

Sirris - R&D Engineer - Wind Energy Innovation Projects

Do you want
to be a part
of our story?

In search of R&D Engineer - Wind Energy Innovation Projects

[Sirris](#) is the collective research & technology centre for the Belgian technological industry. We cover multi-disciplinary research, development and innovation projects in many industry fields and technology themes. Since 2010 Sirris became highly active in the field of industrial wind energy research and development as co-creator of the [OWI-Lab](#), a leading expertise consortium including Sirris, VUB and UGent. Its mission is to support onshore and offshore wind energy research, development and innovation projects that reduce the LCOE of wind energy. Through the OWI-Lab initiative different high tech testing infrastructures have been set-up (for example [a large climatic test chamber](#) in Antwerp where wind turbine components are tested in harsh environments). Also, different research projects and experiments in (offshore) wind farms have been set-up to learn for example from field data to optimise the operations and maintenance of machinery.

Through technology expertise & infrastructure, innovation support services, and both national as international collaboration, we support the EU wind energy sector to maintain our leading role in this emerging energy industry. Within Sirris a dedicated wind energy program has been set-up to support the Belgian on- and offshore value chain with their technology challenges. Currently, this team is coordinating the OWI-Lab collaboration framework, and is executing the expanding R&D project portfolio comprising a range multi-disciplinary R&D projects for which we seek reinforcement of the team.

We seek additional talent with a mixed passion for innovation, entrepreneurship, technical interest in wind energy and/or the energy transition in general. Are you up to the challenge of dealing with multidisciplinary research and development? The R&D projects in which you will be involved are:

- [COOCK Fighting Icing project](#) (dealing with wind energy and icing challenges)
- EU funded [DOCC-OFF project](#) (dealing with digitalization of critical components in offshore wind turbines)
- [EU funded Newskin project](#) (dealing with anti-icing coatings and testing of new coatings in harsh environmental conditions)
- [ICON Supersized 4.0 project](#) (dealing with Smart O&M for a fleet of supersized wind turbines in industry 4.0 context),

- cSBO SeaFD project (dealing with realistic CFD wind load computations for offshore wind turbines)
- [Energy Transition Fund project Phairywind](#) (dealing with setting up a phd-community cluster for offshore wind research in Belgium)
- ICON Rainbow (dealing with wind turbine blade erosion monitoring and degradation behaviour for offshore wind turbines)

Are you also interested to participate or take the lead in funded or commercial research and testing projects? And are you enthusiast about supporting the process of setting up new initiatives and innovation projects within the Sirris wind energy program and the OWI-Lab expertise collaboration?

If yes, read more about this challenging role :

- You are responsible for taking a technological lead in new and ongoing R&D projects or specific work packages either in the onshore, as the offshore wind energy sector. In this context you follow up company ideas or you initiate your own ideas in the framework of the R&D projects and industry interests. The development of concept studies to practical implementations in cooperation with external knowledge partners, and /or with internal expert colleagues are part of your role.
- You support a test & measurement team that develops and executes testing campaigns in both the lab testing environment (for example in our large climatic test chamber) and in field conditions in existing wind farms. You will engineer the sensor and measurement set-ups, support the execution of measurements, post-process and analyze data, and report it to the team and/or customers. Moreover, you will also coordinate the A to Z of projects: project management, setting up the test campaign, interpreting measurement, follow-up projects,...
- You support the team in building out an industry driven wind energy program at Sirris by being up-to-date with ongoing technology trends, support business cases or investigate new test infrastructure investments.
- You focus on projects that are linked to supporting 'environmental testing and monitoring of components and full systems in harsh environments', 'reliability and decision support in harsh environments', and 'operations & maintenance' of wind energy assets in general based on the understanding of the wind turbine application and a wind farm in general.
- In collaboration with experts of other technology fields (external partners and/or internal departments) such as materials engineering, mechatronics, ICT and data-analytics you help companies in the wind power industry to innovate.

What do we expect from you?

- You are an engineer and you have a master's degree in electromechanics, mechanics, energy or equivalent.
- You preferably have 2-3 years of experience in the (offshore) wind energy sector
- You have a pragmatic and practical attitude, have excellent technical insight and are not afraid to be involved in pre-sales or proposal writing activities.

- The following knowledge or experience is an added value:
 - Insight and/or experience with climatic and environmental testing and validation projects
 - Track record in wind turbine operations/maintenance and inspection
 - Vibration & sound analysis, dynamics analysis and interpretation of measurement data (e.g. based on experience in the (wind) energy , aerospace or automotive industry)
 - Knowledge in setting-up and using data acquisition systems and sensors set-ups and/or experience with IOT set-ups.
 - Experience with setting-up (offshore) wind turbine experiments
 - Insights and understanding in signal processing techniques
 - NDT knowledge and experience
 - Experience with technologies to support decision support processes in mission critical operations context
 - Experience with blade erosion and/or wind turbine icing are a plus
- You finish what you started, have a proactive mindset and have an eye for details
- You combine technical insight with customer focus.
- You are a team player who likes to learn and are not afraid to work with multiple stakeholders in complex and challenging R&D projects
- You are creative and eager to translate innovations into practice.
- You have excellent command of Dutch and English, other languages such as German and/or French are an advantage.
- You are prepared to travel regularly, in Belgium (to the different Sirris locations) and abroad.

What do we offer you?

Working at Sirris means working on high tech projects in a challenging, adventurous and innovative environment with large international companies as well as SMEs and startup's. You build up experience with advanced and innovative techniques and state-of-the-art technology. You put technological innovation into practice!

Sirris offers you a flexible working environment, where attention is paid to your personal development. We also provide an attractive remuneration package in accordance with your position and experience.

For more information, please contact [Pieter Jan Jordaens](#) – Program manager on- and offshore wind energy

<http://www.sirris.be/>