

# **Raman spectroscopy of charge transfer complex in films based on the conjugated polymer MEH-PPV**

Diploma thesis abstract

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The present work investigates the intermolecular charge transfer complex in blends of a semiconducting polymer MEH-PPV and conjugated organic acceptors by the use of Raman spectroscopy. Correlations between the chemical properties of the acceptor and the properties of the charge transfer complex are searched for. It is shown that the complex forms in the blend, leading to partial charge transfer and polymer chain planarization. The complex formation is shown to become saturated with increasing the acceptor concentration. The charge transferred and chain planarization are shown to correlate with the electron affinity of the acceptors.