Sept. 2022 Qualified as a first level **radiation protection expert**Nov. 2020-Present **Phd in Physics**, *Università di Roma La Sapienza*, Department of physics.

Nov 2020-Present **PhD project**, *Università di Roma La Sapienza, Department of Physics.*, During my PhD, in addition to continuing my master's thesis work, I am dealing with the experimental study of two-dimensional Van der Waals materials (graphene, transition metal dichalcogenides) both in their crystalline form (bulk) and in their form of single layer of atoms through near infrared Raman spectroscopy. The PhD project is supervised by Prof. Leonetta Baldassarre. Mar 2020 Oct 2020 **Thesis Project**, *Università di Roma La Sapienza, Department of Physics.*, I studied the strong coupling regime between light (plasmonic resonance in a nanoantenna) and matter (intersubband transition in a quantum well) using the near field spectrosocopy investigation technique called photothermal induced resonance (PTIR). The study was performed under the supervision of Prof Michele Ortolani and Prof. Leonetta Baldassarre .

Apr. 2019 - Jun.

Laboratory Project, *Università di Roma La Sapienza*, *Department of Physics.*, I worked in the research group led by Prof. Michele Ortolani and Prof. Leonetta Baldassarre. The aim of the project was to study the presence of nanoplastic inside the sea-water. In order to do that we tried both far field spectroscopy (FTIR) and Near-Field spectroscopy (PTIR) which allowed us to go beyond the diffraction limit. Supervisors: Prof. Michele Ortolani and Prof. Leonetta Baldassarre.