

Student Ambassador **Yajaira Sierra-Sastre**

Bachelor of Science- Chemistry (December 2000)
Graduate Credits- Environmental Health Sciences (December 2002)
Graduate Credits- Chemistry (December 2004)
PHD- Chemistry and Chemical Biology (Present)
Cornell University

LANL Internship:

MPA-CINT: Center for Integrated Nanotechnologies

What motivated you to work at LANL?

Two years ago, I submitted a research proposal to the Center for Integrated Nanotechnologies (CINT) in order to gain access to their research facilities. This collaborative effort is now part of my Ph.D thesis project.

How many summers/years have you spent as a LANL intern?

This summer 2008 was my first summer as a graduate student intern. However, for the last two years, I have been visiting LANL for shorter periods of time as a user of the CINT facilities.

Describe in a short paragraph the type of work do at LANL?

My background is materials chemistry and my thesis project is about biotemplated nanostructured materials. I use proteins to organize metallic nanoparticles at the nanometer scale. Here at CINT, I make use of the facilities for nanowire synthesis to grow semiconductor nanowires in specific arrays using these biotemplated nanoparticle catalysts. This summer I worked in the characterization of different types of nanowires using high resolution transmission electron microscopy.

What do you enjoy most about working at LANL?

What I enjoy the most is the opportunity to work in an interdisciplinary environment. It is rewarding to work with scientists doing state-of-the-art research. The work environment is very friendly as well and motivates you to do your best.

What advice do you have for incoming students?

Before coming to LANL, I would advise the incoming students to establish a close communication with the administration staff and the student association, ask a lot of questions regarding the hiring process, hiring pre-requisites, housing etc. so that the incoming student has a stress-free first week at Los Alamos. Do great science, meet a lot of people in your field, get to know other research capabilities, attend seminars, go to the pond and eat lots of chicken red chili burritos.

What are your hobbies and interests?

Nano(bio)technology, patent law, people, traveling, cultures, international food, latin dance, snowboarding and spending time with family and friends.