

## OBITUARY

## World-Renowned Forensic Microscopist, Walter C. McCrone, June 9, 1916–July 10, 2002

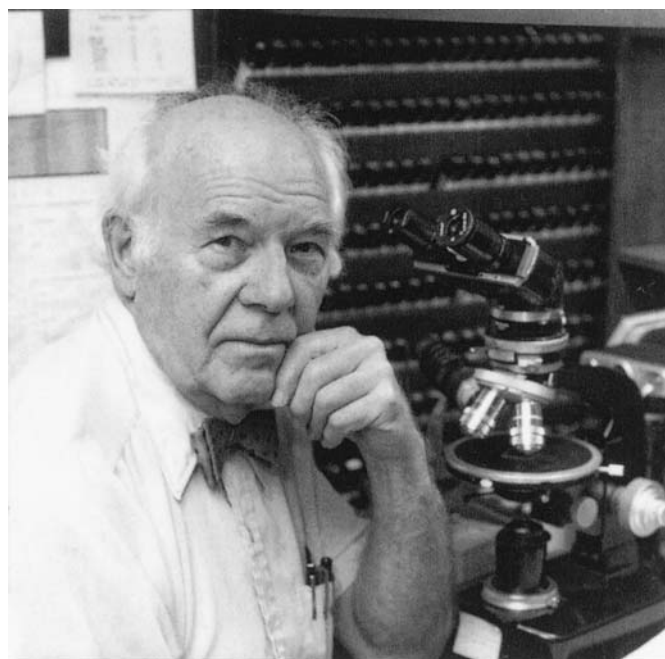
Walter C. McCrone, a pioneer in the science of chemical microscopy, died in Chicago on July 10, 2002 at the age of 86.

Walter C. McCrone, (1916–2002), the father of Modern Microscopy, revolutionized the use of and understanding of the light microscope for materials analysis, trained thousands of students worldwide in the use of microscopy, wrote hundreds of articles and books, gave thousands of presentations and lectures on microscopy, and developed numerous accessories, techniques, and methodologies to push the state-of-the-art in microscopy. He is well known in the forensic science and criminalistics community, having taught the methods of polarized light microscopy to thousands of forensic scientists over the past 50 years. Dr. McCrone is better known to the general public for his analytical work on the Shroud of Turin, the Vinland Map, and various other famous works of art and antiquities.

Less well known to the forensic science community, Dr. McCrone was also a humanitarian extraordinaire. He served on the Board of Directors of Ada S. McKinley Community Services, Inc. since 1951 and as Board President from 1964 to 1995. The Agency, a not-for-profit human services organization, has 40 program locations, a staff of 560, an annual budget of \$40 million, and serves more than 15,000 clients annually throughout Chicago. In recognition of his many years of dedicated service to the Agency, in 1997 they dedicated their new facility in honor of Dr. McCrone, the *Walter C. McCrone Industries* facility. The facility houses 120 clients in its sheltered workshop program and provides intake, evaluation, and job placement for more than 1000 program participants annually. He also served on the boards of VanderCook College of Music, Chicago and The Campbell Center for Historic Preservation Studies in Mt. Carroll, IL.

Walter C. McCrone was born in Wilmington, Delaware on June 9, 1916. He grew up mainly in New York State and attended Cornell University where he completed his undergraduate degree in Chemistry in 1938 and was graduated with a Ph.D. in Organic Chemistry in 1942.

After two post-doctorate years at Cornell University, Dr. McCrone accepted a position as a chemist (microscopist and materials scientist) at Armour Research Foundation (now, IITRI) from 1944 through 1956 where he rose to become Assistant Chairman of the Chemistry and Chemical Engineering Department. In 1956, Dr. McCrone left the structured world of the University to become an independent consultant and, on April 1, 1956 he founded McCrone Associates, Inc., Chicago (now located in Westmont, IL) an analytical consulting firm that grew from a one man/one microscope consulting service to a world renowned materials science facility dedicated to microscopy, crystallography, and ultramicroanalysis, now serving more than 2000 clients each year.



In 1960, Dr. McCrone founded McCrone Research Institute, Chicago, a not-for-profit organization devoted to the teaching and research in light and electron microscopy. In its 42 years, the Institute has taught over 20,000 students in all facets of microscopy. The Institute remains a leading educational facility within the world of microscopy. As Director of the Chicago Institute, he expanded its activities to include McCrone Scientific, the sister organization in London, England.

Dr. McCrone was also the editor and publisher of *The Microscope*, an international journal started by Arthur Barron in 1937 and dedicated to the advancement of all forms of microscopy for the biologist, mineralogist, metallographer, and chemist. *The Microscope* publishes original, previously unpublished, works from the microscopical community and serves as the proceedings of the INTER/MICRO microscopy symposia held in Chicago each year. It emphasizes new advances in microscope design, new accessories, new techniques, and unique applications to the study of particles, fibers, films, or surfaces of any material whether inorganic, organic, or biological.

During his 60-year career as a chemical microscopist, Dr. McCrone published more than 600 technical papers and 16 books

and chapters. *The Particle Atlas*, his best known publication, was written with other McCrone Associates staff members and appeared as a single volume first edition in 1970 and as six-volume second edition in 1973. Today, it is available on CD-ROM and is still recognized as one of the best handbooks available for solving materials analysis problems.

Dr. McCrone received worldwide attention and acclaim for his work with the Shroud of Turin Research Project in 1978. McCrone's conclusion that the Turin shroud is a medieval painting was never questioned within the forensic science community, but was contentious within the pseudo-scientific and lay communities, and Dr. McCrone spent considerable time in his later years in patient correspondence with them. Many skeptics felt his work was confirmed and vindicated after carbon-14 dating in 1988, although those who would not be convinced by anything remain so. In 2000, Dr. McCrone received the American Chemical Society National Award in Analytical Chemistry for "his life-long work in Chemical Microscopy, for his application of these methods to the Shroud of Turin, and for his character during his patient, professional defense of this work for more than 20 years."

Walter McCrone received four awards for his contributions to the forensic sciences: the Certificate of Merit from the Forensic Science Foundation (1982), the Paul L. Kirk Award of the Criminalistics Section of the American Academy of Forensic Sciences (1984), the Founder's Day Award of the California Association of Criminalists (1990), and the Roger Green Award of the California Association of Criminalists (1991).

Throughout his remarkable and outstanding career as a pioneer in microscopy and microscopical techniques, McCrone received many other honors and awards. A few of these honors follow: in 1970, the Benedetti-Pichler award in microchemistry from the American Microchemical Society; in 1977 the Ernst Abbe Award of the New York Microscopical Society; in 1981 the Anachem Award of the Association of Analytical Chemists; in 1988, the Madden Distinguished Service Award, VanderCook College of

Music; in 1990, the Irving Selikoff Award of the National Asbestos Council; in 1991, the Fortissimo Award, VanderCook College of Music; in 1993, the Public Affairs Award of the Chicago Section, American Chemical Society; in 1999, the Emile Chamot Award from the State Microscopical Society of Illinois, and just in June of 2002, he received the August Köhler Award from the State Microscopical Society of Illinois, and is the only person to have received both the Society's awards.

Walter McCrone was as committed as humanly possible to his profession and he loved every minute he spent on microscopy. He worked 14 hour days, 7 days a week, but according to him, he never worked a single day in his life—he was just having fun, doing what he liked to do. Unlike many busy people, Dr. McCrone was also easily reached and generous with his time.

Dr. McCrone and his wife, Lucy, recently took advantage of the Cornell Campaign Challenge to complete funding for the endowed Emile M. Chamot Professorship in Chemistry, honoring the Cornell professor of chemical microscopy who inspired Walter for so long.

Walter McCrone is survived by his wife, Lucy, who is also an accomplished microscopist and has shared Walter's love of microscopy, working alongside her husband for over 40 years. He is also survived by many thousands of former students, clients and friends for whom he has been, and continues to be, a profound inspiration. The McCrone Research Institute, where he worked tirelessly for the past 42 years, remains active in both teaching and research and continues to serve the forensic science and analytical microscopy communities.

Contributions can be made in his name to the Walter C. McCrone Scholarship Fund for Advanced Microscopy Studies, c/o McCrone Institute, 2820 S. Michigan Avenue, Chicago, IL 60616.

With thanks to many contributors  
David A. Stoney  
Director, McCrone Research