Turkish Journal of Physics

Turkish Journal

of

Physics



Influence of Above-Molecular Structure, Electronic and Ionic Phenomena on Durable Properties of Polymer Dielectrics in the Electric Field

> T. M. VELİYEV, S. A. ABASOV, M. J. ZEYNALOVA, E. HALİLOVA Institute of Physics, Azerbaycan Academy of Sciences, H. Javid Avenue, 33, Baku, 370143 - AZERBAYCAN H. MEMEDOV, I. ASKEROV, S. AYDOĞU Dumlupınar University, Faculty of Arts and Sciences, Department of Physics, Kütahya - TURKEY

<u>Abstract:</u> Influence of above-molecular structure (AMS) on electrothermoluminescence, the altering time and the mechanic time of polymer dielectrics in strong electric fields that depend on temperature have been investigated. It has been shown that change of AMS considerably influenced the processes of injection and stabilization of charges as well as the solidity properties of polymers. It has been determined that the relaxation translations in large spherolite samples were observed at lower temperatures than the relaxation translations in small spherolite samples.

phys@tubitak.gov.tr

Key Words: Above moleculer structure, polymer dielectrics.

Scientific Journals Home Page

Turk. J. Phys., **25**, (2001), 575-581. Full text: <u>pdf</u> Other articles published in the same issue: <u>Turk. J. Phys.,vol.25,iss.6</u>.