

C20 The Organization of Scientific Area Committees (OSAC) Digital/Multimedia Scientific Area Committee Standards Work—Part 2: Video/Imaging Technology & Analysis (VITAL) and Facial Identification

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Learning Overview: After attending this presentation, attendees will have learned about the latest work in developing OSAC Standards for the Digital and Multimedia Sciences disciplines of VITAL and Facial Identification.

Impact on the Forensic Science Community: Standards are vital to ensuring the sound practice of forensic science across all disciplines. To implement these standards, community members must know of their existence and scope. This presentation will impact the forensic science community by offering newcomers an introduction to such standards, while offering more experienced practitioners with an opportunity to probe the finer details of the current work and shape the direction of future work.

The Organization of Scientific Area Committees (OSAC) for Forensic Science 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.

These standards are written documents that define minimum requirements, best practices, standard protocols, and other guidance to help ensure that the results of forensic analysis are reliable and reproducible.

OSAC forensic science disciplines are spread across seven major Scientific Area Committees (SACs)" The SAC most relevant to the AAFS Digital Multimedia Sciences section is the Digital/Multimedia SAC (DMSAC). The DMSAC incorporates four subcommittees that address the following disciplines: Digital Evidence, Speaker Recognition, Video/Imaging Technology & Analysis, and Facial Identification. This presentation will focus on the work of the latter two, while a companion presentation addresses the former two.

Each OSAC subcommittee maintains a "roadmap" of standards and other guidance documents for their discipline and identifies the individual standards and guidance document considered to be of the highest priority for their work.

It should be noted that only standards that have been published by an acknowledged Standards Development Organization (SDO) are eligible for publication on the OSAC Registry. While many standards within OSAC disciplines have been published through SDOs, the work of OSAC has revealed that most of these require some modification to reflect the latest advances in forensic science. Likewise, OSAC subcommittees have identified several additional standards that have not yet been published through an SDO and therefore have begun to develop these standards themselves. Once prepared by an OSAC subcommittee, these documents are passed on to an SDO to ensure transparent input by the broadest possible community of stakeholders. As a result, individuals interested in actively developing standards have at least two opportunities to do so—either through participation in OSAC or through an SDO. The SDOs with which the OSAC Digital Evidence and Speaker Recognition subcommittees are currently engaged include American Society for Testing and Materials (ASTM), the Acoustical Society of America, and American National Standards Institute (ANSI).

To facilitate the process by which standards are reviewed and validated through the OSAC, the Forensic Science Standards Board (FSSB) has established an ontology to define the categories and subcategories of standards that may be included in the roadmaps. The primary categories and subcategories of standards as defined in this ontology are as follows: Competency; Physical Evidence; Method Development & Method Validation; Evidence Enhancement, Restoration or Recovery; Examination & Analysis; Interpretation; Quality Assurance; Terminology; and Reporting Results & Testimony. It is expected that individual standards might span more than one of these categories.

During this presentation, attendees will learn about various efforts to develop standards within the disciplines of video/imaging technology and analysis and facial identification with such topics as: Categories of Results/Opinions in Comparison Analyses; Developing Discipline Specific Methodology for Analysis, Comparison, Evaluation-Verification (ACE-V); Digital Video Retrieval and Analysis; Image Authentication; Forensic Photogrammetry; Crime Scene Photography; Physical Stability of Facial Features in Adults; Image Processing to Improve Facial Recognition Searches; and multiple categories of training. In addition, attendees will also hear about a document developed in response to the corona virus pandemic that provides guidance for the remote/offsite examination of digital and multimedia evidence.

Video/Imaging Technology & Analysis, Facial Identification, Standards