

For Immediate Release

Bridgestone to Join International Space Exploration Mission with JAXA and Toyota *Company supporting research on tires for manned, pressurized rovers required for lunar surface mobility*

Tokyo, April 11, 2019 — Bridgestone Corporation today announced that it will take part in an international space exploration mission together with the Japan Aerospace Exploration Agency (JAXA) and Toyota Motor Corporation (Toyota). Announced by JAXA and Toyota in the last month, the goals of this mission include expanding the domain of human activity and developing intellectual property on space exploration. Bridgestone's involvement in this mission will include researching the performance needs of tires for use on manned, pressurized rovers*¹ to help these rovers make better contact with the surface of the moon.

The company has partnered with both organizations to research this next phase of human exploration, building on a joint research partnership with JAXA in the 2000s to examine the contact patch between rovers and the lunar surface, and serve as a technical partner for the Toyota rover project.

Bridgestone's expertise and knowledge of tire contact patch will help explore the mobility challenges faced on the lunar surface, with the development of an *Elastic Wheel* to support the rover's weight, acceleration and braking, minimize shock absorbance, and improve maneuverability, enabling the rover to cruise more than 10,000 km on the lunar surface, required to accomplish the mission.

Bridgestone is proud of its legacy of developing solutions to meet unique mobility challenges, and is committed to actively contributing to this international space exploration mission by developing a contact patch capable of functioning even in the challenging mobility conditions experienced on the lunar surface of the moon.

"We are honored to partner with JAXA and Toyota in the challenge of space exploration," said Nizar Trigui, chief technology officer, Bridgestone Americas, during a JAXA session at the 35th Space Symposium held today. "We believe that our technical capabilities allow us to explore the development of a tire that is capable of functioning even in the harshest of conditions experienced on the surface of the moon, and bring us to a higher level of mobility for mankind. Our founder, Shojiro Ishibashi, believed in contributing to the advancement and development of society, and Bridgestone

fulfills that belief through Creative Pioneering (*Shinshu-Dokuso*), an integral part of our corporate philosophy that allows the company to develop innovative solutions with an eye towards the future. This mission represents that commitment and is a testament of Bridgestone's commitment to improving the way people move, live, work and play."

*1 JAXA and Toyota Reach Agreement on Consideration toward International Space Exploration (news release issued by Toyota Motor Corporation)

<https://global.toyota/en/newsroom/corporate/27059582.html>

About Bridgestone Corporation:

Bridgestone Corporation, headquartered in Tokyo, is the world's largest tire and rubber company. In addition to tires for use in a wide variety of applications, it also manufactures a broad range of diversified products, which include industrial rubber and chemical products and sporting goods. Its products are sold in over 150 nations and territories around the world.



Manned, pressurized rover required for lunar surface mobility

Courtesy of Toyota Motor Corporation



Example of a contact patch