

Harry Diamond Award presented to Guenther

The Harry Diamond Award, one of the four IEEE Field Awards to be presented in 1971, will be awarded to Arthur H. Guenther. Guenther will receive this award for his contribution to "high power pulse techniques that simulate the environmental effects of nuclear weapons explosions, a vital part of the safeguards to the nuclear test ban treaty."



GUENTHER

Guenther is adjunct professor at the Air Force Institute of Technology and has a graduate faculty appointment with the department of electrical engineering at Texas Tech.

Because of Guenther's inventions such as the laser triggered switch, and his experimental ingenuity, the Air Force has been able to create artificially many of the effects of nuclear explosions and to use those techniques to evaluate the survivability and vulnerability of various systems to nuclear encounters.

Department of Commerce honors Robert P. Madden

The US Department of Commerce's Samuel Wesley Stratton Award will be presented to Robert P. Madden, chief of the far-ultraviolet physics section of the National Bureau of Standards, optical-physics division. This award, which consists of a bronze plaque and a \$1500 honorarium, is given annually to honor outstanding scientific or engineering achievements. Madden was specifically cited for "imaginative use of a high-energy accelerator to open a new and rewarding field of atomic research."

Wasserburg receives Arthur L. Day Medal

The Geological Society of America presented the Arthur L. Day Medal to Gerald J. Wasserburg of the California Institute of Technology. This gold award is presented annually for outstanding contributions through the ap-

plications of physics and chemistry to geological problems.

Among Wasserburg's achievements is the development of potassium-argon dating techniques that are used to date sequences of layered rocks in the exploration for oil, gas and metals. He has participated in the lunar-sample evaluation program and his studies of the geology of radioactive elements have led to contributions in the areas of heat flow in the earth, the chemical composition of natural gases and the evolution of the earth's atmosphere.

John R. Ferraro honored with spectroscopy award

John R. Ferraro, senior chemist at Argonne National Laboratory, is this year's recipient of the Award for Outstanding Achievements in Spectroscopy presented by the New York Section of the Society for Applied Spectroscopy.

The award, presented to Ferraro on 18 Nov. during the Eastern Analytical Symposium in New York, is conferred annually "to recognize outstanding accomplishment in spectroscopy and effort expended toward the advancement of this branch of science."

Ferraro, the present editor of *Applied Spectroscopy* and the past president of the Society for Applied Spectroscopy, has authored or co-authored some 130 papers and two texts. His research presently includes infrared and Raman spectroscopy of inorganic and coordination complexes at high pressure.

Walter H. Zinn receives Elliot Cresson Medal

Walter H. Zinn, vice-president of Combustion Engineering, Inc., was one of three physicists honored by the Franklin Institute during the Institute's Medal Day ceremonies on 21 Oct. (see *PHYSICS TODAY*, December, page 65). The Elliot Cresson Medal, the oldest medal conferred by the Institute, was awarded to Zinn for outstanding contributions to nuclear energy, spanning four decades.

Zinn's contribution to nuclear physics began in the late 1930's when he collaborated with Leo Szilard in one of the experiments proving that fission chain reaction was feasible. Later,

working under Enrico Fermi, he carried out many experiments necessary to develop sustained fission chain reaction. He was also the leader of one of the teams that constructed the reactor in Chicago's Stagg Field in 1942.

During the 1940's, Zinn was responsible for the design and construction of the first heavy-water reactor and then became the first director of the Argonne National Laboratory. He also laid out the basic design features of the Experimental Breeder Reactor that produced the first electricity from nuclear power and first demonstrated the breeding of nuclear fuel.

After resigning his directorship of Argonne in 1956, Zinn founded the General Nuclear Engineering Corp and served as president until 1964, when the company was integrated into Combustion Engineering, Inc. He is currently devoting his attention to the development of nuclear-power plants for commercial applications.

James E. Faller receives ISA Arnold Beckman Award

James E. Faller, associate professor of physics at Wesleyan University, received the Instrument Society of America's Arnold O. Beckman Award "for his work in the development of a new method for the measurement of the local acceleration of gravity."



FALLER

This award consists of an engraved plaque, certificate and \$1000 honorarium, and is given in recognition of significant technological contribution to the conception and implementation of a new principle, or instrument design, development or application.

Faller began his work in measuring the acceleration of gravity while working on his PhD at Princeton University. He has since developed a laser-interferometer apparatus to determine gravity acceleration at nine international sites. He also developed the photoelectric spectrometer that was used at the total solar eclipse in 1966 at Huachacalla, Bolivia, and he suggested the basic design for the fused-silica retro reflector