

**STRUCTURAL DEPENDENCE OF THE FRAGMENTATION
OF NAPHTHALENESULFONYL HALIDE
AND NAPHTHALENESULFONAMIDE MOLECULES
UNDER ELECTRON IONIZATION**

**N. I. Giricheva¹, G. V. Girichev²,
and V. M. Petrov¹**

UDC 547-305.2: 544.173

By mass spectrometry it is found that naphthalene, 1-naphthalenesulfonyl chloride, 2-naphthalenesulfonyl fluoride, 2-naphthalenesulfonyl chloride, 1,5-naphthalenedisulfonyl chloride, 1-naphthalenesulfonamide, and 2-naphthalenesulfonamide evaporate congruently on heating and their saturated vapor is presented by the corresponding monomeric molecular forms. The relationship is established between the character of the fragmentation of molecules during electron ionization and the specific features of their geometric and electronic structures.

DOI: 10.1134/S002247661601011X

Keywords: mass spectrum, molecular structure, naphthalenesulfonic acid derivatives, naphthalenesulfonyl chlorides, naphthalenesulfonyl fluoride, naphthalenesulfonamides, fragmentation paths.