



Superconductor Technologies Inc. Strengthens IP Portfolio for Superconducting Magnet Applications

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AUSTIN, Texas, Oct. 16, 2019 (GLOBE NEWSWIRE) -- Superconductor Technologies Inc. (STI) (Nasdaq: SCON) was awarded U.S. Patent No. 10,446,294, entitled "Coated conductor high temperature superconductor carrying high critical current under magnetic field by intrinsic pinning centers, and methods of manufacture of same" from the U.S. Patent and Trademark Office (USPTO). This patent, along with previously issued patents USP 9,362,025 and USP 9,564,258, further protects the company's unique capabilities for improving the performance of its Conductus[®] superconductor magnet wire that utilize the advantages in superconductor magnet applications with lower operating temperatures and high magnetic field are critical.

"STI's proprietary RCE-CDR process provides performance and cost advantages for manufacturing second generation superconducting wire," said Jeff Quiram, STI's President and CEO. "We use these patented techniques to maximize current carrying performance in superconducting magnet applications. Conductus high performance magnet wire is ideal for applications such as Next Generation Electrical Machines (NGEM) and emerging applications such as particle accelerators and fusion systems. Our efforts to commercialize Conductus wire for high performance magnetic applications has produced a much more efficient alternative to existing conductors, such as copper and low temperature superconducting materials, that are unable to meet the requirements of next generation power solutions. We continue to leverage our extensive intellectual property portfolio and manufacturing expertise as we bring our Conductus wire to market and plan to further expand our intellectual property efforts around the RCE-CDR fabrication process in the future."

Reactive Co-evaporation (RCE) and Cyclic Deposition Reaction

Rare Earth, Barium, Copper Oxide (ReBCO) materials are recognized as a superior superconductor by offering better performance in a magnetic field. STI's RCE-CDR process grows a ReBCO superconductor film onto a flexible template. This process is complex, requiring accurate temperature, uniform pressure, precise ratios of elements and the presence of oxidizing atmospheres to grow high performance superconducting materials. The company's RCE-CDR system is scaled for large batch operation to ensure every portion of superconducting wire has uniform material properties.

About Superconductor Technologies Inc. (STI)

Superconductor Technologies Inc. is a global leader in superconducting innovation. Its Conductus[®] superconducting wire platform offers high performance, cost-effective and scalable superconducting wire. With 100 times the current carrying capacity of conventional copper and aluminum, superconducting wire offers zero resistance with extreme high current density. This provides a significant benefit for electric power transmission and also enables much smaller or more powerful magnets for motors, generators, energy storage and medical equipment. Since 1987, STI has led innovation in HTS materials, developing more than 100 patents as well as proprietary trade secrets and manufacturing expertise. For more than 20 years STI utilized its unique HTS manufacturing process for solutions to maximize capacity utilization and coverage for Tier 1 telecommunications operators. Headquartered in Austin, TX, Superconductor Technologies Inc.'s common stock is listed on the NASDAQ Capital Market under the ticker symbol "SCON." For more information about STI, please visit <http://www.suptech.com>.

Safe Harbor Statement

Statements in this press release regarding our business that are not historical facts are "forward-looking statements" that involve risks and uncertainties. Forward-looking statements are not guarantees of future performance and are inherently subject to uncertainties and other factors, which could cause actual results to differ materially from the forward-looking statements. These factors and uncertainties include, but are not limited to: statements pertaining to the offering of the Company's securities, including the use of net proceeds therefrom; our limited cash and a history of losses; our need to materially grow our revenues from commercial operations and/or to raise additional capital (which financing may not be available on acceptable terms or at all) in the very near future, to implement our current business plan and maintain our viability; the performance and use of our equipment to produce wire in accordance with our timetable; overcoming technical challenges in attaining milestones to develop and manufacture commercial lengths of our HTS wire; the possibility of delays in customer evaluation and acceptance of our HTS wire; the limited number of potential customers and customer pressures on the selling prices of our products; the limited number of suppliers for some of our components and our HTS wire; there being no significant backlog from quarter to quarter; our market being characterized by rapidly advancing technology; the impact of competitive products, technologies and pricing; manufacturing capacity constraints and difficulties; the impact of any financing activity on the level of our stock price; the dilutive impact of any issuances of securities to raise capital; the steps required to maintain the listing of our common stock with a U.S. national securities exchange and the impact on the liquidity and trading price of our common stock if we fail to maintain such listing; the cost and uncertainty from compliance with environmental regulations; and local, regional, and national and international economic conditions and events and the impact they may have on us and our customers.

Forward-looking statements can be affected by many other factors, including, those described in the "Business" and "Management's Discussion and Analysis of Financial Condition and Results of Operations" sections of STI's Annual Report on Form 10-K for the year ended December 31, 2018, and in STI's other public filings. These documents are available online at STI's website, www.suptech.com, or through the SEC's website, www.sec.gov. Forward-looking statements are based on information presently available to senior management, and STI has not assumed any duty to update any forward-looking statements.

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