Lithium-ion battery technology south ossetia

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Revolutionary LiGas(R) enables Li-ion battery operation in extreme climates with reduced fire risk. All with improved cost. Operate in new environments: bitter cold, scorching heat, underwater and space. The limit: innovators’ imagination.

SAN DIEGO, Dec. 11, 2023 /PRNewswire/ --South 8 Technologies("South 8"), the first to develop and commercialize LiGas(R), liquefied gas electrolyte for advanced lithium-ion batteries, today introduced its Arctic(TM) LiGas 18650 cell at the Advanced Automotive Battery Conference (AABC) (booth #615) in San Diego.

"LiGas addresses serious lithium-ion pain points: fire risk and depleted energy at low temperatures," noted South 8 CEO Tom Stepien. "Arctic LiGas cells solve these "fire and ice"(TM) problems by minimizing thermal propagation with a non-toxic blend of gases that dissipate harmlessly when punctured or overheated. Arctic cells have the industry"s lowest operating temperature, providing energy down to --60?C (-76?F). We are excited to help our customers safely and efficiently operate in new environments and applications."

"We are delighted to deliver Arctic LiGas cells to our customer base of battery manufacturers and end-users who are validating our unique technology," said Jungwoo Lee, co-founder and Chief Technology Officer. "Through internal and third-party testing, LiGas consistently demonstrates boundary-pushing performance in extreme environments and conditions."

Battery demand across electric vehicles and stationary energy storage is projected to grow at a pace of 53% year-on-year, reaching 950 gigawatt-hours in 2023, according to a November 2023 report by Bloomberg New Energy Finance. Growth is projected to continue, reaching more than 5,800 gigawatt-hours in 2035. Arctic LiGas is one of many lithium-ion battery innovations that will help cell manufacturers deliver safer and more capable solutions to this fast growing, worldwide market.

South 8 solves lithium-ion"s "fire and ice(TM)" problems with LiGas(R), a patented liquefied gas electrolyte. LiGas reduces lithium-ion fire risk and operates from -60 to 60 ?C, enabling clean battery power to more applications, environments and people. The San Diego-based company has been granted twenty-three patents across seven countries and jurisdictions. South 8 investors include Anzu Partners, LG Technology Ventures, Shell Ventures, Foothill Ventures, Taiyo Nippon Sanso and Lockheed Martin Ventures.

"Ninety-nine percent of the batteries that are rechargeable are based off of a lithium-ion design," Palm Beach County Fire Rescue Division Chief Fire Marshall David DeRita said.

"[It"s] probably the most prevalent issue ... in the fire service that we"ve had nationally and internationally,"

DeRita said. "As a fire marshal, I'm putting them probably at the top of my list of hazardous fires that we could have as a homeowner."

Palm Beach County Fire Rescue, along with the Solid Waste Authority and the Home Chemical Recycling Center, posted signs warning of the dangers of the batteries in places like the Tanger Outlets, which was filled with Black Friday shoppers.