

László S. Tibor 1955  
Born 1912, Oravica

## SUN'S RAYS MELT CITY'S COLD STONE

But It's Done by Mirrors in  
New Solar Furnace Designed  
by Fordham Scientist

The city's first solar furnace melted a bit of cold Manhattan granite in three seconds yesterday.

The device, which employs a sixty-inch parabolic mirror to trap the sun's infra-red waves, was demonstrated on the campus of Fordham University, where chemists fashioned it from a surplus Army searchlight.

Dr. Tibor S. Laszlo, its designer and the director of Fordham's high-temperature laboratory, said the furnace has been able to develop a temperature of 6,044 degrees Fahrenheit, about half the surface temperature of the sun. With mechanical improvements and a 120-inch mirror planned for construction this fall, he hopes to attain 9,000 degrees.

Unlike solar ovens, which are being used experimentally to harness the sun's energy, Dr. Laszlo's furnace was planned to collect a maximum of heat for concentration in a small area. Test materials are melted or even boiled in one spot about the size of a dime. Their physical and chemical properties at high temperatures can then be studied.

In the solar furnace, it was shown, only a small spot is exposed to intense heat. Observers can watch the heating action through tinted glass and handle the test material after it is removed with a vise-like arm. The high temperatures are achieved so quickly that some twenty experiments can be made in half an hour.

Besides determining the melting and boiling points of several materials, the chemist plans to study other properties at various temperatures. He said atomic scientists and jet aircraft designers were eager for all possible high-temperature test results.

The world's first solar furnace was built in Jena, Germany, in 1924. Dr. Laszlo said he knew of only two in operation today, one in Montlouis, France, the other used in research for private industry in San Diego. Dr. Laszlo plans to invite all scientists with research problems to use the Fordham furnace.

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