



1  
00:00:00,000 --> 00:00:09,881

Music

2  
00:00:09,916 --> 00:00:13,905

I am Sara Rengifo. I am a Tribolgy and

3  
00:00:13,940 --> 00:00:17,345

Metrology engineer. I have been working

4  
00:00:17,380 --> 00:00:21,849

at MSFC for almost 3 years. I was born in

5  
00:00:21,884 --> 00:00:24,609

Medellin. I love being a Colombian, I love

6  
00:00:24,644 --> 00:00:27,561

my accent. I know so many times people

7  
00:00:27,596 --> 00:00:29,929

don't even understand what I am saying

8  
00:00:29,964 --> 00:00:32,481

but my accent is something I can not get

9  
00:00:32,516 --> 00:00:36,001

rid of. Since I was very little, I always

10  
00:00:36,036 --> 00:00:38,569

wanted to be a scientist. I was always

11  
00:00:38,604 --> 00:00:41,657

mixing things food and all the jars were

12  
00:00:41,692 --> 00:00:45,009

mine. My Mom had to save all the jars for

13  
00:00:45,044 --> 00:00:47,625

me. So, when I graduated, I knew I

14

00:00:47,660 --> 00:00:50,257

wanted to be a mechanical engineer.

15

00:00:50,292 --> 00:00:53,096

Tribology is the study of lubrication,

16

00:00:53,131 --> 00:00:56,913

wear and friction. Metrology is

17

00:00:56,948 --> 00:00:59,161

connected to Tribology. So many

18

00:00:59,196 --> 00:01:02,169

times we run tribology testing and then

19

00:01:02,204 --> 00:01:05,369

we take the materials to the metrology

20

00:01:05,404 --> 00:01:07,761

side and we inspect what happened

21

00:01:07,796 --> 00:01:10,537

after the mechanical test. So we measure

22

00:01:10,572 --> 00:01:14,785

wear. We also can measure surface

23

00:01:14,820 --> 00:01:19,129

texture parameters and verify tolerances

24

00:01:19,164 --> 00:01:24,241

and see if maybe our customers have

25

00:01:24,276 --> 00:01:26,785

what they require, what they need.

26

00:01:26,820 --> 00:01:29,200

We have five different labs. These labs

27

00:01:29,235 --> 00:01:31,649

are environmental, particles control,

28

00:01:31,684 --> 00:01:33,649

humidity control and temperature

29

00:01:33,684 --> 00:01:37,553

control. I am always trying to make our

30

00:01:37,588 --> 00:01:40,713

labs better to help the labs to get the

31

00:01:40,748 --> 00:01:43,401

latest technology. I really want my

32

00:01:43,436 --> 00:01:46,616

labs to get the best data for the project

33

00:01:46,651 --> 00:01:49,233

and support them in the best way we

34

00:01:49,268 --> 00:01:51,689

can. Right now we support a variety

35

00:01:51,724 --> 00:01:55,113

of projects. We work a lot with ECLSS,

36

00:01:55,148 --> 00:01:59,153

Orion, additive manufacturing, Europa

37

00:01:59,188 --> 00:02:03,825

lander, RS-25. Now that we plan to go

38

00:02:03,860 --> 00:02:07,689

to the moon in 2024, I'm working really

39

00:02:07,724 --> 00:02:09,481

hard trying to meet the project

40

00:02:09,516 --> 00:02:11,961

managers and trying to meet the

41

00:02:11,996 --> 00:02:15,097

people that is related to lunar landers.

42

00:02:15,132 --> 00:02:17,297

I want tribology and metrology to

43

00:02:17,332 --> 00:02:19,505

support these projects. Right now,

44

00:02:19,540 --> 00:02:22,840

our plan is to run some tribology testing

45

00:02:22,875 --> 00:02:26,441

and see the negative effect of the

46

00:02:26,476 --> 00:02:29,713

regolith on the mechanisms. Being

47

00:02:29,748 --> 00:02:33,233

Colombian to me means a lot because

48

00:02:33,268 --> 00:02:35,273

coming with a different background