



Conducting research for a changing society: This is what drives us at Forschungszentrum Jülich. As a member of the Helmholtz Association, we aim to tackle the grand societal challenges of our time and conduct research into the possibilities of a digitized society, a climate-friendly energy system, and a resource-efficient economy. Work together with around 7,500 employees in one of Europe's biggest research centres and help us to shape change!

Research and innovation are considered key enablers in the global green transition. Bio-based and recyclable products and processes play a crucial role in decoupling growth and emissions. Taking a promising technology to commercial scale is a significant challenge and the obstacles faced by the industrial biotech market are particularly unique while the large scale-up itself is characterized by an inherent level of unpredictability. Therefore, this doctoral thesis will analyze the diffusion and economic dynamics of sustainable innovations that underlie a successful market ramp-up, to enable a solid prediction of the associated target conflicts in the context of a sustainable and sufficient provision of biomass and related inputs. The research is conducted at the Institute of Energy and Climate Research - Jülich Systems Analysis (ICE-2).

**We offer you to the next possible date an exiting**

## PhD Position – Innovation ecosystems in the Circular Economy

### Your Job:

- Analysis of market dynamics in the context of Innovation Ecosystems and Diffusion Theory
- Systematic integration of concepts from institutional, behavioral, and resource economics
- Identification and parameterization of innovative and circular industrial processes as a central component of the sustainability transformation
- Identification of possible usage profiles for different types of (bio-based) feedstocks including their substitution potential
- Validation and scaling of the results
- Sustainability assessment of transformation scenarios and European/global trade potentials
- Development and implementation of modeling approaches and empirical analyses
- Publication and presentation of research results in relevant journals and at (international) conferences

The job will be advertised until the position has been successfully filled. You should therefore submit your application as soon as possible. We look forward to receiving your application via our

**Online-Recruitment-System!**

### Questions about the vacancy?

Get in touch with us by using **our contact form**.

Please note that for technical reasons we cannot accept applications via email. [www.fz-juelich.de](http://www.fz-juelich.de)

- Supervision of student seminar papers and theses

#### **Your Profile:**

- You have successfully completed your studies in economics, (business) engineering, natural sciences, or data science with very good results
- Knowledge in the fields of environmental economics, resource economics, economic theory, evolutionary economics or innovation economics are an asset
- You are enthusiastic about complex interrelationships in economic and resource systems and your working methods are characterized by very good analytical and conceptual skills
- You have a strong understanding of the concepts of sustainable development (e.g. circular economy, bioeconomy) and current innovations in this area
- You have profound knowledge in the field of quantitative data analysis
- A high degree of motivation and commitment characterize your way of working. You work just as well independently as in a team
- A very good command of English and a confident manner with strong communication skills complete your profile

#### **Our Offer:**

We work on the very latest issues that impact our society and are offering you the chance to actively help in shaping the change! We offer ideal conditions for you to complete your doctoral degree:

- **TEAM & ENVIRONMENT:** You will work in a motivated team with an international and interdisciplinary focus – at one of the largest research institutions in Europe
- **RESEARCH & INFRASTRUCTURE:** You will have access to excellent scientific and technical facilities for your work
- **NETWORKING & EXCHANGE:** You will participate in (international) conferences and project meetings and actively build your scientific network
- **SUPERVISION & SUPPORT:** We will accompany your doctoral studies with continuous, expert guidance from your academic supervisor
- **WORK-LIFE BALANCE:** We offer flexible working hours to help you balance your professional and personal life. You also have the option of flexible working (in terms of location), which is generally possible after consultation and in line with upcoming tasks and (on-site) appointments
- **SUPPORT FOR INTERNATIONAL EMPLOYEES:** Our International Advisory Service makes it easier for international employees to get started
- **DOCTORATE WITH PERSPECTIVE:** The opportunity to complete a doctoral thesis within 3 years through professional supervision and internal support services; time taken to submit the final thesis for the last 16 doctoral students at ICE-2: 2.7 - 3.4 years
- **VACATION:** You will receive 30 days of vacation
- **FAIR REMUNERATION:** Depending on your qualifications and assigned responsibilities, you will be classified according to pay group 13 (75%) of the TVöD-Bund. Additionally, you will receive a special payment ("Christmas bonus") amounting to 60% of one month's salary. All information about the TVöD-Bund collective agreement can be found on the BMI website (pay scale table on page 66 of the PDF download): <https://go.fzj.de/bmi.tvod>
- **FIXED-TERM:** The position is initially for a fixed term of 3 years

In addition to exciting tasks and a collegial working environment, we offer you much more: <https://go.fzj.de/benefits>

We welcome applications from people with diverse backgrounds, e.g. in terms of age,

gender, disability, sexual orientation / identity, and social, ethnic and religious origin. A diverse and inclusive working environment with equal opportunities in which everyone can realize their potential is important to us.

Further information on diversity and equal opportunities: <https://go.fzj.de/equality>