



National Research Center for Integrated Natural Disaster Management CONICYT/FONDAP/15110017

Postdoctoral opportunities

The **National Research Center for Integrated Natural Disasters Management (CIGIDEN)** started its operation in 2013 and is located at the **Pontificia Universidad Catolica de Chile**, Santiago, Chile. The Center is a cross-disciplinary research initiative aimed to mitigate the tremendous and complex impact of natural disasters in the society, considering the physical infrastructure, the human stock, and the economic development. The Center takes advantage of Chile as one of the most active natural seismic and geo-hazard laboratories in the world.

To encourage the research work, CIGIDEN is offering four Postdoctoral research opportunities in the global area of *Vulnerability and Risk Assessment of Physical and Social Systems*. One of them focuses on **Risk Assessment and Uncertainty Quantification in Natural Disasters**. The researchers are expected to have expertise in one or more methodological approaches, and to complement CIGIDEN's existing strengths in various engineering and social systems, such as: critical infrastructure systems; disasters; systems dynamics and interactions; transportation and communication networks, or healthcare.

The successful applicant is expected to merge Engineering, Statistics and Applied Mathematics into research oriented to applied problems associated with the consequences of natural disasters, such as earthquakes, tsunamis, landslides, fires, etc. Topics to be developed by the applicant include, but are not limited to uncertainty modeling, risk assessment and vulnerability of social and physical systems and networks, disaster modeling, complex system analysis, network science, optimization, Agent Based Modeling (ABM) simulation, and big data analysis. Candidates are expected to range from specialists in one of the topics to interdisciplinary researchers that focus on systems analysis approaches to solve complex problems within the broad area of resiliency of complex and coupled systems.

The candidate will be appointed at CIGIDEN, located within the School of Engineering at the Pontificia Universidad Catolica de Chile, San Joaquin Campus, Vicuña Mackenna 4860, Santiago.

For additional information about the Center please visit <http://www.cigiden.cl> or contact Felipe Rivera (fnrivera@uc.cl- +56 2 23541805).

Interested researchers should send their CV's and statement of purpose by email to contacto@cigiden.cl with Subject Line "Postdoctoral Position CIGIDEN, Line 3" Cc: fnrivera@uc.cl. The call is open until June 30th, and the starting date should ideally be during the first semester of 2014. Late applications may be considered until the position is filled, and special conditions may apply for the starting date. The duration of the position is for a minimum of 12 months and a maximum of 36 months. Contract conditions, including salary, will be market conditions for researchers in Chile and provided upon personal request.