

Title Ceramic Materials Development Engineer

Department NASCENTechnology, Inc., Watertown, SD

Reports to VP/GM NASCENTechnology

Job objective

This position will provide LTCC and ferrite materials development support to NASCENTechnology's new product development team which develops multilayer transformer, inductor, and module designs using cast ferrite tape systems and Low Temperature Co-fired Ceramic processing methods. Materials development is done by collaborating with suppliers to ensure that materials selected and chemical formulations developed are processable, and meet the desired electromagnetic, mechanical, thermal, physical and chemical properties.

Responsibilities

- Develop new materials formulations, qualification and production phase-in plans for ferrite LTCC materials, conductor inks, and dielectric paste systems.
- Lead new material development by researching the current state of the art in low temperature fired ferrites, documenting material performance requirements, identifying potential solutions, and collaborating with suppliers to find cost effective materials advances.
- Develop and ensure all incoming materials inspection systems are in place for new materials and provide guidance on incoming inspection of existing materials.
- Solve complex materials problems at the system (material interaction) as well as component (single material) levels.
- Collaborate with NASCENTechnology design engineering and marketing to identify new raw material property goals and economically justify project budgets.
- Research and identify potential new suppliers of ferrite based raw materials.
- Collaborate with NASCENTechnology Manufacturing to improve production yields and product reliability when needed.

Job specifications

- MS Ceramics Engineering or BS in Ceramic Engineering with equivalent in experience.
- MS Materials Science Engineering or BS Materials Science with equivalent in experience.
- MSEE with electronic materials emphasis or equivalent in experience.
- Experience or education in ferrite material theory is desirable.
- Ceramic tape casting or thick film material experience is a plus.
- 3 years experience in Engineering/R & D environment is desired.
- Candidate must be either a U.S. citizen or a permanent U.S. resident.
- Candidate will work closely with manufacturing and business development teams to ensure that projects are on time and within budget.