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OLD SEARCHLIGHT AIDS IN JET STUDY

Discard Used at Fordham by Tibor Laszlo in His Solar Research Experiments

Army surplus costing $500 has been parlayed into a potential multimillion-dollar scientific achievenment by a solar scientist who worked at Fordham University.

Just prior to Tibor Laszlo's resignation as director of the university's high temperature laboratory last week it was announced that he had completed some of his most significant work in solar research.

Seven years ago Mr. Laszlo fled Communist Hungary and established at Fordham one of the first solar furnaces on an American campus. He made it out of an Army surplus searchlight. Within a short time it was generating temperatures exceeding 9,000 degrees Fahreheit and was being used in experiments "invaluable to the future of science."

Dr. William O'Connor, chairman of the university's Department of Chemistry said Mr. Laszlo's latest experiments were "of a potential value to present national defense and to future generations in the millions of dollars."

Atmosphere Simulated

Mr. Laszlo developed a way to simulate the atmosphere of interstellar space, in which materials can be studied at temperatures of thousands of degrees. That is an important step in determining at what temperatures materials used in jet planes, rockets and guided missiles will melt under actual flight conditions.

The scientist also crystallized highly refractory materials in forms said to be the purest achieved at high temperatures.

He made important findings from his recent study of titanium nitride under high temperatures. He feels that they confirm his hypothesis that the compound with its extremely high melting point is an ideal material for use in tomorrow's jets and rockets.

The Fordham solar furnace works on the principle used by the schoolboy who burns a piece of paper with sunlight focused through a magnifying glass. The furnace's sixty-inch mirror focuses the sun's infra-red rays on a small surface about the size of the top of a pencil and the material melts.

The solar furnace is superior to conventional gas and electric arc furnaces because it can reach 9,000 degrees Fahrenheit, necessary in the testing of new compounds of the atomic age.

Unlike a conventional furnace, the solar device is instantaneous in melting material. It also allows the researcher to observe the specimen at all times and it protects the specimen from contamination by the melted insulating materials. That insures increased accuracy in the experimentation.

Mr. Laszlo will continue such work at the Wright Aeronautical Division of the Curtiss-Wright Company in Wood Ridge, N. J.