



Iveco Group N.V.  
Corporate Seat: Amsterdam,  
the Netherlands  
Chamber of Commerce  
Registration no.  
83102701

**Iveco Group** (MI: IVG) is a global automotive leader active in the Commercial & Specialty Vehicles, Powertrain, and related Financial Services arenas. Each of its eight brands is a major force in its specific business: IVECO, a pioneering commercial vehicles brand that designs, manufactures, and markets heavy, medium, and light-duty trucks; FPT Industrial, a global leader in a vast array of advanced powertrain technologies in the agriculture, construction, marine, power generation, and commercial vehicles sectors; IVECO BUS and HEULIEZ, mass-transit and premium bus and coach brands; Iveco Defence Vehicles, for highly-specialised defence and civil protection equipment; ASTRA, a leader in large-scale heavy-duty quarry and construction vehicles; Magirus, the industry-reputed firefighting vehicle and equipment manufacturer; and IVECO CAPITAL, the financing arm which supports them all. Iveco Group employs approximately 34,000 people around the world and has 28 manufacturing plants and 29 R&D centres.

We would like to fill the following position as soon as possible:

## BMS Algorithms Developer

As a member of the BMS Development Team in the Battery & Fuel cell division of FPT Industrial, you will be part of a highly skilled team driven to design and engineer best-in-class battery modules, packs and systems for FPT Industrial electrified powertrain product portfolio. You will be contributing to the development of advanced concepts as well as their implementation for application to on-road vehicles and non-road applications, by developing, implementing, testing and validating algorithms for the BMS.

### Your tasks

- Defining testing protocols for characterization of battery cells and battery systems needed for algorithms development and validation
- Creating detailed battery models to simulate battery systems behavior
- Performing data analysis of experimental data and postprocessing of simulation results required for development and validation of BMS algorithms
- Developing battery state estimation algorithms such as SoC and SoH using innovative methods (Kalman filters, Neural Networks, AI, etc...)
- Implementing the control logic in Matlab-Simulink using a model-based approach. This includes function optimization for implementation onto embedded systems
- Performing algorithms testing and validation at MiL, SiL, HiL and component level to evaluate correctness and accuracy
- Generating design and user documentation, validation plans and reports

### Your profile

#### Basic Qualifications:

- Professional or university education MSc degree in engineering fields
- 3-5 years of experience in Battery Management Algorithm development

FPT Motorenforschung AG  
Schlossgasse, 2  
Postfach 80  
9320 Arbon – Switzerland  
Ph: +41 71 447 74 77  
VAT n° CHE-108.055.502



- Programming skills in Matlab-Simulink and in C-code
- Specific Knowledge of Li-ion battery aging and performance indicators (SoC, SoH, SoX, SoF)
- Generic knowledge of battery management algorithms (Cell balancing, contactors control, charging, communication, etc...)
- Experience with battery modelling using equivalent circuits and mathematical modelling
- Experience with adaptive and predictive algorithms such as Kalman Filters, AI methods and Neural Networks

**Preferred Qualifications:**

- PhD in engineering fields
- 5 years working experience in a relevant field
- Expertise in programming
- Fluency in English written and spoken, German or Italian language beneficial

Please note that the position may be either based in Arbon (Switzerland) or in Coventry (UK).

**Interested?**

Please send your application in English to [recruitment.arbon@ivecogroup.com](mailto:recruitment.arbon@ivecogroup.com)

FPT Motorenforschung AG, Schlossgasse 2, CH-9320 Arbon, Tel. +41 71 44 77 477,  
[www.fpt-motorenforschung.ch](http://www.fpt-motorenforschung.ch)