

Innovative ideas in the beta and technical domain

Solar thermoelectric generator

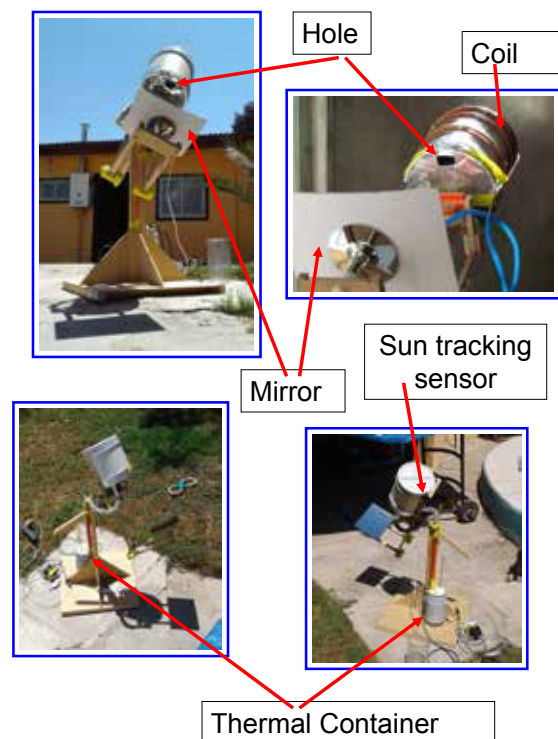
Energy production, besides with environment care, are one of the most concerning issues for nowadays society. The big challenge here is to find the most clean, efficient and cheaper energy source. Most of the current technologies match with one or two, but not all of these properties. Particularly solar energy is maybe one of the cleanest energy sources, nevertheless its high price and low efficiency make it not very competitive in the global market.

Here we propose to build a thermoelectric generator powered by concentrated solar radiation that could reach a quite high efficiency with a relatively low price.

What is the idea?

By means of a parabolic mirror the sun light is concentrated in a small point and made pass through a small hole into a big closed cavity keeping it inside. The radiant energy is transferred to a water flow, heating it as much as possible. Then this hot water is used to impulse a thermal engine witch ultimately can generate electric power. If properly constructed, this system could offer the highest efficiency among all concentrated solar systems.

Solar Collector Prototype



Adolfo Toloza, PhD in theoretical physics, and I am in Amsterdam doing a postdoctoral research about gravity at University of Amsterdam.

My main interest is science, though I am very concerned about the issue of energy and environment, for this reason I would like to put my skills and knowledge to the service of society and the earth planet.

