



## Research Engineer in Converter Integration (M/F)

Company: MITSUBISHI ELECTRIC R&D CENTRE EUROPE

1, allée de Beaulieu, CS 10806, 35708 Rennes Cedex 7, France

Web site: <http://www.fr.mitsubishielectric-rce.eu/>

Type of contract: permanent contract, as soon as possible; reference PES\_PERM\_042019

### Context and description:

MITSUBISHI ELECTRIC is one of the leading manufacturers of power electronics related products such as power devices, inverters for motor drives. As MITSUBISHI ELECTRIC Group's subsidiary, MITSUBISHI ELECTRIC R&D CENTRE EUROPE includes a research division specialised in power electronics and its application to renewable energy systems and power electronic products.

The research team is located in Rennes (France – Bretagne [35]) and is looking for a research engineer with expertise in converter integration, with the following duties:

- Conducting research in the domain of heterogeneous power integration, die embedding, and multi-objective (cost-performance-reliability) converter and power component optimisation.
- In conjunction with academic partners, developing highly integrated power assemblies and converters and the associated manufacturing processes for extended-lifetime and high-density integration.

### Education and experience required:

- PhD degree on subjects linked to power integration, converter topologies and their multi-objective optimisation.
- At least 3 or 4 years of experience (including PhD degree) within the field of converter design and integration, through a public or private R&D laboratory (industrial experience is a plus).
- Expertise in power converter topologies, their control, the use and integration of power devices (including wide band-gap: SiC and GaN).

- Basic knowledge of any of the topics of converter stress and reliability, power electronic packaging and associated experimental procedures.
- Familiarity with PCB process flow and real-time control systems.
- Familiarity with simulation tools such as SABER, MATLAB/Simulink, FEM Analysis.

Personal Profile:

- Ability to work across multiple tasks methodically and efficiently and meet committed schedules.
- Motivated to work in dynamic environment and adaptable to changes in priority.
- Excellent communication and interpersonal skills: ability of sharing information with team players (must show evidences of team-working).
- Fluent English.
- Availability for frequent business trips abroad.

Contact:

Madam Magali BRANCHEREAU (Human Resources),

Please send your CV and motivation letter in pdf format by email (in object: your name + the reference PES\_PERM\_042019) to : [jobs@fr.mercede.mee.com](mailto:jobs@fr.mercede.mee.com)