



## Criminalistics Section – 2005

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### **B58 Characterization of Automobile Body Fillers**

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After attending this presentation, attendees will understand the characterization of auto body fillers by instrumental means.

This presentation will impact the forensic community and/or humanity by providing forensic scientists a mean to compare and characterize body fillers will be greatly increased.

The objective of this study was to determine if chemical and physical differences in body fillers from various manufacturers exist and could be identified. Extensive research was done to obtain a representative sample of automobile body fillers and spot putties used in the U.S. After all of the samples were identified, 33 samples were obtained. Twenty-four of the samples were body fillers and 9 were spot putties. Nine different companies manufactured the 33 samples. All of the samples were analyzed by FTIR microscopy, stereo microscopy and pyrolysis GC-MS. The results of the analysis showed that 13 of the 33 samples could be correctly identified as to source, while the rest of the samples could be put into groups containing 2-4 types.

**Automobile, Body Fillers, Spot Putties**