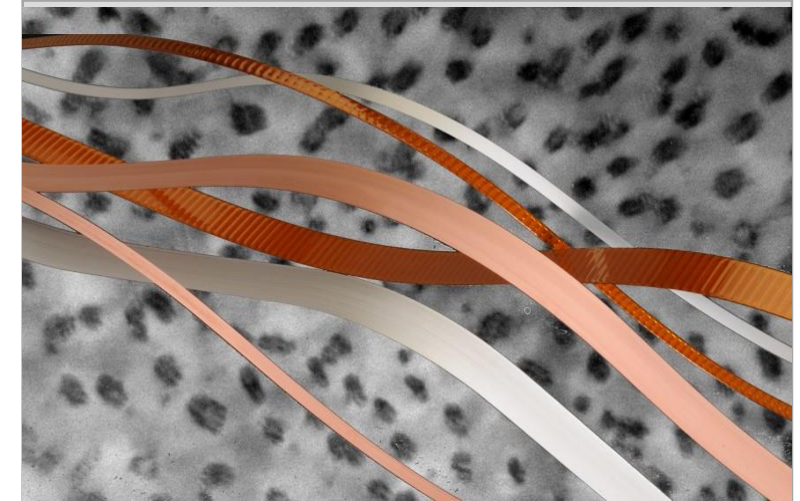


# CABLE Conductor Manufacturing Prize



Team Name:	<i>SuperPower REBCO</i>
Primary Submitter Name:	Yifei Zhang
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Submission Title:	Super Enabling Conductor



## Description of Material

- *Long-length HTS tapes with optimized nano-particle pinning centers in REBCO for maximizing electrical current carrying capability at low temperatures and high fields, enabling a variety of demanding applications including compact fusion and high-field NMR.*

## Fabrication Approach

- The high-temperature superconducting tape is fabricated by depositing the REBCO film using MOCVD (metalorganic chemical vapor deposition) on buffered Hastelloy substrate made with IBAD (ion beam assisted deposition) technology.

## Potential Impact

- The REBCO HTS is an enabling material. The development of REBCO HTS based fusion technology will change the way how electric power is generated. Therefore it will make a great contribution to the SDG.