



# THE INNOVATION CATALYST

STRATEGIC PARTNERSHIPS OFFICE  
NEWSLETTER  
JUNE 2020

## HOW TO GET INVOLVED IN TECH TRANSFER

The world of technology transfer pairs business with government laboratories to make commercialization possible. Through licensing, NASA can transfer space-related inventions to the private sector, amplifying the reach of technological progress. From medical devices to agricultural advances, NASA's technologies have made tangible contributions to fields outside the domain of space.

If you've ever wanted to explore the licensing and commercialization side of technology development, you have several options, and the [Strategic Partnerships Office \(SPO\)](#) can help you explore. Due to conflicts of interest, innovators can't participate in every part of the licensing process, but there are plenty of other ways to get involved.

### BE AN ADVOCATE FOR YOUR INVENTION

As an inventor, you understand your technology better than anyone. When meeting with companies that are interested in NASA inventions, Goddard's technology managers like to involve the technology's inventor in conversations. Your participation helps potential licensees better grasp the intricacies of your technology, and by being a part of the discussion, you can answer their questions in real time, moving the process forward more quickly. Licensees often need information about how the invention works, how it might interact with their existing product, or what steps they will need to take in adapting it to the function they'd like to perform. While SPO can serve as a conduit between inventors and licensees, inventor participation is always an asset.

### ATTEND CONFERENCES

While in-person conferences might be off the table for a while, many conferences have gone virtual, still enabling interactions between government and industry through video conference platforms. Some conferences revolve around specific topics, such as [small satellites](#) or [optics and photonics](#). SPO attends these conferences to meet with industry and make companies aware of Goddard's patented technology portfolio. Informal conversations can lead to license agreements, and when an inventor is present to answer questions and highlight the capabilities of their technology, this can help to communicate all the attributes of the invention.

### PARTICIPATE IN WEBINARS

SPO hosts informative webinars that highlight NASA technologies available for licensing. Now more than ever, webinars are effective communication tools when meeting in person isn't an option. Companies and entrepreneurs who attend webinars can learn information directly from the inventor of a technology or hear more about Goddard's technology areas of expertise. It's a great opportunity to connect with a non-government audience.

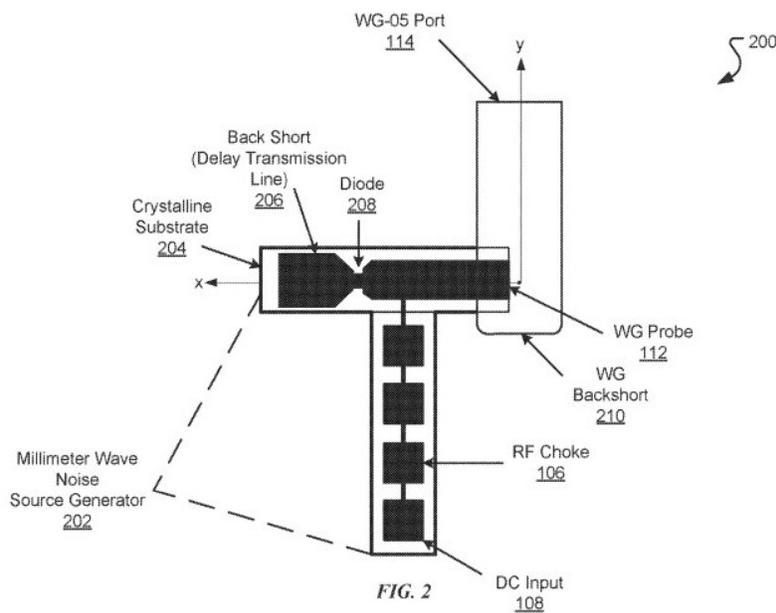
### JOIN THE MASTER INNOVATOR PROGRAM

SPO is always looking for new candidates for the [Master Innovator Program](#), a Goddard-based initiative which recognizes innovative achievements stemming from the Goddard community. Participants move through color-coded levels based on their experience level and accomplishments, similar to the martial arts. Master Innovators who reach the "black belt" level serve on a panel of innovation experts to provide guidance and advice to the Center Director's Office. This allows innovators to play a role in strategic partnerships formulation and cultivating innovation at Goddard.

# Guess The Patent Drawing!

- 1 This calibration module is designed specifically for millimeter to submillimeter wavelengths.
- 2 It was invented by NASA innovators Negar Ehsan, Jeff Piepmeier, and Edward Wollack.
- 3 This invention was patented in 2018.

Can you guess the invention? [Click here](#) for the answer.



## Tech Transfer Trivia

- 1 As of June 1, 2020, how many NTRs have Goddard innovators submitted for Fiscal Year 2020?  
A. 152 B. 193 C. 206 D. 217
- 2 On June 1, 2019, how many NTRs had Goddard innovators submitted for Fiscal Year 2019?  
A. 122 B. 146 C. 189 D. 204
- 3 Compared to other NASA centers, where does Goddard currently rank in number of NTRs submitted for Fiscal Year 2020?  
A. First Place B. Second Place C. Third Place D. Fourth Place

[Link To Answers](#)

# Goddard Tech 12

Each month the Strategic Partnerships Office tells the story of successful spinoffs at NASA's Goddard Space Flight Center and shows how these technological breakthroughs are brought from the labs to our lives. To see the full series, [click here](#). Photo Credit: NASA/SDO/Goddard Space Flight Center

## UV Light Detection

Gaining insight into the workings of the Sun is no easy task. Science has come a long way since Galileo discovered sun spots with the naked eye, but still more research needs to be done to further understand how the Sun affects Earth.

NASA's Solar Dynamics Observatory is undertaking this mission. The SDO measures extreme ultraviolet (UV) radiation from the Sun, which plays a key role in atmospheric heating and satellite drag. Without factoring for these measurements, this type of radiation can send spacecraft plummeting back towards Earth. Goddard scientist Shahid Aslam saw shortcomings in how UV light was measured – particularly, how interference from other light sources affects the data being collected. His innovation isolated and measured just UV light and nothing else. In addition to creating clearer images of the Sun, Aslam noticed his invention was measuring wavelengths between 280 and 400 nanometers, the wavelengths which pass through Earth's atmosphere and affect human skin.

After Shahid Aslam realized he created a way to isolate and measure the Sun's UV rays that affect skin, he teamed up with marketer Karin Edgett to bring the NASA technology to the marketplace.

The product, UVA+B SunFriend, measures both UVA and UVB rays. These rays are important for health purposes, as they pass through the atmosphere and make contact with Earth's surface.

UVA rays have longer wavelengths, between 400 and 320 nanometers, and penetrate deeper into the skin causing physical signs of aging. UVB's shorter wavelengths, between 320 and 280 nanometers, are responsible for producing vitamin D in the human body, but these light rays also cause sun burns. Managing one's sun exposure is a balance between getting enough UVB rays to produce vitamin D and getting too much of UVA or UVB, which can cause long term health problems or sun burn.

There is existing work aimed to help people control their sun exposure. The UV index shows the duration at which UV wavelengths will cause reddening of the skin. Shahid Aslam's creation is a more active approach to preventing sun related health issues while still getting a sufficient amount. The wearable wrist accessory allows users to set their personal skin color and sensitivity and reads UV exposure throughout the day. When the LED lights start to flash, the wearer has had the optimal amount of sun exposure for the day.

# Upcoming Events

## THE COFFEE BREAK

National Aeronautics and Space Administration



**THE COFFEE BREAK**  
SOFTWARE RELEASE EDITION

JUNE  
**11<sup>th</sup>** 1-2PM  
ON OFFICE  
365 TEAMS

Please join the Strategic Partnerships Office (SPO) for a new virtual event series called "The Coffee Break." This installment will focus on the software release process, but we welcome any questions you may have about NASA's Technology Transfer Program, partnerships, and SBIR/STTR. Check Dateline for the link to join the Microsoft Teams meeting. For more information on the software release process, please visit <https://softwarerelease.ndc.nasa.gov>.

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[www.nasa.gov](http://www.nasa.gov)

## SMALLSAT CONFERENCE 2020

August 1-6, 2020

This year's Small Satellite Conference will be hosted on an all-virtual platform, and admittance is free for anyone interested in attending. Many functions of the traditional SmallSat Conference will continue in virtual form, with seminars, small sessions, and office hours with people from all across the SmallSat community. Registration begins in June. For more information, visit <https://smallsat.org>.

