Spectral Properties of 3-Benzanthrone Derivative Dyes in Isotropic Solvents, Polymer Film and Liquid Crystal

I. Grabchev, I. Moneva, E. Wolarz^a, D. Bauman^a, and S. Stoyanov^b
Institute of Polymers, Bulgarian Academy of Sciences, Sofia 1113, Bulgaria
^a Faculty of Technical Physics, Poznan University of Technology, Poznan, Poland
^b Faculty of Chemistry, University of Sofia, Sofia, Bulgaria

Reprint requests to Dr. I. G.: Fax: +359(2)70-75-23: E-mail: grabchev@polymer.bas.bg

Z. Naturforsch. 56a, 291–296 (2001); received January 24, 2001
Some recently synthesized benzanthrone derivatives bearing azomethine and oxy groups at C-3 po-

Some recently synthesized benzanthrone derivatives bearing azomethine and oxy groups at C-3 position have been systematically studied. The influence of the substituents and of the environment (isotropic and anisotropic media) on the absorption and fluorescence of the dyes and their vibronic transitions is discussed in this paper.

Key words: 3-Benzanthrone Derivatives; Azomethine and Oxysubstitutes; Absorption; Fluorescence; Vibronic Structure.