

**Abstract:**

This bachelor thesis reviews the data on the distribution of arsenic in surface and underground natural waters of the Czech Republic. In addition the thesis focuses on the occurrence of anomalous arsenic concentrations and tries to detect sources of arsenic contamination. Results of the thesis suggest high quality of the surface and groundwater in the Czech Republic with respect to arsenic. Its anomalous concentrations in the natural waters in Czech Republic have been rarely documented only in areas with strong anthropogenic impact and in areas affected by historical mining operations.

**Keywords:** Arsenic, toxicity, contamination, surface water, groundwater, Czech Republic