

PhD Position in Biological Physics: Salzburg / Austria

One 4-year PhD position is available from the 1st of October 2023, in the MorphoPhysics group based within the Department of the Chemistry and Physics of Materials at the University of Salzburg, Austria.

The ability of biological tissues to change both their external shape and internal structure, allows organisms to grow, to adapt to their environment, and even to heal damage. Shape changes may even perform a function in tissues without an active metabolism, such as found in seed dispersal units within the plant world. In the MorphoPhysics group we explore how mechanical and geometric boundary constraints influence shape changes in growing and swelling tissues using a combination of theoretical and experimental techniques.

Open Position: We are looking for curious, broad minded and motivated candidates with a strong background in physics, biophysics, biology, biochemistry, biomaterials, and/or bioengineering. Applicants must hold a Masters degree to enable them to satisfy the entry requirements for a PhD program at Salzburg University. The PhD project will focus on the role of geometry on the behaviour of plant cells or how such cells give rise to particular geometric patterns. As a long term goal this research goes in the direction of physico-chemical characterization and developing new sustainable materials solutions for our society, based on the bio-economy. Skills in basic cell and molecular biology are highly desired and experience in imaging techniques such as confocal or light-sheet microscopy are also beneficial. Additional experience in chemical characterisation such as Raman, FT-IR spectroscopy or ICP-MS would also be useful. English communication skills, both verbal and in writing are essential. The position is funded by the University of Salzburg meaning the student will participate in teaching activities (2 hours a week) during the last two years of the PhD. Interested applicants should submit a cover letter describing research experience and interests as well as a CV, and a 1 page description of their past studies and research activities, future goals and a statement why the candidate wishes to work together us.

Applications must be submitted to the following email address (bewerbung@plus.ac.at).

Please quote the reference number: **GZ A 0072/1-2023** in the application letter.

The PI, John Dunlop (john.dunlop@plus.ac.at), can be contacted for more information or assistance. The deadline for applications is the **10.05.2023**.

(Further information about the positions can be found in German on the following [link](#))

See also <https://www.morphophysics.com> for more information about the research interests of the group.