

## Speaker Profile



### Contact details

**Organization name:**

National Renewable Energy Laboratory

**Address:**

1617 Cole Blvd, Golden CO 80226

**Phone:** 303-384-6559**Fax:** 303-384-6432**E-mail:**

se\_hee\_lee@nrel.gov

**Website:**

[http://www.nrel.gov/basic\\_sciences/technology\\_staff.cfm/tech=8/ID=34](http://www.nrel.gov/basic_sciences/technology_staff.cfm/tech=8/ID=34)

**Dr. Se-Hee Lee****Senior Scientist****National Renewable Energy Laboratory**

Dr. Lee's primary research interests involve the investigation of the electrochemical and electro-optical properties of transition metal oxides, as well as their micro-structural characteristics. His laboratory expertise is extensive and includes thin-film deposition (evaporation, sputtering, PE-CVD, sol-gel synthesis), electro-optic characterization, AC impedance spectroscopy, and electrochemical deposition and analyses techniques.

Dr. Lee holds a B.S. and an M.S. in Metallurgical Engineering from Seoul National University and a Ph.D. in Materials Science and Engineering from Seoul National University. He joined NREL in 1997 as a postdoctoral research associate and became a staff research scientist in 1999. He is currently a Senior Scientist in Materials Science Center.

During his tenure at NREL, Dr. Lee has been engaged in the research and development of a variety of technical subjects: solid-state nano-composite supercapacitors for energy storage, solid-state thin-film lithium batteries, ion-insertion mechanisms in advanced materials, fiber-optic hydrogen sensors based on chemochromic actuation, and novel opto-electronic phenomena involving nanoscale materials. He has gained international recognition for his technical contributions, with more than 70 professional publications to his credit. He is an active member of the Electrochemical Society and is the holder of four U.S. patents and has six patents pending.