
TCSUH Special Seminar

Application of Superconductivity to Electric Power System and Bearings

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IIT

Mumbai, INDIA

Host: Prof. Venkat Selvamanickam

Friday, July 7, 2017

HSC 102

12:00-1:00PM

ABSTRACT:

An increase in short circuit levels in the grid call for upgrades or replacements of the existing circuit breakers. This can be expensive and have limitations in terms of availability. An option is to use superconducting fault current limiters.

The talk will focus on application considerations for superconducting fault current limiters. The SCFCL impacts several aspects of the operation of the system like impact on breaker, installation location, choice of shunt etc. This talks gives an overview of the SCFCL application for a utility in India and touches on impact of the SCFCL on the system.

The second part of the talk would focus on development work done at IIT Bombay on superconducting magnetic bearings. The talks present an overview of the activities and some analytical formulations and measurements conducted in the Cryogenics Laboratory at IITB.

Biography:

Himanshu J. Bahirat (S'06) received the B.E. degree from Visvesvaraya Regional College of Engineering, Nagpur, India, in 2002 and M.S.E.E. and Ph.D. degrees from Michigan Technological University, MI in 2009 and 2013 respectively. He was with Schneider Electric Private Ltd. and Larsen and Toubro Ltd. at their design centers in India, working in the area of circuit-breaker design from 2002-2005. His research interests are wind farms, DC power systems and transients in power systems.

Persons with disabilities who require special accommodations to attend this lecture should call (713) 743-8213.
