



### **D3 Spontaneous Human Combustion (SHC): This Incomprehensible Phenomenon Refuses to Die**

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After attending this presentation, attendees will learn of the existence of this curious phenomenon and the possibility of spontaneous release of fire under particular conditions.

This presentation will impact the forensic community and/or humanity by demonstrating not all fires obligatorily require a criminal, suspect or involuntary intervention of a human.

Several cases of human combustion, the cause of which was not evident, have been described over the last few centuries. These cases pose two kinds of enigmas. First, although the body is consumed, the immediate surroundings are left almost fully intact. Second, there is often no visible source of heat that might have started the fire. Furthermore, one is struck by the fact that the bodies are not completely consumed, certain parts being perfectly preserved, next to others that are reduced to a state of ashes.

Several hypotheses have been advanced over the years, the earliest of which seem ludicrous today. The authors review all these theories culminating with the most recent, scientific hypothesis based on experimental findings. They consist of alcohol, overage amount of fat and the "candle effect". Even though certain such deaths do not have fully satisfying explanations, medicolegal experts should be well aware of this phenomenon as it can have vital importance in cases that may involve homicide made to look like an accident or a suicide.

#### **Spontaneous Human Combustion, Candle Effect, Fat**