

Technical Assistance Request

MujiElectric LLC, herein referred to as MujiElectric, is a new startup, a black-owned business, focused on commercializing state of the art holistically designed high efficiency perovskite solar cells. To accomplish this, the company is requesting for technical assistance in the following areas:

Optical constant material library for perovskite based devices

One of the important steps to achieving MujiElectric's goals is performing high level optical design on perovskite solar cells. Those in this industry who have done this type of work would already be fully aware as to how important it is to have accurate material optical constants. In fact, in this area, many heads are better than one, especially because spectroscopic ellipsometry can get complicated, in addition, some groups may have a lot of experience in working with some specific materials. Anyway, it would be useful if the people with these libraries would be willing to share the data, along with information on what material it is that has been characterized. MujiElectric is also willing to collaborate with groups out there on building a comprehensive and definitive optical constant material library for perovskite-based devices – this would indeed greatly assist in perovskite based research and manufacturing.

Industrial scale manufacturing

MujiElectric is working hard to develop a perovskite-based prototype that can easily be scaled to large industrial size manufacturing processes. To this end, the company wishes to leverage the American Made Network in order to engage with large scale manufacturers of perovskite-based devices, or other photovoltaic materials. This is an ongoing effort by the company to gain a solid understanding of how industrial scale, high throughput production lines work, and the kinds of issues that arise often in these types of environments. Additionally, MujiElectric is interested in learning more about contract manufacturing in the perovskite space. MujiElectric's representatives would be open to speaking with any parties involved in large scale manufacturing.

Electric vehicle photovoltaic integration

One of the markets that MujiElectric is interested in, i.e., in marketing its developed solar cells to, is electric vehicles. There is a lot of progress being made in not only charging technology, but also energy demands made by vehicle connectivity and autonomy. To this end, MujiElectric is hoping to gain a good understanding on the work and issues surrounding solar integration initiatives. This is a broad request, but it will greatly help the company to understand how to design its devices to meet specific vehicle energy needs.

Venture funding

MujiElectric is keen to grow and scale its business and hence, the company is keen on pursuing various funding initiatives, one of which is venture capital. As many may already know, this is not a simple feat, all the way from finding the right partners, to negotiating classes of company shares, it can easily seem impossible. To this end, the company hopes to leverage the American Made Network in order to find the best people to partner with on the journey to commercialization.

MujiElectric LLC

A Black-owned Business

American Made Perovskite Startup Prize

MujiElectric's people would be willing to talk to any parties with knowledge or experience in this area.

Filing full utility patent applications

As MujiElectric is growing, and is filling more and more provisional patent applications, the costs associated with filing the full utility applications are extraordinarily large. Especially the associated intellectual property lawyer fees. As many already know, these costs can easily be prohibitive for many small businesses. To this end, MujiElectric wishes to leverage the American Made Network to see what assistance is available for small businesses in this photovoltaic space who are filing numerous patents. Any helpful information on this topic would be of immense importance.