





## **JOB Announcement INNOSENSE Europe / Labo Ampere**

# PhD in magnetic and electronic field

Based in Lyon area, France

#### **About Innosense**

INNOSENSE is expert in solution for automotive electrical component/measurement INNOSENSE European Innovation Center has for main missions:

To be advanced technology and innovation center of the company.

To define with customer (Power Module Maker, Battery Management Unit maker or even OEM) next generation of electronics component with integration of several features (T°, Current, Voltage, Software & Al...)

To build a lab able to test & prototype & validate new concepts

To work with our Chinese R&D center together and support their project development

Our company is developing a new concept of sensor using magnetic field properties

## **Job Overview:**

We are looking for a candidate to a PHd in magnetic and electronic field for current sensors application.

The position is open in our European Innovation center is based in Brignais (Lyon Area) with part time (30%) to be done in Labo Ampere (Villeurbanne, Lyon Area).

You will be integrated in our local INNOSENSE team (3 persons) in Brignais under the lead of our Innovation Manager and work in parallel with Professors and Research Center at labo Ampere I in Villeurbanne

An appetite for innovative technologies, a strong autonomy, a taste for challenge are all qualities that are necessary to join our growing company, with the opportunity and responsibility to contribute to our brilliant future.

#### **Responsibilities:**

- Understand physical phenomena around our concept
  - Magnetic Field analysis and impact analysis on the head of our sensor
  - Ferro Magnetic material analysis
  - o Analysis of different sensor construction with different magnetic field material
- Build and test prototype
- Simulation tools comparison with test bench
  - Model définition
  - o Simulation Loop to have a tool for future design (using COMSOL...)
  - o Create SW simulation to optimize Design loop







- Analysis of impact for different application and level of magnetic field, level of frequency...
- Conduct technical competitive analysis and benchmarking
- Communicate complex engineering ideas in simple and effective way but rooted in engineering principles.
- Define new features and solutions

# **Your profile**

- Engineer / Master / good skills and know-how on Electro-Magnetism
- Electronic HW and SW capability
- English skills: Good level
- Communicative Behavior & Sense of Responsibility

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#### **Generic Information**

Localization: Brignais (70%) Villeurbanne (30%

Contract type: CDD PhD 36 months Full Time

Starting date: 1st of September 2024

Salary: Minimum 2135€/month

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