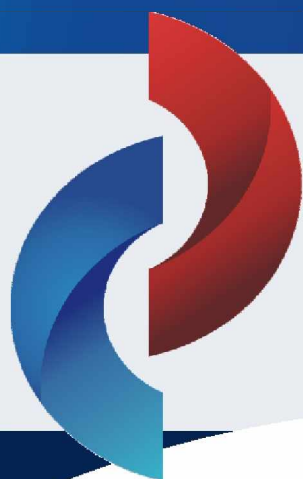


XX International Workshop on
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V Workshop on Non-Equilibrium Processes

18-21 July 2019, Belgrade, Serbia



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Absolute Differential Cross Sections for Electron Scattering from Anaesthetic Molecules

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We have investigated elastic electron scattering from anaesthetic molecules, halothane and sevoflurane, in the medium energy range from 50-300 eV [1]. Experiment has been performed on the UGRA apparatus [2] settled at the Institute of Physics Belgrade. The experimental setup, based on a crossed beam technique comprising of an electron gun, a single capillary gas needle and a detection system with a channeltron, was used to measure differential cross sections. The absolute scale for the cross sections is obtained by relative-flow method using argon gas as a reference [3]. Absolute DCSs for elastic electron scattering from sevoflurane at 100 eV are shown in Fig.1.

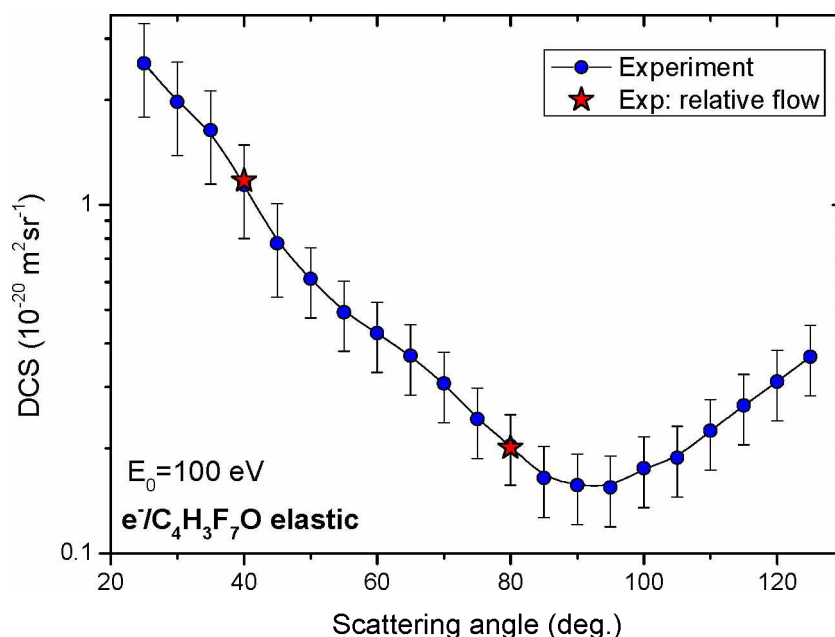


Fig.1. Angular dependence of the DCSs for elastic electron scattering from sevoflurane at 100 eV. Circles represent absolute experimental differential cross sections; stars represent absolute values obtained by relative flow method.

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