Modelling and analysis of different aspect of mechanisms in lightning injury

ABSTRACT

Over hundreds of years in worldwide, many of damages and fatalities caused by lightning have been reported with severed had injured in a short or long term effect. This work aims to model and analyse the different aspects of lightning mechanism in relation to the current and voltage distributions across the human body. The works have been carried using the electromagnetic transient program via transient modelling approach and the model is based on the well-published IEC standard. Results showed the variations in results of current and voltage distributions across the human vital parts under different injury mechanisms and different physical aspects of the victim.

Keyword: Electromagnetic transient program; Injury mechanism; Lightning; Lightning injury