2023 AFTE Conference – Austin, TX

1. 2023 Keynote Speaker
   Jon-Adrian "JJ" Velazquez, *New York State Program Director of the Frederick Douglass Project*

2. AFTE 2024
   Nicolette Roth, *State of Alaska Department of Public Safety*

3. How to Host AFTE
   Ally Anderson, *Durham Police Department*
   Calissa Carper, *West Virginia State Police*
   Jessica Winn*, California Department of Justice - Fresno*

4. Deterioration of Gunshot Residue in Humid & Non-Humid Environments
   Sammi Castle, *Alaska Scientific Crime Detection Laboratory*

5. OSAC Update
   Andy Smith, *San Francisco Police Department Crime Laboratory*
   Erica Lawton, *Alabama Department of Forensic Sciences - Mobile*

6. Standards Development Activities in Firearm and Toolmark Examination
   Jennifer Floyd, *Arkansas State Crime Laboratory*

7. Technical Working Group on 3D Toolmark Technologies
   Erich Smith, *Federal Bureau of Investigation Laboratory Division*
   Michael Stocker, *National Institute of Standards and Technology (NIST)*

8. AFTE Journal Submissions: How to Work Around Common Issues with Publication
   Jennifer Gelston, *Utah Bureau of Forensic Services*
   Erica Lawton, *Alabama Department of Forensic Sciences – Mobile*

9. The AFTE Scholarship Fund (ASEF)
   Jim Hamby, *International Forensic Science Laboratory and Training Centre*

10. Glass Traces on Bullets as Additional Evidence for Shooting Reconstruction
    Shirly Montero, *Arizona State University*

11. Back to Front or Front to Back
    Deborah Gillis, *Alaska Scientific Crime Detection Laboratory*

12. The Forensic Examination of 3D Printed Components: Photopolymer Resin-Based Technologies
    Corey W. Scott, *Terrorist Explosive Device Analytical Center of the Federal Bureau of Investigation Laboratory Division*

13. Initial Observations of 3D-Printer Nozzle Marks
    Kirk Garrison, *San Bernadino County Sheriff's Department*
14. Toolmark Source Determination of Fabricated 3D-Printed drop-in-auto-sears (DIASs) using Fussed Deposition Modeling (FDM) Desktop 3D-printers
    Douglas Halepaska, *Federal Bureau of Investigation*

15. Objective Comparisons of Printer Marks on 3D-Printed Firearm Components
    Thomas Brian Renegar, *National Institute of Standards and Technology (NIST)*

16. The National Institute of Standards and Technology (NIST) Scientific Foundation Review of Forensic Firearm Examination: Update on Validation, Proficiency, Theory of Identification and Statistical Analysis
    Gregory S. Klees, *Bureau of Alcohol, Tobacco, Firearms, and Explosives (ATF) Laboratory*
    Steven P. Lund, *National Institute of Standards and Technology (NIST)*

17. Quantitative Comparison of Toolmarks Made by Tongue and Groove Pliers
    Eunah Joo, *National Forensic Services of South Korea*

18. AFTE Website Updates
    Jill Prathers, *Forensic Tool Mark Consultants, LLC*

19. AFTE Machining and Subclass Guide
    Omar Felix, *Unified Metropolitan Forensic Crime Lab*

20. Examination of Consecutively Manufactured Metal Injection Molded Breech Face Inserts from the Smith & Wesson M&P Shield EZ M2.0 Pistol
    Joseph Vandenburgh, *Nassau County Crime Laboratory*

21. The Wound Ballistic Aspects of the Assassination of President Abraham Lincoln
    Luke Haag, *Forensic Science Services, Inc.*

22. Virtual Microscopy and Algorithm Analysis with Firearm Component Casts
    Zac Carr, *Cadre Forensics*
    Ryan Lilien, *Cadre Forensics*

23. The 1966 University of Texas Tower Shooting
    Edward E. Hueske, *Forensic Training & Consulting, LLC*

24. NIST Ballistics Database Testbed (NBDT): Basic Structure and Possible Usage
    John Song, *National Institute of Standards and Technology (NIST)*

25. Understanding the Firearms Examination Process: Presenting an Interactive Process Mapping Tool
    Melissa Taylor, *National Institute of Standards and Technology (NIST)*

26. Computer-Identified Best Non-Matches Between 10 Consecutively Manufactured 9mm Ruger Barrels
Luke Haag, *Forensic Science Services, Inc.*

27. Firearm Mark Obliterations Documented in Afghanistan: A Case Study
Bailey Henwood, *Cranfield University*

28. A 22LR Revolver Double Strike: The Case of an Unusual Toolmark
Jonathan Charron, *Sacramento District Attorney's Laboratory of Forensic Services*

29. Finite Element Modeling and Analysis of Breech Face Impressions
James A. Hamilton, *West Virginia University*

30. The Trouble with Inconclusives in Firearms
Lynn R. Garcia, *Texas Forensic Science Commission*

31. Progressive Marks Evaluated by Various Virtual Comparison Microscopy Systems
Amanda Deal, *St. Louis County Police Crime Lab*

32. An Evaluation of the Equivalent Circle Circumference Method
Michael G. Grisham, *Mesa Police Department Forensic Services*

33. Propellant Source and GSR Production
Evan Thompson, *Retired*
Luke Haag, *Forensic Science Services, Inc.*

34. Significance of Adoption of Toolmarks Examination on Bones and Cartilages
Mohammad A. AlShamsi, *Dubai Police*

35. Quantitative Analysis of Breech Face and Firing Pin Impressions Based on High-Resolution Topography for Common Source Determination
Danny Roberge, *Forensic Technology*

36. Diagnostic Tools for Automatic Cartridge Case Comparisons
Joseph Zemmels, *Iowa State University*

37. Validity of Forensic Cartridge Case Comparison: A Field Study
Max Guyll, *Arizona State University*
Stephanie Madon, *Arizona State University*

38. Can Contextual Information Affect Verification Conclusions? [Non-Blind Verifications]
Stephanie Madon, *Arizona State University*
Max Guyll, *Arizona State University*

39. Effect of Subclass Characteristics on Congruent Matching Cells (CMC) Algorithm
    Veronica Franklin, *West Virginia University*

40. Differentiating Paint Samples from Overpainted Firearms Obliterations
    Bailey Henwood, *Cranfield University*

41. Why Tool Marks are Unique?
    Lior Nedivi, *Independent Firearms Examiner & Crime Scene Examiner*

42. Comparing Variability Within and Between Tools: An Empirically Trained Algorithm to Compare
    3D Screwdriver Marks Using Angle of Attack, Direction of Tool Travel, and Repeated Measures
    Heike Hofmann, *Iowa State University*

43. Algorithmic Assessment of Striation Similarity Between Wire Cuts
    Yuhang Lin, *Iowa State University*

44. Panel Discussion: Implementation of 3D Technology
    Dawn LaPorte, *Harris County (Texas) Institute of Forensic Science*
    Kelly Woolard, *Kern Regional Crime Laboratory*
    Jared Ford, *Arizona Department of Public Safety*
    Michael Beddow, *Phoenix Police Department*

45. Panel Discussion: Implementation of 3D Technology
    Jordan Smith, *The Intercept* (Moderator)
    Peter Stout, *Houston Forensic Science Center*
    Colin Bellair, *Travis County (Texas) District Attorney's Office*
    Kim Zeller, *Houston Forensic Science Center*
    Shaun Sylvester, *Houston Police Department*
    Anna Vasquez, *Innocence Project of Texas*
    Mike Ware, *Innocence Project of Texas*
    Scott Ruplinger, *Travis County (Texas) Public Defender's Office*