

Global thinking,
interdisciplinary research:
the spirit of Leibniz!



Nestled in a modern city surrounded by nature and with an exceptional standard of living, Leibniz University Hannover offers excellent working conditions in a vibrant scientific community.

The Department of Phytophotonics at the Institute for Botany / Hannover Centre for Optical Technologies welcomes applications for the following position to be filled from August 1, 2025:

Research Assistant (Doctoral Candidate) with specialising in hyperspectral imaging (salary scale 13 TV-L, 75 %)

The fixed-term position is for a duration of 36 month in accordance with the project duration.

Your role

In the Phytophotonics department, you will work as part of an interdisciplinary team at the interface between plant sciences and optical technologies. The focus is on various spectroscopic and imaging methods for the contactless detection of plant conditions.

The position is being advertised as part of the joint project 'DHYNAmite - Integrative plant protection through drone-based hyperspectral identification of spider mite infestation foci and needs-based beneficial insect application in outdoor cucumber cultivation', which is funded by the BMBF within the funding programme KMU-innovativ: Bioökonomie. The sub-project of the Phytophotonics department focuses on analysing hyperspectral imaging data for predicting infestations in field crops.

The focal topics of the sub-project include:

- Realisation of a measuring stand for the collection of hyperspectral data on a test field
- Collection of imaging data and creation of a database
- Establishment of a data processing routine for pre-processing the hyperspectral data
- Development of algorithms for infection and evaluation of infection hotspots in the plant population
- Coordination of the scientific interface to the project partners with regard to entomological investigations and the data interface for treatment planning
- Continuous literature research on the sensory detection of plant damage symptoms with a focus on insect pests
- Writing reports and participating in workshops and conferences

The successful candidate will be employed at Leibniz University Hannover and will be part of a highly motivated interdisciplinary project team of Leibniz University (Departments of Phytophotonics and Applied Entomology), HAIP Solutions GmbH (Hannover), Katz Biotech AG (Berlin) and Weber Agrar Robotik GmbH (Schwäbisch Hall). In addition, it is intended to link the doctoral candidate with the Leibniz School of Optics of the DFG Cluster of Excellence PhoenixD.

Who are we looking for?

The prerequisite for employment is a university science degree in physics/optical technologies or alternatively in natural sciences/horticulture.

In addition, we are looking for a candidate with the following:

- A high level of motivation to collaborate at an interdisciplinary interface
- Expertise in the field of data processing, preferably with regard to image processing using artificial intelligence, is required
- Experience with scoring of plant disease symptoms is a plus but not a requisite

Equal opportunities and diversity are core values at Leibniz University Hannover. Our goal is to tap into individual potential and open up possibilities. We therefore welcome applications from anyone interested in the position, irrespective of gender, nationality, ethnic origin, religion or ideology, disability, age, sexual orientation and identity.

We strive towards a balanced and diverse workforce and a reduction in under-representation in accordance with the Lower Saxony Equal Rights Act (*Niedersächsisches Gleichberechtigungsgesetz – NGG*). We therefore also welcome applications from women for the above-mentioned position. Preference will be given to equally-qualified candidates with disabilities.

Why join us?

With more than 5.000 employees, Leibniz University Hannover is one of the largest and most attractive employers in the Hannover region. We offer a vibrant interdisciplinary and international working environment, and promote personal and professional [development](#) ranging from subject-related skills to leadership and languages.

Part-time employment as well as remote work (mobile work, work from home) can be arranged upon request. We support employees with [balancing work and family life](#), through services such as back-up childcare, childcare during school holidays, and parent-child offices, as well as providing individual advice regarding family responsibilities and caring for dependants.

To promote health and well-being among employees, we offer an extensive [sports programme](#) with over 100 different sports, as well as a fitness centre with a sauna and climbing space. [Health management](#) measures, such as courses on stress management, good nutrition and relaxation, aim to ensure a healthy workplace.

Additional information

Further information on the Phytophotonics department can be found on the Internet at:

<https://www.hot.uni-hannover.de/en/research-groups/phytophotonics>

Please submit your application and supporting documents by June 29, 2025 electronically to

Email: dag.heinemann@hot.uni-hannover.de

or alternatively by post to:

Gottfried Wilhelm Leibniz Universität Hannover
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Abteilung Phytophotonik
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<http://www.uni-hannover.de/en/jobs>

Information on the collection of personal data according to article 13 GDPR can be found at:

<https://www.uni-hannover.de/en/datenschutzhinweis-bewerbungen/>