Determining the Sequence of Non-Intersecting Media on Documents: Ballpoint Pen Ink and Laser Toner
[Valery N. Aginsky]

This paper describes a technique for establishing the sequence of ballpoint ink entries and laser-printed entries in instances when these entries do not intersect.

An Instance of Inkjet Printer Identification
[Joseph L. Parker]

Examination of a series of anonymous documents generated by inkjet printer technology, revealed the presence of several printing flaws. A suspect inkjet printer was received for examination. Test printing with the suspect printer reproduced the same flaws observed on the questioned documents. Examination of the suspect machine, and its test prints, resulted in isolation of “class” flaws and a previously unobserved “individual” printing flaw. The accumulative presence of these features enabled an association between the anonymous documents and the suspect inkjet printer.

Association of Counterfeit Documents to a Printing Plate by Means of Halftone Dots
[Linton A. Mohammed and George G. Jenkinson]

Several printing plates, proofs, suspect documents and genuine documents were submitted for examination. Comparison of the printing established that the suspect documents were counterfeit. Comparison of the halftone dots to the printing plates, proofs and suspect documents under high magnification (X80) established a similarity in the numbers, shapes, sizes and connectivity of the dots. Using these patterns, it was possible to distinguish between 6 equivalent images on the cyan printing plate and to say which was associated with a specific suspect document. A determination could be made that the printing plates, proofs and suspect documents shared a common source.

Ink Differentiation for the Fiscally Challenged
[Steven G. Drexler and Geoffry Smith]

Being asked to distinguish between two or more inks that may have been used to alter a document is a common problem posed to the Forensic Document Examiner. In today’s modern laboratory, sophisticated instruments have been made available, such as the VSC-4 and VSC2000, manufactured by Foster & Freeman, Worcestershire, England, that are specifically designed to aid in the differentiation of inks. However, the considerable expense may make these instruments unavailable to many government and private laboratories. The present study introduces a low cost ink differentiation system, comprised of simple commercially available components, and tests its ability to distinguish between various black inks.
Impression by Traced Forgery  
[Robert D. Kullman, Michael Sinke, and Erich Speckin]

In the effort to determine whether it was possible to successfully “forge” indented impressions, 39 individuals were asked to trace entries on a prepared form. An Electrostatic Detection Apparatus (ESDA) was used to develop indented impressions created by the tracings. The developed impressions were then compared to the prepared entries. The research indicated that fully developed ESDA impressions that consist of more than a short single stroke were readily identifiable as the product of original writing or the product of tracing. Additionally, many impressions consisting of short single strokes were also detectable as authentic impressions or traced forgeries. Further, weak ESDA impressions of more than 2 letters or formations were also identifiable as “forged” tracings.

Historical Review: Questioned Documents  
[Albert S. Osborn and Albert D. Osborn, with introduction by John Paul Osborn]

This is an abridged version of an article published by Albert S. Osborn and Albert D. Osborn dated January 1941. The article was published just the year before the formal founding of the American Society of Questioned Document Examiners in 1942. Albert S. Osborn was the first president and primary organizer of the ASQDE. Albert D. Osborn served as the third president. This article is being reprinted in tribute to the 60th anniversary of our organization.