Jessica Delgado

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EDUCATION

SIMON BOLIVAR UNIVERSITY
Licentiate degree in Physics| 5 years degree
Expected March 2018 | Caracas, Venezuela

LUND UNIVERSITY
Master Exchange Student
September 2016-June 2017 | Lund, Sweden

COURSEWORK

ADVANCED LEVEL
Intro. to Synchrotron Radiation at MAXIV
Physics experimental tools
Intro. to Nuclear Physics
X-ray Crystallography
Statistical Physics
Electromagnetic Theory
Mathematical Method of Physics
Classical Mechanics
Quantum Mechanics
Basic and Advanced Physics Labs

COMPUTER SKILLS

Python • Matlab • LaTeX

Familiar:
Java• Mathematica •Windows • Microsoft Office

LANGUAGES

Spanish (Mother tongue)
English (Advanced level)

NATIONALITIES

Venezuelan
Spanish

RESEARCH

MASTER THESIS | Title: Trace element analysis based on neutron activation with coincident γ-ray detection
Jan 2017 – Jun 2017 | Lund University, Lund, Sweden

- The thesis focused on the trace elements identification and quantification of six sedimentary samples, by using the combination of a coincidence γ-ray spectrometer and the neutron activation technique. Supervised by Linus Ros from Lund University and Haydn Barros from (Simon Bolivar University)

EXPERIENCE AND ACADEMIC FORMATION

INFOCARRERA (Scientific communication and Physics demonstrations) | Organizer Committee Member
Jan 2014 – Aug 2016 | Simon Bolivar University, Caracas, Venezuela

- Helped to organize the event and worked as a exhibitor, promoting the science interests of high school students.

DIDACTRON (A science interactive Museum) | Guide
Jan 2013 – May 2013 | Simon Bolivar University, Caracas, Venezuela

- Experiments demonstrations in the area of chemistry, physics, mathematic and biology at the science museum for students from high school and university.

ADVANCED PHYSICS LABORATORY |Enrolled student
Apr 2016-Jun 2016/ Sep 2017-Dec 2017 | Caracas, Venezuela

- Worked in different experiments in the Nuclear Physics Laboratory at the Simon Bolivar University, supervised by Prof.Haydn Barros (lab.nuclear@gmail.com). The experiments were focused on:
  - Element identification using X-ray fluorescence
  - Determination of mass attenuation coefficients for different elements using a γ-ray spectrometer
  - Correction of random γ-ray summing effect and coincidence-summing effect in NaI-detector based on γ-ray spectrometry.
  - Concrete density measurement using γ-ray backscattering technique.

COMMUNITY SERVICE |Volunteer teacher
Apr 2016-Jun 2016 | Caracas, Venezuela

- An activity for children with limited opportunities and poor conditions. It consists of weekly academic training of them and at the end a summer camp.

ON-LINE COURSE
Sep 2015 – Dec 2015 | Coursera.org-Tokio University

- Obtained an certificate of accomplishment for the on-line course From the Big Bang to Dark Energy.

HNMUN (Harvard National Model United Nations) | Delegate
Feb 2013 | Boston, Massachusetts, USA

- Model of United Nations, is an educational simulation in which students represent the diplomatic members of every country of UN.
- Representing the Simon Bolivar University as a delegate in the conference.