Would you like to contribute to solutions to climate change and resource scarcity? Work with us at the Institute of Bio- and Geosciences - Plant Sciences (IBG-2). We develop novel bioeconomy concepts for the intensification and sustainability of plant production as well as the use of the produced biomass in integrated biorefinery processes.

The IBG-2 has a globally leading position in plant phenotyping, focusing on dynamic plant-environment interaction combined with technology development, engineering, digitization and bioinformatics. One key aspect of the research at the IBG-2 targets alternative biomass, cell wall and secondary metabolite biochemistry and its interaction with biomass conversion techniques in integrated biorefinery processes. Through our work we target the development of plants and processes for future climate and production conditions, while reducing the environmental footprint.

This PhD project is embedded in the DFG project FAIRAgro (www.fairagro.net).

We are looking to recruit a

**PhD Position - FAIR Data for Field Phenotyping - Developing a Data Model for Diverse Field Phenotyping Data**

**Your Job:**
- Should have an interest in working with existing data and shall have the ability to develop and implement concepts for novel and FAIR data structures based on existing field phenotyping data
- Will work in the use case 5 of the FairAgro consortium (www.fairagro.de) and will develop in cooperation with other scientists of the consortium a novel data model for real world field phenotypic data
- Having access to an already existing large data set of field data, which was acquired during the past years in the frame of the Excellence Cluster PhenoRob (www.phenorob.de)
• Reviewing the data and aiming to develop different categories of data
• Developing a meta-data model that is compliant with existing standards for phenotypic data and which shall be compliant with the FAIR data concepts
• Will scientifically describe the data model and work with scientists of FairAgro to test and implement these concepts within the larger framework of FairAgro
• Will scientifically publish the concepts behind the data model and will be in the lead of implementing the concept into the operational frame of FairAgro
• Thus this PhD project has a basic research and applied dimension and will enable the candidate to develop his profile in this emerging discipline

Your Profile:
• Master Degree in Plant Sciences, Agriculture, Mathematics, Informatics, Spatial Sciences, Ecology or other related disciplines
• Interest to work at the interface between data science, field phenotyping and optical remote sensing
• Solid background in relevant programming languages and be familiar with state-of-the-art data concepts
• Very good English communication and writing skills are mandatory. Knowledge of German can be advantageous

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:
• The candidate will receive a 3-year PhD contract at IBG-2 at Forschungszentrum Jülich and will be enrolled as PhD student at Bonn University
• The candidate will be associated to either the graduate school at Forschungszentrum Jülich or Bonn University and will have the benefits of these graduate school
• The Forschungszentrum Jülich (www.fz-juelich.de) is one of the largest research centers of Europe and offers a wide range of training and qualification programs
• A large research campus with green spaces, offering the best possible means for networking with colleagues and pursuing sports alongside work
• Further development of your personal strengths, e.g. through an extensive range of training courses; a structured program of continuing education and networking opportunities specifically for doctoral researchers via JuDocS, the Jülich Center for Doctoral Researchers and Supervisors: https://www.fz-juelich.de/en/judocs
• Targeted services for international employees, e.g. through our International Advisory Service

The position is initially for a fixed term of 3 years. Pay in line with 65% of pay group 13 of the Collective Agreement for the Public Service (TVöD-Bund) and additionally 60 % of a monthly salary as special payment („Christmas bonus“). Further information on doctoral degrees at Forschungszentrum Jülich including our other locations is available at: https://www.fz-juelich.de/gp/Careers_Docs

In addition to exciting tasks and a collaborative working atmosphere at Jülich, we have a lot more to offer: 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.