MicroPower Global Corporation

Thin Film Engineer

(Sr. Engineer, Grade 8 or 9)

Department Description
MicroPower Engineering, San Marcos, TX
MicroPower Global Corporation ("MicroPower") is a private company developing a new semiconductor device that can efficiently and cost-effectively convert heat directly into electricity, leading to significant energy savings. This is a clean, green technology which will save energy, reduce harmful emissions, and lead to the availability of substantial carbon credits for applications in industrial, transportation, consumer, aerospace, government and solar. MicroPower's Engineering department is engaged in developing this technology into cost-effective and manufacturable devices and modules.

Scope of Responsibilities/Expectations
This position will be focused on applying an understanding of materials science and clean room processes for the development of solid state thermoelectric devices and thermoelectric modules for use in next-generation green energy. The *Thin Film Engineer* will have these fundamental responsibilities:

- Lead the selection, installation, and qualification of an appropriate Metallization tool.
- Provide technical insight of the Thin Films deposition of novel Ohmic contact layers for thermal electric devices.
    - Design appropriate process methods to lay down Ohmic contact layers providing low resistance, diffusion barriers and inter- metallic adhesion.
    - Design and Perform DOEs, ANOVAs and other experiments
    - Use metrology tools (SEM, 4 point probe, Profilometer, etc.)
    - Create and document specifications
    - Meticulous about experiment data recoding
    - Maintain preventive maintenance schedule
- Bring the Thin Films process into statistical control for volume manufacturing.
- Demonstrated knowledge in surface preparation (cleans)
- Assist in the evaluation of lower cost approaches.

Specific Knowledge/Skills
The job requirements include:

- B.S. or M.S. in material science or relevant discipline with 5 to 7 years of experience or more with thin film deposition such as sputtering, evaporation, CVD, PECVD, plating and diffusion.
- Significant experience in clean room operations, tool installation and qualification as well as the proven ability to document process flow, tools, waste, and consumables.
- Pragmatic, hands-on follow through.
- Experience doing design of experiments using statistical software
- Ability to interact well with a multi-disciplinary technology team in the creation of new designs and approaches.
- Excellent organizational and communication skills, both written and oral.
- Flexibility in scope of job responsibilities in a start-up environment.
- Willingness to do light travel.
- US Citizen or Permanent Resident

How to Apply
Qualified candidates should submit their resume to Mike Gardner, V.P. of Egr & Ops, at mike@micropower-global.com. Please refer to requisition number REQ 206.

MicroPower is an equal opportunity/affirmative action employer. We welcome and encourage diversity in our workforce.