Description of Potential Project

Personal CO2 Alert System

Those who trek into volcanic areas such as researchers, search and rescue personnel, or even just adventurers may find themselves in an environment where CO­­2 levels are dangerously high. When cooled, CO2 emitted from volcanic activity is denser than air and can accumulate in low-lying topographical features. Carbon dioxide is odorless and colorless, so a warning system could be useful in order to prevent exposure. A personal CO2 sensor, worn on a vest, backpack, or around the neck could provide immediate alerts to excessive CO2 in the air via an audible alert tone and a simple display, such as a bar graph or flashing light.

Description of Potential Project

Rain alarm systems

Plan the day with confidence with your own rain alarm system. One advantage of using your own rain alarm system over regional weather predictions is that data comes right from your backyard. The weather forecast is based on two main related weather variables: temperature and humidity. The data after processed is displayed on an LCD screen. The system is useful for outdoorsy families since it provides information about when it’s going to rain and how heavy.