

Abstract

This thesis was focused on extraction of individual arsenic species from reference materials of fish protein DORM-3 and DORM-4. Extracts were then analyzed by a hydride generation method with detection by inductively coupled plasma mass spectrometry.

Materials were extracted in two ways – in a microwave device and in a heating block. It was found that extraction with 2% nitric acid is not efficient. Extraction performed in 2% nitric acid with addition of hydrogen peroxide at various concentrations increased the extraction yield, but it caused conversion of arsenic species. This conversion would mean the overestimation of inorganic arsenic content.