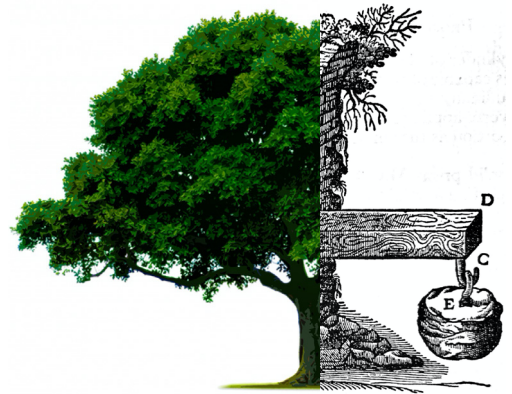




TECHNISCHE  
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WIEN



Der Wissenschaftsfonds.



## **POSTDOCTORAL POSITION IN WOOD MECHANOBIOLOGY** at the Institute for Mechanics of Materials and Structures, TU Wien

The growth of trees, and the resulting wood microstructure, is substantially influenced by the mechanical loading to which the respective tree structure is subjected. The Austrian Science Fund (FWF – Fonds zur Förderung der wissenschaftlichen Forschung) funds, within the scope of the 1000 ideas programme, a two-year project aiming at the development of computational tools which allow for predicting how and to which extent trees grow under certain mechanical boundary conditions. While so far the field of plant mechanobiology has been mainly driven forward through experimental studies, this project bears the potential of launching a completely new (sub-)field, namely computational plant mechanobiology, by reconciling the theoretical concepts of classical beam mechanics, multiscale wood mechanics, and multiscale systems biology.

To that end, we offer, in the framework of the above-described project, a two-year post-doc position. Candidates should exhibit the following skills and assets:

- solid background in engineering mechanics;
- proven expertise in applied mathematics;
- experience in programming and standard mathematical software;
- experience in pertinent biological disciplines is not mandatory but advantageous.

Following the policy of the TU Wien as regards the promotion of gender equality in research, female candidates will be given preference if the qualifications are comparable.

The post-doc position is foreseen to start on January 1, 2021, for a duration of two years. The gross salary is € 3,889.50 per month.

Interested candidates should send, until November 15, 2021, a letter of application, a CV, as well as names and addresses of three references to Associate Prof. Stefan Scheiner (stefan.scheiner@tuwien.ac.at), the principal investigator of this project.