

**Abstract :** Due to the inherent viscosity of polymer, piezoelectric response in the thickness direction ( $d_{33}$ ) of cellular ferroelectret films usually depends on the time of measurement. In this letter, the micromechanical theory of viscoelastic composite was extended to predict the time dependence of the overall piezoelectric  $d_{33}$  coefficient of voided charged polymer foam. Experiments were carried out to find the time spectra of piezoelectric  $d_{33}$  coefficient of voided charged polypropylene film. Theoretical simulation agrees well with experiment data.