

# VASE: INSTRUMENT TO STUDY BIAXIAL ORGANIC MOLECULAR THIN FILMS

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**Abstract:** Spectroscopic ellipsometry was employed to determine the complex refractive index and dielectric function of a *N,N'*-dimethylperylene-3,4,9,10-dicarboximide (DiMe-PTCDI) film grown on *S*-GaAs(100). The optically biaxial film shows strong anisotropy. From the investigations we can conclude that the DiMe-PTCDI molecules in the organic layer are predominantly oriented with their long axis parallel to the [011] direction of the GaAs substrate and tilted with their molecular plane with respect to the substrate plane.

**Key words:** generalised ellipsometry, anisotropy, organic molecular thin films.

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