

Science In Our Lives

Road To Safety May Run Through The Earth's Core

(NAPSA)—For the breakthrough technology built into its latest tires, one company nearly went to the center of the earth. At least, it used sand sent up from there.

A key element in a smart new tire is the use of volcanic sand. It lets the tire stay flexible, even in cold weather and have exceptional traction in any weather.

The new Goodyear tire is the culmination of decades of research into the design, engineering and physics of all-weather tire technology. This means drivers can confidently take on rain-drenched highways, icy or snowy roads or unanticipated situations on dry pavement, with help from three distinct tread zones—Water Zone, Ice Zone and Dry Zone.

Volcanic sand is used in the tire's Ice Zone, which has a high-tech rubber compound to create a rough surface on the treadface. As the tire is used, the volcanic sand "grit" presents microscopic cavities that work as tiny traction edges for better grip on slick surfaces.

"The volcanic sand is added to the tire as a ground pumice material," said Michael Crawford, a Goodyear engineer. "The pumice creates a constantly rough and textured surface that proves very effective in delivering the kind of grip that drivers demand."

The volcanic sand in the tire's "winter formulated compound" is complemented by the use of glass fibers. These tiny fibers are designed to create a pitted surface



Sometimes, it's good to have sand and glass in your tires, scientists have discovered.

in the tread that "resembles a textured lunar surface," according to Crawford.

The unique rubber compounding of the Goodyear Assurance featuring TripleTred Technology™ is complemented by tread design in the three zones that also promotes superior traction.

The Water Zone, consisting of deeply carved Aquachutes, propels water away from the tire's tread on rain-drenched roads.

An interlocking tread pattern in the Ice Zone translates into more gripping power on icy or snow-covered roads.

The Dry Zone features reinforced tire shoulders for confident maneuvering around curves, potholes and unexpected road debris on dry pavement.

The tire comes in 16 sizes, ranging from 14- to 16-inch wheel diameters.

For more information, go to www.goodyearassurance.com.