ON THE CONTROLLABLE CHANGE OF THE REFRACTIVE INDEX OF A SILICONE POLYMER

V.I. Grygoruk, A.N. Dmitruk, V.M. Ogenko¹, Yu.T. Onys'ko, Yu.A. Slinchenko

Taras Shevchenko Kyiv National University,
Faculty of Radiophysics
(6, Academician Glushkov Ave., Kyiv 03127, Ukraine;
e-mail: ys@univ.kiev.ua)
¹V.I. Vernadskyi Institute of General and Inorganic
Chemistry, Nat. Acad. Sci. of Ukraine
(32/34, Academician Palladin Ave.,
Kyiv 03680, Ukraine)

Summary

Specific materials that include silica nanoparticles have been investigated. A possibility for the refractive index of a silicone polymer to be controlled within the limits from 1.4062 to 1.4090 at a temperature of 18 °C has been demonstrated.