

## **Questioned Documents – 2021**

## J12 The Use of Digitally Captured Signature (DCS) Technology in Everyday Casework

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Learning Overview: The goal of this presentation is to familiarize attendees with methods of using and incorporating DCS technology in everyday casework in a laboratory environment, either for analysis, presentation, or sample collection.

Impact on the Forensic Science Community: This presentation will impact the forensic science community by allowing comprehension and adaptation of the new technology to routine casework.

Forensic Handwriting Examination (FHE) research in DCS usually focuses either on the examination procedure of a disputed DCS or the comparison of signing behavior between glass and paper. Consequently, many examiners believe that they need to deal with DCS technology only when they encounter a case with a disputed DCS signature.

Yet there is another aspect of DCS technology that can enhance the FHE analysis in everyday casework that focuses on traditional Pen and Paper (P&P) signatures. The different options of representation of the captured information of DCS signatures allow the experts (through the use of specialized programs) to visualize different aspects of a signature formation.

This presentation focuses on the benefits of using DCS technology to collect comparison samples for P&P cases, the process of sample collection (either for a disputed DCS or a disputed P&P case) using several different hardware options, as well as the benefits of using the Wacom® Clipboard (PHU-111) for the DCS capturing, highlighting the managerial aspects of the process.

The Wacom® Clipboard allows simultaneous capturing of a signature formation in both A4 paper form and digitally, enhancing the managerial aspects of the process within casework with respect to document creation and handling. The simultaneous creation of a paper version and a full digital version of a document (in PDF) resolves a lot of legal aspects of report writing and record keeping within an organized laboratory environment while at the same time giving the expert the opportunity to collect and analyze DCS data.

Finally, some examples of using collected DCS samples in real cases will be presented to highlight the advantages of such practices in routine cases where the disputed signature has been executed on paper with a pen.

Bioimetric, DCS, Signatures