## TO tour May 3, 2012 Le Lycee of Los Angeles 8<sup>th</sup> grade Marion Thomas, Vito Rubino, Katie Snell, Thomas Ader

How to make earthquakes in the lab When continents collide: working in the highest mountains of the world How scientists learn how tall mountains were in the past Pourquoi étudier la géologie? or Why study geology?"

## Vito: How to make earthquakes in the lab

My goal was to explain the topic of my research. The idea was to use my work as an example of how science is carried out and what motivates it. For example, why do we do earthquake models and experiments and what can we learn from them. This was my second participation at the TO Oureach activities. The first time I used slides from my technical presentation and adapted the language in order to engage the students. This time I also adapted my slides, in order to make them more kids-friendly. I also showed some laboratory samples so they could touch what they saw in the pictures. Another way to keep the students engaged was to ask them questions. I would not answer to all questions immediately but as I went through the presentation, so to keep their interest alive. My impression is that their attention was captivated and that they got away with something. Overall, it was a great experience for me and I hope for the students too.

## Marion: Pourquoi étudier la géologie? or Why study geology?"

So I gave a broad overview of what is a geologist and why it is important to study geology.

1) first part was:

- what is a scientist?
- why studying geology/

- what a geologist do? (geophyscist, paleontologist, geochimist, volcanologist, etc...)

2) For the second part I brought a fossil discovered in the Himalaya and I asked them: what's that? where did I find it? Why is a sea animal now at the top of a mountain?

3) Then I start to talk about plate tectonics, how they interact, why, to explain why mountains exist and why we found the fossil over there. I talked about the different boundary between plate (strike-slip, normal, inverse fault) whith some nice video we have.

20 minutes were a bit short, I prepared more slides, but that is ok. I guess it went well. The student interacted well and they were not too shy to answer my questions.

Then the teacher told me she did appreciate it was basics in geology, that gives a broad view of how earth "works", especially because some of them did not have any class on the subject. The teacher also said next time, it would be better if she makes the student asking questions in advance, so they are coming to get an answer. It can become more interactive. I think it is a great idea.