**Postdoctoral Research Scientist**

**Position at the Columbia Water Center at Columbia University**

**We seek a Postdoctoral Research Scientist** to work on programs conducted by the Columbia Water Center at Columbia University in close collaboration with the Department of Earth and Environmental Engineering and The Earth Institute at Columbia University.

The Columbia Water Center has a focus on addressing global water scarcity and climate risk through interdisciplinary approaches working with public-private partnerships. Specifically, the goal of this project is development and benchmarking of a modeling platform for ***quantitatively assessing environmental risks*** associated with mining and their ***financial implications***, as part of a rigorous analysis of ***investment for sustainable development***. The initial models will consider ***water related risks*** for ***selected mining activities***, and will subsequently be extended to a more comprehensive setting. The post-doc will perform risk analyses with water quantity and quality in mining and energy systems.

**Job requirements**: We seek a candidate with strong quantitative and interdisciplinary skills. The successful candidate will have a PhD in engineering or related sciences with a strong emphasis on data analysis, statistical and numerical modeling to address specific pathways for water risk exposure in mining and its financial implications. Knowledge of the mining industry is required as well as experience with Bayesian statistical models, water footprint and risk assessment, GIS, R and Matlab skills are required. Excellent English communication, technical writing and presentation skills are also required.

**Preferred Qualifications:** At least one degree in a related science or engineering discipline is strongly preferred. Familiarity with hydrologic and water quality aspects of mines highly desirable. Skills in risk analysis, Bayesian Networks, Hidden Markov Models and spatial processes, as well as exposure to natural language processing and machine learning desirable.

The position is full-time with a full benefit package. The initial appointment will be for one year with the possibility of annual renewal based on performance and the availability of funds. Search will remain open for no less than 30 days from the date of posting, and until the position is filled. To apply, please send your CV to Lisa Mucciacito at [lmucciacito@ei.columbia.edu](mailto:lmucciacito@ei.columbia.edu).

**Columbia is an equal opportunity/affirmative action employer.**