



**UNIVERSITÀ DEGLI STUDI DI MILANO**  
DIPARTIMENTO DI SCIENZE DELLA TERRA  
“ARDITO DESIO”

The Department of Earth Sciences “A. Desio” - University of Milan (UNIMI) offers a 18-month postdoctoral position focusing on the development and implementation of a SWAT-based mass balance model. The model will evaluate loadings of nutrients and phytosanitary products in the main river waters of the North-Eastern Italy.

Key activities that the postdoc is expected to carry out include

- Creation of a homogenized geodatabase for the implementation of a SWAT-based numerical model for the analysis of the mass balance of nutrients and phytosanitary products in surface water bodies.
- Definition of the hydrologic setting (conceptual model) of the study area.
- Calibration and validation of the above-mentioned SWAT model.
- Development of examples for the application of the model for prediction purposes (climate change, land use changes).
- Support the organization of short courses illustrating the model utilization (to be carried out in Italian).
- Contribute to the scientific dissemination of the results, via peer-reviewed manuscripts and attendance to workshops.

Skills and requirements that will be evaluated through a public competition include:

- Demonstrated expertise with SWAT modeling, particularly focusing on regional scale modeling and flow and contaminant transport.
- Holding a PhD in Geosciences or equivalent discipline related to hydro(geo)logical studies, obtained from an Italian or foreign university.
- Knowledge of English language.
- Knowledge of Italian will be considered an advantage.

Applicants in possession of degrees obtained abroad, who have not the declaration of equivalence, will have to enclose in the application form a translation into Italian or into English of the foreign degree, (Degree with marks earned in each examination and PHD degree), completed by a self-certification related to the correspondence to the original of the translation itself.

The appointment is expected to start on 1<sup>st</sup> April 2022. The Fellowship’s yearly gross amount is of Euro 20000. The amount is tax free according to art. 4 law 13 August 1984 n. 476 and subject, for what concerns welfare regulations, to regulations as from art. 2 paragraphs 26 and following law 8 August 1995 n. 335. The University will provide, for the period of the contract of collaboration to research, private insurance cover, with a public liability insurance and industrial accident insurance in favour of the fellow and within carrying out of research activities. The amount of the premium for insurance against industrial accidents is subtracted each year from the remuneration for the fellow. The amount is paid in postponed monthly instalments.

To apply please visit <https://www.unimi.it/it/ricerca/ricerca-lastatale/fare-ricerca-da-noi/assegni-e-borse/bandi-assegni-di-ricerca/bando-di-tipo-b-dott-camera-dott-pedretti-id-5233>

**Deadline 03/03/2022 23.59**

For further information write to [corrado.camera@unimi.it](mailto:corrado.camera@unimi.it) and [daniele.pedretti@unimi.it](mailto:daniele.pedretti@unimi.it)