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

Iveco Group (MI: IVG) is a leading global automotive company active in commercial and special vehicles. It employs approximately 35,000 people worldwide and has 28 production sites and 29 R&D centres. Within the Group, FPT is the business unit specializing in the research, development and production of powertrains.

Around 270 highly qualified employees work at FPT Motorenforschung AG in Arbon, directly on the shores of Lake Constance in North-Eastern Switzerland. We are the leading innovation centre for FPT and play a central role in the development of future powertrain solutions (not only for diesel engines but also for electrified drivetrains, hybrid engines and fuel cells, as well as for novel engine concepts and fuel types) and are therefore at the forefront of a transition within Iveco towards a future of alternative propulsion systems.

We are currently looking to fill the position as

Hydrogen Module Systems Engineer – PEM Fuel Cell (f/m/d)

Scope of the role:

In this position, you will support the engineering, development, and integration of fuel cells into hybrid powertrains for light to heavy commercial vehicles. You will be responsible for the entire H2 module on a fuel cell, from interface to the supply to purging and draining, including recirculation and H2 injection. You define requirements at system and components level based on system and stack operation requirements, translate them to technical implementation, coordinate with design teams, plan the development, testing and validation of the hydrogen module and integration in the main system.

Your responsibilities:

- Develop requirements and specifications for hydrogen subsystem and components
- Scout for hydrogen loop components, build and maintain technical relationship with component suppliers
- Coordinate activities of internal design functions to reach subsystem requirements
- Create hydrogen subsystem development-, design- and validation-plans based on internal and external standards and safety best practices
- Develop test protocols together with test engineering and assist in the characterization of components
- Create design documentation and manage change processes for the subsystems along the lifecycle
- Support material selection for prototyping and long-term industrialization of media supply unit
- Assist the functional and geometrical integration of the hydrogen subsystem into the fuel cell system
- Support the development of safety work products like DFMEA and safety risks mitigation strategies
- Assist in the assembly and prototype of test samples and coordinate failure analysis of tested samples
- Interpret test data and provide detailed documentation with results and analysis
- Assist cost engineering by providing design and material specifications
- Monitoring the latest technology developments and trends in industry
- Develop roadmaps for future projects and products to achieve continues improvement of our fuel cells
- Collaborate closely with external laboratories and universities

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Our requirements:

- (Post)graduate degree in a relevant engineering field such as Mechanical Engineering, Material Science or a closely related discipline
- 4+ years of **work experience with hydrogen is an *indispensable must-have* qualification**; it would be ideal, but not mandatory, if at least parts of this experience had been gained in an industrial setting
- Strong knowledge of hydrogen properties including fluid mechanics and thermodynamics.
- Understanding of fuel cell operating principles and trade-offs as well as the electrochemical foundations
- Capable of developing simple models in Excel/Matlab for sizing of components
- Understanding of manufacturing and prototyping processes for key hydrogen subsystem components, including a strong technical grasp of recirculation pumps, injectors and ejectors
- Understanding of CFD and FEA analysis as well as design principles and standards
- Fluency (C1 or higher) in English as our business language is a must, with additional German skills being considered a strong asset.
- **A valid work permit for Switzerland is a *compulsory* requirement** (not needed if you are a Swiss citizen or hold a passport from an EU-26 or EFTA member state!)

Life at FPT/IVECO in Arbon

Arbon is located in North-Eastern Switzerland on the shores of Lake Constance 30 minutes from the German and Austrian borders offering an outstanding quality of living, with our site being based right at the lakefront. Lunchbreak by the water or meeting the family after work in the park? That will take you literally just seconds. Are you more into skiing, hiking or biking than watersports? The Swiss and Austrian mountains are at our doorstep. You prefer settling in a city over country life? St.Gallen, Eastern Switzerland's cultural and economic center with its world-renowned university, is a mere 15 minutes' drive from Arbon (yes, we provide free parking) with distinctively more affordable costs of living than most of the other larger cities in Switzerland.

As Swissmem members, our working conditions are regulated by the **tariff of the Swiss machinery and metal industry**. We work a 40 hour week with flexible working hours, offer between 25 and 30 days of holidays per year depending on your age grade (plus another 5 to 6 days off as a compensation for 10 minutes extra per day, so in effect **30 to 36 days of holidays for a 40.83 hours week**), **home office** opportunities of **up to 12 days per month** (depending on the position) as well as an open-minded corporate culture with international and diverse teams, flat hierarchies and informal culture based on mutual respect. And, most importantly, we are providing a state-of-the-art environment for engineers in the automotive industry that is second to none within Switzerland and offers various career paths for all interests.

Interested?

Please send your application to recruitment.arbon@ivecogroup.com

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