

Abstract

This bachelor thesis is dedicated to the use of renewable sources of energy in practice, namely in the Czech Hydrometeorological Institute (CHMI) objects, such as professional meteorological stations or observatories. The first part of bachelor thesis deals with the description of the alternative energy sources, the principles of acquisition and processing for the needs of the energy industry. The second part relates to devices already installed in CHMI objects and zooms technological solutions and experiences with the operation of these facilities. The third part presents a proposal for the use of specific devices for selected CHMI objects.

Key words: renewable sources of energy, solar energy, wind energy, hydro energy, heat pumps, biomass, meteorological stations