

SPECTROSCOPY OF POLYSILANES WITH
ACCEPTOR MOLECULES IMPURITIES

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S u m m a r y

The appearance of $\sigma^- \pi$ type charge transfer (CT) complexes in the PMPS and PDHS solutions with the admixture of TCNQ and TNF molecules is proven. The complexes reveal themselves by new absorption bands in the visible spectrum of the investigated mixtures and by the mixture color change. Irradiation of these mixer solutions also leads to the appearance of new bands in the absorption spectrum. However, the position of their peaks and the way of appearance significantly differ from those of CT bands. It has been shown that these bands are related to the creation of a chemical bond between acceptor molecules and radicals which are formed as a result of their degradation. So, the CT complexes of nondegraded polymers and an acceptor are formed.