



FOOD & BEVERAGE SERVICES

The McCrone Group offers you expertise in the analysis of food and beverage contaminants and packaging problems. Our team of scientists at McCrone Associates has unmatched experience in solving a wide variety of particle identification and materials problems. The diverse faculty of experts at Hooke College of Applied Sciences can teach you cutting-edge techniques, and the knowledgeable McCrone Microscopes & Accessories sales team can supply and help you configure instruments to meet your laboratory needs. From analysis to education to instruments, The McCrone Group is your premier microscopy resource for the food and beverage industries.



ANALYSIS •  **McCRONE**[™]
 ASSOCIATES, INC.

McCrone Associates is focused on solving particle identification and materials problems using microscopy and micro-analytical techniques. The root cause of many contamination issues and packaging failures often involves particles or defects barely or not visible to the naked eye. Our staff scientists use state-of-the-art instruments and techniques to provide reliable, confidential analysis of your contaminated food and beverage products and/or packaging defects. All our services begin with an evaluation of your problem and samples, and continue with analysis and consulting. If needed, we also offer on-site investigation and coordination of additional services.

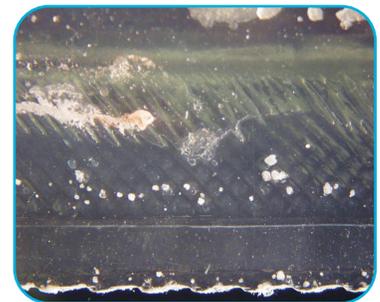
McCrone Associates, Inc. is accredited to ISO/IEC 17025: 2017 by the American Association for Laboratory Accreditation (A2LA) . Our scope of accreditation on certificate #3631.01 now includes cGMPs and CGLPs per applicable portions of 21 CFR sections 58, 210, 211 and 820 of the Federal Food, Drug, and Cosmetic Act. Please consult A2LA Certificate # 3631.01 for a list of accredited test technologies at www.a2la.org.

Analytical Services:

- Contaminant/Adulterant/
Foreign Object Identification
- Additives Analysis
- Flavoring/Odor Analysis
- Compositional Analysis
- Product Comparisons
- Printing Problems
- Packaging and Package
Seal Problems
- Product Tampering

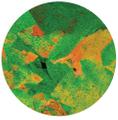
Common Packaging Samples:

- Beverage Containers
- Aluminum and Stainless Steel Cans
- Plastic Bags and Multi-layered Films
- Printed Paper Stock



Food debris preventing proper application of heat-seal wrapper.

We maintain professional and business relationships with other laboratories where analysis beyond the capabilities of our laboratory can be obtained.



Hooke College of Applied Sciences provides accredited training and education to technicians and scientists from a wide range of industries. Our instructors deliver, via professionally-produced videos, high-quality microscopy and microanalysis online courses that provide the essential skills needed for problem solving back at your own laboratory. Learn new skills and techniques from the experts in microscopy.

Let us collaborate with you to design a custom course. Depending on the level of customization required and the number of employees to be trained, custom training solutions can often be more cost effective than sending the same individuals to an open enrollment course. As an added bonus, learning activities built into the courses provide great team-building opportunities.

Our online, food analysis-related courses include:

- Polarized Light Microscopy
- Scanning Electron Microscopy
- Infrared Microscopy



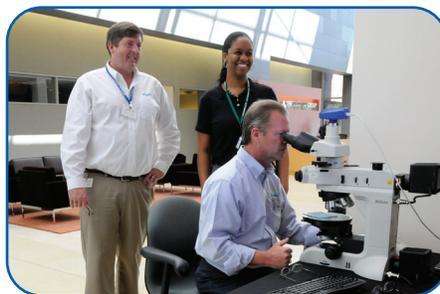
Courses are taught by recognized experts with decades of real-world experience.



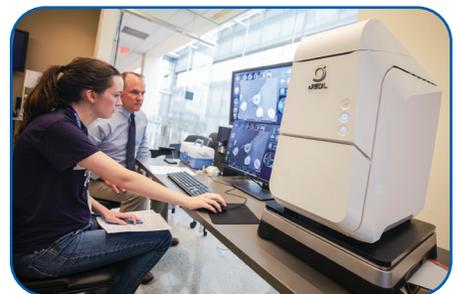
McCrone Microscopes & Accessories offers you proven microscopy equipment and accessories for the sample preparation and analysis of food contaminant samples. Our technical sales team has helped create custom instrument packages to fulfill the needs and specifications of laboratories around the country. We can help outfit your entire lab and provide ongoing product training and support.

Our products include:

- Nikon Microscopes
- Nikon Measuring and X-Ray Systems
- JEOL NeoScope JCM-7000 Benchtop SEM with EDS
- Linkam Thermal Stages
- Timegate PicoRaman
- McCrone Micronizing Mills
- Retsch Mills
- Hirox Digital Microscopes
- Motic Microscopes
- Digital Imaging Systems
- Microscope Accessories/Tools
- Lab Supplies
- Cleaning, Calibration, Installation and Training
- References and Resources



A Nikon polarized light microscope.



The JEOL NeoScope JCM-7000.



Freeze drying system.



Sample comparisons using McCrone Slide Reference Sets.