DEPOSITION OF TIN DROPLETS ON ELECTRONIC COMPONENTS IN THE ABSENCE OF GRAVITY

Universidad de Antioquia
Faculty of Engineering
Medellin-Colombia
The Team

Pilar Monsalve
Mechanical Engineering student

Oriana Mejia
Mechanical Engineering student

Paulina Quintero
Electronic Engineering student

Liliana Bustamante
Project coordinator
PhD (c), MsC, Eng.
Our Institution
Motivation

Soldering of electronic components in space missions

This Photo by Unknown Author is licensed under CC BY-NC-SA
The project

Main objectives

• Depositing tin droplets in weightless conditions.

• To analyze the effect of microgravity on the microstructure of tin droplets.
Relevance

SDG 5: “Gender Equality”
- Promoting women's participation in STEM areas.
- Reduce gender bias.

SDG 9 “Industry, Innovation and Infrastructure”
- Promoting new research topics such as microgravity in the Faculty of Engineering.
- Developing soldering process focused on space conditions
- Contributing to the advancement of Medellin’s aerospace research.

SDG 17 “Partnerships for the goals”
- Collaboration with space agencies will promote space science education in the city, encourage its study, and help the country's space sector development.
Thanks

ingenieria.udea.edu.co
Liliana.bustamante@udea.edu.co
+57 604 219 5550