Dr. Luisa Chiesa



Dr. Luisa Chiesa is an Assistant Professor in the department of Mechanical Engineering at Tufts University. Dr. Chiesa's primary research focus is superconducting materials for energy application.

Dr. Chiesa has been active in the field of superconducting materials for large-scale applications for more than 10 years. Her current research focus is on the electro-mechanical behavior of superconducting materials for large magnets used in fusion power and high energy physics devices. Finite element analysis and experiments on electro-mechanical behavior of both low and high temperature superconductors are performed at Tufts University and in collaboration with several national laboratories. These research topics are also of interest for other energy applications such as Superconducting Magnetic Energy Storage (SMES) and Superconducting Transmission Lines.

The research activities performed not only provide useful information to the scientific community but also educate and train students, an essential component to the successful continuation and future progress in the field of cryogenic and superconductivity.

Dr. Chiesa received her Ph.D. in Nuclear Engineering at the Massachusetts Institute of Technology and her B.S. in Physics at the Universita' degli Studi in Milano (Italy). She held professional positions as scientific engineer associate at Lawrence Berkeley National Laboratory and as guest scientist at Fermilab National Accelerator Laboratory where she was involved in experimental and analytical work on magnets for high energy physics applications (mechanical stability and quench protection). Professional activities include being an editor for the IEEE Transactions on Applied Superconductivity publication.