

PHD SCHOLARSHIPS AVAILABLE FOR STUDENTS STARTING IN 2020

Applications are invited from candidates interested in pursuing a full-time PhD degree by research within the new **Hans Merensky Chair in Advanced Modelling of *Eucalyptus* Wood Formation (*EucXylo*)** at Stellenbosch University, based in Stellenbosch.

A wide range of topics are available within the program, and students have great scope to tailor their own research project to their interests and ideas. Some possible topics include, but are not limited to:

- Physiological and molecular determinants of vessel differentiation in *Eucalyptus*.
- Sugar-hormone interactions and the mediation of xylogenesis by morphogenic gradients.
- Cause or effect: Linking xylem hydraulic properties, stem stiffness and xylem differentiation.
- Functional-structural models of eucalypt tree form using L-systems.

See <http://blogs.sun.ac.za/fmm/hmf-eucxylo/> for more information.

Students from a wide range of backgrounds are welcome to apply, including from applied fields like Forest and Wood Science, Plant Biology, Genetics and Horticulture, or more basic sciences, including Mathematics, Biochemistry, Physics, Chemistry or Biology. However, we will be looking particularly for students who have achieved above-average results in prior degrees. Also, some restrictions may apply in regard to prior qualifications, and applicants can be expected to be subject to certain biometric/competency testing.

A tax-free **scholarship of R160,000 per annum** is offered for three years for successful candidates. Running costs will be covered by the project. Students will have the opportunity to present their work at an international conference during their candidature, and may have the opportunity to spend some time working at an overseas research lab (e.g. Ghent, Belgium or Brisbane, Australia) or with visiting international experts. Students must register full time and be based on the Stellenbosch campus of the University. At least three peer-reviewed publications will be expected from PhD candidates by the time of graduation.

Please send applications **before the end of September 2019**, and address any queries, to Dr David Drew (drew@sun.ac.za) including the following:

- All previous degrees and academic records.
- A cover letter giving background to your application.
- A comprehensive and up-to-date résumé including the names and details of at least two referees.
- A 1 - 2-page essay outlining your ideas for a possible research direction you see you could take in your PhD project within the EucXylo program.

