

The Technical Aspect of PDF Conversions and How it Affects a Forensic Document Examiners Casework

Presented by: Leonard Rosenthol – Adobe Systems

Half Day Workshop – Friday, October 11, 2019

Mr. Rosenthol will discuss the technical aspect of PDF conversions, possible changes from the original document, effect of editing a document in a PDF format, format, workflows, tools and meta data available, etc.

Biography of Leonard Rosenthol

Leonard Rosenthol is a Senior Principal Scientist with Adobe Systems and serves as their PDF Architect having been involved with PDF technology for more than 20 years. He also represents Adobe on various international standards bodies including the ISO and W3C. Prior to re-joining Adobe in 2006, Leonard worked as the Director of Software Development for Appligent, and the Chief Innovation Officer for Apago, while also running the successful consulting business of PDF Sages. Before becoming involved in PDF, Leonard was the Director of Advanced Technology for Aladdin Systems and responsible for the development of the StuffIt line of products.

How Chemical Examinations of Inks and Paper Can Corroborate and Supplement Forensic Document Examinations

Presented by: Gerald M. LaPorte, MSFS

Full Day Workshop – Saturday, October 12, 2019

Often times, the forensic examination of documents requires a comprehensive suite of testing to provide the most information possible regarding how and when a document was created and if a document is authentic with respect to the purported date of preparation. The purpose of this workshop is to provide attendees with a background in how chemical examinations can be used to corroborate and supplement a host of forensic document examinations such as: i) ink and paper comparisons; ii) indentation and impression results including sequencing of impressions; iii) determining whether multiple documents dated over a course of time were prepared contemporaneously; iv) results from video spectral analysis or hyperspectral imaging; v) interpretation of alterations and obliterations; vi) printing process determination; and vii) to potentially corroborate qualified handwriting conclusions. Attendees will be introduced to the general concepts of thin layer chromatography (TLC), gas chromatography/mass spectrometry (GC/MS), and other analytical methods to understand their application to forensic document examination and the limitations of the testing. Participants will also be introduced to the basic concepts of color and light theory as it applies to video spectral analysis and certain imaging techniques. A major portion of this session will include a discussion and analysis of questioned documents from adjudicated cases. The workshop participants are not required to have a background in chemistry since the main objective is to provide an overview and understanding of how chemical methods can help to elucidate some background about the materials used to compose a document such as writing inks, printing inks, paper, and other materials that could be used to alter or artificially age a document.

Biography of Gerry LaPorte

Mr. LaPorte serves as the Director in the Office of Investigative and Forensic Sciences at the National Institute of Justice (NIJ), where their mission is to improve the quality and practice of forensic science through innovative solutions that support research, development, technology, evaluation, and information exchange for the criminal justice community. His primary duties are to oversee the management of over \$400 million in grants and to provide expert analysis and advice on agency-wide programs or issues of national impact relating to forensic science.

Mr. LaPorte received his Bachelor of Science and Business Administration degrees from the University of Windsor (Canada) and Master of Science in Forensic Science from the University of Alabama at Birmingham. Over the course of his 25 year career, he has worked in various capacities as a forensic scientist. Prior to joining NIJ, Mr. LaPorte was the Chief Forensic Chemist for the United States Secret Service.

Mr. LaPorte has over 25 publications, including chapters in three text books, and has presented over 100 lectures and workshops in 13 different countries. He is a member of various organizations including the American Academy of Forensic Sciences, Mid-Atlantic Association of Forensic Scientists, American Society of Questioned Document Examiners, and the American Bar Association. Mr. LaPorte served as the co-chair for the Standards Practices and Protocols Interagency Working Group under the Executive Office of the President of the United States and as a Commissioner on the National Commission on Forensic Science. He currently serves as a subcommittee chair for Forensic Document Examination on the Organization of Scientific Area Committees (OSAC), which is managed under the oversight of the National Institute of Standards and Technology (NIST). The OSAC works to strengthen the nation's use of forensic science by facilitating the development of technically sound forensic science standards and by promoting the adoption of those standards by the forensic science community.