100, fax 312-842-1078.

2012

MICROSCOPY COURSE INFORMATION

WWW.MCRI.ORG



Selected Course Summaries

Forensic Dust Analysis* (NEW)
This course is an introduction to the analysis of dust traces for trace evidence analysts and is based on the instructor's (Skip Palenik) over 50 years of experience in studying dust in a forensic context. Beginning with the history of dust analysis and the work of Locard, Popp, Schneider, Heinrich, Frei-Sulzer and others, it will explore the techniques for collecting, separating, analyzing and interpreting dust evidence. Special emphasis will be placed on developing investigative leads such determining environment and/or occupation from the analytical results of a dust analysis.

Forensic Paint Microscopy* (NEW)
Investigate automotive and architectural paints from a forensic point of view. Although new to the public, this course has been taught for years to trace analysts per a cooperative agreement with the National Institute of Justice. Come see why this is the most highly sought-after forensics course.

Microscopy of Extraneous and Foreign Matter in Food (NEW)
"Black specks," glass, and other contaminants can be identified using microscopy. Take this course to identify potential sources of "black specks": chars, metals, alloys, rubber, asphalt, carbon, combustion products, sand, soil, and rust. The analysis of glass fragments will be covered, as well as a survey of other contaminants (polymer, fibers, films, hair, and bone).

Microscopy of Food
Identify the microscopic anatomy of plants and the microscopic histology of meat, bone and other animal protein sources. Learn the microscopical and microchemical characterization and identification of proteins, lipids, starches, gums, spices, spray-dried products, and additives. Localize food constituents in finished products.

Comparative Microscopy of Soils*
Study the composition and origin of soils while learning the geological and forensic principles of soil comparison. Soil samples are separated into clay, silt and sand size fractions, light and heavy minerals, and concentrates of pollen, spores, diatoms and phytoliths.

Sample Preparation and Manipulation for Microanalysis
Useful to every scientist working with small samples, this course offers instruction and practice in the isolation, preparation, and transfer of samples to suitable substrates for analysis (e.g. light microscopy, infrared microspectroscopy–FTIR, SEM/EDS, etc).

Digital Imaging and Photomicrography
This course covers the most important aspects of digital imaging microscopy: camera and microscope hardware, system set-up, user settings, collection of quality images, introductory image processing, storage and printing.

Microscopy of Explosives*
Using chemical microscopy to identify explosives was one of Dr. McCrone's first research projects, and McCrone Research Institute remains the finest place to learn the methods he developed. This is an advanced course in the microscopy of bulk explosives, pyrotechnics and explosive residues. Organic, inorganic, military, commercial and improvised explosives are included.

*Indicates prerequisite of Applied Polarized Light Microscopy/Forensic Microscopy.

About McCrone Research Institute

Dr. Walter C. McCrone founded McCrone Research Institute, a not-for-profit corporation, to provide high-quality microscopy education. Over fifty years later, McCrone Research Institute continues to teach and develop courses relevant for an array of scientific disciplines.

All courses are hands-on, featuring lectures, demonstrations, and laboratory practice. Select from courses that introduce Applied Polarized Light Microscopy, Scanning Electron Microscopy and X-ray Spectroscopy (SEM), Infrared Microspectroscopy (FTIR), Raman Microscopy, and Fluorescence Microscopy. Or take courses that feature uninterrupted time for intensive study in a specialized area, some of which are described above.

Detailed information about McCrone Research Institute, and its courses, publications, and conferences are available at www.mcri.org.