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Diploma thesis abstract.

**Raman spectroscopy of solutions  
of charge-transfer complexes  
on the basis of semiconducting polymers.**

In the present work was investigated a charge-transfer complex in a solution of a mix of semiconducting polymer MEH-PPV with a high-molecular organic acceptor TNF by the method of Raman spectroscopy. Dependences of shifts of the basic line of a Raman spectrum of MEH-PPV on frequency of  $1582\text{ cm}^{-1}$ , position and intensity of a line of  $966\text{ cm}^{-1}$  from concentration of TNF, and also dependence of position of a line on  $1582\text{ cm}^{-1}$  from temperature were investigated. The received dependences, along with received earlier absorption dependences in a complex, allow to explain features of formation charge-transfer complex on the basis of the semiconducting polymers in solutions.

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