

Challenging position in Wind Turbine Operation

ECN is the largest research centre in the Netherlands in the field of energy and holds a leading international position in the field of wind energy research. A convenient truth: the wind energy sector has been growing exponentially over the last decades and will continue this growth in the next decades as it is the only emission free bulk renewable electricity option that can be implemented in the short term at relatively low cost.

The Unit

The Unit ECN Wind Energy develops knowledge and technology for the offshore wind energy market. The research programme consists of activities in the fields of wind turbine design, control, and aerodynamics and operations. An expanding measurement & experiment group, which is ISO 17025 accredited, forms part of the unit.

The unit has 40 employees and has an intermediary position between universities, the wind turbine industry, project developers and government agencies. ECN has its own test location EWTW (ECN Wind Turbine Test Site Wieringermeer) with various turbines for experimental research and a scaled wind farm under construction for experiments on wake aerodynamics. ECN co-operates closely with international universities and other research institutes and is getting more and more involved in high level consultancy for wind farm developers, wind turbine manufacturers and blade manufacturers.

The group

Activities of the group Wind Farm Operation & Condition Monitoring include optimisation of maintenance strategies for offshore wind farms, condition monitoring, experimental research for the verification of design data and the development of new measuring methods. The group closely co-operate with the group Experiments & Measurements, which carries out standard measuring campaigns for the measuring of power performance, mechanical loads and noise. These measuring campaigns are carried out in accordance with the ISO 17025 accredited quality system, making use of in-house developed measuring systems, processing software, and databases.

The position

Expert on Wind Turbine Operation

You will carry out R&D projects and offer advise in the area of maintenance optimisation of (offshore) wind farms. You will be managing large measurement campaigns on turbines at our test site EWTW and on wind turbines and wind farms offshore. An essential part of this job is to collect and give feedback on operational experiences of wind turbines and information on condition monitoring and measuring systems. You will develop new methods for the analysis of availability and maintenance costs of wind farms. You will maintain direct contact with clients and will contribute to the definition of new R&D projects.

Profile

You have an academic technical background, preferably in the area of mechanical or electro-technical engineering. You are familiar with operational techniques for the optimisation of reliability, safety, and maintenance and know how to apply this knowledge in a pragmatic manner. You are acquainted with the measurement of mechanical loads, power performance and noise on wind turbines. You are expected to operate in an independent and structured manner and you function well in a team. Moreover, you have excellent speaking and writing skills in the English language.

Both junior and senior experts are invited to apply!

Contact information

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