

At the **Department of Forest Sciences, Institute of Forest Growth and Forest Computer Sciences, Chair of Forest Biometrics and Forest Systems Analysis** is offering a

### **PhD position**

which entails 50% of the fulltime weekly hours. The position will be filled as soon as possible. This is a temporary appointment for 3 years (The period of employment is governed by the Fixed Term Research Contracts Act (Wissenschaftszeitvertragsgesetz - WissZeitVG)). Payment is according to the nationally agreed scale E 13 TV-L.

In the project: "Morphological adaptations of mangrove trees to environmental stress and their consequences for local plant interactions and regeneration patterns in degraded mangrove ecosystems." for developing and testing an individual-based model for analysing the effects of shrub/tree development in varying hydrological conditions. This work is part a DFG-funded project that combines both theoretical and empirical research and is embedded into the project Coastal Research of Environmental Change (CREC) funded by the EU as Marie Curie Action supporting the exchange of international research staff.

**Project description** Our overarching goal is to examine adaptations in tree growth and morphology to harsh conditions, and to analyze the ecological consequences of these changes for local plant interactions and their impact on stand-level regeneration. You will perform field studies for analyzing morphological changes in mangrove trees, and simulation experiments using recently developed computer models modified in the frame of your study.

#### **Requirements**

You are a highly motivated natural scientists holding a Diplom or Masters degree in plant ecology, geo-ecology, forestry, life science, physics, applied mathematics, or computer science. You have a keen interest in major ecological concepts and in approaching the project's questions with simulation models. The ideal candidate has above-average study marks, background knowledge in object-oriented programming and individual-based modelling, solid knowledge in modern statistics, excellent interpersonal and communication skills, and is easily able to express his or her ideas in English writing.

#### **Location**

The TU Dresden and the institute offer excellent facilities for research in mangrove ecology and ecological modelling. The department is beautifully situated Tharandt the second oldest academy of forest science in Europe (200 years old). Dresden offers a high-quality living environment with a multitude of cultural activities.

For more information: please contact Prof.Dr. Uta Berger, e-mail: [uta.berger@tu-dresden.de](mailto:uta.berger@tu-dresden.de).

Applications from women are particularly welcome. The same applies to disabled people. Please send your application letter outlining your suitability and motivation, plus complete curriculum vitae including degree certificates with marks by **15.04.2011** (stamped arrival date of the university central mail service applies) to **TU Dresden, Fakultät Forst-, Geo- und Hydrowissenschaften, Fachrichtung Forstwissenschaften, Institut für Waldwachstum und Forstliche Informatik, Professur für Forstliche Biometrie und Forstliche Systemanalyse, Herrn Dr. Klaus Römisch, Postfach 1117, 01735 Tharandt, Germany** or [roemisch@forst.tu-dresden.de](mailto:roemisch@forst.tu-dresden.de) Please note: We are currently not able to receive electronically signed and encrypted data.