

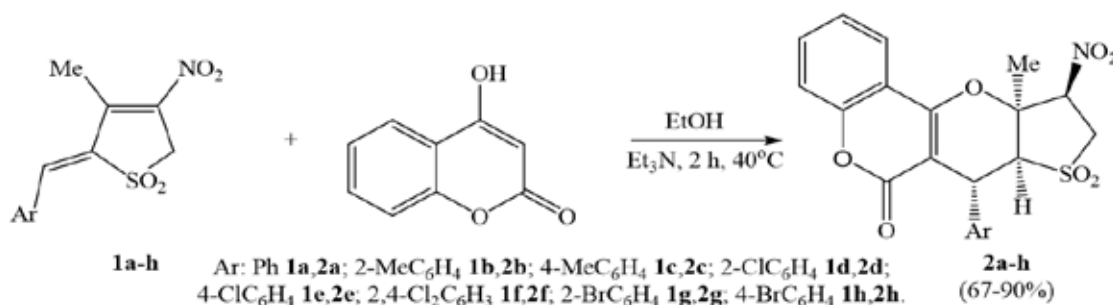
# SYNTHESIS AND STRUCTURE OF NEW TYPES OF SULFOLANOCROMENONES

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*s-trans*-Fixed nitrosulfodienes **1a-h** are convenient substrates for constructing fused sulfolane-containing polycycles with pyrrolidine, isoxazolidine, and hydrochromenone rings<sup>1</sup>. The research of the reaction of dienes **1a-h** with 4-hydroxycoumarin, carried out under mild conditions (ethanol, 40°C, cat. TEA, 2 h), led to the synthesis of a new derivatives type of the sulfolanopyranochromenones **2a-h** series with yields up to 90%.



Compounds **2a-h** are crystalline substances, their structure was established on the basis of IR, <sup>1</sup>H, and <sup>13</sup>C NMR spectroscopy data using homo- (<sup>1</sup>H-<sup>1</sup>H COSY, <sup>1</sup>H-<sup>1</sup>H NOESY) and heteronuclear (<sup>1</sup>H-<sup>13</sup>C HMQC, <sup>1</sup>H-<sup>13</sup>C HMBC) two-dimensional experiments, as well as X-ray diffraction analysis.

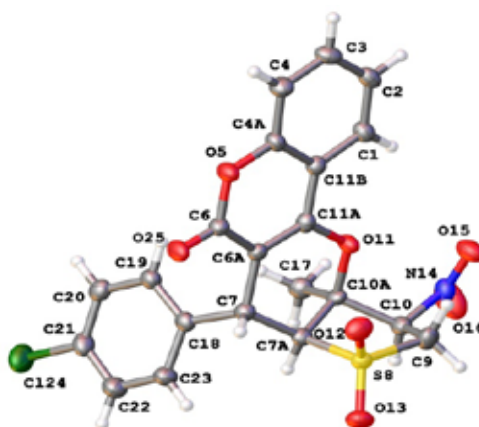


Fig 1. Molecular structure of polycycle 2e in crystalline boundedness

## References

1. Efremova I. E., Lapshina L. V., Baichurin R. I., Serebryannikova A. V., Savelev I. I. *Russ. J. Gen. Chem.*, 2020, **90**, 1369.

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