The
Institute of Fluid Mechanics and Heat Transfer
Technische Universität Wien
invites applications for a

PhD Studentship

starting on October 1, 2018 for a duration of 3 years
degree of occupation: 30h/w

The PhD studentship is part of a cross-disciplinary FWF project on the impact of fluid flow on small larvae (Drusinae) situated in the turbulent boundary layer of shallow creeks. The project is led by Prof. Waringer (Department of Limnology and Bio-Oceanography, University of Vienna), while the PhD student will be associated with Prof. Kuhlmann (TU Wien), whose group works on hydrodynamic instabilities, nonlinear dynamics, chaotic mixing and transport of particles.

Requirements:
A diploma or master degree in engineering or physics is required. We are looking for a motivated scientist with a strong background in theoretical and computational fluid mechanics and interest in cross-disciplinary work. Skills in large-scale computing, flow over complex bodies, fluid-structure interaction and/or AutoCAD would be of great advantage.

Tasks:
The tasks concern the numerical simulation of the turbulent flow over Drusinae larvae sitting on the riverbed and being exposed to the turbulent boundary-layer flow. Foreseen is the use of OpenFOAM, considering models of different complexity for Drusinae larvae. The ultimate goal of the project is the clarification of the effect of the turbulent flow and surface stresses on larvae of different morphological types. We offer the opportunity to submit a PhD thesis to TU Wien.

The monthly salary for this post is determined by FWF and currently amounts to € 2.112,40 gross (14 x per year). Equally qualified women will be preferred in hiring.

Applications together with the usual documents (cover letter, CV, all transcripts, photo) must be sent to

Mr. Rene Fuchs
TU Wien, Personaladministration, Fachbereich wiss. Personal
Karlsplatz 13, A-1040 Wien
rene.fuchs@tuwien.ac.at

Deadline for applications is May 31, 2018. Further details can be inquired from Prof. Kuhlmann (hendrik.kuhlmann@tuwien.ac.at) or Prof. Waringer (johann.waringer@univie.ac.at).