

# KRISTEL CAROLINA MEZA FAJARDO

## PERSONAL DETAILS

- *Date of Birth:* 05/May/1978
- *Country of Nationality:* Honduras
- *Current Address:* Col. Bella Oriente, Bloque “C”, Casa #11  
Tegucigalpa, Honduras
- *Phone number:* (504) 7250 7993
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## EDUCATION

- 2007 **PhD in Earthquake Engineering**  
University of Pavia, Pavia, Italy.
- 2004 **Master of Science in Civil Engineering.**  
Area of study: *Structural and Earthquake Engineering.*  
University at Buffalo, State University of New York, USA.
- 2000 **Bachelor of Science in Civil Engineering**  
Universidad Nacional Autónoma de Honduras (UNAH), Honduras.

## LANGUAGES

- Spanish: Native language
- English: Fluent in reading, writing and conversation.  
TOEFL score: 623 (Taken on 02/Aug/2002)

## ACADEMIC EXPERIENCE

- 2008-present **Lecturer** (Profesora Titular). Department of Civil Engineering.  
Universidad Nacional Autónoma de Honduras, Tegucigalpa, Honduras.  
Courses: Structural Analysis, Concrete Structures
- 2006-2007 **Research Assistant.** Department of Civil Engineering.  
University of Patras, Patras, Greece.
- 2005 **Teaching Assistant.** European School for Reduction of the Seismic Risk.  
University of Pavia, Pavia, Italy.  
Course: Basics of Seismology and Seismic Hazard Assessment.
- 1998-2002 **Instructor.** Department of Mathematics  
Universidad Nacional Autónoma de Honduras  
Courses taught: Geometry, Linear Algebra, and Calculus

## RESEARCH EXPERIENCE

- *PhD Thesis:* “Numerical Simulation of Wave Propagation in Unbounded Elastic Domains using the Spectral Element Method”.

- *Individual Study*: “A Non-Convolutional Perfectly Matched Layer for Isotropic Elastic Media”
- *Individual Study*: “Closed form solution of the Kramers-Kronig dispersion relations in linear dissipative continua”
- *Master Thesis*: “Torsional response of structures to the near fault ground motions”.

### **OTHER EXPERIENCE**

- Nov-2004      Member of the technical team for the structural and safety assessment of Government Buildings after the Lago Garda earthquake, Italy.
- 2001-2002      Design Assistant. Constructiva, S. de R. L. San Pedro Sula, Honduras.

### **PUBLICATIONS**

- Meza-Fajardo, K. C., Papageorgiou, A. S.  
“On the Stability of a Non-convolutional Perfectly Matched Layer for Isotropic Elastic Media”. *Soil Dynamics and Earthquake Engineering*. Vol. 30, pp. 68-81. (2010)
- Meza-Fajardo, K. C., Papageorgiou A. S.  
“A Non-Convolutional, Split-Field Perfectly Matched Layer (PML) for Wave Propagation in Isotropic and Anisotropic Elastic Media - Stability Analysis”. *Bulletin of the Seismological Society of America*. Vol. 98, No. 4, pp. 1811-1836. (2008)
- Meza-Fajardo, K. C., Lai, C. G.  
"Explicit Causal Relations between Material Damping Ratio and Phase Velocity from Exact Solutions of the Dispersion Equations of Linear Viscoelasticity" *Geophysical Journal International*, 171 (3), pp. 1247–1257. (2007)

### **HONORS AND AWARDS**

- 2002-2004      Scholarship. *FULBRIGHT Program, USA*  
Ranked 1 out of 36 in the candidate selection.
- 2002-2004      Tuition Scholarship. *University at Buffalo, Buffalo, USA*
- 1999              Diploma in Recognition to Academic Excellence. UNAH

### **AFFILIATIONS**

- Since 2004      Member of the Seismological Society of America
- Since 2000      Member of the Association of Civil Engineers of Honduras