

---

# TCSUH Special Seminar

## Industrialization of Superconductivity in China

**PROF. JIANGDI FAN**

Chief Scientist and Director  
Chongqing Academy of Science & Technology

---

**August 15, 2016**

HSC 102 • 12:00 noon – 1:00 p.m.

### **ABSTRACT:**



Productive and Applied Projects of Superconductivity were started as early as the 1990's of the last venture in China. The world's first HTSC maglev train was made by Jiasu Wang's group at Southwest Jiaotong University in 2000, followed by his student in 2014 with an improved prototype which possibly could be operated in a vacuum tube. The most successful entity is the Western Superconducting Technologies Co., Ltd., in Xi'an, China, which has now become a successful enterprise in producing NbTi and Nb<sub>3</sub>Nb<sub>3</sub>Sn wires of low temperatures superconductors (LTSC). The other enterprise was initiated in 2011 for the production of high temperature superconductor (HTSC) YBCO tapes. Applied projects were initiated mainly by the Institute of Electrical Engineering, Chinese Academy of Sciences (CAS), for both low and high temperature superconductors. Chongqing Center was established less than three years ago mainly for applied projects of LTSC and HTSC. The speaker will mainly introduce what they are doing and what they plan to do. Finally, if time is allowed, the speaker will discuss the theory of superconductivity mechanism and its dilemma.

### **BIO:**

Dr. Fan began his academic career at Chongqing University, where he was an instructor from 1978 to 1983. He was a visiting assistant professor at Brown University in 1983, and from 1984 to 1998 was a doctoral student in condensed matter physics at the University of Houston. After receiving the Ph.D. in physics, he was appointed professor at Southern University and A&M College, Baton Rouge, LA, where he served from 1989 until 2012. He became chief scientist and director of the Chongqing Academy of Science and Technology, China, in 2012.

---

*Persons with disabilities who require special accommodations in attending this lecture should call (713) 743-8213.*

---