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## **News Release**

**23<sup>th</sup> November 2021**

### **QORTEK SELECTED TO PROVIDE SPIN-IN TECH FAIR BRIEFING TO NASA**

#### **QorTek, Inc. is one of 40 US Companies Down Selected to Present at NASA Global Reach Spin-in Technology Fair**

NASA has down selected QorTek, Inc. to be one of only 40 advanced technology developers invited to present at its 3<sup>rd</sup> Annual Global Reach Spin-in Technology Fair. This all-day event will be open to the entire NASA community and includes enabling one-on-one or group-on-one technology web briefings to NASA engineers and scientists. QorTek has been selected to brief its advances in space systems propulsion flow control and regulator valves provided by its new all-solid-state in-line valve (flow controller) technology. Offering to replace many of the existing magnetic-based valve designs, such as solenoid-based valves, used prolifically across satellite propulsion systems the new technology introduces several key performance advances into the space system valve market as to include true linearity and high bandwidth not available in magnetic-based designs. The new all-solid-state technology offers the ability to both operate at high temperature (150°C objective) and high inlet pressures. The technology further enables design space to include 350°C operating temperatures and >1kpsi inlet pressure. Its high temperature capability now allows for direct integration of the valve mechanisms with the high temperature subsystems such as thruster components, reducing sizings and complexity; the ability to operate to very high inlet pressures now allows this technology to replace pressure regulators in spacecraft propulsion systems.

Central to the innovation is the introduction of textured ceramic actuation. QorTek is the World leader in textured ceramic technology and our devices offer about double the stroke per unit length as any available piezoceramic actuation mechanism. Exploiting this much higher stroke capability in a new design approach that lengthens the actuator without sacrificing overall form factor leads to a some remarkable breakthrough in solid-state valve flow control technology.

For more information about NASA Technology Transfer programs please visit: <https://technology.nasa.gov/>

#### **About QorTek Inc.**

With about 80 employees including over 45 Engineers (EE, ME, MatSE), and 5 PhDs, QorTek is a world leader in smart material devices and high-density power electronics, innovating, developing, and providing quality solutions to a diverse array of industries including underwater systems, land & air systems, military & commercial space systems, medical, and industrial. The dedicated and experienced team is committed to creatively advancing technology to promote sustainable business growth, driven by dynamic engineering enabled by advanced science and technology.

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