Canadian astronaut will use AES Sunphotometer

Marc Garneau the recently named Canadian astronaut, will point a small light meter-like instrument at the sun through the window of the October space shuttle flight.

The Super Sunphotometer experiment will support current Canadian environmental research in climate, the ozone layer and acid rain.

Aiding climate research, the Sunphotometer will measure the state of the El Chichon volcanic cloud in the stratosphere. The haze cloud is slowly disappearing and Environment Canada scientists want to study how this is happening.

The Sunphotometer will measure gases, such as water vapor which affect the chemistry of the ozone layer, vital in protecting the earth's surface from ultraviolet solar radiation.

In the acid rain monitoring network in Canada, the Sunphotometer has become the instrument against which all others are calibrated.

The Sunphotometer, recently designed by Environment Canada scientists and built by Sonotek Ltd., a Mississauga, Ontario firm, replaces an older instrument monitoring haze in the atmosphere.