



Maria Telkes, born today in 1900, was a Hungarian-American physical chemist who pioneered in the application of solar energy to water distillation and home heating. Telkes was raised in Budapest and studied physical chemistry at the University of Budapest, graduating with a B.A. in 1920 and a Ph.D. in 1924. She decided to immigrate to the United States after visiting a relative in Cleveland. In 1925, she accepted a position as a biophysicist for the Cleveland Clinic Foundation, where she helped to create a photoelectric device that recorded brain waves.

In 1937, Telkes became a research engineer at Westinghouse Electric, where she developed instruments that converted heat into electrical energy and made her first forays into solar energy research in 1939. That year, as part of the Solar Energy Conversion Project at the Massachusetts Institute of Technology (MIT), she worked on thermoelectric devices powered by sunlight.

Telkes was assigned to the U.S. Office of Scientific Research and Development during World War II, and it was there that she created one of her most important inventions: a solar distiller capable of vaporizing seawater and re-condensing it into drinkable water. Her invention saved the lives of torpedoed sailors and downed airmen, and was later redesigned to help meet the water needs of the Virgin Islands with a modified version still in use today. Until the end of her career, Telkes continued to develop solar-energy applications and received several patents for her work. She helped design and constructed the world's first modern residence heated with solar energy.

In 1952, Telkes became the first recipient of the Society of Women Engineers Achievement Award. She received a lifetime achievement award in 1977 from the National Academy of Sciences Building Research Advisory Board for her contributions to solar-heated building technology, and the Charles Greeley Abbot Award from the American Solar Energy Society. Telkes held seven patents in the United States for various methods for storage of heat, heating technologies, as well as cooling technologies. Due to her many contributions to solar technologies, Maria Telkes was inducted into the National Inventors Hall of Fame in 2012.

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