
UOP
#5

1
00:00:08,390 --> 00:00:06,230
i'm here with john vickers and he is the

2
00:00:09,669 --> 00:00:08,400
manager of the new materials lab project

3
00:00:12,310 --> 00:00:09,679
on the space station john thanks for

4
00:00:14,310 --> 00:00:12,320
joining us today tell us what materials

5
00:00:15,910 --> 00:00:14,320
lab is i mean this is not your average

6
00:00:18,390 --> 00:00:15,920
database we're talking about now so

7
00:00:20,310 --> 00:00:18,400
we're really excited about materials lab

8
00:00:22,950 --> 00:00:20,320
materials lab is a new project it's a

9
00:00:25,029 --> 00:00:22,960
new approach actually to conducting

10
00:00:26,790 --> 00:00:25,039
materials microgravity science on the

11
00:00:28,470 --> 00:00:26,800
space station and this is really

12
00:00:30,310 --> 00:00:28,480
important work we're doing i mean we've

13
00:00:32,069 --> 00:00:30,320

got to learn how these materials behave

14
00:00:33,430 --> 00:00:32,079
in microgravity so that we can venture

15
00:00:34,389 --> 00:00:33,440
further and it helps us here on earth as

16
00:00:36,709 --> 00:00:34,399
well

17
00:00:38,709 --> 00:00:36,719
absolutely materials research is one of

18
00:00:40,389 --> 00:00:38,719
the fundamental building blocks of any

19
00:00:41,830 --> 00:00:40,399
technological

20
00:00:43,750 --> 00:00:41,840
innovation

21
00:00:45,830 --> 00:00:43,760
we're directing this materials lab

22
00:00:48,950 --> 00:00:45,840
research to be applicable to first our

23
00:00:50,549 --> 00:00:48,960
nasa needs but also to

24
00:00:53,510 --> 00:00:50,559
industrial needs that we might have here

25
00:00:55,750 --> 00:00:53,520
on earth so this is a novel way to share

26
00:00:58,229 --> 00:00:55,760
information really and tell us about the

27
00:00:59,029 --> 00:00:58,239
informatics part of that so one of one

28
00:01:01,110 --> 00:00:59,039
of the

29
00:01:04,710 --> 00:01:01,120
big ideas that we have around materials

30
00:01:07,030 --> 00:01:04,720
lab is to accelerate the information

31
00:01:09,270 --> 00:01:07,040
through our new marshall located

32
00:01:11,429 --> 00:01:09,280
physical science informatics

33
00:01:12,469 --> 00:01:11,439
system that allows the data to be more

34
00:01:13,990 --> 00:01:12,479
accessible

35
00:01:15,109 --> 00:01:14,000
to

36
00:01:16,710 --> 00:01:15,119
scientists

37
00:01:18,230 --> 00:01:16,720
internationally to

38
00:01:20,390 --> 00:01:18,240

many stakeholders

39
00:01:22,230 --> 00:01:20,400
around the nation around the world so

40
00:01:23,749 --> 00:01:22,240
it's not only industry i mean we're

41
00:01:25,590 --> 00:01:23,759
talking about future spacecraft

42
00:01:27,830 --> 00:01:25,600
developers too that can use this

43
00:01:30,230 --> 00:01:27,840
treasure trove of information

44
00:01:32,230 --> 00:01:30,240
absolutely we have real nasa needs for

45
00:01:33,749 --> 00:01:32,240
higher performing materials so

46
00:01:36,310 --> 00:01:33,759
understanding how we can make those

47
00:01:38,789 --> 00:01:36,320
materials uh more capable

48
00:01:41,109 --> 00:01:38,799
or louder for example is very important

49
00:01:42,149 --> 00:01:41,119
to us at nasa and anything we learn in

50
00:01:44,630 --> 00:01:42,159
space

51
00:01:46,630 --> 00:01:44,640
pretty much can be converted to use

52
00:01:48,230 --> 00:01:46,640
absolutely we do need to know how these

53
00:01:49,910 --> 00:01:48,240
materials perform in space and there's

54
00:01:52,149 --> 00:01:49,920
only one way to find that out to

55
00:01:54,389 --> 00:01:52,159
investigate them in space many many

56
00:01:56,230 --> 00:01:54,399
times we can apply that back on earth

57
00:01:57,830 --> 00:01:56,240
so for folks who need this information

58
00:02:00,069 --> 00:01:57,840
how do they get it

59
00:02:02,149 --> 00:02:00,079
so it's really easy to get to our

60
00:02:04,469 --> 00:02:02,159
physical science informatics system you

61
00:02:05,510 --> 00:02:04,479
can go to our nasa marshall webpage and

62
00:02:07,990 --> 00:02:05,520
locate it

63
00:02:10,389 --> 00:02:08,000

rather easily there you can also google

64
00:02:13,110 --> 00:02:10,399
nasa physical science informatics go and

65
00:02:14,710 --> 00:02:13,120
register log in your own

66
00:02:16,309 --> 00:02:14,720
have we had any results so far i mean

67
00:02:18,309 --> 00:02:16,319
are you hearing any feedback about how

68
00:02:20,150 --> 00:02:18,319
this is really working so our physical

69
00:02:21,430 --> 00:02:20,160
science informatics system has just been

70
00:02:23,830 --> 00:02:21,440
online for

71
00:02:26,070 --> 00:02:23,840
probably six months now what we're doing

72
00:02:27,910 --> 00:02:26,080
presently is loading old science data

73
00:02:29,910 --> 00:02:27,920
that we've had from past experiments

74
00:02:31,589 --> 00:02:29,920
that we've conducted in space we're here

75
00:02:33,350 --> 00:02:31,599
really hearing good results back from

76
00:02:35,589 --> 00:02:33,360
that already

77
00:02:37,110 --> 00:02:35,599
good can't wait to go and see if i can

78
00:02:38,630 --> 00:02:37,120
figure some of this materials research