Technical Assistance Request

Project: Reliable and Low Cost Solar Tracking

Company: Gizmatic LLC

Address: 7411 Livingston Rd., Ste 204, Oxon Hill, MD 20745

Contact: Will Vatis, 571-488-1614, will@gizmatictech.com



Our team is working on developing a low cost, low maintenance, and robust solar tracking system, which uses electrically heated nitinol shape memory alloy coils for actuation. In order to help us develop our new technology we request technical assistance in the following areas:

PV Solar Panel Power Output:

- Comparative testing and validation by a trusted third party to show performance benefits of our system over conventional fixed angle solar panels.

System Testing:

- The main functional components in our system are two opposing shape memory alloy coils. They are also the main moving component. Due to this, it is critical that we verify they do not fail in fatigue under typical cyclical loading. This can be done through extending testing under controlled conditions.
- In addition to the coils themselves, it is important that the entire system is reliable under cyclical loading, as well as wind loading and extreme weather conditions (heat, rain, snow, etc.). This can be verified through extending testing under controlled conditions.

Business Consulting:

 A key point of our business plan is to partner with solar industry panel manufacturers and/or installers as an avenue to sell our solar tracking system. We will also need partners to work with for the final stage of design, to ensure our system works with existing solar panel hardware and installation procedures. We will need assistance identifying and networking with potential partners for these purposes.

Manufacturing Supply Chain:

- We will need assistance from the American Made Network or other partners to help find local solar system manufacturers and/or suppliers and establish our manufacturing supply chain. Specifically sourcing PV panels themselves.