



Ampère

Unité Mixte de Recherche du CNRS - UMR 5005

Génie Electrique, Electromagnétisme, Automatique,
Microbiologie environnementale et Applications

mardi 10 mai 2016

Our Reference : C13

SiC Power Semiconductor Devices Characterization & Modeling

Post-Doctoral position

Period : starting from June 2016 for duration of 12 months

Context : The study is supported by the GENOME/PREMICE French Project

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applications to be submitted immediately.

Areas of knowledge : Electronics, Power electronics, Semiconductor

General context : The GENOME/PREMICE project aims to evaluate the maturity of industrial level power semiconductor devices based on Wide Band Gap (SiC). In this context, advanced power semiconductor device models are needed, for design purposes.

Work definition :

The use of SiC power semiconductor devices need advanced models for design purposes. The candidate will have to achieve electrical measurements (in static, transient and switching modes) to extract the model parameters and fit the simulation with experimental results.

The application to analyze the Safe Operating Area would be a final step.

The target simulation framework is SABER/MAST.

Profile of the candidate : PhD or equivalent, Engineer even Master Degree. The candidate must have **good** knowledge in electronic/electrical system measurements. He/she must be familiar with the basics of power semiconductor devices and have some knowledge on semiconductor physics.

An experience circuit simulators like SABER/MAST will be a plus.

Fluency in English will be appreciated.

Contact us with a CV and possible reference people.