



**Jobbnorge ID:** 225787

**Deadline:** 6/1/2022

**Website:** <http://www.norceresearch.no/>

**Scope:** Part time

**Duration:** Permanent

## About NORCE

NORCE is a forward-looking research institute with a wide academic breadth and strong knowledge environments. Our vision is "Passion for Knowledge - Together for Sustainability". The UN Sustainable Development Goals (SDGs) are an important framework for our strategy. We deliver research and innovation in energy, health, climate, environment, society, and technology.

Our solutions respond to key societal challenges and contribute to value creation locally, nationally and globally. We have over 800 employees in offices in Bergen (head office), Tromsø, Haugesund, Stavanger, Kristiansand, Grimstad, and Oslo.

To our Kristiansand Office

## Researcher to our Modelling and Simulation Team

### Division and group information

The position will be linked to the modelling and simulation group located in the Energy and Technology division. The group has researchers with background in mathematics, physics and chemistry, which work cross-disciplinary with researchers from all departments in NORCE. The modelling and simulation group works closely with the industry and deliver applied research. We have industry-oriented researchers with the academic background to observe, understand, model and optimize a wide range of processes and equipment.

We work strategically to contribute to a more digital and more sustainable industry. In addition, our expertise is used to deliver applied science into the fields of renewable energy, health technology and sustainability analysis.

NORCE Energy and Technology is one of three division in NORCE. The division has close to 200 scientific employees, organized into four departments, and has offices in Bergen, Stavanger, Haugesund, Kristiansand, Oslo and Tromsø. Research activity in the division has a particular focus on energy savings for the petroleum and process industry, as well as geological carbon utilization and storage (CCUS) and renewable energy sources, energy systems, and energy storage.

### About the position

The selected candidate will be appointed a part-time position (0,5 fte) as a Forsker/Researcher in the NORCE Kristiansand office. The working language is English, although knowledge of or willingness to learn Norwegian will be an additional advantage.

We are looking for a researcher to complement our Modelling and Simulation team. Initially, the successful candidate will be responsible for programming agent-based models of urban logistic systems in a H2020 grant that brings together industry leaders in logistics services, novel solution providers for shared, connected, and automated operations and research experts to co- develop novel last mile delivery solutions combining green automated vehicles and shared space utilization models. ABM activities will focus on representing supply chains, and will be a collaborative effort between NORCE who is primarily responsible for providing representations of the demand side (customer adaptive behaviours related to novel logistic services) and another leading European research institution who is primarily responsible for providing representations of the supply side (institutional actors). The goal is to improve the knowledge about user needs, habits, and preferences in terms of deliveries and contribute to the development of digital twins of real-world urban areas. Ultimately, ABM will be used to assist city stakeholders in making greener decisions.

There are no teaching obligations. The position will include funding for grant application development and traveling to conferences.

### Who are we looking for?

Candidates who are motivated to further their career in ABM and contribute to the theoretical, conceptual, and/or computational advancement of the methodology are invited to apply. The successful candidate should be able to work independently and to collaborate with all members of the research team (incl. interacting with international researchers and stakeholders). She/he will be expected to produce high-quality research, contribute to project's deliverables, write scientific articles published in relevant peer-reviewed journals, and present the results of the research in Norwegian and international contexts.

The successful candidate is expected to start in Autumn 2022, or as soon as possible thereafter.

## Required qualifications & competences

- A completed or almost completed PhD in a relevant discipline (e.g., computational social science, resource management, future studies or similar).
- Substantial expertise in ABM, including excellent programming skills in ABM-relevant languages (e.g., Python, NetLogo, AnyLogic, GAMA, Repast) and experience in the modeling of human and social interactions, preferably in urban contexts.

## Desired qualifications & competences

- Experience in quantitative data analysis techniques (e.g., multivariate regression techniques, machine learning) and tools (e.g., Python, R, SPSS, Stata, SAS).
- Experience in qualitative data collection (e.g., stakeholder workshops, focus-group interviews, individual in-depth interviews, games), analysis techniques and CAQDAS (e.g., Nvivo, MaxQDA, QDAMiner).
- Experience in the integration of various types of data in multi-method research designs (e.g., combining quantitative, qualitative and simulation methods).
- Data visualization skills (e.g., GIS, quantitative data, qualitative data).
- Experience in research with stakeholders, preferably in participatory settings.
- Very good academic writing skills, reflected in publications in high quality international peer-reviewed academic journals in the field.
- Proven ability to collaborate in multi-, inter- or transdisciplinary research teams, to take the lead in organizing collaborative work, and to work independently.
- Excellent written and oral command of the English language.

## What we can offer

- A creative, interdisciplinary, multicultural NORCE environment with excellent development and networking possibilities,
- An opportunity to meaningfully contribute to the pioneering methodological work of a fast-growing research institution,
- Working on stimulating projects that aim to bring about positive changes in complex social systems,
- Support in advancing ABM programming skills (esp. Python),
- Support in learning Norwegian,
- Competitive salary,
- Good pension and insurance schemes.

## How to apply

Apply electronically by registering your application at [jobbnorge.no](http://jobbnorge.no)

The application must include:

- Motivation letter,
- CV,
- Copies of relevant diplomas and certificates,
- 1-2 research outputs (e.g., journal articles, book chapters, scientific reports),
- 2 reference letters with names and contact information (email, phone number) for the referees.

Application deadline: June 1st 2022

## Contact

Questions about the position can be directed to Research Director of Modelling and Simulation, Nora Stray at ([nost@norceresearch.no](mailto:nost@norceresearch.no)) and questions about the process to HR Advisor, Bente Heggdal Martinsen ([bema@norceresearch.no](mailto:bema@norceresearch.no))

## Additional information

**Place of service:**