

# BIOGEOS

BIOMEDIATED GEOMATERIAL STRENGTHENING



## JOIN US at LMS, EPFL

(Lausanne, January 2020)

We are looking for **two PhD candidates** in geomechanics and environmental geotechnics.

Would you like to influence the success of our high profile project BIOGEOS and gain a sense of contribution in building the next generation of sustainable geotechnics and of numerical simulation developments? If so, this is what you will do by joining our highly motivated team at the the laboratory for Soil Mechanics (**LMS**) of the Swiss Federal Institute of Technology, Lausanne (**EPFL**).

**BIOGEOS** (**BIO**-mediated **GEO**-material **S**trengthening) is supported by an Advanced Grant of the European Research Council, awarded to Prof. Lyesse Laloui in 2018. We target the establishment of innovative, sustainable processes within mainstream geo-technical practices. Among the techniques developed at LMS is that of bio-cemented geo-materials. The significant impact of **bio-cementation** ranges from the protection of infrastructure against liquefaction & poor quality of foundation soils to mitigating risks related to landslides and soil erosion which are intensified by extreme weather. BIOGEOS aims to crystallize new knowledge into constant innovation and implement state-of-the-art advances in the fields of micro-structural inspection, numerical modelling and material characterization.

**CANDIDATE PROFILE:** For PhD candidates a recent M.Sc. (or equivalent) degree in Civil or Environmental Engineering or other related field is required. Background in Geotechnical Engineering, Porous/Fluid mechanics and Numerical methods is very much appreciated. Candidates are expected to demonstrate independent research and scientific reporting skills. Communication skills and teamwork attitude are a big plus. Selected candidates will be invited for an interview at EPFL.

**CONDITIONS OF EMPLOYMENT:** We are offering excellent research facilities and a competitive salary. The EPFL offers an outstanding international ecosystem full of training and development opportunities. We are looking for motivated candidates ready to undertake advanced experimental and numerical work within our team. Positions include part-time supervision of M.Sc. students and participation in teaching activities.

**APPLICATIONS:** The call is open and candidates are urged to apply as early as they can. Please contact [recruitment.lms@epfl.ch](mailto:recruitment.lms@epfl.ch) for applications. Suitable candidates should send an e-mail including a cover letter describing interests and qualifications and a CV, **as a single PDF.**

**EPFL**



[lms.epfl.ch](http://lms.epfl.ch)  
[biogeos.epfl.ch](http://biogeos.epfl.ch)



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