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## **Professional experience**

**Earth Engineering Center of Columbia University (EEC):** Research Associate. January 2011 to date.

- Co-author of: "Guidebook for the Application of Waste to Energy Technologies in Latin America and the Caribbean". Produced for the InterAmerican Development Bank (IDB).  
Waste thermal treatment technologies are practically nonexistent in Latin America and the Caribbean, reason for which there is little knowledge of the subject in the area. However, governments are now facing waste management problems, and are constantly being approached with solutions involving these technologies. Therefore, the IDB engaged the EEC to develop this guidebook to help their member countries understand the thermal treatment technologies available, and the requirements for their installation.  
The guidebook includes a technical part where the different technologies are described, and thoroughly explains the requirements for the implementation of mass burn technologies. It also includes three case studies (Argentina, Chile, and Mexico) to exemplify the first part of the guide.
- Pre-feasibility study of a Waste to Energy plant in Uruguay.  
A division of the government of Uruguay hired the EEC to do a pre-feasibility study of a WTE plant in Montevideo, the capital city of Uruguay. I helped throughout the whole study but, in particular, I traveled to Uruguay to collect the information needed for the study, and developed the financial analysis.
- Participated as speaker in the 19<sup>th</sup> Annual North American Waste-to-Energy Conference (NAWTEC 19), with the paper: "The Potential and Obstacles for Waste-to-Energy in Island Settings". The paper explains three case studies where WTE has been successful (Bermuda, St. Barth, and Martinique), and three where it has been considered, but has not been implemented due to different obstacles (Jamaica, Mauritius, Rhodes).

**Heyman y Asociados, S.C.:** Manager. September 2003 – December 2008.

Privately owned institutional asset management and investment advisory firm. Based in Mexico City.

I had responsibilities in client coverage, investment ideas, investment decision-making process, and portfolio trading for several institutional funds such as: pension funds, endowment funds and mutual funds.

**Instituto para la Proteccion al Ahorro Bancario:** Associate, Treasury department. September 2001 – October 2002.

Federal Deposit Insurance Fund established by the Mexican Government in charge of the bank restructuring process after the 1994 crisis.

I was mainly involved in two projects:

- Development of optimization methods for liquidity use in debt prepayments.
- Development and implementation of financial risk measurement systems for liability management.

## **Academic history**

**Earth and Environmental Engineering MS.** Columbia University, 2009-2011.

Graduated with the thesis: "Cost-Benefit Analysis of a Waste to Energy plant for Montevideo; and Waste to Energy in Small Islands".

**Applied Mathematics BS.** Instituto Tecnológico Autónomo de México (ITAM), 1996-2001.

Graduated with honors.

**International academic exchange.** Universidad de Barcelona, Spain, January – May 1999.

## **Internships and Teaching assistantships:**

**Carbon Credit Capital Llc.:** Summer 2010 Internship.

Financial services and project development company dedicated to carbon finance. Based in NYC.

I was involved in analyzing greenhouse gas reduction projects to assess the feasibility of Carbon Credit (Certified Emission Reductions - CERs) origination.

**ITAM:** January-December, 2000. Assistantship.

Teaching assistantship in the Mathematics faculty for ITAM students.

## **Other:**

**Asociación Mexicana de Intermediarios Bursátiles (AMIB):** Certified as Investment Strategy Adviser.

**Procter & Gamble Mexico:** Fellowship (Jan-May 2000) awarded to the ITAM's three highest scoring students in Procter and Gamble's test and interview process.

**Universidad Nacional Autónoma de México (UNAM):** Scholarship (Aug 1993-Jul 1996).

**University of Michigan:** Certificate of Proficiency in English (1995).

**Languages:** Spanish (native) and English.