

# Omar E. Marcillo

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## **RESEARCH INTEREST**

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I am interested in the geophysical characterization of volcanic explosions. My research is focused on understanding the air waves that are generated by volcanic explosions and the factors that influence their propagation. I am also interested in the development of instruments for seismic and infrasonic studies.

## **EDUCATION**

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New Mexico Institute of Mining and Technology. Socorro, NM. USA  
Second year Ph.D. student, expected graduation 2011

University of New Hampshire. Durham, NH. USA  
Master of Sciences in Geology, December 2007

Escuela Politécnica Nacional. Quito. Ecuador  
Bachelor of Sciences with major in Physics, December 2002

## **RESEARCH EXPERIENCE**

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New Mexico Institute of Mining and Technology. Socorro, NM. USA  
*Research Assistant, since January 2008.*  
Developing of sensors for infrasonic studies and technical support for field work.

IRIS-PASSCAL Instrument Center. Socorro, NM. USA  
*Summer Intern, Summer 2008*  
Developed and tested a prototype system for fly-over downloading information of a seismic station for polar environments.

University of New Hampshire. Durham, NH. USA  
*Research Assistant, August 2005-August 2007.*  
Developed wireless sensor networks for volcano monitoring and supported in field work.

“Instituto Geofísico”, Escuela Politécnica Nacional. Quito. Ecuador  
*Research Assistant since June 2002-August 2005*  
Designed and implemented scientific instruments for volcano studies.

Lund Laser Center. Lund. Sweden  
*Undergraduate intern, January-February 2003*  
Tested a laser instrument for the measurements of gas content in porous media

## **PUBLICATIONS**

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**Omar Marcillo**, “Digital seismo-acoustic signal processing aboard a wireless sensor array for volcano monitoring”, M. Sc. Thesis, University of New Hampshire, 2007

Geoffrey Werner-Allen, Konrad Lorincz, Mario Ruiz, **Omar Marcillo**, Jeffrey Johnson, Jonathan Lees, and Matt Welsh, “*Deploying a Wireless Sensor Network on an Active Volcano*”. In *IEEE Internet Computing*, Special Issue on Data-Driven Applications in Sensor Networks, March/April 2006.

**Omar Marcillo**, Daniel Cárdenas, Wilson Enriquez, “*Acquisition and monitoring integrated system SAMI*”, 1er Congreso Latinoamericano de Sismología., Armenia, Colombia, August 2004.

Christian Cisneros, **Omar Marcillo**, Wilson Enríquez, “*Digital geophone calibrator*”, 1er Congreso Latinoamericano de Sismología, Armenia, Colombia, August 2004.

## **REFERENCES**

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Upon request