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**Title of presentation:** Fire Science Myths: Examining Arson and Wrongful Convictions

**Abstract**

Prior to 1992, fire investigators examined fire scenes through subjective observation and by process of elimination. If no cause could be determined for fire, arson would be assumed. If the cause were suspected, analysis of scenes based on an array of fire origin myths and patterns, such as crazed glass, would take place, usually resulting in a decision of intentional lighting. This research examines the use of fire science myths and fire pattern analysis in Canadian Courts, pointing to the potential for existing wrongful convictions based on outdated fire scene investigation methods. Through a mixed-methods study design, a sample of 30 court case summaries mentioning fire patterns were analyzed. Ten of which, dating prior and twenty occurring after 1992. As this research is in progress, results have not yet been formulated. However, speculation of current findings suggests that fire science myths have been used in Canadian court history.