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Superconductivity Global Alliance for a Greener, Healthier, More Prosperous and Sustainable Future

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***Abstract*–Superconducting technologies have been developed significantly over the last few decades and are ready to be scaled up and deployed in diverse applications beyond their present usage (MRI, NMR, and physical sciences and research). Superconductivity has the potential to provide means towards zero-emission targets, enabling extensive usage of wind power generation, facilitating zero-emission transportation, enabling fusion power, superconducting quantum computing, water purification new medical diagnosis and therapy tools, and new scientific breakthroughs.**

To realize the potential of superconductors in addressing our societal future needs as identified in the United Nations' 17 Sustainable Development Goals (SDGs), also called the Global Goals; will require, among other things, the development of new partnerships and alliances including new business models for investment and funding to accelerate the development of commercial superconducting technologies and solutions for diverse sectors and translate it into successful market applications.

This special session will review the progress of the Superconducting Global Alliance (ScGA) initiative for a Greener, Healthier, Prosperous, and Sustainable Future. Proposed strategic roadmaps and an update on Consortia membership addressing identified grand challenges will be presented for identified smart markets in healthcare, big science, digital and computing, industrial, and energy sectors followed by a panel discussion on the ScGA's role in addressing the Global Development Goals.

***Keywords (Index Terms)*–Superconductivity Global Alliance (ScGA), Sustainable Development Goals (SDG's)**

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