Vacuum Society honors Farnsworth and Kazmerski

As part of its annual meeting this November, The American Vacuum Society will present the Medard W. Welch Award to Harrison B. Farnsworth and the Peter Mark Memorial Award to Lawrence L. Kazmerski. Farnsworth will be honored for his pioneering studies of atomically clean surfaces, and Kazmerski will be recognized for his investigations on the electrical and chemical properties of solar cells.

FARNSWORTH

KAZMERSKI

The Welch Award was established in 1969 to commemorate the efforts of Medard W. Welch in founding and supporting the AVS by recognizing and encouraging outstanding theoretical or experimental research in fields of interest to the AVS. The award consists of a solid gold medal and a thousand dollars. Farnsworth has been a leader in the field of surface science since his graduate work at the University of Wisconsin in 1922, when he wrote a paper in the Physical Review on the reflection of electrons from metal surfaces. He continued these investigations at the University of Maine until 1928 when he joined Brown University where he remained for 45 years. His investigations have covered a wide range of topics in surface physics, including the fundamental work on inelastic diffraction, the use of radio tracer techniques to study adsorption, and the development of ion bombardment cleaning techniques. He was the first to observe the reconstruction of elemental semiconductor surfaces, to investigate the surface of vacuum-cleaved crystals, to study the effects of surface damage on catalytic reactions.

The Mark Award was established in 1979 as a memorial to Peter Mark, the editor of the *Journal of Vacuum Science and Technology* from 1975 until his death in 1979. It recognizes the outstanding theoretical and experimental work of a scientist or engineer under the age of 35 and includes a $500 prize. Kazmerski is cited "for demonstrating the correlation between the electrical and chemical properties of interfaces in polycrystalline photovoltaic devices." Kazmerski, now in the photovoltaic devices and measurement branch of the Solar Energy Research Institute, received his PhD in 1970 from the University of Notre Dame. He joined the University of Maine's Electrical Engineering Department in 1971, where he continued his research until 1977 when he became senior scientist at SERI. The topics of his published papers include photovoltaics, thin films, surface and interface phenomena, molecular-beam epitaxy and semiconductor defects.

Engineering awards to VLA, coal process and windmill

The National Society for Professional Engineering has announced selections in their annual recognition of engineering achievements. Among the ten examples cited are the National Radio Astronomy Observatory's Very Large Array (VLA) Telescope Facility at Socorro, New Mexico, the high-gradient magnetic separation of coal at Oak Ridge National Laboratory in Tennessee, and the Makani Huila 200-kW Wind Turbine at Kahuku, Hawaii.

The VLA radio telescope is located on the Plains of San Augustin, an ancient seabed 7000 feet above sea level, near Socorro, New Mexico. The VLA consists of 27 antennas, each 82 feet in