SIMULATION OF MOTOR VEHICLE FIRES IN FORENSIC ENGINEERING

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Abstract: Motor vehicle fires represent a specific field of research within scientific field of fire protection. A considerably larger part of this research is dedicated to the causes of vehicle fires and the manners of their detection. However, little attention is dedicated to research of potential fire development once it has already started and the possibilities of its transferring to nearby materials and objects. This type of research is aimed at determining "safe" distance from a vehicle on fire in order to postpone as much as possible or prevent igniting of surrounding materials, vehicles and parts of nearby facilities. The results of this type of research can be applied on determining „safe" distance when designing parking lots, subterranean garages and generally the spaces where several parked vehicles can be found or in cases a facility is located in their vicinity.
Keywords: vehicle fire, fire simulation, Fire Dynamics Simulator (FDS), fire expertise

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