An effect of large angular dispersion for opal films in the visible spectrum has been found. This effect has been observed in refraction and reflection of light at the glass - photonic crystal interface. It has been shown that a stop band of the
photonic crystal is manifested against the background of the unchanged spectrum of reflected and refracted Bragg waves. A change in the position of this stop band can be induced by minor changes in concentrations of a number of substances filling the photonic crystal. The application of such an optical system as an optical chemical sensor has been demonstrated (Fig. 1.3).

Публикации:
Publications: