



## PhD Position in Landslide Risk Mitigation



Department of Civil, Environmental, Land, Building Engineering and Chemistry

Politecnico di Bari

The Department of Civil, Environmental, Land, Building Engineering and Chemistry (DICATECh) of Politecnico di Bari invites public applications for a 3-years scholarship for the PhD programme in Risk, Environmental, Territorial and Building Development (DRSATE). The grant is funded by the Italian Ministry of University and Research through the National Operational Programme 2014-2020 as part of the PhD programmes for sustainability and innovation-related subjects (Sustainability-based topics; Action IV.5).

### Context of research

Italy is the European country with the highest landslide risk, which is expected to get more severe due to climate change in the next future. In particular, for the hilly and mountainous inner areas, landslide hazard is related to widespread damage on buildings and infrastructures, hence jeopardising their socioeconomic development and worsening the ongoing depopulation. It is mandatory to contrast the landslide susceptibility that contributes to the marginalization of wide areas of the country by improving the resilience of the slopes through mitigation measures with a low impact on economy, landscape and environment.

As a consequence of overlooking the hydro-mechanical causes of the processes, the current monitoring and mitigation interventions are often ineffective, causing further economic loss. Hence, it is desirable to devise an informative platform for the widespread surveillance of landslides, able to assist the accountable authorities in their land management activity. At the slope scale, such a platform should allow to manage landsliding on the basis of the knowledge of the geo-hydro-mechanical context (GHM) and of the causes of failure. As a consequence, it will be cost-effective and repeatable, in a variety of GHM contexts.

The proposed research involves the interaction with companies operating in the fields of monitoring and surveying, through a mandatory 6-months internship to be held in an Italy-based company.

### **Additional information**

For more information about the position and informal discussion please contact:

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### **Application procedure**

Please apply before **15:00** (Italian time) of **18 October 2021** following the application process outlined in the official call of Politecnico di Bari (link 1). In particular, the applicant must include a research proposal, consistent with the research topic described in the document downloadable from link 2 (Scholarship n. 26) using the official template (link 3)

1) [https://www.poliba.it/sites/default/files/dottorati/call\\_for\\_phd\\_sustainability\\_and\\_innovation\\_3.pdf](https://www.poliba.it/sites/default/files/dottorati/call_for_phd_sustainability_and_innovation_3.pdf)

2) [https://www.poliba.it/sites/default/files/dottorati/drsate\\_-\\_phd\\_risk\\_environmental\\_territorial\\_and\\_building\\_development.pdf](https://www.poliba.it/sites/default/files/dottorati/drsate_-_phd_risk_environmental_territorial_and_building_development.pdf)

3) [https://www.poliba.it/sites/default/files/dottorati/format\\_-\\_research\\_proposal\\_-\\_sustainability\\_3.docx](https://www.poliba.it/sites/default/files/dottorati/format_-_research_proposal_-_sustainability_3.docx)