



Criminalistics Section – 2004

B42 Dr. Walter C. McCrone's Contributions to Microscopy, Microchemistry, and Crystallography

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The name of Dr. Walter Cox McCrone stands preeminent as the leader and most outspoken champion of analytical chemical microscopy in the Twentieth Century. He was born on June 9, 1916, and received his PhD in chemistry from Cornell in 1942. During his university studies he came under the influence of Professor Emile Chamot, then the most influential chemical microscopist in the U.S. As a result of this association, Dr. McCrone began his lifelong love affair with chemical microscopy. His influence extended over the fields of industrial, pharmaceutical, and forensic microscopy as well as conversation science in the areas of art and archaeology.

This presentation will focus on *some* of Dr. McCrone's original contributions to chemical microscopy that have a wide range of applications not only in forensic science but in other areas of applied science as well. These include the approach and technique for the manipulation and identification of small particles culminating in the publication of *The Particle Atlas*, dispersion staining, fusion methods, the petrographic characterization and identification of high explosives, and the ultramicrominiaturization of microchemical tests.

Microscopy, McCrone, Microchemistry