

We look for a Carbon Quality Engineer

Spark is a young start-up developing clean hydrogen production units, with zero-CO₂ emission and 4x less electrical power than electrolyzers. We developed a unique nanopulsed **plasmalysis** process: non-thermal plasmas (controlled lightning!) extract hydrogen from (bio)methane, with solid carbon as a co-product. In the past two years, we have developed an elementary nanopulsed plasmalysis module operating continuously. In 2023, we will be deploying a pre-industrial Demonstrator by stacking 5 modules, and are focusing on the **valorization of the carbon co-product**. We are looking for highly skilled Ph.Ds & engineers to join the team as we scale up!

Your mission (shall you accept it!) :

- Characterize the carbon currently produced by Spark, using existing diagnostics and implementing new ones (SEM, TEM, Raman, TGA, BET,) and implementing new ones so as to qualify the material for the applications of interest
- Optimize the quality of the carbon produced in the reactors in the R&D Lab as well as on the Demonstrator .
- Support the work done with our partner laboratories and the modeling team to predict the quality of the carbon produced in our setup.

You will report to the CTO, and interact daily with Spark's Experimental team and our network of suppliers and integrators.

You are:

- A material-science engineer with hands-on experience in Laboratory analysis
- Knowledgeable on carbon nucleation and growth physics
- Keen to **learn, help and share** your expertise in a multi-expertise team.
- Most importantly, eager to take on one of the biggest challenges of our time: **decarbonize** our industry.

It feels like a fit ? Contact us!

contact@spark-cleantech.eu

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Starting date : ASAP