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Start date

Flexible

Duration

6 months

Languages

Good spoken and written English levels are required (B2 onwards)

Location

Redcar, Northeast England

Redcar is a traditional seaside town offering British fish and chips and the famous lemon top ice cream. With long stretches of sandy beaches and a gateway to the magnificent [North Yorkshire Moors](#) national park you can enjoy a whole host of outdoor activities. Great night life, shops and restaurants are abundant in nearby Middlesbrough, and you will always find a friendly Geordie welcome in the lively city of Newcastle a short train ride away.

Are you eligible?

You are eligible for an ESPA internship if you are a registered student or have graduated within the past two years and have access to some form of grant funding

Benefits

See website for details of all ESPA benefits. For all internships over 6 months, additional benefits will be paid. Details available at interview.

Role

This is a great opportunity for an enthusiastic chemical or process engineer keen to gain experience in this innovative company, specialising in turning waste biomass into valuable biochemicals and biofuels. Mentored throughout you will assist with the development of an Aspen Plus model of the current patented demonstration process unit and then explore options to scaleup the process to a commercial operation. This is not only a great chance to showcase your skills, but you will also have the satisfaction of knowing you will contribute to the future decarbonisation of the planet and get yourself a brilliant internship story onto your cv. Apply now.

Tasks

- Develop a strategy for modelling an existing process unit into the Aspen Plus simulation software
- Collect the necessary data from the existing units to validate the model
- Integrate the various modules of the demonstration unit to a full process model of a commercial operating plant
- Produce initial reports of operating performance, greenhouse gas assessment and capital cost estimates using the existing Aspen software.

Desired Skills

- Studying for a degree in Chemical or Process Engineering
- Proficient with the use of Aspen Plus for process simulations, capital estimations and greenhouse gas assessments
- Proficient with Microsoft Excel and preparing technical reports
- Good communication skills
- Ability to be a self-starter

The Host Company

The host company is an innovative cleantech business that has created a revolutionary and proprietary patented process, that enables customers to convert wood and agricultural plant residues into high value sustainable bio-carbons, biopolymers, biochemicals and advanced biofuels for a host of different industries. With the ever increasing need to become a green planet this is another major step to replace the need for fossil fuel derived and synthetically created materials.