Below is the Floatron® water purifier, a product that combines two space technologies: NASA ionization technology for water purification and solar electric power generation. Marketed by Floatron Inc., Phoenix, Arizona, the Floatron device measures only 12 inches in diameter but it can purify a swimming pool, pond, fountain or other water container holding up to 50,000 gallons.

Floatron provides an alternative to chemical control of algae and bacteria through a process developed by NASA for purifying water aboard manned spacecraft (see page 110). The process involves introduction to the water of ionized minerals that kill microorganisms, such as algae and bacteria.

In use, the unit floats on the water, its solar panel (below) collecting sunlight that is converted directly to electricity. The harmless, low power current thus generated energizes a specially alloyed mineral electrode below the waterline and causes release of metallic ions into the water.

Floatron costs nothing to operate. The only part requiring replacement is the electrode, which has a service life of approximately two years and can be changed in one minute.

Floatron-purified water falls within drinking water standards established by the Environmental Protection Agency. Additionally, the water remains clear and stable for extended periods because the minerals do not evaporate.

*Floatron is a registered trademark of Floatron Inc.