The Leibniz-Institute of Vegetable and Ornamental Crops (IGZ) conducts excellent research in a broad range of fields related to horticultural sciences. Resource optimised cultivation of crops inside controlled environment horticulture (CEA) such as greenhouses is the main focus of the research group ‘Protected Cultivation’ within the Program Area ‘Horticultural Systems for the Future (HORTSYS)’

Damages to the physiological apparatus caused by plant stress are known to be reversible up to a certain point, while mild stress can have positive effects on plants in terms of harvest product composition and other quality parameters. A possible solution to detect stress would be to combine data information from sensors with plant physiological models to so called soft sensors. In that, the knowledge of leaf morphology and especially stomata conductance play a central role. Understanding and systematic analyses of the signals controlling stomata behavior and their incorporation in stomata-modelling is still lacking important bricks.

To contribute to the target of the team ‘Protected Cultivation’ on creating model based decision support tools for resource optimised crop production in CEA we look for a

Scientist (f,m,d) in the area "Crop microclimate monitoring"
Reference Number 21/2018/4

to join our team at the earliest possible date. The Scientist will be working at the IGZ site in Großbeeren (close to Berlin). The employment will be initially for three years. The salary will be based on qualification and research experience according to the wage agreement TV-L, salary domain east, up to EG 13 (100% of the regular working time).

Tasks include
- Design and execution of plant growth and lab experiments incl. data collection and analyses
- Mathematical modelling of crop physiological processes
- Writing scientific publications
- Supervision of bachelor, master & PhD students
- Presentation of results to international scientific audience
- Active in applications on grants for German and international calls as e.g. Horizon 2020, Horizon Europe

We are looking for a highly motivated candidate with strong background in greenhouse horticultural technology with experience in greenhouse crop physiology and modelling, measurement technique of the crop microclimate & stress detection, leaf morphology and stomata biology
- A PhD within the field of greenhouse horticulture, plant physiology and modelling
- Experience of plant microclimate and leaf morphology measurements
- Knowledge of mathematical analytics and ability to translate processes to equations and to systems in e.g. Matlab
- Experience in phenotyping tools for crop monitoring as e.g. chlorophyll fluorescence and imaging techniques
- Independent but functioning as team player
- Ability to organize research grants
- Excellent organization and English language communication skills
- German language skills or the interest in learning German
- Open, flexible and positive person, able to take the initiative

We offer
- An inspiring and dynamic research environment, including state-of-the-art research facilities
- The opportunity to work in a team and building on the own scientific career
- A place of employment located close to Berlin and Potsdam

Please send a strong motivation letter stating why this is an interesting topic for you and why you have the right attitude and expertise to contribute to the project and make progress in this special cross-over field of technology, mathematics and biology. Also send your CV, copies of highschool and academic certificates, names of up to three references and indicate your earliest possible starting date.

Contact: Dr. Oliver Körner (+49(0)33701 78 355; koerner@igzev.de).

IGZ is an equal opportunity employer. Handicapped people with equal qualifications will be employed preferentially. The IGZ wishes our staff to reflect the diversity of society and thus welcomes applications from all qualified candidates regardless of age, gender, race, religion or ethnic background.

Please send your application citing the reference number by 29 November 2018 to: Personalbüro, Institute for Vegetable and Ornamental Crops, Theodor-Echtermeyer-Weg 1, D-14979 Großbeeren or online in pdf-format to personal@igzev.de.